

The Law and Economics of Eco-Labels

Law and Economics van Eco-Labels

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TABLE OF CONTENTS

INTRODUCTION

1. Background	1
2. Research Relevance.....	4
3. General Scope of Research.....	5
4. Boundaries and limitations.....	6
5. Structure of Research	7

CHAPTER I

Defining Eco-labels and Eco-certification

1. Introduction	13
2. Development of Environmental Labelling	13
2.1 The First Earth Summit and the Seventies	14
2.2 The Blue Angel and the following years	15
2.3 The Rio Earth Summit and Agenda 21.....	16
2.4 World Summit on Sustainable Development	18
2.5 Towards Rio+20	19
2.6 The earth summits role in the evolution of eco-labels.	19
3. Defining Environmental labelling and Eco-labels.....	22
3.1 The Early Definitions of Eco-labels	23
3.2 Eco-labelling and eco-labels	24
4. The goals of eco-labels.....	25
4.1 Defining the eco-label's impact	27
4.2 Eco-labels impact: marginal environmental effects.....	27
4.3 Eco-labels impact: rate of adoption	29
5. Eco-labelling criteria: their determination and content	30
5.1 Criteria selected for specific environmental problems.....	30
5.2 Life Cycle Assessment as a way to determine the criteria	31
5.3 The content of the criteria: process or performance based.....	32
5.4 Ratcheting up the criteria: the eco-label's ever raising bar	33
6. Classification Of Eco-labels	34
6.1 The classic classification.....	34
6.1.1 Single-issue (single-standard) mandatory labels	35
6.1.2 Single-issue voluntary labels	36

6.1.3 Multi-criteria and life-cycle labels (eco-labels)	37
6.2 The ISO classification: Types I, II, III	39
6.2.1 The ISO-14020 series	40
6.2.2 Type I Eco-labels	41
6.2.3 Type II Eco-labels	42
6.2.4 Type III Eco-labels	43
6.2.5 The ISO classification in reality	43
6.3 Categories of eco-labels	44
6.3.1 Targeted at individual consumers, industrial customers, investors, governments or others	44
6.3.2 Single-issue or multiple-issue	45
6.3.3 Awarded due to consumption effects, production impacts or the product's complete life cycle	45
6.3.4 Single or multiple sectors	45
6.3.5 Criteria or scope defined locally, regionally or internationally	46
6.3.6 Second or third party certifications, or self declarations of conformity	46
6.3.7 Impacts of a single product, a range of activities or a defined manufacturing site	46
6.3.8 Initiatives are environmental, social or economic, or a combination of these	47
6.3.9 Type of organisation sponsoring the eco-label.....	47
7. Environmental Certification	49
7.1 Reliance of eco-labels on third party certification.....	50
7.2 The modern international sustainability certifiers and eco-labels.....	51
8. Other corporate 'sustainability' communication tools	52
8.1 Environmental Ratings	53
8.2 Sustainability Reporting	54
8.3 Emerging environmental communication tools	55
8.3.1 In-house standards and trusted brands	55
8.3.2 New sourcing models and partnerships with NGOs.....	55
8.3.3 Linking sustainability performance to the place of origin instead of a label	56
8.3.4 Tagging and mobile technologies that connect the dots across the value chain	57

8.3.5 Other initiatives	57
9. Conclusions	58

CHAPTER II

Eco-labels' place in the market

1. Introduction	61
2. Information and Environmental Attributes	61
2.1 Quality	62
2.2 Information	63
2.3 Information Asymmetries	64
2.3.1 Search Goods	64
2.3.2 Experience Goods	65
2.3.3 Credence Goods	66
2.3.4 Potemkin Goods	68
2.4 Uncertain information and 'indeterminate goods'	69
2.4.1 Indeterminacy of new products in the market	70
2.4.2 Indeterminacy due to rival hypothesis concerning the past of the product	71
2.4.3 Indeterminacy concerning future impacts of the product.....	72
2.5 Placement of eco-labelled goods within the classifications	73
2.5.1 Eco-labelled goods as credence goods	73
2.5.2 Environmental qualities as 'indeterminate'	74
2.6 The eco-label organisations and the certifiers	76
3. Eco-labels: branding and certification an IP point of view	77
3.1 Collective and geographic marks	77
3.1.1 Collective Marks.....	78
3.1.2 Geographical name certification marks	78
3.2 Trade marks	79
3.2.1 Trade mark's quality reassurance	80
3.2.2 Effects and affects on the market.....	81
3.2.3 Brands.....	82
3.3 Certification Marks.....	82
3.3.1 Assurance of quality: trade marks vs certification marks	83
3.3.2 Are eco-labels certification marks?	84
3.4 Reputation in relation with certification.....	85

3.4.1 Building a reputation	85
3.4.2 Certification to lower costs of reputation building	88
3.4.3 Certification marks and their collective reputation.....	90
4. The Eco-label Market: Competition matters	92
4.1 Eco-labels and their vertical and horizontal restraints.....	93
4.1.1 Vertical restraints, franchises and eco-labels.....	93
4.1.2 Horizontal cooperation, cartelization and eco-labels	95
4.2 Eco-label's market segmentation and product differentiation.	96
4.2.1 Product differentiation	96
4.2.2 Market segmentation.....	97
4.2.3 Anticompetitive effects of product differentiation and market segmentation.....	98
4.2.4 Differentiating Eco-labelled goods	99
4.2.5 Identifying the Eco-label's market segments.....	100
4.3 Eco-labels and tying.....	105
4.4 Eco-labels and Bundling	106
4.4.1 Eco-labels as Impure Public goods.....	107
4.4.2 Eco-labels as impure public goods: effects	108
5. Eco-label pricing and price premiums	112
5.1 Pricing strategies for eco-labelled goods	114
5.1.1 Mark-up Pricing and other strategies used in practice	114
5.1.2 Competitive and Product Line Pricing.....	115
5.2 The Eco-Premium and the price-quality relation	117
5.2.1 Eco-premiums and production costs.....	118
5.2.2 Quality-Informational Premiums.....	121
5.3 Effects of Eco-Premiums on the Market.....	122
5.3.1 Prices in a segmented market	123
5.3.2 Excessive demand for eco-labels and the effects in prices.	124
5.3.3 Over supply of eco-labels	125
5.3.4 No price differential due to high prices for the normal goods	126
5.4 Effects of eco-premiums on consumers	128
5.4.1 Effects of the eco-label on consumers beliefs.....	128
5.4.2 Effects of prices on consumers beliefs	131
6. Negative effects of Eco-labels	133
6.1 Types of greenwashing	134

6.2 Motivations for greenwashing.....	136
6.3 Economics of Greenwashing.....	137
6.3.1 The green washing model.....	138
6.3.2 Game-theoretic approach to greenwashing.....	140
6.4 The Harm of Greenwash.....	142
7. Conclusion	142

CHAPTER III

Eco-labels and Business

1. Introduction	145
2. The relation between Eco-labels and CSR	146
2.1 The Different Views on Corporate Responsibility	147
2.2 Criticisms to CSR	148
2.3 The Profitability of CR.....	149
2.4 Corporate Responsibility and Eco-labels	151
3. Corporations Motivations for Eco-labelling	153
3.1 Intrinsic Motivations.....	153
3.1.1 Altruism and Corporations.....	154
3.1.2 Internal motivations for eco-labelling: profits.....	156
3.1.3 Long run profitability.....	157
3.2 Extrinsic Motivations	158
3.2.1 A Pigouvian tax or subsidy for eco-labels	158
3.2.2 Intangible benefits	159
3.3 Reputation or image motivations for eco-labelling	160
3.3.1 Reputation and Status.....	161
3.3.2 Status and Stigma.....	162
3.3.3 Competitive altruism and costly signalling	163
3.3.4 Conspicuous conservation	165
3.4 Interaction between the incentives.....	167
3.4.1. Crowding out effects of material incentives.....	167
3.4.2 Interaction of Private incentives with Image rewards	168
3.4.3 Price dilemma	169
3.4.4 The Distortions created by social signalling.	170
3.5 Policy implications.....	170
4. Conclusion	171

CHAPTER IV

Eco-labels and Consumers

1. Introduction	173
2. Understanding the Consumer	174
2.1 Rational Behaviour and the <i>Homo Economicus</i>	175
2.1.1 Unbounded Rationality	177
2.1.2 Optimisation Under Constraints	178
2.2 Bounded Rationality and the <i>Homo Sapiens</i>	178
2.2.1 Automatic and Reflective systems	179
2.2.2 Heuristics and biases	180
2.2.3 Bounded rationality, behavioural economics and Irrationality	181
3. Bounded Self Interest and Pro-environmental Preferences.....	181
3.1 The dilemma of environmental preferences and attitudes	182
3.2 Pro-environmental preferences and behaviour	183
3.2.1 Norms and pro-environmental preferences.....	184
3.2.2 Other people's behaviour and Pro-environmental behaviour.....	187
3.3 Altruism and environmentalism.....	188
3.4 From pro-environmental intent to Pro-environmental Behaviour	189
4. Bounded information-processing capacities and eco-labels.....	189
4.1 Information and consumption.....	191
4.1.1 Filling the informational gaps	192
4.1.2 How information spreads	193
4.1.3 Assimilation of information	193
4.1.4 Framing the information	195
4.2 Cognitive Dissonance and Guilt to change behaviour	198
4.2.1 The power of guilt.....	199
4.2.2 Offsetting eco-guilt	199
5. The Role of Eco-labels in Consumers Decisions	201
5.1 Consumers decision processes	201
5.1.1 Classic Consumption Models.....	202
5.1.2 Emotionally charged decisions.....	203
5.1.3 The neuro-science behind brand recognition	203
5.1.4 Simplification of Information: The Halo Effect	204
5.2 Simplifying the Decisions	205

5.2.1 Concurring eco-labels	205
5.2.2 A single environmental score or rating	207
6. Conclusions	209
6.1 Policy Recommendations	209
6.2 Future Research.....	210
6.3 Final Remarks	210

CHAPTER V

Eco-labels and the Law

1. Introduction	213
2. Dealing with Type II eco-labels or environmental self-declarations	214
2.1 Rationale for regulating environmental advertising	214
2.2 Environmental claim guides or standards	215
2.3 Environmental Claims and Trademarks	216
3. Laws applicable to Eco-labels	218
3.1 Organisational matters of eco-labels	219
3.2 Ownership structure of eco-labels	221
3.2.1 Private eco-labels	223
3.2.2 Public eco-labels	227
3.2.3 Public-private or hybrid eco-labelling scheme.....	230
3.3 Other labelling models	230
3.3.1 The USDA Organic Label	231
3.3.2 The EU Eco-label	234
4. Possible Legal Issues with Public Eco-labels within the WTO	236
5. Eco-labels as Certification Marks	239
5.1 Legal Rationale for Certification Mark Regulations	239
5.2 Certification Marks: Legal Implications	241
5.2.1 Certification Marks' guarantee function	241
5.2.2 Use of the certification mark: contract.....	242
5.2.3 Responsibility of the certifier	242
5.2.4 Differences between certification marks as intellectual property and deceptive advertising	243
5.3 Application for a Certification Mark.....	244
5.3.1 Absolute and relative grounds for refusal.....	244
5.3.2 The Certification Mark Regulations	246

5.3.3 Invalidation and Revocation of certification marks	248
5.3.4 Registration of Certification Marks in countries that do not contemplate them.....	249
5.3.5 Uniformisation of Laws	250
5.4 Certification Trademarks in Australia.....	253
6. Conclusions	254

CHAPTER VI

The Law and Economics of Eco-labels

1. Introduction	257
2. Eco-labels and their Law and Economics Rationale.....	257
2.1 Eco-labels and Market Failures.....	258
2.1.1 Information Failures	259
2.1.2 Externalities and Public Goods	261
2.2. Eco-labels and Government failure	261
2.3 Eco-labels: an Initial Assessment.....	263
2.3.1 The Price Mechanism.....	264
2.3.2 Eco-labels and the production of public goods	266
2.3.3 Concurrence of eco-labels and claims: too much information	267
2.3.4 Eco-labels and greenwashing: the informational conundrum.....	270
2.4 Greenwashing: different problem, different law?.....	273
2.5 Scope for Law in Eco-labelling	274
3. Possible Regulatory Designs for Eco-labels	276
3.1 Law, Regulation and Intervention.....	276
3.1.1 Defining Regulation.....	277
3.1.2 Regulation and Law	278
3.1.3 Regulation and Intervention	278
3.2 Role of Government	280
3.2.1 Free Market Environmentalism.....	280
3.2.2 Role of government in Free-Market Environmentalism	281
3.3 Co-regulation and Smart Regulation	282
3.3.1 Co-regulation	283
3.3.2 Smart Regulation	286
3.4 Types of regulatory instruments	287
3.4.1 Command and Control Regulation.....	288

3.4.2 Self-regulation	288
3.4.3 Voluntarism.....	289
3.4.4 Education and information Instruments	289
3.4.5 Economic Instruments.....	290
4. A Smart Regulation for Eco-labels	292
4.1 The Basic Regulatory Pyramid Strategy	293
4.2 The Eco-label's dynamic instrument pyramid.....	295
4.3 Eco-label's tip-less pyramid and the Dual role of Government	298
4.3.1 The Role of Government in Certification	299
4.3.2 The Role of Government in Environmental Claims	300
4.4 Trade or environment: government dilemma	300
5. Conclusions	302

CHAPTER VII

The Mexico-US Tuna Conflict and the Role of the 'Dolphin-Safe' Eco-label

1. Introduction	305
2. The Core of the Conflict	305
3. The Development of the Conflict.....	309
3.1 The 1980s and The First Embargo	309
3.1.1 US Tuna Market Characteristics up to 1990	310
3.1.2 The Environmentalists' Background.....	311
3.2 The 1990s	311
3.2.1 The Marine Mammal Protection Act	311
3.2.2 The Inter-American Dolphin Conservation Program.....	315
3.2.3 The Americanisation of the Problem.....	315
3.3 The private and public 'dolphin-safe' policy in the US.....	316
3.3.1 Starkists' 'dolphin-safe' Programme	316
3.3.2 The US 'dolphin-safe' Policy	318
3.3.3 The GATT Procedure and the Dolphin Protection Consumer Information Act.....	318
3.3.4 After-math of the 'dolphin-safe' Policy	319
3.4 The Last Decade	320
4. The Last WTO Dispute.....	322
4.1 The Core Arguments	323
4.2 The Panel's Report.....	324

4.3 The appeals	326
4.4 The conclusion of the Case.....	328
4.5 The Impact of the case on eco-labels	328
5. The 'dolphin-safe' labelling policy and eco-labels	329
5.1 The 'dolphin-safe' labelling policy's effectiveness	330
5.2 Earth Island Institute 'dolphin-safe' and the role of Environmental Activists	331
5.3 Taking Credit of Mexico's Environmental Improvements	332
5.4 The limits of the 'dolphin-safe' labelling policy	333
6. Conclusions	334

Chapter VIII

Policy Recommendations

1. Introduction	337
2. Regulating Environmental Claims.....	338
3. Enhancing Certification Marks.	339
3.1 Pre-authorisation of the criteria	339
3.2 The creation of a universal symbol for registered certification marks	341
3.3 Implementation of this system in other legal systems.....	341
3.4 Recognition and homologation of foreign eco-labels	342
4. Deterring greenwash.....	343
5. Conclusions	344

CONCLUSIONS

1. Overview	345
2. Main Contributions and Findings	346
3. Further Research	349
4. Final remarks	350

LIST OF REFERENCES	353
SUMMARY	367
SUMARIO	369

LIST OF ABBREVIATIONS

ASA	Advertising Standards Authority
AIDCP	Agreement on the International Dolphin Conservation Program
ATA	American Tuna-boat Association
ACCC	Australian Competition and Consumer Commission
BCG	Boston Consultancy Group
CFC	Chlorofluorocarbon
CAC	Command-and-control regulation
CSR	Corporate Social Responsibility
CR	Corporate Responsibility
DSB	Dispute Settlement Body
DCIA	Dolphin Consumer Information Act
EII	Earth Island Institute
ETP	Eastern Tropical Pacific Ocean
EMS	Environmental Management Systems
EU	European Union
EEZ	Exclusive Economic Zone
FLO	Fair-trade organisations
FDA	Food and Drug Administration
FSC	Forest Stewardship Council
GATT	General Agreement on Tariffs and Trade
IUU	Illegal, Unregulated and Unregistered vessels
IP	Intellectual property
IADCP	Inter-American Dolphin Conservation Programme
IATTC	Inter-American Tropical Tuna Commission
IDCA	International Dolphin Conservation Act
ISEAL	International Social and Environmental Labelling Alliance
ISO	International Organisation for Standardisation
LEED	Leadership in Energy and Environmental Design
LCA	Life Cycle Analysis
LOHAS	Lifestyles of Health and Sustainability
MSC	Marine Stewardship Council
MSI	Multi-stakeholder sustainability initiatives
NOAA	National Oceanic and Atmospheric Administration
NGO	Non-Governmental-Organisation

NAFTA	North-America Free Trade Agreement (NAFTA)
OECD	Organisation for Economic Co-operation and Development
OFPA	Organic Foods Production Act of 1990
PEB	Pro-environmental behaviour
PPM	Process and Production Method
TBT	Technical Barriers to Trade Agreement
MMPA	The Marine Mammal Protection Act
MSC	Marine Stewardship Council
WIPO	The World Intellectual Property Organisation
UN	United Nations
UNCTAD	United Nations Conference on Trade and Development
UNESCO	United Nations Education, Scientific, and Cultural Organisation
UNEP	United Nations Environmental Programme
UNCED	United Nations United Nations Conference on Environment and Development
US	United States
USTPO	United States Patent and Trademark Office
USDA	United States Department of Agriculture (USDA)
WIPO	World Intellectual Property Organisation
WTO	World Trade Organisation
WWF	Worldwide Fund for Nature or World Wildlife Fund
WTP	Willingness To Pay

INTRODUCTION

1. Background

By late 2012, the Ecolabel Index¹ had 432 eco-labels on record. In the first quarter of 2010, the same Index measured only 340. This reflects an increase in the interest in eco-labelling in the last couple of years. While it is unclear why this sudden interest in eco-labelling, it is true that markets for certified goods have become more visible and relevant in some sectors. For instance it has been reported that up to 20 percent of world exports of bananas are certified. Considering that in 2008 the total value of international banana trade was estimated at US\$ 5.8 Billion per year, 20 percent is quite significant. Certified coffee represents 17 percent of global production. In the US alone the estimated value of the coffee market is of US\$ 19 billion per year, which again makes certified coffee quite important. However, in other sectors such as forestry, fisheries, cocoa, cotton, and tea certification is relatively small. In the forestry sector, the Forest Stewardship Council (FSC) has certified the equivalent of 5% of the world's productive forests, which is relatively small, but it is the equivalent of 125 million hectares of forest over 80 countries. Moreover the value of FSC labelled sales is estimated at over US\$ 20 billion in 2008. Similarly, the Marine Stewardship Council (MSC) for certified sustainable seafood is estimated to have a value of US\$ 1.5 Billion. MSC represents only 7% of the total global landings of marine fisheries (fish taken out of the water on to land), which is equivalent to 5.25 million tons of fish. These examples show that while the numbers seem relatively low, the absolute impact is still very relevant, because of the scale, the scope and their value.²

These products are different from average fish, timber, tea, bananas or coffee because they have environmental and social attributes. These attributes however are unobservable, for both consumers and marketeers (upstream producers, retailers and other intermediaries). The consumer will not be able to extract the information it needs about the product on its own. Hence, there needs to be an external instrument that conveys such information. This external instrument is certification. Certification's role is to provide proof that the attributes that a good claims to have is really there. Without certification the market would not even

¹ The Ecolabel Index is a global directory for eco-labels.

² Data from: **Certification and roundtables: do they work?** WWF review of multistakeholder sustainability initiatives, WWF September 2010. As well as from: **Toward Sustainability, The Roles and Limits of Certification**, Final Report, June 2012, prepared by the Steering Committee of the State of Knowledge Assessment of Standards and Certification.

exist, as the consumers will be unaware of the attributes or goods they cannot observe. Therefore, if there is a market for environmental attributes or environmental goods, there needs to be certification otherwise the market will not function, or it would not even exist. There are two ways to prove that a good is certified: with a certificate or a mark. In the case of consumer goods, the mark is more appropriate as it can be placed on the product for the consumer to see. These marks are called certification marks, and in the environmental arena they are deemed eco-labels.

In simple terms, an “eco-label is an independently verified, on-pack label [mark] intended to communicate environmental and/or social performance to consumers. It’s underlying purpose is to make production more visible.”³ In essence eco-labels are very simple tools that communicate or inform consumers about certain desirable attributes of a good, which will aid consumers decide whether to buy it or not. However, overtime eco-labels have been regarded as regulatory tools. Hence they are also expected to incentivise and promote environmental protection. In theory, eco-labels allow “...consumers to “vote” with their wallets by selecting certified goods and services over other, less desirable alternatives, thus providing incentives for industry to produce those goods and services.”⁴ Hence there is an underlying assumption that consumers find environmental and social attributes (or general sustainable attributes) desirable, thus they are willing to pay for them, at a premium price. All these assumptions and expectations look well in paper, however the reality is quite different. For instance, in many cases this price premium, which is the key motivator for industry to engage in sustainable behaviour is not always present and when it is, it might not be very large. For example, coffee can command up to 10 cents per pound; tea’s premium can reach up to US\$ 1.3 per kilo; the premium for cocoa can reach 29 cents per kilo; and, the premium for bananas is of US\$ 1 per box⁵ (if it is organic the premium can go all the way to US\$ 2.30 per box). Other cases, such as fish do not even command premium. This can be extremely puzzling, as this premium is supposed to be the primary motivator for firms to seek voluntary certification. If such premium is not present or is small, then premium prices are not what incentivises the behaviour. Another problem with this model is that it is assumed that

³ SustainAbility. **Signed, sealed and delivered? Eco-labels, trust and behaviour change across the value chain**, White Paper, March 2011, p. 2

⁴ Environmental Law Institute. **Harnessing consumer power. Using Certification systems to promote good governance.**

⁵ The boxes are normally 18.4 kilos each.

consumers have an interest in environmental attributes. While it is true that there is consumer preference for environmental goods; it is unclear whether it is enough to provide the incentives needed to obtain the environmental impacts that are expected. This is because it is estimated that only 15% of consumers are truly committed to environmental causes. Notwithstanding these observations, eco-labels have still managed to evolve and multiply over a wide range of sectors and countries. An increase of eco-labels can be considered positive, as more eco-labelled goods means better environmental performance. However, it has not been without its drawbacks.

Eco-label's drawbacks can be reflected on both the market and the environment. On the one side, an increase in demand of certain environmental attributes lead to an increase in production of environmental attributes. An increase in production can be considered as a drawback because such increase, might imply an increase in pollution even if it is 'environmentally friendly'. It has to be considered that maybe producing the normal good at a smaller scale is a better solution. In addition, because it is voluntary certification, firms will opt for the environmental attribute that is easier to achieve or is trendy at the moment. Then other more pressing matters might be overlooked. Furthermore, this improvement in one environmental attribute might distract from a deterioration of another. Notwithstanding these undesirable consequences, the most harmful of the eco-labels side effects is opportunistic behaviour. The unobservable attributes of a product are called credence attributes. The problem with credence attributes is that unlike other attributes, that are observable either instantly or through experience, the normal learning mechanisms do not work. Other types of goods allow for reputation building so a consumer can learn a product's quality over time and then create brand or product preferences. This does not occur with credence goods, even if they have a mark. *Credence attributes permit opportunistic behaviour because the buyer cannot recognise the degree of truth of the statement by the seller and has no chance of verifying the product's 'green' attributes through experience.*⁶ This opportunistic behaviour is what is commonly called 'greenwash'. In theory eco-labels have the potential to tackle greenwash, as they provide credible information about environmental attributes. However, the problem with greenwashing is that it undermines the credibility of the entire eco-labelling mechanism. A mechanism that relies almost entirely on the mark's capacity to convey credibility. This creates a scenario similar to Akerlof's 'market for lemons', in which the

⁶ Helmut Karl and Carsten Orwat, **Economic aspects of environmental labelling**

market may break down because there will be too much greenwash. Real or truthful eco-labels will not be able to establish themselves in the market, hence they will be forced to leave.

2. Research Relevance

In June 2012 the Rio +20 United Nations Conference on Sustainable Development (or simply Rio +20) took place. Its predecessor the Rio Earth Summit of 1992 (or the Rio Summit) had important results regarding environmental policy, hence by 2012 many results were expected. In anticipation to this summit, the academic, environmental and political spheres became interested in evaluating, analysing, improving or even creating environmental policy tools. This environmental-policy hype placed much of its attention on corporate sustainability. Based on the idea that engaging private-parties into the sustainability agenda is one of the best strategies. During the course of this analysis, it became clear that many of the policy tools used and promoted since the Rio Summit were never evaluated or even followed. Hence, it was not possible to make any concrete recommendations as there was practically no information available. Therefore, in the last years academics, Non-Governmental-Organisations (NGOs), governments and other entities have focused their attention into finding tangible results of tools such as eco-labelling, environmental ratings, corporate reporting, sustainable branding, private-public partnerships, sponsorships, and all the array of corporate environmental strategies that are in place.

In sum, these events created a huge gap in the economics, legal and policy arena. In the early 1990s around the Rio Summit the same type of hype was created regarding sustainability-tools. The main difference is that in the 1990s the tools were new, their effects were unknown and the community was still very sceptical. The discussions were oriented on whether they would work, if there was in fact a market or how and who would implement those tools. However, 20 years later the scenario changed drastically, eco-labels and other corporate sustainability tools became popular, and it is only now that their real effects can be observed. Hence, the studies from twenty years ago serve as a mere stepping stone for the type of analysis that can be done today. What once were predictions have now become a reality. Hence, this work attempts to take advantage of this situation and actualise the theory behind eco-labels specifically.

3. General Scope of Research

This work is focused on answering whether eco-labels call for legal intervention. This is the core of the work. Through out this research other questions will appear. These specific questions will aid to build on the scope and form law can take to improve eco-labels. In the end, the expected result is to see how the legal and economic status quo of eco-labels can be improved. This will be achieved by using different insights from different disciplines, specifically Law and Economics. In short the central research questions are: *Do eco-labels call for legal intervention, and if so, what type of intervention would be the most appropriate?*

This is not the first study on eco-labels that has been done recently. Due to the corporate sustainability hype, many articles, dissertations, case-studies and large research projects have emerged in recent years attempting to provide new insights into eco-labelling. This work, presents the unique advantage of being within the Law and Economics field. Law and Economics uses economic insights and methodologies to better understand the Law. Hence, this Law and Economics approach to eco-labelling gives some very useful insights that other disciplines would not be able to attain.

This research targets a wide audience. First, policy makers in the environmental, trade and consumer protection areas will find some useful insights. Specifically, towards the conclusion where the recommendations of how the governments should deal with eco-labels are addressed. Another target are businesses. Business can be considered producers of the eco-labelled good, the eco-labelling entity itself, retailers and other intermediaries. The research addresses organisational issues, incentives as well as a clear understanding of consumers. Hence, it will be possible for them to understand consumers so that their environmental efforts are better capitalised. The eco-label industry will be able to use this research as a guideline of their roles and duties, which will hopefully improve their performance. And stating the obvious, this research is also relevant for the academic community from different areas. For those that study corporate environmentalism from a scientific perspective, it will be useful to see how this research translates their findings into useful policy recommendations. On the other hand, social sciences and in particular law and economics, will benefit from this classic analysis. This has been done by understanding the market and using economic models as tools, not as the purpose of the research. It will be

shown how the economic insights clearly reveal the problems of the market and how those insights can improve the law.

4. Boundaries and limitations

From all the corporate sustainability tools, eco-labels were chosen because they are the most salient. In addition, they involve different actors such as governments, businesses and consumers which allows for a richer analysis. This is because it allows eco-labels to be analysed from many perspectives. Moreover, other sustainability tools are not as widespread or are very recent, hence analysing them would have proven complicated and maybe even precipitated. Nonetheless, many of the issues addressed in the research can be applied to other corporate sustainability tools.

This research is focused on consumer goods. The analysis is done with on-pack marks in mind. This is because they are what the market can actually observe. As it will be seen in the research, eco-labels are one of the many available corporate sustainability tools. However, not all of them result in on-pack marks; hence their impact is quite different. Eco-labels and other tools might have things in common, such as compliance with standards, verifications and even the granting of certificates. However, as it will be shown, the marks or labels themselves are crucial for the functioning of the eco-label market, it is not just the certification. In addition, while the thesis refers to all eco-labels, it was written with the most salient eco-labels in mind. These eco-labels are Rainforest Alliance, Forest Stewardship Council, Marine Stewardship Council, Fairtrade International and UTZ Certified. There are many studies and much information about these eco-labels, hence it made the research easier. Nonetheless, it is acknowledged that not all eco-labels and certification schemes are of such scale and importance. Smaller eco-labels and accredited certifiers (that normally work behind-the-scenes) are taken into consideration. In a similar note, this research does not consider organic labelling as an eco-label. While, in a broad sense organics are a type of eco-label, they differ from a regular eco-label because they are perceived to be healthy. This little detail gives organics a completely different set of incentives and allows them to reach into other markets. This is shown with the fact that the price-premiums for organics is very well established and can be very high, whereas eco-labels' premiums are still uncertain. However, there are many similarities with eco-labels. This is the reason why some literature, references and examples will be occasionally used. Finally this research will focus on

environmental attributes. Nonetheless, it has to be acknowledged that eco-labels are not exclusive to the environmental field, as they also refer to general sustainable practices which include social and economic factors as well. Most of the analysis of the research will be applicable to general sustainable practices, and sometimes it will be specifically pointed out.

From the legal perspective, it is important to note that this research is not meant to be a comparative law study. It analyses eco-labels as market or policy tools. Hence, no distinction will be purposely made between different legal systems; though it will be seen that different legal systems have different approaches. These will be duly analysed with the purpose of seeing what laws and regulations can be applied to eco-labels, and what alternatives there are at hand. The analysis will be kept at a general level, where possible. Hence, the results of this research could be implemented in any system, precisely because the analysis is on the tool itself. In a related topic, eco-labels in the international trade system are only discussed briefly. This is because at the moment there is not a clear standing from the World Trade Organisation or any other body, on eco-labels. It will be seen, even though there have been cases taken before the WTO' Dispute Settlement Body, such cases are so particular that it is not possible to make general inferences for other eco-labels. Furthermore, International Trade has very specific definitions and literature that was not taken into consideration. While it is possible to analyse eco-labels from such point of view (and it has been done) this research does not address it in depth and does not use the terminology and tools of that area.

5. Structure of Research

To address the underlying question of this research, it is necessary to understand the story behind eco-labels. The stories will be told from different perspectives. Each chapter of this thesis will address a particular perspective. By the end, all the information and insights will be taken into consideration to answer the research questions.

The first chapter, *Defining Eco-labels and Eco-certification*, is the base of all the thesis. Its main purpose is to limit and define eco-labels. To do so, it first goes to the origins of eco-labels and shows how they have evolved over the last 30 years. This will be seen by analysing the different definitions that have appeared over time. In the end, the definition that will be used for the research will be set. In addition, this chapter will also address eco-

labelling. Eco-labelling refers to the mechanism that is created due to the use of eco-labels. In short, when a consumer buys an eco-labelled good at a premium price, it sends a signal to businesses. Businesses observe this signal and are incentivised to obtain the certification, which is a substantial investment. Business will have to change their production to more sustainable ways to be able to comply with the certification criteria. Hence, these changes will lead to better environmental practices that will benefit the environment. In other words, the more consumers are interested in eco-labels, the more incentives businesses will have to obtain certification, which will overall lead to improved environment quality. In addition, this chapter will also make a classification and typology of eco-labels, which make it easier to identify the eco-labels addressed in the research. Finally, a brief explanation of other corporate sustainability tools will be made.

The second chapter, *Eco-labels' place in the market*, makes an extensive economic analysis of eco-labels. It starts with information economics, as eco-labels are information-tools. By using information economics certain potential market failures will be observed. Furthermore, the role of certification will be determined. In the analysis of eco-labels as information tools it becomes obvious that eco-labels share similar traits to trademarks or brands. Following this idea eco-labels are analysed from an Intellectual Property perspective. This analysis is what reveals that eco-labels are in reality certification marks, which is a crucial finding, as certification marks have Intellectual Property rights. In addition to informational insights, this chapter also addresses eco-labels from a competition perspective. Here it will be seen whether eco-labels enhance or hinder competition. To do so, the market will be analysed, including the different market segments. Where there are market segments, there will always be product differentiation, hence the eco-labels standards will also be addressed. In addition, eco-label pricing and the price-premiums will be addressed. Finally the negative effects of eco-labels will be addressed. Specifically the economics of greenwashing will be analysed. This section will show how easy it is to engage in greenwashing as well as getting away with it.

Chapter III, *Eco-labels and business*, attempts to find the incentives of businesses to engage in pro-environmental behaviour, that will allow them to obtain eco-labels. The interest of this chapter is the fact that eco-labels are voluntary, hence they imply an over-compliance from the mandatory standards. To obtain eco-labels firms are expected to go beyond and above what they are legally required. In addition to compliance to the eco-labels criteria,

certification is costly in itself. It is this puzzle that allows this chapter to go deeper into the firms incentives. It addresses Corporate Social Responsibility (CSR) as it is a discipline that normally addresses these type of issues. However, it will be seen that eco-labels are a small part of CSR. In addition, many times CSR is more related to Industrial Organisation and refers to management and other areas which are out of scope. When it comes to explaining the incentives, CSR simply suggests that it is altruism. However, it will be stressed that firms cannot be altruistic as they are not people. Only people can be altruistic, not firms. Firms may have altruistic type behaviours, such as doing good for others. However, the purpose will always be profits. Therefore if a firm engages in pro-environmental behaviour it is because it sees a benefit in doing so. Such benefits are likely to come in the form of increased market share, reputation or salience, which are all very desirable. These motivations have to be considered before governments decide to intervene, as interventions may alter motivations and produce undesired or unforeseen consequences.

Chapter IV turns to the demand of eco-labels, *Eco-labels and consumers*. This chapter is in essence a summary of behavioural approaches to consumer's decision making and pro-environmental preferences. It argues that human rationality is not always what economists suggest or want it to be. Nonetheless, by applying psychology, neurology and other behavioural sciences much can be understood about consumers and their behaviour. For example, certain mistakes, biases and other 'anomalies' are actually predictable. It will be seen that eco-labels and other tools harness these biases and errors making them more effective. In addition this chapter will also analyse what motivations or incentives individuals have to engage in pro-environmental activities. It will be seen that reputation and other image or social concerns are crucial for this type of behaviour.

Chapter V changes the direction of the previous chapters as it addresses the law: *Eco-labels and the Law*. This chapter addresses how the law handles eco-labels. While there is no specific law that addresses eco-labels as such, there are other regulations that are potentially applicable to them. For instance, deceptive marketing laws could potentially apply to environmental claims and labels. In some countries, they have specific guide-lines for environmental claims. However, the circumstances change when certification is involved. In addition, it will be seen that eco-labels may have different types of owners, which has different consequences. For example, if the owner is an NGO it might be heavily monitored by the State, whereas if it is for-profit it will not. On the other hand, and more importantly

public eco-labels might have their share of unintended consequences, as they risk being considered a technical regulation, which is a protectionist measure according to the WTO. Moreover, this chapter will address the legislation in the countries where certification marks are regulated within the Intellectual Property laws. These laws will be duly analysed as they are the only ones that refer directly to the matter at hand. Their characteristics and the procedures will also be addressed as they provide valuable insights on what governments already deem relevant.

Chapter VI is, the *Law and Economics of Eco-labels*, as its title suggests, this chapter is in charge of answering the research questions. This chapter is divided in to two parts. The first part goes through rationales for regulating eco-labels. In this sense, the different market failures will be pointed out as well as the legal failures (lack of law specifically). The second part of the chapter will deal with how the law of eco-labels should be designed to improve the status quo. This section uses the insights and principles of smart regulation. By doing this the optimal eco-labelling regulatory strategy will be obtained.

The Mexico-US Tuna Conflict and the Role of the 'Dolphin-Safe' Eco-label will be analysed in Chapter VII. This chapter offers a complete analysis of the Dolphin-Tuna case between the United States and Mexico. This case was brought to the WTO in 2008 and it was only resolved in May 2012 (though the enforcement and compliance from the parties is due only in June 2013). Which makes this analysis one of the first on the subject. Nonetheless, the chapter has the purpose of illustrating by means of this case the impact of eco-labels in international trade. The 'dolphin-safe' eco-label was one of the original eco-labels and is one of the few eco-labels that has reliable data regarding its effects (because of all the law-suits). Moreover, it is a label that has proved effective in protecting dolphins, hence it is normally used as a positive example of eco-labelling. In addition, the fact that it was recently taken to the WTO means that there is now legal precedents on eco-labels, which in cannot be ignored. Moreover, it provides a nice comparison between two countries with different regulatory approaches towards the same problem. This will bring up some interesting debates regarding the effectiveness of voluntary tools in pressing environmental matters, such as biodiversity conservation.

Chapter VIII is a brief chapter that provides a series of specific *Policy Recommendations*. The purpose of the chapter is to offer a series of changes or adaptations to the current

system that is aimed at increasing the credibility of eco-labels. It takes as the base the current regulation for certification marks. Finally, the conclusions of the work will be summarised. In the conclusions, the main findings of the work will be discussed. In addition, it sets several proposals for further research.

CHAPTER I

Defining Eco-labels and Eco-certification

1. Introduction

The purpose of this chapter is to introduce and limit the topic of eco-labels and eco-labelling. At first glance, eco-labels do not seem very complicated. In fact, the idea of eco-labels is quite simple: it is a mark that conveys information about environmental aspects of a particular good or service. However, for the purpose of this research this idea of eco-labels is too simple. Hence, before embarking into finding the scope of law in eco-labelling, it is imperative to have a strong background and clear understanding to avoid confusion. This chapter is mostly descriptive. Its purpose is to layout the origins, evolution, scope and functioning of eco-labels. To do so it will start by presenting the origins of eco-labelling. Subsequently, the focus will shift to defining eco-labels and eco-labelling. This part will show how eco-labels and eco-labelling have been defined and described by academics and policy makers over time, resulting in an actualised definition that will be the basis of this research. Closely related to the definition of eco-labels and eco-labelling is their goals and their criteria. In addition, a detailed classification and typology of eco-labels will be presented based on the most commonly used concepts in academia and policy arenas. This chapter will also give a brief introduction to certification. It is imperative to make the link between eco-labels and certification at this point, as it will become a central point in further chapters. Finally, a very brief analysis of other corporate environment-information tools is provided. This is because, there are many types of environmental instruments that are similar to eco-labels, but are not eco-labels. Hence, it is possible to use the present analysis for other tools which might share characteristics of eco-labels.

2. Development of Environmental Labelling

Eco-labelling is a fairly recent phenomenon. In 1977 Germany created the first eco-labelling programme and by today there are over 432 eco-labelling active programmes around the world.¹ This section will address the evolution of eco-labels by following the different environment-related international summits that started in the 1970s sponsored by the United

¹ Eco-labels considered in the 'Eco-label Index' as consulted on November 2012.

Nations and other international organisations. This chronological recollection will shed light on how different policies have affected eco-labels and has shaped them into what they are today. Hence, it can be argued that eco-labels have evolved from the 'original' eco-labels into the 'new generation' eco-labels.

2.1 The First Earth Summit and the Seventies

The 1970s was a decade characterised by the active involvement of society in political matters. Such is the case for environmentalism. In spring 1970 the first Earth Day² was celebrated in the United States. Its purpose was to raise awareness of the environmental degradation caused by human activities. Shortly after, the United Nations Conference on the Human Environment,³ dealt with the widespread concern for the human environment. Out of this conference emerged the United Nations Environmental Programme (UNEP). The main objective of this programme is to assist countries in developing and implementing environmentally sound practices and policies. In October 1977 the first intergovernmental environmental education conference was held in Tbilisi, Georgia (USSR). This conference was organised by the UNEP in collaboration with the United Nations Education, Scientific, and Cultural Organisation (UNESCO). The results of this conference, known as the Tbilisi Declaration, are mainly the framework, principles and guidelines for environmental education at different levels.

The Tbilisi Declaration suggests that environmental education has the objective to create patterns of behaviour towards the environment. Furthermore this education should be targeted to all non-specialised public, whose daily behaviour has decisive repercussions on the preservation or deterioration of the environment. Finally, it endorses the participation of the public. In order for the public to take responsibility for their actions, governments would need to provide skills and tools to distinguish the environmental consequences of their actions. Consumers should be aware of the environmental consequences of their decisions and should be well informed about the best available environmental decisions.⁴

² US Senator Gaylord Nelson conceived the idea of Earth Day after visiting an oil spill in Santa Barbara. Senator Nelson proposed Earth Day as a teach-in (were common for rally's against the Vietnam war in the 1960's) to be held on April 22, 1970 in all Colleges and Universities through out the United States. To this first Earth Day, over 20 million people participated.

³ Stockholm, June 1972.

⁴ See: <http://www.gdrc.org/uem/ee/tbilisi.html> (as consulted on November 25, 2010).

2.2 The Blue Angel and the following years

Following the tendency of the United Nations, Germany took the lead in creating and implementing such tool. In 1978 the Blue Angel (Der Blaue Engel) eco-label was created on the initiative of the Federal Minister of the Interior and was approved by the Ministers of the Environment (both at Federal and State levels). It was conceived as a market-conform instrument of environmental policy designed to distinguish the positive environmental attributes of products and services. Also, this instrument would be voluntary which would enhance competition of environmentally friendly products. This product-related environmental tool would achieve the goals of consumer participation and orientation towards more environmentally aware decisions, set by the UNEP. Furthermore, the design of the label is based on the UNEP logo. This is a clear indicator of the alignment the German new instrument with the UNEP's proposals of the time. Also it shows a certain formality that the "new" generation of eco-labels do not share.



Figure 1. The logos of the UNEP and the Blue Angel.⁵

During the 1980s public awareness about the state of the environment intensified. Products proudly presented their environmental attributes such as "recyclable", "CFC-free", "biodegradable" or simply "nature friendly". In 1985 only .5% of products in American markets were considered green, by 1990 this number had increased to 9.5%, almost 20% more. Consumers wanted to contribute in protecting the environment and were willing to do so through their everyday purchases.⁶ This was supported by surveys, which indicated that up to 80% of consumers were willing to pay up to 10% more for an environmentally friendly

⁵ It can be observed that the Blue Angel uses the UNEP symbol as part of the logo, hence it makes it look 'official', which is a trait 'new generation' eco-labels do not share.

⁶ In 1988, *The Green Consumer's Guide: From Shampoo to Champagne: High-Street Shopping for a Better Environment* by John Elkington & Julia Hailes was a best seller, translated into 17 languages.

product.⁷ In this sense, eco-labels were very well suited tools to provide consumers with the information they required to make their contributions to the environment. In 1988 Canada and Japan issued their own eco-label. By 1991 Norway, Sweden, Finland (in a common programme), France, Portugal, Austria and New Zealand had plans for issuing their own eco-labels as well.

The apparent change in consumer attitude that characterised the late 1980s and early 1990s was the element that allowed the idea of eco-labels to spur. At the time the OECD viewed eco-labels as a “voluntary economic instrument which promotes more environmentally friendly purchasing on the side of the public and a precautionary approach on the side of the industry.”⁸ They were a promising environmental initiative and the OECD was very optimistic about them. Jim Salzman, co-writer of the first OECD documents regarding eco-labels, describes how governments and environmental groups viewed eco-labels “as powerful, high-profile, low-cost, market-based instruments to promote environmental protection.” At this time the trend was to move past the traditional command-and-control measures imposed by governments towards a model of market governance, self-regulation and new environmental policy instruments.⁹ Furthermore, the fact that they were voluntary was very attractive because then it would fall into “soft” policy instruments, which complement and enhance the traditional environmental regulation (command-and-control).

2.3 The Rio Earth Summit and Agenda 21

Rio de Janeiro, June 1992 was the venue for the United Nations Conference on Environment and Development (UNCED). “The central focus was the question of how to relieve the global environmental system through the introduction to the paradigm of sustainable development. This notion emphasises that economic and social progress depend critically on the preservation of the natural resource base with effective measures to prevent environmental degradation.”¹⁰ From this conference several important documents came out. The first is the Framework Convention on Climate Change, which in turn led to the

⁷ Jim Salzman. **Green Labels for Consumers**, The OECD Observer, 1991, p. 29.

⁸ OECD, **Environmental Labelling in OECD Countries**, 1991, p. 11.

⁹ Ralph E. Horne. **Limits to labels: the role of eco-labels in the assessment of product sustainability and routes to sustainable consumption**, International Journal of Consumer Studies, No. 33, 2009.

¹⁰ http://www.eoearth.org/article/United_Nations_Conference_on_Environment_and_Development_%28UNCED%29,_Rio_de_Janeiro,_Brazil as seen 8:00pm 19 march 2011.

Kyoto Protocol. The second, is the Convention on Biological Diversity (normally referred to as Biodiversity Convention) which is a binding agreement by which countries agreed to conserve and use in a sustainable manner their biodiversity. It also has in its goals the fair and equitable use of benefits from resources. This last point is relevant because within this framework the concepts of fairness and equity stand in pair with environmental concerns. This means that sustainability must include indigenous communities and their local traditions in matters regarding their natural biodiversity. When it comes to sustainable development social matters are just as important as environmental ones. The natural environment is not the sole purpose of sustainable development. This is one of the key achievements of the Earth Summit, was precisely positioning the term sustainability in the agenda right next to environment.

Another important document produced in the Earth Summit is the 'Agenda 21'. Agenda 21 is the international plan of action to sustainable development. It is supposed to be implemented and adapted at local levels by governments, businesses and communities. Therefore it mainly outlines key policies and strategies for achieving sustainable development. It attempts to define a balance between production, consumption, population, development, and the Earth's life-supporting capacity.¹¹ Agenda 21 explicitly identified environmental labels as a way to encourage consumers to adopt more sustainable consumption patterns in their daily activities. It states that governments, industry and other groups 'should encourage expansion of environmental labelling and other environmentally related product information programmes.' Also, it suggests that these entities ought to support the informed consumer by providing accurate information about the health and environmental *impact* of products. Finally, it stresses that governments should increase the demand for environmentally sound products as well as promoting the environmentally sound

¹¹ http://www.eoearth.org/article/United_Nations_Conference_on_Environment_and_Development_%28UNCED%29,_Rio_de_Janeiro,_Brazil as seen 8:00pm 19 march 2011.

'use' of products.¹² Meaning that consumers should also be aware of their responsibilities towards the environment, e.g. consumers should wash their clothes with cold water, if not the efforts of producers to make detergents that work in cold temperatures become irrelevant.

2.4 World Summit on Sustainable Development

Agenda 21 proposes a review of its progress on a 10-year basis. Consequently, in 2002 the Summit took place in Johannesburg, South Africa. It is known as the World Summit on Sustainable Development (WSSD). It had the purpose to review Agenda 21 and adopt new strategies by identifying new targets and evaluating the previous ones. An interesting difference is that in its plan of implementation it stresses constantly that 'developed' countries must to guide and aid 'developing' nations so that they too become integrated in the sustainable development schemes. In this sense, Article 15 of the Implementation act suggests "All countries should take action, with developed countries taking the lead, taking into account the development needs and capabilities of developing countries, through mobilisation, from all sources, of financial and technical assistance and capacity-building for developing countries." These actions could consist on developing 'awareness-raising' programmes for all relevant segments of countries, such as the youth. Specifically, it states that countries could, "e) Develop and adopt, where appropriate, on a voluntary basis, effective, transparent, verifiable, non-misleading and non-discriminatory consumer information tools to provide information relating to sustainable consumption and production, including human health and safety aspects. These tools should not be used as disguised trade barriers". One of eco-label's main criticisms has always been that they might disguise non-tariff trade barriers. Up today this issue has not been solved, it is true that some eco-

¹² Section I. Social & Economic Dimensions, Chapter 4, Changing Consumer Patterns.

4.21. Governments, in cooperation with industry and other relevant groups, should encourage expansion of environmental labelling and other environmentally related product information programmes designed to assist consumers to make informed choices.

4.22. They should also encourage the emergence of an informed consumer public and assist individuals and households to make environmentally informed choices by:

(a) Providing information on the consequences of consumption choices and behaviour so as to encourage demand for environmentally sound products and use of products;

(b) Making consumers aware of the health and environmental impact of products, through such means as consumer legislation and environmental labelling;

(c) Encouraging specific consumer-oriented programmes, such as recycling and deposit/refund systems.

Section II. Conservation and Management of Resources for Development. Chapter 9 Protection of Atmosphere.

9.12 Governments at the appropriate level, with the cooperation of the relevant United Nations bodies and, as appropriate, intergovernmental and non-governmental organisations, and the private sector, should: (I) Establish or enhance, as appropriate, in cooperation with the private sector, labelling programmes for products to provide decision makers and consumers with information on opportunities for energy efficiency.

labels have posed as a trade-barrier, but not all of them are considered as such. This proposal gives line to what is expected and needed from an eco-labelling system: on a voluntary basis, effective, transparent, verifiable, non-misleading and non-discriminatory

2.5 Towards Rio+20

In 2012 the Rio+20 or the 'Earth Summit 2012: Vision, Cooperation, Transformation' will take place in Rio de Janeiro, Brazil.¹³ In 2009 the UN by resolution of the General Assembly, it was decided that such summit would take place and the preparations began. Besides evaluating and improving the previous goals, the Summit will also focus on two specific themes: a green economy in the context of poverty eradication and sustainable development, and an institutional framework for sustainable development. It is because of this drive that eco-labels have gained attention once more. The main concern today is whether eco-labels are a relevant 'environmental' strategy, i.e. are they effective in ameliorating environmental issues. The recent papers and studies focus on the environmental performance and *impact* of eco-labels. Whereas with previous studies this had not been an issue, the focus was on the label's internal processes and governance. Today according to the 2010 Global Eco-label Monitor survey 67% of its respondents have never studied or even plan to study the environmental and social *impacts* of their programmes.

2.6 The earth summits role in the evolution of eco-labels.

In synthesis eco-labels have evolved since the first Summit in Stockholm where even if the term 'eco-label' was not yet carved, it gave the a key element for its creation. It was stressed that governments needed to increase environmental awareness of the private sector and consumers, through education. Furthermore, the public (enterprises and consumers alike) had to take responsibility for the consequences of their actions on the environment. This attempt to share responsibility over the environment with the public is a key step for the establishment of eco-labels.

Germany's Blue Angel Eco-label was a clear breakthrough. It gave the strategies and recommendations of the UN a tangible tool that was very promising. The Blue Angel eco-label was to be awarded by the German government, through an independent Jury

¹³ By the time of completion of this work such Summit would have already taken place. However, it will be left out of this work due to time.

1. Defining Eco-labels and Eco-certification

(composed with people from different sectors), to those products that proved to be environmentally friendlier than other serving the same use. The eco-label was a base for the all the following programmes, who copied the basic features of the tool, giving each one unique characteristics and results. At the time, eco-labels were defined as “the voluntary granting of labels by a private or public body in order to inform consumers and thereby promote consumer products which are determined to be environmentally more friendly than other functionally and competitively similar products.”¹⁴ Interestingly, at this moment eco-labels were conceptualised as a governmental instrument, the idea of private entities awarding them was not clear. A private eco-label would have meant an industrial association type of label, which would not have been very trust worthy in the public eyes.

It was until the Rio Summit and its Agenda 21 that eco-labels were specifically recommended the use of eco-labelling programmes to inform consumers about environmental characteristics of products. This Earth Summit, as mentioned before, includes societal values in pair with the environmental ones. This was a cornerstone for eco-labelling programmes. After Rio it is common to see programmes that include in criteria that are supposed to tackle social development, fairness, equity or other issues of the sort. Even if the focus of a label is primarily environmental, it will still include social criteria. But also, Rio spurred other trends such as ‘private certification schemes’ which are key to understanding the current concept of eco-labelling.

Notwithstanding the achievements and relevance of the ‘Earth Summit’ in Rio, non-governmental organisations (hereinafter referred to generally as NGO’s) were not convinced about how certain problems were tackled. Specifically, they were unhappy with the results of the Forest Principles, enacted in such conference. NGO’s were disappointed that no binding document resulted from this intergovernmental forum. This intensified the ideas that private initiatives were needed to fill the void created by intergovernmental approaches. As an example, the Forest Stewardship Council¹⁵ (FSC) emerged in 1993 out of the frustration of NGO’s and governments alike. Specifically the Worldwide Fund for Nature/World Wildlife Fund (WWF) took on the task of creating this certification association. The Austrian

¹⁴ OECD, *Op, cit*, p. 12.

¹⁵ FSC is the first certification association. It is the responsible for awarding eco-labels to the products that come from sustainable-managed forests in accordance to the principles it has set as an association as well as those specific for each geographic area, which are specific to the forests needs.

government supported the WWF economically. Austria had banned tropical timber from forests that weren't environmentally sound, of course countries exporting tropical timber threatened to go to the GATT claiming a protectionist 'non-tariff barrier to trade'. Before anything happened, Austria rescinded the law and manage to funnel the funds it had for its implementation towards a private certification programme: the FSC.¹⁶ The birth of independent certification programmes introduced eco-labels as their private standpoint. From this moment on, eco-labels stopped being "just" soft governmental policies and became actual competing "green" brands.

Finally, the Summit held in Johannesburg in 2002 addressed the importance of voluntary tools used to inform the public about product's sustainability, health and safety. Moreover, it mentions that these tools have to be transparent, meaning that the need to be drawn up in an open or democratic multi-stakeholder¹⁷ context. The process of formation and the management of eco-labels must be transparent in order for them to be considered democratic. In other words, they should not be authoritarian, top-to-bottom governmental acts. Nonetheless, by this time, many of the 'successful' eco-labels were not governmental, they were being fostered or sponsored by independent governmental organisations (NGOs), contrarily to what was expected previously. Furthermore, it states that these instruments need to be verifiable. Since environmental qualities are difficult to observe it is imperative to be able to prove that the information on the labels are accurate and true. In this sense, certification is the key element to give assurance to the public. Finally, the labels have to be effective, meaning that they have to produce a positive or at least a neutral effect on the environment and communities, as well as inform the public and raise awareness of sustainability measures. The effectiveness would need to be measured scientifically which is why the document also proposes the use of Life-cycle analysis to determine the products actual effects on the environment. Life cycle analysis also has the benefit that it increases

¹⁶ Tim Bartley. **Institutional Emergence, in an Era of Globalization: The Rise of Transnational Private Regulation of Labor and Environmental Conditions.** American Journal of Sociology, Volume 113 Number 2, September 2007, p. 320.

¹⁷ Conventionally stakeholder is a broad term, such as: "anyone who has an interest in the project. Project stakeholders are individuals and organisations that are actively involved in the project, or whose interests may be affected as a result of project execution or project completion. They may also exert influence over the project's objectives and outcomes." In a more formal-traditional business jargon stakeholders would be considered only the stockholders or shareholders of a corporation, i.e. the owners. In a broader view, a corporation may include workers, investors, suppliers and costumers in relation to the increased benefit the shareholders would obtain by listening to these groups. However, in sustainability literature, stakeholders are literally anyone with an interest ranging from governmental bodies, political groups, trade associations, trade unions, communities, associated corporations, prospective employees, prospective customers, and the public at large. Sometimes even competitors are counted as stakeholders.

transparency on the supply-chains and industry networks that support the product. As it will be dealt on further, eco-label's effectiveness is measured by their *impact* both on the market and the environment. Many problems have risen due to this note. Because it was only at this point when it was realised that there were no data on the *impact* of eco-labels. It is crucial to determine whether eco-labels have an *impact* or not, so they can be included in the political tool-box for climate change. Current research is focused on the effectiveness of eco-labels.

3. Defining Environmental labelling and Eco-labels

Any allegation made by a firm about the positive environmental qualities or characteristics of their goods and services is considered an environmental claim or green claim. They can refer to the environmental advantages of the products' production process, packaging, distribution, consumption or even their disposal. Environmental claims can appear on a product-label, on its package, related literature or advertising material, promotional or points-of-sales material, and other forms of marketing. These claims can take diverse forms such as words, symbols, emblems, logos, graphics, colours and product brand names.¹⁸ Environmental claims are very broad. Almost any claim about the "positive" environmental and social qualities of a product can be considered an environmental claim. Environmental claims comprise environmental labels and even eco-labels. However, not all environmental claims are an environmental label or even an eco-label.

An environmental label would, consequently, be a type of environmental claim, which consists of a logo or seal placed on a product or package of a consumer product considered to be less harmful to the environment than other functionally and competitively similar products. Ultimately, an eco-label is a type of environmental label that today is understood as a "trust mark or certification given to the independently verified, on-pack labels intended to communicate environmental and/or social performance to consumers."¹⁹ This concept has evolved since the appearance of the first eco-labels in the 1980s. An eco-label has to "independently verified" meaning that the mechanism is very close to the notion of certification. However, the line between eco-labels and environmental certification is not

¹⁸ OECD, **Enhancing The Value and Effectiveness of Environmental Claims: Protecting and Empowering Consumers**, Report on OECD Workshop, 15-16 April 2010, p. 4

¹⁹ This definition is brought by SustainAbility, which are the same people behind the "Green Consumer Guides". See Patrin Watanatada, SustainAbility. **Signed, Sealed...Delivered? Eco-labels, trust and behaviour change across the value chain**. Phase One White Paper, March 2011, p. 2

clear anymore. Whether eco-labels today are a merged version of eco-labels and certification, or a new breed altogether, will be discussed further down.

3.1 The Early Definitions of Eco-labels

The OECD first defined environmental labelling in 1991, as “the voluntary granting of labels by a private or public body in order to inform consumers and thereby promote consumer products which are determined to be environmentally more friendly than other functionally and competitively similar products.”²⁰ Similarly, in 1993 the UNCTAD defined environmental labelling as “the use of labels in order to inform consumers that a labelled product is environmentally more friendly relative to other products in the same category.”²¹ This seal would help identify and segregate the environmentally less harmful product from its ‘environmentally unfriendly’ competitors.

The then General Agreement on Tariffs and Trade (GATT) in 1992 first defined ‘environmental labelling’ as ‘systems for the usually voluntary granting of labels by a private or public body in order to inform consumers’.²² Nowadays the World Trade Organization (WTO) refers to the use of eco-labels as “labelling products according to environmental criteria.”²³ These broad definitions are well justified. The WTO focuses on the effects of environmental labelling on international trade and limiting the definition would not be very useful for its purpose. Even though WTO recognised eco-labels as efficient market instruments; they do pose a threat to international trade or at least potentially provide a clever way for countries to circumvent their GATT obligations. The official position of the WTO before eco-labels is still to be determined by the Committee on Trade and Environment, as ordered by the 2001 Doha Ministerial Conference. Notwithstanding the above, the Dispute Settlement Body on the recent case ‘United States- Measures Concerning the Importation, Marketing and Sale of Tuna and Tuna Products’ that is due in early 2011, also has to solve the matter of eco-labels as a marketing tool.

²⁰ OECD, Environmental Labelling in OECD Countries, p. 12

²¹ Jha, Vossenaaar and Zarrilli. **Ecolabelling and International Trade**, UNCTAD, Discussion Papers, No. 70. October 1993, at 1 (reference from Environmental Labelling Programmes: International Trade Law Implications).

²² General Agreement on Tariffs and Trade. Group on Environmental Measures and International Trade, Note by the Secretariat, Packaging and Labelling Requirements, TRE/W/3, 29 September 1992, p. 22.

²³ http://www.wto.org/english/tratop_e/envir_e/labelling_e.htm as viewed at 3:30 pm on 15 February 2011.

A caveat worth pointing out is that very few products actually 'benefit' the environment. Products are likely to harm the environment at some point of their 'life-cycle'. Therefore, it is inaccurate to call a product 'environmentally friendly'. As acknowledged by the UNCTAD and the OECD in their definitions, a product holding an environmental label is only relatively more benign than others in its category.²⁴

Eco-labels are a specific type of environmental labels and they are not to be considered synonyms. Specifically, eco-labels are those that represent a complete judgement of a product's relative environmental qualities compared to other functionally and competitively equivalent product. Furthermore, they will always be voluntary. It is the manufacturers choice whether to apply for an eco-label or not. Other environmental labels can be mandatory and sometimes only consider one environmental quality, these are typically not considered eco-labels.²⁵ In other words, environmental labelling refers to any label used to differentiate a product based on the provision of environmental information, and 'eco-labelling' refers specifically to environmental labels awarded based on a life-cycle analysis.²⁶

The previous ideas are all part of the original analysis of eco-labels in the early 1990s when they were considered the 'next best thing'. However, in reality all these conceptualisations of the different international bodies did not manage to perm-through to the market. The term eco-label in practice is used to refer to anything that involves environmental requirements and the application of a seal of approval. The term is so unclear that it fails to distinguish among, eco-labels that may have different characteristics and effects altogether.

3.2 Eco-labelling and eco-labels

An eco-label is specifically the logo or mark that is placed on the product "to inform the purchaser that it was created using methods that are more sustainable than those of similar products from different makers." In this sense, the mark itself has the sole purpose to inform the purchaser of the product. Eco-labelling on the other hand, is the initiative that promotes the "making relevant environmental information about a product available to the appropriate consumers through the product label to promote an environmental goal, cause or objective

²⁴ OECD, **Environmental Labelling in OECD Countries**, 1991, p. 17

²⁵ Jim Salzman, OECD, **Life cycle management and trade, trade implications of eco-labelling. The trade implications of trends in eco-labelling**, p. 42.

²⁶ Arthur Edmond Appleton. **Environmental Labelling Programmes: International Trade Law Implications**, p. 3.

through consumer choice.”²⁷ The eco-label is the trigger that enables the eco-labelling mechanism. This mechanism, follows the assumption that, within a given class of products, not all the products will place the same burden on the environment. Producers that are able to lower their environmental cost will want to distinguish themselves from competitors, by placing the eco-label on their product, which will create a competitive advantage for such producer. Furthermore, if environmentally concerned consumers are willing to pay a premium for eco-labelled products, producers will have even more incentives to take the necessary steps to comply with the standards and obtain the eco-label. The eco-label will inform consumers which products satisfy their environmental ‘needs’. This mechanism will eventually lead to an enhanced environmental performance and awareness of the market.²⁸

Behind the eco-label there is an administrative body that is in-charge of the executing the programme. The programme, in turn, is the framework composed of principles, standards, criteria and general internal rules that are set in coordination with the stakeholders. The programme will ensure how eco-labels are going to be awarded and to whom, as well as addressing the supervision, inspections and sanctioning. It is here where the fine line between certification and eco-labelling can be found. In the original eco-labels, like the Blue Angel, the producer would certify its products with an independent certifier and then ask for the administrative body of the eco-label to be placed on its products. However, today what can be observed is that it is the programmes are complex organisations who certify the products (e.g. the FSC, FLO and MSC) either themselves or by authorised or subordinated certification bodies. In this sense, the eco-label would in reality be an environmental certification mark. If an environmental certification mark and an eco-label are equivalents, will be duly analysed below.

4. The goals of eco-labels

In essence the ultimate objective of eco-labels is to accelerate sustainable behaviour of all players in the market. However, eco-labels are mere on-pack logos that tell consumers a product was produced or can be consumed in a more sustainable way. It is a complex idea that combines sustainability standard-setting, information and branding, underpinned by the

²⁷ Magali Delmas, WIne Consumer Research Team, UCLA . Spring 2010, University of California, Los Angeles.

²⁸ Jim Salzman, OECD, **Lyfe-cycle management and trade, trade implications of eco-labelling. The trade implications of trends in eco-labelling**,, p. 43

credibility of an independent body. The idea of eco-labels seems quite simple, however it is not. It is expected that these simple logos go beyond the promotion of sustainable behaviours, by delivering measurable social and environmental impacts. It is presumed they will also offer a credible yet simple assurance on sustainability claims as well as increasing brand value. Notwithstanding the previous, they are also expected to have a reasonable return on the investments for all the concerned stake-holders. It is because of all these expectations that policy makers in the 1980s and early 1990s were very optimistic about eco-labels.

These expectations are based on the simple idea that an eco-label creates a mechanism which strives for sustainable behaviour of all players in the market. In this sense, "The basic purpose of an eco-label is to tell the consumer a credible story about what's happening in the rest of the value chain. The story is intended to create demand for more sustainable value chains by influencing or affirming performance improvements upstream and purchasing decisions downstream."²⁹ From the mechanism we can derive the three distinct functions of the eco-label.

- a) Performance. An eco-label is expected motivate producers to achieve operational improvements in social and environmental arenas, by committing to the use of voluntary standards.
- b) Trust. Eco-labels must provide credible assurance around sustainability performance to consumers, customers, NGOs and other stake-holders. In this sense, it goes beyond marketing practices by committing to accountability and transparency.
- c) Demand. Eco-labels are expected to increase demand by modifying purchasing decisions and behaviour by communicating sustainability performance to consumers at the point of purchase, and more broadly, by increasing awareness and changing the social norms and expectations associated with a product category.³⁰

Eco-labels strive to improve the market's environmental performance. It has done so by targeting adjacent causes of low environmental performance such as low consumer awareness, lack of market segmentation or insufficient financial rewards for environmental

²⁹ **Signed, Sealed...Delivered?**, p. 4.

³⁰ **Signed, Sealed...Delivered?**, p. 4.

innovations. In this sense, eco-labels serve as a communication tool that companies use to publicise their environmental credentials. The information disseminated in an eco-label is a mere means to an end, which is environmental performance. However, to determine the environmental performance of a product it is necessary to measure it. It is necessary to count with metrics to point out the environmental improvement attributable to the eco-label.

4.1 Defining the eco-label's *impact*

An eco-label's effectiveness will be measured with its *impact*. The "impact of an eco-label is a function of both the marginal environmental improvements associated with it and its rate of adoption."³¹ Considering that eco-labels are considered a commercial as well as an environmental policy tool it has to be evaluated in both aspects and how they interrelate with one another. Effects can be observed in the market or the environment that not necessarily can be attributable to the eco-label. Even if the effects are attributable to the eco-label, such effects have to be both-sided (trade and environment) to be able to consider the impact of the eco-label otherwise, the eco-label is not considered effective. The eco-label's impact equation has two variables: the marginal environmental effects attributable to the eco-label and its rate of adoption.

A point can be raised in measuring the eco-labels effectiveness and not its efficiency. Efficiency or in this case eco-efficiency has been defined as "adding maximum value with minimum resources use and minimum pollution." Eco-efficiency is a mere measure of a products environmental qualities. It is necessary to know the eco-efficiency of the products to be able to identify where the improvements can be made. However, the improvements need to be on the whole process not just the product, the industry has to adapt and modify its behaviour to become sustainable.

4.2 Eco-labels impact: marginal environmental effects

Measuring the eco-label's effectiveness should be as simple as measuring the effects and improvements it has had on the environment. In principle it would be possible to use life-cycle analysis or other evaluating methodologies to gather quantifiable data reflecting marginal environmental improvements associated with compliance to specific eco-labels. In real life, gathering environmental data and establishing causation, is very difficult, at least.

³¹ Tom Rotherham, UNEP. **The Trade and Environmental Effects of Ecolabels: Assessment and Response**, p. 10

I. Defining Eco-labels and Eco-certification

Data regarding programmes effectiveness is normally anecdotal and not necessarily scientific or even objectively measurable.

Environmental problems are generally created by different interrelated factors. To measure the effectiveness of an eco-label these other factors also have to be considered. Furthermore, if there were competition between an eco-label and other eco-labels or any other policy instrument, it would also have to be considered in the assessment. If competition among eco-labels were strong, an eco-label would not submit to this type of evaluation unless it were obligatory or all the other competitors were doing so. If that were not enough isolating the effect of one single programme might be difficult, and if performed, it would be incomplete.

Although it is intuitively appealing to believe that eco-labels will improve the environment, there is no replacement for evidence based-research.³² This evidence is not available precisely because the attention on the effects of the environmental labels on the environment is fairly recent. Most (if not all) environmental-labels did not design and implement monitoring and evaluation *impacts* systems early on. There is a time lag between the establishment of the programmes and the implementation of the *impact* evaluation systems.³³ Modern environmental-labels need to incorporate these monitoring and evaluation systems from the beginning. Only then will the information be reliable, and attributable to the system.

Surveys and other research on the matter back the view that these evaluations are not practised. A survey performed in 2010 by Duke University that includes over 150 eco-labelling programmes found that one-third of surveyed labellers had never attempted to monitor the environmental or social benefits of their programmes and had no intentions of doing so. Furthermore, over a half of the single-standard labels surveyed had never conducted an *impact* study to assess the effect of certification on the environment.³⁴

³² WWF. **Certification and roundtables: do they work?** , p.30.

³³ *Idem*, p.15.

³⁴ Jay S. Golden. Corporate Sustainability Initiative, Duke University Interim Report, **An overview of Ecolabels and Sustainability Certifications in the Global Marketplace.**, p. 6.

Furthermore, the oldest eco-label, *Der Blaue Engel*, which is over 30 years old, has never performed an independent scientific assessment on the environmental improvements of the programme.³⁵ Of course there are exceptions, e.g. organic agriculture, which has proven to improve the soil and water quality and the 'dolphin-safe' tuna label (in the USA), which performed several scientific assessments as a consequence of litigation. Nevertheless, it is possible to state that there is no clear evidence of the effectiveness of eco-labels in the environment.

4.3 Eco-labels impact: rate of adoption

An eco-label's influence in a market also involves its adoption rate. *Impact* or influence is easier to measure, since it involves other types of information. There is quantifiable data, which includes, for example, the number of product categories covered by a label, the market share of an eco-labelled product, growth in sales, number of companies certified and how often the criteria are updated. There is also qualitative information that indicates an eco-label's credibility, which is normally based on how the eco-label was developed and the type of organisations that support it. These are proxy indicators that assess the success eco-labelling and "...are currently the only available quantifiable indicators of success."³⁶

The main objection to proxy indicators is that they are focused on consumer behaviour and the impending price premia, not necessarily their environmental characteristics. While it is true that consumer acceptance is key for the success of a programme, is it because of environmental concern or another private motivation. In other words, whether the consumer buys an energy-efficient appliance because he is concerned about the environmental *impacts* of energy consumption and his 'carbon foot-print' or he buys it because he has a private motivation, like reducing operation costs and cutting bills in the long run, makes results unclear. Of course, what matters is that the market segment is created and that energy-efficient appliances will eventually improve the environment (or harm it less), regardless of the consumer's motivation. However, if it is not possible to separate and understand the motivations behind these purchases, it is not correct to state that it is a

³⁵ Tom Rotherham. *Op. cit*, p. 5

³⁶ *Idem*.p. 5,-7.

consumer-oriented market-tool.³⁷ It is as if eco-labels took credit for something they might or might have not caused.

5. Eco-labelling criteria: their determination and content

The higher *impact* of an eco-label the better is its quality, therefore its effectiveness. The quality of an eco-label can only be determined by the quality of its standards/criteria and its credibility. How an eco-label is designed can determine the success or failure of a programme. The programme's criteria are precisely its unique characteristic, which will differentiate it from its competitors and what will determine the *impact*. Whether the chosen criteria are the 'right' ones to address certain problems will never be straightforward. This may explain the multiplicity of labels addressing the same issues. Furthermore, criteria are dynamic, they change with innovation of technologies and processes, as well as with the market (industry and consumer) needs.

5.1 Criteria selected for specific environmental problems

An environmental problem is normally noticed at the moment someone is affected by it. The environmental problems are hard to predict. There are uncountable activities that harm the environment (present and past human activities) and in a huge scale. When a specific problem arises, it is important to identify the source of the problem and attempt to stop it and if possible reverse it. If it is unclear to individualise the responsible (firm) for the damage, there might be a need for general government intervention. Top-to-bottom regulation might not be popular however, because they are reactive measures. Due to the 'precautionary' approach of environmental regulation, 'retrofitting' or end-of-pipe corrections are not well regarded. They are not very welcome because they are expensive, short-sighted and normally they are accompanied by government pressure. In this scenario a specific eco-label to address to problem would be an aid to governmental regulation.

Sustainability and precaution are compliments. Sustainability is not only about the environmental harms and the losses, its about enduring. Resource management is an area in which eco-labels can play an important part. Consuming natural resources with no limit just because it is possible has proven unsustainable. In this sense, an eco-label could aid in the awareness of the problem before it becomes a causes harm. It attacks the problem from

³⁷ OECD, **Environmental Labelling in OECD Countries**, p. 11

the source in a preemptive manner. Such is the case of the 'dolphin-safe' eco-label, which its purpose is to reduce the dolphin mortality in the tuna fisheries. No more, no less. Notwithstanding the achievements of this label, it is important to note that the same problem has been addressed more efficiently through a government mandated standard. In this sense, the fate of the fishery was not left in the hands of the market, specifically consumers.

There are several Multi-stakeholder sustainability initiatives (MSI), promoted by the WWF that refer to specific industries. Different criteria, different programmes for specific resources, specifically regions with different needs. MSIs not necessarily end-up in certification, when they do they are eco-labels. Their purpose is to have a democratic and transparent consultation and negotiation to develop criteria or principles or indicators to promote sustainable production across a specific sector or product. Famous examples are the FSC and the MSC. Even if the focus is on the resource, like palm tree oil or forestry, the approach would be holistic and would address economic and social issues as well. Therefore, even if it is not created in a 'Life-cycle' approach they are effective in the sense that they are well sponsored and tailored.

A criticism about labels that address specific resources or species, is that it may raise attention and consumption of the good. Consumers might select an eco-labelled tuna from the Mediterranean, which is not endangered (but close to), instead of a more common variety which is not eco-labelled. Finally, the main criticism is that it is not a comprehensive sustainable approach.

5.2 Life Cycle Assessment as a way to determine the criteria

Firms and governments are expected to be pro-active and take pre-emptive measures to avoid the environmental problems from the beginning. Today's firms, theoretically strive to be eco-efficient. To deliver competitively priced goods and services that satisfy human needs and bring quality of life, while progressively reducing ecological impacts and resource intensity throughout the life cycle. By identifying and attacking the source of the environmental problem, within the production process or throughout the supply chain, firms would become more sustainable as a whole. The tool used to identify and assess the eco-efficiency of a product is precisely 'life-cycle' analysis.

Life Cycle Assessment (LCA) is the investigation and valuation of the environmental impacts of a given product or service caused by its existence. Once the investigation is performed, and all the information is available, the programme to determine the criteria for the eco-label. To determine the criteria the eco-label would consider the LCA results, the expected performance improvements as well as the current regulations on the industry. It would select the areas where the process can be improved at the different stages of the products life-span and design criteria to overcome the problems. LCA based criteria, would apply the same metrics to all similar products, meaning it can compare the eco-effectiveness of all similar products and award eco-labels to those that can prove they outperform the average similar product.

5.3 The content of the criteria: process or performance based

Standards can be systems based or performance based. Systems-based or “general principle” standards specify the management systems that must be in place, but do not specify any minimum level of performance or benchmark that must be achieved. This means that two systems-certified companies could in practice have very different environmental performance. Furthermore, it is more difficult to determine whether these standards are being observed. Conversely, performance standards specify a benchmark level of on the ground performance, but do not specify how it should be achieved.³⁸ Eco-label programmes are most effective their criteria are performance based, specific, implementable, and auditable at the field level.³⁹ However, as said before environmental impact evaluations are normally not required therefore performance is difficult to prove. In addition, process or systems-based standards are more widespread and have served as a proxy to environmental and social performance.

Nonetheless there are new eco-labels that appear to be performance based such as the one promoted by the Carbon Trust in the United Kingdom. It is a mere pilot, but its objective is to grade the overall performance of the product, by stating the product’s carbon-footprint. The objective is not only to know the carbon content but eventually reduce it up to zero. By constant monitoring and evaluation.

³⁸ Environmental Law Institute. **Harnessing consumer power.** *Using Certification systems to promote good governance*, p. 2

³⁹ *Idem*, p, 17.

5.4 Ratcheting up the criteria: the eco-label's ever raising bar

Since the first analysis of eco-labels it was conceived that eco-labels had to be dynamic. In theory, a regulatory approach would be slow and could be captured by industry, thus skewing it towards technologies that might not be the optimal for the environment. It would be slower, because from the moment a technology is available, a regulatory body would not have the means to regulate it immediately, furthermore it would hinder research and development for other even better technologies. Eco-labels were expected to solve these issues by promoting innovation. Additionally, because of the immediacy with the industry and the flexibility of the standards it would be easier to ratchet up the criteria along with innovations and demand.

The first analysis of this point, visualised only a small share of the market as eco-label holders, and whenever more products were meeting the criteria, these would need to be reviewed and raised. One of these reports states, "Frequently these environmental criteria are drafted in such a way that only a limited number of products in a given product area will meet them (usually about 15 percent). If in a later date, more than the target number meet the threshold criteria, these requirements can be reviewed and raised. This assures that manufacturers will continue to look for ways to improve the environmental characteristics of both their products and their manufacturing processes."⁴⁰ It is suggested that eco-labelled products would only represent about 15% do the market of such product. Where this number came from and why is there a limit is unclear, but surprising because it also coincides with other reports (such as the OECD and GATT). Eco-labels are conceived in a way that only a few products in a market can meet the criteria. Not all producers in a market should thrive to obtain eco-labels. They are supposed to be difficult and costly to obtain. This is what allows the eco-label holders to increase the price of their products and recoup their investments. However, over twenty years of eco-labelling have proved that the most successful eco-labels are those that have increased market presence.

In reality, eco-labels do not really ratchet up when they get too many certified clients. As mentioned previously, monitoring and evaluation mechanisms were not implemented in many programmes until very recently. This means that data about effectiveness of standards is not available and will not be available for at least 10 years after the mechanisms were

⁴⁰ Arthur Edmond Appleton. *Op. Cit.*, p. 8.

placed. Once this data is available it will be possible to know if the criteria actually had an improvement on the environment. This suggests that firms' that fulfil the criteria have improved their environmental performance. Only then criteria should be reviewed and ratcheted up. If the results are negative, they should also be corrected. Without a stable system of monitoring and evaluation, criteria are unlikely to be raised. Other eco-labels, such as the European Energy labelling scheme, which grades the eco-efficiency from A to G, in addition to a colour scheme. Another labelling scheme that uses this grading system is 'Cradle-to-Cradle' certification (C2C) have tiered labels. The eco-label can be *basic*, *silver*, *gold* and *platinum* (the tiers) which will be awarded conditional on the criteria that are met, the more criteria the firm meets the higher the ranking it obtains.⁴¹ Tiers or ranking eco-labels might be a solution to motivate innovation and development of 'better' processes (considering that C2C is about the life-cycle) even if a label is already awarded.

6. Classification Of Eco-labels

Addressing eco-labels today is general and imprecise. There are deep differences among programmes, not only in their outcomes and structures but also in the incentives and effects. The confusion and generalisation of the term indicates that the market sees them as a single tool whose purpose is communicate the environmental credentials of a firm. A systematic categorisation is needed to analyse and determine the effectiveness of environmental-labelling as a policy tool.

6.1 The classic classification

In their first analysis both the UNCTAD and the OECD identified three types of environmental labels. These were 'life-cycle' labels, single-issue labels, and negative labels. At that time attention was focused on life-cycle schemes, as they yielded the most potential. However, it was Jim Salzman who divided environmental labels into eco-labels (life-cycle schemes), single-issue (or single-standard) voluntary labels, and single-issue mandatory labels.⁴² As it will be duly analysed, each type of label is expected to create different incentives and effects on the market.

⁴¹ Majority of the products have a silver C2C label, very few have basic, but there is no platinum. <http://c2c.mbdc.com/c2c/list.php?order=type>

⁴² Arthur Edmond Appleton, *Op. cit.*, p. 3.

6.1.1 Single-issue (single-standard) mandatory labels

It is a normal practice for governments to require (by law) labelling of products with consumer information such as the carcinogenicity of cigarettes, nutritional content of foods, or toxicity of chemicals. These regulations are important because they allow the consumer to make an informed judgement regarding the product's 'direct' or 'immediate' effect or risk on his health. In the environmental arena, the immediacy of the products' repercussions on the consumer is not that evident. The label, in the environmental case, would be directed on the effect or risks the product has on the environment not the consumer.

Single-issue mandatory environmental labels, describe one or more specific attributes in a product's life-cycle (production, use or disposal), but do not provide the overall view of the product's environmental characteristics. These labels can be divided in two types.

6.1.1.1 Negative single-issue mandatory labels

The first type is the negative label. This label reveals negative characteristics or *impacts* of a product. The label identifies possible dangers to human, animal or plant life or health associated with the products use or disposal. The whole purpose of these labels is to warn and inform consumers of important health and safety risks of consumption and disposal of the product. Therefore, even if the labels may discourage sales, they are normally welcome by the market and dodge criticisms.⁴³ Labelling in this sense is a 'paternalistic' approach from the government. Its purpose is to nudges consumers to make better choices or to promote awareness about certain health hazards. The government wants to protect consumers from their own 'flawed' judgements either by informing or warning.

6.1.1.2 Process and Production Method (PPM) labelling

The second class of labels reflects how the product is manufactured. Specifically the 'process and production methods' (PPMs) used in the products manufacture. It is specifically addressed to producers and manufacturers, not consumers. States are free to regulate how products are manufactured. PPMs can be product related or product related (product related-PPMs). The difference is very subtle and lies in the effect it has on the final-product.

a) Product related PPM

⁴³ *Idem*, p 10-11.

I. Defining Eco-labels and Eco-certification

The PPM is considered product related if the product itself can be differentiated due to its physical characteristics. If an apple is grown using pesticides, the pesticide can be traced, thus this apple can be differentiated from one grown pesticide-free. In general countries are free to regulate product-related PPMs, under certain rules.

b) Non-product-related PPM

The key question for a non-product related PPM is whether the final-product has different qualities that would cause it to be treated differently in its use, handling or disposal from a practical substitute (the “average” product). In other words non-product related-PPMs do not affect the product’s physical or other identifiable characteristics.⁴⁴ This type of unverifiable characteristics is much more complicated to assess because they do not alter or leave traces on the product itself. As an example one can think of a ‘fair trade’ apple, where the attribute of ‘fair trade’ cannot be traceable by any physical means. Furthermore, the ‘fair-trade’ apple performs in every sense exactly the same as the “average” apple. It can be concluded that the ‘fair-trade’ attribute is a non-product related PPM, since it has a trivial effect on the final-product.

Mandatory labels apply to all products in a market, both national and imported. Therefore if a government were to issue a non-product related PPM it could be deemed unlawful by international trade laws, specifically with the WTO. The reason it would be controversial is that such measure could pressure firms in other countries and jurisdictions to adopt specific PPMs and non-product related-PPMs. Consequently it may lead to foreclosure of foreign products or preferential treatments to national products, which are sanctioned by the international trade laws.

6.1.2 Single-issue voluntary labels

Just as single-issue mandatory labels, this label only refers or emphasises on one or more specific traits of the products’ life-cycle. The difference is that these have a voluntary nature. The main benefit of these schemes is that they are a potential marketing advantage for the manufacturer. Single-issue labels advertise specific environmental traits of the product to benefit from a particular environmental issue that might be ‘trendy’ at a given moment and place.

⁴⁴ Environmental Law Institute, *Op. cit.*, p. 25.

From a consumer point of view, single-issue labels allow them to identify products with a particular environmental trait that they deem important. The information is presented to the consumer in a simple and straightforward manner: “no animal testing”, “dolphin-safe”, “organic” are clear examples. There is no additional effort required from the consumer to find out what the label stands for. It is imperative that consumers trust the labels for the mechanism to work. As it will be detailed further down, the assessment of the veracity of these claims by experts is crucial.

Contrarily, producers might be compelled to adapt their PPMs to specific environmental qualities that are ‘trendy’ and consumers demand. In this sense, manufacturers will address specific environmental problems as long as it is demanded, thus profitable. Furthermore, it is much simpler and cheaper for producers to apply and adapt their manufacturing processes, to comply with the environmental issue at hand, than it is to apply a life-cycle schemes. In addition, the producer has a wider option of attributes he could highlight. Moreover, he would have the flexibility to redesign the process (at relatively low cost) if the environmental awareness of consumers were to shift to another environmental problem.

Single-issue labels may have the effect of increasing consumer and corporate awareness of specific environmental problems. However, if they also have a positive or ‘less bad’ effect on the environment is not so evident. First, producers have an incentive to misuse the labels. Manufacturers can easily incorporate the label in the products’ packaging and send it to the market reaping the benefits from a higher price or increased sales. Because it is not government mandated, the risk of being caught is low. Second, because there is no limit to the single-issues a producer can focus on, the market could become flooded with single-issue labels. One single product can bear several single-issue labels. This overflow of information will lead to consumer confusion. In the same line, if there are many ‘cheaters’ in the market, consumers will not only be confused but they will eventually mistrust all the labels. As said before the key for this mechanism to work is the consumer’s trust in the label. Finally, focusing on only one environmental attribute can hide other even more serious environmental effects of the product. An appliance might be energy efficient, but utterly pollute water. If this appliance increases its sales it will also increase water pollution, in an ‘energy efficient’ manner.

6.1.3 Multi-criteria and life-cycle labels (eco-labels)

Only multi-criteria⁴⁵ voluntary environmental labels should be referred to as 'eco-labels'. Eco-labels give environment-related information on the overall environmental quality or characteristics of a product. To obtain the label the product has to satisfy several criteria. The criteria would be set to measure the holistic or overall environmental *impact* of the product on the environment. This holistic approach is what led to the idea of life-cycle assessment, thus the name 'life-cycle' labels. Nevertheless, this name can be misleading because as studied further on, there is no clear way to measure the products true life-cycle effect on the environment.

Life-cycle assessment is a tool used to evaluate the environmental effects associated with a product, process or activity by identifying and assessing the inputs used and wastes released into the environment at different points. This may encompass extraction and processing of raw materials, manufacturing, transportation, distribution, use and reuse, maintenance, recycling and final disposition. In essence a 'life-cycle' assessment would be performed to define the different criteria of multi-criteria label. This assessment will determine which are the criteria that should and can be measured, which reflect the desired environmental qualities of the product.

Multi-criteria labels can be very sophisticated or simple, depending on the industry and technologies available for a given industry. In general multi-criteria labels can evaluate a product's effects on the three separate media (air, water, soil), as well as the use of renewable energy, product durability, safety and maybe even social *impact*. It is not as thorough as life-cycle is supposed to be, however it's the best approximation. For example Cradle-to-Cradle Certification makes its evaluation based on criteria for material health (toxicity of chemicals in the product), material reutilisation, renewable energy use, water stewardship and social responsibility.⁴⁶

For a manufacturer to engage into a multi-criteria scheme, the motivation goes beyond marketing. The initial investment to achieve this type of label is much more expensive and requires a meaningful change in the normal course of business. Furthermore, production processes are complicated and normally involve complicated supply chains or production

⁴⁵ They can also be called multi-issue or multi-standard labels.

⁴⁶ Cradle-to-Cradle® offers different rankings (basic, silver, gold and platinum) the more criteria is covered within the different evaluation areas the higher ranking you would achieve.

networks, where the identities upstream suppliers and producers are unknown. To qualify for a multi-criteria label, the products' chain of custody is key in the assessment. The gathering of all this information can be very costly. If this were not enough, as it will be studied further on, certification is essential for this label. Needless to say, this type of certification does not come cheap. The incentives have to be strong enough for a producer to engage in these efforts. This is matter of an independent chapter of this work.

This type of multi-criteria labels could be conceived in a mandatory (governmental) scheme. This would prohibit the sale of unlabelled products in a particular market, in other words it would be like a ban. This would obviously affect the imports of competing products and thus would be in breach of the WTO rules. This is why there are no such schemes in existence. However, if many firms were to have these labels it might signal to the government that such environmental thresholds are easy to meet and that is what the public wants. Furthermore, if the presence of eco-labels in the market were large, consumers might also be inclined to think that such labelling is mandatory, therefore they would de facto discriminate foreign products.

Inversely to the idea of widespread obligatory labels, eco-labels are conceived in a way that only a few products in a market can meet the criteria. Not all producers in a market should thrive to obtain eco-labels. They are supposed to be difficult and costly to obtain. This is what allows the eco-label holders to increase the price of their products and recoup their investments. However, over twenty years of eco-labelling have proved that the most successful eco-labels are those that have increased market presence.

6.2 The ISO classification: Types I, II, III

During the preparation period leading up to the Earth Summit in 1992, the UNECD had to ensure that it had the full support of the business sector. As a result it created the World Business Council for Sustainable Development (WBCSD). This Council approached the ISO and other organisations to see what were their advances in the area of environmental management and to motivate their involvement. After the WBCSDs request to ISO established alongside other organisations the Strategic Advisory Group on the Environment (SAGE) to study the situation and present recommendations. SAGE had two major contributions, first was a series of recommendations on environmental management, which were submitted to the UNCED preparatory conference in January 1992, which became a

backbone of Agenda 21. The other contribution was the recommendation to develop standards in the area of environmental management, headed by ISO. In 1993 ISO created a Committee to address environmental management standards.⁴⁷ The Committee (officially called ISO/TC 207) continued to create the environmental management standards in the ISO 14000 series. The EMS standards were designed in a way that does “not set limit levels or performance criteria for operations or products; instead, its activities are based on the philosophy that improving management practices is the best way to improve the environmental performance of organisations and their products.”⁴⁸ This idea has been the centre of the criticisms of this series, in essence “there is not much convincing evidence on the table which would suggest that the implementation of an EMS standard has indeed boosted environmental performance.”⁴⁹ Besides environmental labelling, the Committee also developed general standards on Environmental Management Systems (EMS), as well as specific standards for the other types of EMS such as Environmental Auditing & Related Investigations, Environmental Performance Evaluation, Life Cycle Assessment, Greenhouse Gas Management and Related Activities.

6.2.1 The ISO-14020 series

The ‘ISO-14020 Environmental labels and declarations - General Principles’, as its title describes sets the general principles for environmental labelling. Environmental labelling is defined as ‘a set of voluntary tools aimed at stimulating the demand for products and services with lower environmental burdens by providing relevant information on their life cycle to address purchaser’s demands on environmental information.’ It enumerates nine general principles to be applied to all environmental labels and declarations. A relevant principle suggests that whenever there is a conflict with a more specific standard, the more specific one should take preference. Another principle suggests that the development of the environmental labels and declarations should take into account all relevant aspects of the life cycle of the product (even if some eco-labels are specific such as recyclability). Its purpose is to standardise the development of the programme criteria and the design of the programmes. It does not limit what the programme should be about or any ‘threshold’

⁴⁷ http://www.iso.org/iso/about/the_iso_story/iso_story_environmental_management.htm

⁴⁸ <http://www.tc207.org/about207.asp>

⁴⁹ Joint ANEC / ECOS comments on the ISO 14000 series review, ANEC-ENV-2007-G-030final, October 2007.

criteria. It is about the process and requirements a programme should have to be considered an eco-labelling programme. In theory, any established programme could seek the ISO verification, so the eco-labelling programme would be ISO certified.

6.2.2 Type I Eco-labels

This type of eco-labels are contained in the ISO 14024. Type I eco-labels “...are voluntary, multi-criteria based, third-party programmes that awards labels to products with overall environmental preferability based on life cycle considerations.”⁵⁰ It is understood that its aim is to identify environmentally superior products, however the definition refers to ‘environmental preferability’. This represents a problem because environmental superiority is not the same as preferability. In a market with a 100 products, 99 are likely to be preferable to the worst performing one. The product has to be environmentally superior to justify its higher price. Whether this is a mistake or if it is on purpose is not clear, however there is pressure to change it. This eco-label has pre-set criteria, in the sense that the criteria are standardised and not ad-hoc to a specific product. This criteria should ‘consider’ simplified life cycle inventory and or other method of environmental impact assessment.

The definition states that eco-labels *are* voluntary, third party schemes run by an independent body. It does not claim that the product needs to pass third-party certification to obtain the eco-label, it claims that the eco-label is the actual certifier. In this case, the independence is from the producer not the eco-labelling programme. The entity that administers the eco-labelling programme is the independent entity. Consequently the eco-label is a certifying scheme in itself, and the eco-label (the logo or mark) is a specific type of certification-mark. However, this means that the criteria are set and verified by the same entity, which may represent a problem unless the criteria are determined by an other body altogether. Another problem, is that an eco-labelling programme, with set criteria that asks for ‘third-party certification’ from an ‘independent’ certifier would not be considered a Type I eco-label. Eco-labels that are self-standing certification schemes are rare thus this definition is limited. This definition and characteristics resemble the Blue Angel, the Nordic Swan and all the other government based approaches were developed and in full operation at the time

⁵⁰ **Environmental labelling standards in the ISO 14000 Series**, Bill Dee, Chair SC3/201, COPOLCO Workshop, Kuala Lumpur, 24 May 2006.

this standard was established. There is no account for how many schemes have or even follow the ISO 14024 standard.

Other features of this standard is that it describes operational procedures to assist the creation of new programmes. It also provides a framework for mutual recognition between programmes. In this case, if these schemes are based on the original eco-labels, it makes sense to be able to recognise foreign eco-labels in the sense that the majority of the labels were government-sponsored. Furthermore, even though ISO is an NGO its members are the national metrology-normalisation or standardisation bodies of countries, therefore where national eco-labelling programmes are in place they are likely to follow this Standard.

6.2.3 Type II Eco-labels

The ISO 14021 refers to environmental claims that are made directly by manufacturers, importers, distributors, retailers or other stakeholders about the environmental friendliness of their products without third-party certification. They can come in the form of statements, symbols or graphics on product package labels or in other forms such as product literature, advertising, technical bulletins or other sources of product information.⁵¹ These 'green-claims' are normally regulated by the government as 'misleading advertisement' or specifically as 'green advertisement'. Because there is no third-party certification it is treated as advertisement. The Standard sets out general requirements for truthfulness and accuracy applying to all claims. It provides specific guidance for the most common claims. It deals with ways producers can verify their claims, even if it is not intended to be used as a seal of approval. By defining the most common claims and symbols it gives certainty in the international trade arena, both for producers and consumers. However, because the definitions are meant to be adapted to national legislation and be used by industry worldwide the concepts tend to be very vague and imprecise. It also sets the principles of such declarations, precisely due to the fact that they are not third party verified, the labels are arguably not very informative. Hence, countries such as Australia and the US have made enacted laws where the claims must be scientifically verifiable.

The criticism here, is that they can be verified by an independent third party scheme. In reality what differs from the Type I and III labels is not the body issuing the information, what

⁵¹ Richard Bonsi, *et al.* **Eco-labels and International Trade: Problems and Solutions at the WTO**, Journal of World Trade,

matters is the 'type' of information provided. These claims, verified or not, are mere single-issue labels. This means that a label such as 'dolphin-safe', which is a third party certified single issue label, does not enter in this category, neither in the previous one.

6.2.4 Type III Eco-labels

In 2006 another type of label was added, the ISO 14025. This environmental label has "quantified environmental data for a product with pre-set categories or parameters based on ISO 14040-series of standards but not excluding additional environmental information provided within a type III environmental declaration program."⁵² The ISO 14040 is the series that addresses life cycle assessments and inventories. For this classification these are life cycle labels, contrarily to the previous classification which would consider Type I as life cycle labels. In this sense, a third party certification agency or an independent body will use a number of environmental performance indicators, including energy consumption, air emissions, water emissions, and others, to obtain a score, which serves as a template for each product group. It is assumed that such templates will help costumers compare different goods and then purchase the one with the best score. The downside of this label is that if the costumer is not acquainted with the parameters, the information is of little use. Reason why these environmental declarations are more appropriate for use in business-to-business communications.⁵³ With this type of eco-label there are no benchmarks or scales as in the Type I, they do not judge products they just present the information in a report known as the Environmental Product Declaration (EPD).

6.2.5 The ISO classification in reality

The shortcomings of each type has been duly pointed out, however in overall the most relevant shortcoming is that eco-labels today do not reflect the characteristics set in the standards, the majority of labels are a mix of the types. A Type II (green claims) can be and is encouraged to be verified by a third party certifier, if it does it ceases to be a Type II, even if the verification was a step up. The most common labels today, Fairtrade, FSC or the MSC do not fit into any of the categories. Therefore people suggest calling them 'Type I-like' or even consider them a different type all together. The suggested Type IV eco-label which

⁵² Environmental labelling standards in the ISO 14000 Series, Bill Dee, Chair SC3/201, COPOLCO Workshop, Kuala Lumpur, 24 May 2006.

⁵³ Richard Bonsi, *et al. Op. cit.*,

would refer to single-issue, independent third-party certified programmes. However ISO has not taken any action into this. The relevance of ISO is that it is the reference industry, governments and prospect programmes use to create eco-labels. The attempt to unify how eco-labelling programmes are created and administered is an accomplishment of the ISO.

6.3 Categories of eco-labels

Eco-labels, today can be very broad and confusing, they have different objectives, different targets, different administration forms. In the end, the types of eco-labels proposed by the 'authorities' in this matter (or at least the once authorities) do not reflect on the market. The market is flooded by different eco-labels and few can sort them out (if it is they notice them at all!) Consumers see them on their products, and will act based on its ideas about the product, brand and personal tastes (a chapter will be dedicated to see the consumers standpoint). Producers will have incentives to become more sustainable in the long-run, it is trendy and the market pressures, but when it is time to decide, the decision is going to be a business decision, not an environment-oriented decision (NGOs and governments play that role, not business). Again, selecting which eco-label can be time consuming and can lead to losses if the wrong eco-label was chosen.

Eco-labels, are different among them however they still share common characteristics. They are voluntary, cooperative in nature (criteria setting is normally done in a transparent, democratic or inclusive process) and they are independent and reliable (it goes beyond mere marketing, the certification is key). Whenever these characteristics are not met, it is not an eco-label. Eco-labels can be classified but as sub-types of eco-labels, which will be briefly addressed.

6.3.1 Targeted at individual consumers, industrial customers, investors, governments or others

The information each of these actors needs is very different, there are some eco-labels that are very efficient in signalling certain information to the rest of the industry or supply-chain, but that consumers do not need to understand, (e.g. the green dot) and vice-versa. The final consumer, might not understand every detail of the programme. The decision to buy an eco-labelled is not necessarily based on pure environmental motivations. Many consumers see

eco-labels as brands. To an industrial customer, on the other hand, environmental and supply-chain management might be crucial, to make important business decisions.

6.3.2 Single-issue or multiple-issue

An eco-label can focus on one specific environmental issue, such as natural resource, i.e. dolphin safe tuna. However, it can also address the whole life-cycle of the product or multiple criteria to address social, economic and environmental issues concerning the production of the product. This last approach is what would be expected from all eco-labels, however in reality both types have proven to co-exist and have diverse results.

6.3.3 Awarded due to consumption effects, production impacts or the product's complete life cycle

Criteria can evaluate a wide variety of things. Presumably, life-cycle programmes would truly assess a product's repercussions on the environment at every moment of its existence. However, these type of labels do not exist, because even if a producer traces every moment of the product, the moment the product is sold, the responsibility is transferred to the consumer. What is clear is that many eco-label criteria are focused providing assurances about planning and implementation of sustainable management and governance schemes rather than the 'absolute measures of environmental performance'. Studies have proven that many firms that undergo through certification have improved operational effectiveness and internal governance, however whether their environmental and social *impacts* are also improved, is not assessed (at all!).⁵⁴

6.3.4 Single or multiple sectors

Certain eco-labels such as the Rainforest Alliance Certification, or the Carbon Trust, and even the Blue Angel, have one common label but different criteria sets for different products or industries. Others, only focus on one industry sector, like apparel, palm oil or forestry goods. It does not mean they have less criteria, it is just addressed to a specific industry with a specific problem. There are also resource based labels, such as carbon, energy and water. These cross-through different industries but focus on the correct management of these resources, the lower the scores the better the product.

⁵⁴ ISEAL report ,100

6.3.5 Criteria or scope defined locally, regionally or internationally

Different regions have different problems. It is hard to imagine a truly international set of criteria. There might be some minimum requirements, but it is precisely the democratic nature of the criteria setting that allows regional problems to be addressed specifically. A one-size fits all label would be difficult to draft in an international setting. The largest problem is recognition and validation of foreign eco-labels. As an example flower-growers in Colombia had a problem with their eco-label because it was not recognised by the Dutch market, because the standards did not match their own eco-label. This problem is hard to solve, because it is not a matter of the government but it does create a barrier to trade.

6.3.6 Second or third party certifications, or self declarations of conformity

Currently an eco-label has to be certified to be considered an eco-label. As mentioned before, any self-declaration is considered a green claim and are subject to specific rules (at least in the US, Australia and England). Second party certifications are what are known as industry or association related validations. A producer would have to meet certain standards in order to be part of this industry-association. Once met, the association would allow him to use the label. The problem with these labels is that even if its not self-declared it is awarded within the same group of interest. They might be useful as internal communication tools, however the consumer might not really trust them. Third party certification is not without criticism either. As any other certification scheme the fact that a producer literally pays the certifier it could create biases in the process, some authors even suggest a forth party certification scheme, in which a government or international body would take care of the certification, as to ensure unbiasedness.

6.3.7 Impacts of a single product, a range of activities or a defined manufacturing site

Eco-labels are designed to communicate a products environmental *impacts*. Chapter 2 will discuss the fact that some author's consider eco-labels a bundled product, where the consumer is buying 2 products, the good, e.g. a coffee; and an environmental benefit, e.g. more trees for tropical birds (this is the case of shade-grown coffee). However, it is possible that a producer (for internal Corporate Responsibility policies or Public Relations and Marketing) decides to donate or participate in an environmental programme or partner up with an NGO. It is seen that when producers commit to these activities they want to

communicate it to the consumers and obtain the price premiums. When this information is presented on the product's label it is interpreted as an eco-label and the consumer is misled. In 2009 Cadbury, placed on its chocolate bars label that made it clear that it was using sustainable palm oil. This was essentially true, Cadbury was a founder member of the RSPO (Roundtable for Sustainable Palm Oil) in coalition with the WWF. At the time RSPO was not concluded, reason why Cadbury was obtaining its certified palm oil from an independent certifier. The problem was, it only bought 2,800 tons out of the 40,000 it uses in a year. Cadbury was attacked by environmentalists and upset consumers for greenwashing and eventually removed such label.⁵⁵ In this case, communicating CSR through the products label is not an eco-label, even though committing to an eco-label is CSR. Furthermore, certain resource-based labels focus on the geographical areas, such as a forests, palm tree or coffee plantations. In this case, the label communicates the efforts to improve the ecosystem, again it does not mean that the end-product is sustainable in itself.

6.3.8 Initiatives are environmental, social or economic, or a combination of these

Since the Rio Summit it was established that sustainability has a triple bottom-line: social, economic and environmental. Any instrument or policy would have to address the triple bottom-line to be deemed 'sustainable'. Today it would not be common to find a purely 'environmental' eco-label. Normally all criteria are a combination of these, some as mentioned before, focus on the social aspects, such as the Fair-trade organisations (FLO) that focuses on human rights and social aspects. However, within their criteria there are economic and environmental factors too. The multi-criteria that address several aspects of the product is the closest thing to a 'life-cycle' label, which is expected to be comprehensive, thus effective.

6.3.9 Type of organisation sponsoring the eco-label

The type of organism that fosters the eco-labelling programme can influence the rate of adoption of the label. As it can be seen from the graphs from the Global Eco-label Monitor 2010 report (below), 58% of eco-labels are managed by non-profits, which is probably due to the credibility of the eco-label. For-profit or private-led eco-labels comprise 18% of the eco-labels, however an eco-label that is representative of this type is not evident in the market.

⁵⁵ <http://www.guardian.co.uk/environment/cif-green/2009/aug/20/cadburys-palm-oil?INTCMP=SRCH>

Eco-labels are normally created in a transparent multi-stakeholder inclusive process, the criteria that arise from these processes are normally very similar. The type of entity that manages the label once the criteria are set is not relevant for the quality of criteria, it is relevant in the market presence and assurance in the market. For example, the non-profit-led eco-labels tend to have more in-site visits, audits and third party certifications than other privately-led eco-labels.⁵⁶ This might reflect on the trust consumers place on this type of eco-labels, hence their popularity.

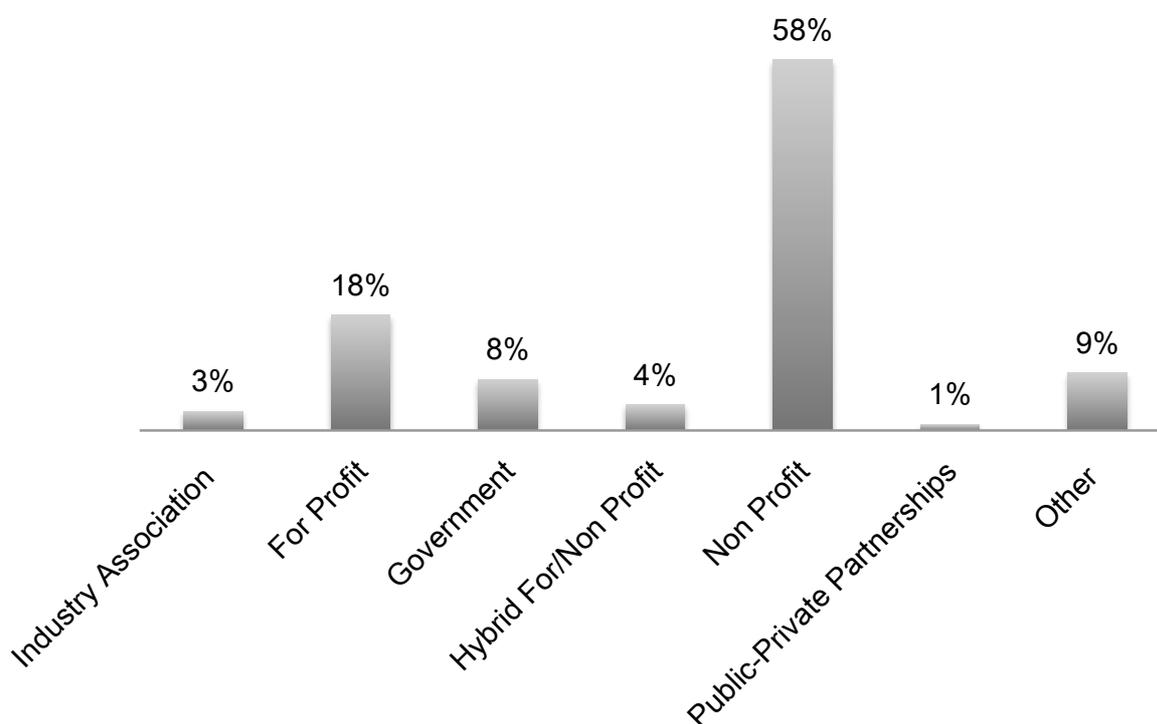


Figure 2. Type of Organization Running the Eco-label⁵⁷

Government sponsored eco-labels are voluntary environmental standards such as the EU flower or the Blue Angel, they can run in parallel with obligatory schemes. The companies that decide to comply with those might see benefits such as closer relationship and improved image before the authority, leading to preferential treatments from the authorities such as less inspections and *bone-fide* presumptions in case of faulty performance. However, the consumer might not be aware of this label or confuse it with a mandatory

⁵⁶ Global Eco-label Monitor 2010, page 10

⁵⁷ 2010 Global Eco-label Monitor, Report, p. 08

programme. The private or for-profit eco-label, is a business in itself. It operates certifying and awarding labels to interested parties in exchange of a price. This is not the same as an industrial association eco-label which suggests that in order to be a member of such association, the firm should certify that it covers certain benchmarks (probably set by the association itself). A firm might be motivated by the shared reputation effects of being part of a 'cleaner' industry or supply network, however if a firm wants to stand out from its peers this type of eco-label might not be optimal. Non-profit organisations or NGOs can also foster eco-labels, the WWF for example has backed many eco-labels, by aiding in the formation process by providing know-how as well as by endorsing the new labels with its reputation.⁵⁸ Firms might seek this NGO-sponsored eco-labels to buff their own brand as being 'altruistic' or 'responsible'.

7. Environmental Certification

After analysing the different definitions of eco-labels, the term certification constantly stands out. Certification is not new. There is evidence to suggest that even in ancient Greece and Rome (in the Mediterranean area) a verification and marking system for olive oil trade was in place. The amphoras were marked and sealed, containing information such as the geographical precedence of the olives, as well as the name of the farmer that pressed the olives, the weight of the oil and the name of the shipper (person who handled the oil during its transport). This information was then verified by a Roman official. While this information was crucial for the Roman epicureans of the time, its real purpose was to insure the olive oil from one of the greatest scams of the time: switching the oil for inferior quality or stealing part of the oil while in route.⁵⁹

Romans left a vast institutional heritage, including verification and certification systems. Today the basic idea remains the same, a third party will verify that the information that is on the labels is accurate. There is a difference between verification and certification, especially in the sustainability arena. Though the differences are subtle and can be interpreted differently depending on the programme.

⁵⁸ NGOs can also make partnerships and endorse private firms in their efforts to become more sustainable

⁵⁹ Daniel Goldman, **Ecological intelligence: The coming age of radical transparency**, p.75



Figure 3. Rainforest Alliance eco-labels: certified and verified.

- Verification, is carried out by a second or third party certifier and its only purpose is to observe and testify how sustainable the producer or product is with regards to the criteria. Verification can be performed by an NGO or a local independent auditor or a business association, whenever there are no certifiers that are certified by the programme available. It is useful for business to business communications specially along the supply chain. Small farms can verify their standards, so an upstream retailer can use that verification in their chain-of-custody evaluation to obtain certification. It can be a pre-requisite for certification and in some cases, when there is no certification programme established, it serves the purpose of assurance to consumers (but it is not common).
- Certification, is a guarantee through a certificate or certification mark that a set of criteria have been met in a specific environment (individual producers, collective producers, co-operatives, or regions). An independent certified or accredited auditor makes the evaluation that the criteria are met. When the confirmation of the status is cleared the producer will obtain the certificate which can serve as a guarantee.

7.1 Reliance of eco-labels on third party certification.

As in many qualities, olive oil's characteristics are not observable until after the oil is consumed, it is an experience good. Therefore it relies on trial and error purchase to know which quality is the preferred one. Once the preferred one is identified the consumer needs to be able to identify it, thus the need for a mark. However, whether there were any chemicals involved in the process, or if the farm has a sound water or waste programme, or even if its employees are treated and paid fairly cannot be clearly observed even after experience. These attributes, are considered credence goods. As noted promptly by Caswell

and Mojduszka, environmental attributes are principally credence attributes. The key factor that makes them credence attributes is that it is not practicable for individual consumers to assess the quality of the product, either because it is economically or physically unfeasible. The consumer cannot measure the quality and also cannot learn it from his or her experience in consuming the product. There is no market mechanism that solves the problem with credence goods because consumers cannot punish the producer by not purchasing the product in the future in response to false claims (in advertising or labelling). In the long run there is no market for high quality credence goods.⁶⁰

7.2 The modern international sustainability certifiers and eco-labels

When analysing the ISO type I eco-label it was clearly pointed out that an eco-label is a third-party certification scheme. This is striking because normally, the definitions claim that the goods are certified or verified by a third party, as a pre-requisite to obtain the eco-label. Which suggests there is a firm, an independent certifier and an eco-labelling entity. The firm would go to the certifier, obtain the certification (understood as some type of document) and only then go to the eco-labelling entity to obtain the eco-label (by signing a time-limited licensing contract). However the doubt rises when not only the ISO claims that eco-labels ARE the certifying schemes, but also the large eco-labels today are considered certification schemes rather than 'eco-labels'. Which suggests that there is only a firm and a certifier and the certifier itself awards the eco-label. Additionally, there are very different approaches in the literature regarding eco-labels and certification, some equalise it, some make a distinct separation, some when analysing one do not mention the other. What can be deduced is that the line between eco-labels and environmental certification is very thin if not non-existent.

Certifications schemes today are likely to vary from one another, however, the key components are identified as "(1) establishment of standards, (2) certification assessment for compliance with the standards, (3) certification seal or label, (4) **accreditation of the certifier by the certification body**, and (5) compliance monitoring."⁶¹ The point that stands out is precisely the difference between the traditional concept of eco-label and the new 'sustainability' certification schemes. Traditional eco-labels agreed on the standards, going

⁶⁰ This matter will be discussed in depth in Chapter II

⁶¹ Environmental Law Institute, *Op. cit.*, p. 2

to the third party certifier, obtaining the label and compliance monitoring, eventually renewal of the label could take place by re-certifying. However, this point is clearly pointing out that the certification body and the certifier are independent entities. The certification scheme is the certification body, the one that orchestrates the criteria setting, and designs the label and does all the administrative work, which includes accrediting the certifiers. With this responsibility it is up to the famous labels, through accreditation, to ensure and guarantee that these independent certifiers are competent. This is precisely how they form the international networks. They collaborate with local authorities and stake-holders by adapting their criteria to local necessities, and accredit local organisms to perform the certification. It is up to the certification bodies to ensure that the accredited certifiers are competent and trustworthy because their 'brand' depends on them. Finally, local producers who already obtained the certification can approach the certification body for the award of the eco-label.

In this sense eco-labels are a complex version of certification marks. To be more precise a sustainable certification mark. The main difference being that traditionally after the certification is performed if its a company it would receive a certificate, but if its a product it can receive a mark. However, the certification is a step previous to the award of the eco-label, to be able to use the eco-label a licensing contract has to be signed with the eco-labelling programme (or certification body). Notwithstanding the previous, each programme differs and it is possible to find simpler schemes in which the eco-label is exactly the certification mark. In conclusion, today eco-labelling programmes are complex sustainability certification schemes that create, promote and are at the the centre of international certification networks.

8. Other corporate 'sustainability' communication tools

A corporation, once it commits to an environmental management system, any pro-environmental or sustainability action that is beyond their legal obligations, will very likely want to communicate these actions to its stakeholders. As mentioned before there is an underlying idea that sustainable corporations have more value in the eyes of stakeholders. Furthermore, there are many benefits for the corporation once it takes real action. However, if such actions are not communicated to stakeholders and the public in general, the benefits are very likely to be limited (reduced water and electricity costs, probably). It can be possible that corporations invest in environmental schemes and do not communicate it, however this

scenario is unlikely, corporations seek profits. Always. There is no sense in today's market place to not communicate pro-environmental actions. Transparency is crucial in the business world. Levelling the information with the public is regarded as a positive, and perhaps even imperative. There are many instruments a corporation could use to communicate its sustainability engagement. These other tools and strategies will be briefly described below, as a manner to understand the differences with eco-labels.

8.1 Environmental Ratings

In short environmental ratings, rankings, indices and awards are instruments that seek to measure, compare or reward corporate sustainability performance. They essentially follow the same business model as financial ratings. Conventional financial ratings aim at assessing the financial standing of a company, whereas environmental or sustainability ratings measure sustainability performance. After an evaluation, against the agency's measuring system the company will obtain a sustainability score. The sustainability score is based on an intricate weighting system that examines company actions regarding things such as corporate governance, environmental performance, energy efficiency and climate change strategies. This score is used as a metric to compare a specific company with others, there precisely the 'rating' they use one common language making it easier to identify the best performers. The evaluations normally focus on long-term sustainability and environmental performance, rather than short term as the financial scores. Therefore in the financial performance of companies with high environmental ratings might not be as good as companies with good financial ratings. There are many studies on this matter, the majority inconclusive. However, if the investor is interested in profits tobacco, alcohol and weapons seem to outperform their sustainably competitors.

Sustainability rating agencies have "all the inherent conflicts in the business models of credit ratings agencies, the same false sense of security applies to sustainability ratings as well." After the financial crisis of 2007 where rating agencies were at the heart of the problem, attention was brought to other rating agencies as well. The main problem with sustainable ratings is that rating agencies are spurring the market place increasing the amount of information. Raters strive to differentiate their ratings by taking different approaches to evaluating sustainability performance. This leads to a market where some ratings focus on performance and others gauge transparency; some ratings focus on triple-bottom-line issues

and others focus on single issues; some ratings require company input and others rely entirely on third-party information sources. Furthermore, there is demand for specific information from stakeholders that want to know how companies perform or communicate on issues that matter to them.⁶² Therefore there ratings that focus on carbon efficiency, diversity, water risk and employee engagement. Making them single-issue ratings.

The target of ratings is the corporation itself, its supply-chain and relations with other actors within its sphere of action. They do not relate to their specific products. The environmental rating of the company that produces certain eco-friendly product does bear the score on the product. Its target are investors not the general public.

8.2 Sustainability Reporting

Just as environmental ratings, reporting has the purpose to be 'transparent'. Firms would report their performance, their results and the achievements of their strategies. It is also known as non-financial reporting, even if it is common to see reports with both financial and non-financial information. Precisely after the financial crisis, attention has been placed on these reports, that are self-generated by the company (maybe verified by an external auditor). Promoters of reporting suggest that it serves as a self-check to the advances, mistakes and opportunities on sustainability issues in the company.

The biggest problem with reporting however is that information can be edited and tailored to specific needs. For example, BP's sustainability review 2010 had to report the terrible oil spill of the 20 of April 2010 in the Gulf of Mexico. Even if there is a hearty part of the document dedicated to the spill and how it was dealt with. The relevant information about carbon emissions, the number and volume of spills, which were not optimal, did not receive much attention. Furthermore, there were no sustainability goals for 2011. For stakeholders that follow the company this particular point can be worrying. The main critic is that the report was lacking real information and it was full of sustainable discourse. This report is generated on an annual basis, the nature of BPs operations call for this type of report, it is a high-risk international corporation. Additionally, this report was audited by a renown firm. Problem was, the comments of the auditors did not seem as an outside perspective, causing doubt in the role of the auditor.⁶³ This shows that reporting is delicate the public will judge the

⁶² SustainAbility, **Rate the Raters, Phase One, look back and current state**. May 2010.

⁶³ <http://www.greenbiz.com/blog/2011/03/24/bp-post-spill-csr-report-long-rhetoric-short-goals?page=0%2C1>

performance and thus determine the trust-worthiness of the company and its products. If information is not regarded as accurate or if the information is incomplete by the public it can receive bad publicity and consumers would stop trusting altogether.

8.3 Emerging environmental communication tools

There are other corporate environmental initiatives, that are similar to eco-labelling in their motivations and effects. They can be considered alternatives as well as complements to eco-labels. These corporate initiatives lack certification, therefore assurance. This means that they could be regarded as 'sustainability marketing' strategies. However, if there is a programme in practice (potentially verifiable), then it would be appropriate to consider them as tools to communicate sustainability efforts. These tools also have the benefit of increasing overall brand and corporate image and eventually this will influence the demand for sustainable products.

8.3.1 In-house standards and trusted brands

Certain companies have decided to pursue sustainability within their own sphere of action. They relate their sustainability programmes directly with their own supply-chains. Therefore the effectiveness of these internal standards and codes will be directly related to the company's home brand. If the programme fails or is deemed as 'greenwash' the repercussions will be directly on the companies profits and reputation. Reasons a firm might have to do this vary. For example, in contexts where the practices or the supply-network is so particular that no pre-set eco-label criteria fits it. Additionally if the home-brand is already strong in itself, it might not want to share the reputation (and risk) with other companies that might have lower standards and that are its competitors. Examples of these schemes are Starbucks CAFE Practices or HP Eco Highlights.

In the presence of a trusted brand or a notorious house brand the situation is very similar to the in-house standards. The difference is that it does not involve the whole supply chain, they use their corporate brand to engage in bold sustainability commitments, and the brand itself is the 'guarantee' of the good sustainability performance. This is the case of companies such as Patagonia, the Body Shop or even Ben & Jerry's.

8.3.2 New sourcing models and partnerships with NGOs

Companies can outsource their sustainability projects with specialised NGOs or other entities. Alternatively they can partner with a renown NGO to create a project in conjunction, to improve business practices or to transform their operations to a more sustainable manner. Additionally, firms can make donations to the NGO so it can use the resources as it considers appropriate. Consumers trust the NGO and when they see that the NGO supports the corporation, they extend the trust to the corporation. These schemes can be used either to complement or instead of in-house standards and labels. For example, the WWF has several corporate partners such as IKEA, Toyota, Wal-mart, Nike, Johnson and Johnson, IBM, HSBC and Alliance, additionally The Coca-cola Company, has a transformation partnership the WWF to create business operations with sustainable water considerations. In other parts of the world, depending on specific problems corporations might partner with local NGOs or even governments. In Mexico, for example, in some places it is easier to access a Coca-cola than water. An average Mexican consumes annually 140 litres of the liquid (data from 2007). Coincidentally Mexico also holds one of the highest rates of obesity, closing up to the United States. Coca-cola Mexico, has consequently received very bad publicity by almost being blamed for the obesity pandemic. Therefore, it decided to partner up with the National Sports Commission and the Ministry of Public Education. The results are programmes, entirely funded by Coca-cola for public schools focused on teaching healthy living habits, as well as promoting physical education. Coca-cola also organises and sponsors sports events nation wide.⁶⁴ Another example is Cadbury's. The chocolate industry has been attacked since the early 1900s, in fact in 1907 Cadbury's Brothers were victims of the first CSR scandal when it was made public that these Quakers were using slaves in their cacao plantations in Africa. Cacao grows in the tropics, in places that poverty is wide-spread. In the 1900 it is true that slaves were used, however today whilst slavery is officially not an issue, the working conditions are still hard, to say the least. Slavery and other allegations have been present throughout chocolate's history. Consequently, Cadbury's partnered with the United Nations Development Programme and local authorities, farmers and communities and created the Cadbury Cocoa Partnership. In addition, its *Cadbury Dairy Milk* chocolate obtained the Fairtrade label in some countries and it has partnered with FLO to expand the label to other lines of chocolate.

8.3.3 Linking sustainability performance to the place of origin instead of a label

⁶⁴ Still it is criticised because the uneducated Mexican population now believes Coca-cola is healthy.

This type of claim is increasing, a company forgoes a label and commits to buying regionally produced goods.⁶⁵ The sustainable argument is that the supply-chain is considerably shortened. Transportation costs are less and it promotes environmental and economic development of the consumers locality. It is very appealing for the consumer, as it is true that by eliminating transportation costs and intermediary costs, the prices are going to decrease (environmental costs too). Additionally by treating directly with the farmers and communities in the local markets trade becomes personal again and the 'guarantee' is the farmers personal reputation (as it once was). It does not have to be very extreme, even emphasising that a product is nationally produced may sway national consumers to prefer these products. This is precisely the philosophy of Slow Food's Earth Market's network. They promote regional production and consumption as well as promoting the local culinary traditions. However, these actions go beyond the mere obligatory labelling and tracing (such as in cows after the mad-cow epidemic in Europe). These initiatives normally work well where regional and national pride is high.

8.3.4 Tagging and mobile technologies that connect the dots across the value chain

Technology has reached a point that people can access almost any information at the moment they want it. A decade ago, bad business practices were being noticed and publicised within days. Now it can be done within minutes. However, the same goes for 'good' practices. If the company has reasonable practices overseas and has sound supply-chain engagement, it can grant access to NGOs to film, and to allow the direct traceability of goods. Technology is being created, in food sector, to trace material to aid in outbreaks or other matters where traceability is keen. With this technology there can be direct live-feed contact between the different intermediaries in the supply-chain and consumers. For example, GoodGuide⁶⁶ puts sustainability data in consumer's hands at the point of purchase via iPhone or text messaging. In addition social networking tools such as tweeter have channels regarding sustainability, where people create positive or negative 'word-of-mouth' regarding product's sustainability.⁶⁷

8.3.5 Other initiatives

⁶⁵ SustainAbility, **Signed, Sealed....Delivered?** p. 7

⁶⁶ <http://www.goodguide.com/>

⁶⁷ SustainAbility. **Signed, Sealed....Delivered?** p. 7

As seen, these types of green claims are spurring in today's markets. Other initiatives that are observed are branded product lines, where multi-product corporations commit one or two product lines to sustainability. There are vast examples of these lines, Nike Considered, Philips Green, Office Depot Green. Another initiative is choice-editing, where the retailer commits to sustainability by not distributing unsustainable products. The choice is not left to the consumer, it is on the retailer. In the UK Tesco and Sainsbury (also in the UK) committed to phase-out incandescent bulbs, before legislation requires them to do so.⁶⁸ Other retailers including UKs Tesco, Sainsbury's and Marks & Spencers pre-select eco-labelled products, locally-produced goods and organics. So consumers do not have to worry about sustainability.

9. Conclusions

The aim of this chapter was to define and limit eco-labels and eco-labelling. Thereby providing a uniform and clear understanding of the terms that will be used throughout this work. Nonetheless, even if this chapter was descriptive in nature it still had some interesting findings. The first finding is that the eco-labels that are seen in the market today are very different from the 'original' generation of eco-labels. This has a tremendous impact in this specific research as it means that the 'classic' literature on eco-labelling today might not be very useful. Hence, a theoretical gap has been created due precisely to this evolution. Proof of the evolution of eco-labels is the current prevalence of multi-criteria or LCA eco-labels. Single criteria eco-labels that were very common in the 1990s, such as the 'dolphin-safe' label, which is analysed in Chapter VII, are not anymore. Today eco-labels, while they might focus on a specific sector, include general sustainability criteria over a broad range of indicators. In addition, eco-labels today are likely to be owned by private entities not governments. Whereas the original eco-labels were actually devised as government tools. This difference in conceptions has had repercussions in the policy arena, as it will be discussed in Chapters V and VI.

Another finding of this chapter is that eco-labelling systems are in fact complex sustainability certification schemes. This strengthens the notion that certification is the base of eco-labelling. Any other environmental label that is not third-party certified cannot be considered an eco-label. Moreover, by defining eco-labels as certification schemes a door is opened to

⁶⁸ *Ibidem*

a different set of literature (both economic and legal) that will complement the traditional eco-labelling theories. Furthermore, in the legal arena the repercussions of this view are tremendous as it will be discussed in Chapter V.

This chapter provides an overview of the world of eco-labelling. However, many topics have remained at an introductory level. Subsequent chapters will address many of the issues brought up and pointed out in this chapter. Specifically the following chapter will be focused on analyzing the role of eco-labels in the market. With the aid of economic tools and theory it will be possible to demonstrate how eco-labels, regarded as marks and certification schemes, affect the market. Furthermore, some of the most salient pitfalls of eco-labels will also be identified.

CHAPTER II

Eco-labels' place in the market

1. Introduction

The first thing that would have to be determined is whether there is a market for eco-labels. This question is essential, as it would be useless to continue this analysis if there were no market. The real world provides this answer, as eco-labels can be seen in many products and services. However, on a theoretical level the story might be slightly different. Behind the eco-labels that can be seen in the market are complex mechanisms at place that make eco-labels work (or not work). This chapter will use a wide variety of economic theories and tools to explain eco-labels and its mechanisms. First, the economics of information is the branch that has traditionally dealt with eco-labels. Hence, it will be the first approach to the analysis. It will be shown that eco-labels have certain characteristics that make them rely on certification for the markets to exist. Without certification eco-labels would be mere advertisement. However, eco-labels are environmental certification marks, this means that they are proof that the good has been certified. Hence, the market will work as if it were a normal experience good market, in which reputation and branding have an important function. Section 3 will precisely deal with eco-labels from a branding and intellectual property (IP) perspective. In this section, different IP tools will be analysed, including certification marks. It will be shown that eco-labels are certification marks. Subsequently, eco-labels will be analysed from a competition perspective. This section has two main arguments; the first is that the market is segmented, hence eco-labels are a mere response to the need to distinguish goods and second that eco-labels have the potential to restrict competition. The following section, refers to pricing and premium pricing. The premise of this idea is that firms will supply eco-labelled goods because they can charge a premium. Much of the eco-labelling mechanism depends on this 'eco-premium'. This section, draws on the array of experiments and studies on the matter and provides a simple pricing scheme that eco-labels are likely to follow. Finally, the disincentives or the negative effects of eco-labels in the market are shown. Eco-labels have a side-effect that is known as greenwashing. Greenwashing has the potential to hinder the whole eco-labelling mechanism.

2. Information and Environmental Attributes

II. Eco-labels' place in the market

Daniel Goleman, points out that “the tiny patch of real estate on product labels is one of the most hotly contested in the world of commerce”.¹ The value of labels is that they have the power to change consumer behaviour. Every detail (phrasing, colour and graphics) in the label is planned in a way that maximises the probabilities of capturing consumer attention. The consumer reacts to the labels by buying the product (or not buying it). The change in consumer behaviour in the long run leads to market changes. Thus, the information presented in the label plays a crucial role in the market. Eco-labels present certain information, that has the purpose of stirring consumers into buying products with environmental attributes.

All products have environmental attributes. A products environmental attributes are the specific traits that are enhanced during the products life-cycle so it has less harmful effects on the environment. These traits or elements can be achieved by adhering to certain standards, such as those proposed by an eco-labelling scheme or by adapting the life-cycle to reduce negative impacts. In more technical wording, the actions taken to internalise the externalities of production are deemed environmental attributes. These are namely process attributes, meaning they do not alter the functions of the product. However, they do alter the characteristics of products enough to be considered of a different variety or a different quality of the original product.

2.1 Quality

Quality is a complex and multifaceted notion. Commonly quality has two basic denotations. One refers to a standard of something as measured against other things of a similar kind. This idea suggests that quality has a vertical or hierarchical dimension, a kind of grading. This standard can be both objective (i.e. if a product is made out of recyclable material it would have higher environmental quality against the same product without it) or subjective (i.e., when an individual buys shade-grown coffee because it helps save the birds in tropical countries, making that coffee superior than others for that individual). The other denotation of quality pertains to a distinctive attribute or characteristic possessed by someone or something. In this sense, particular characteristics of goods are what define its quality. For the purpose of this thesis product quality should be understood as a bundle of characteristics or attributes that define and differentiate a good. The combination and the

¹ Daniel Goleman. **Ecological Intelligence**, p. 76

amount of these attributes can then be assessed, valued and ranked by the consumers. There will be products that there is a general understanding of the value and rank but there are others that will be determined by each consumer.

Environmental quality, thus would be the characteristics or attributes that make a product more environmentally sound than others. When a product has these environmental attributes, that are different from the average good making the good environmentally superior, the producer normally communicates this to the consumers. A way to communicate a products environmental quality is precisely through its label. Nonetheless, environmental attributes are process-related, therefore it is close to impossible for the consumer to experience them. Eco-labels certify that the environmental attributes that the producer claims the product has are really there.

2.2 Information

Eco-labels communicate the environmental quality of a product. This communication is how the consumer gets informed or how he learns about the product's characteristics. Information is defined as the facts provided or learned about something or someone. Information plays a central role in all markets. In healthy markets information is communicated and transferred between actors openly. However, if withholding information or keeping secrets would lead to more profits, there is very little incentive to divulge it. Furthermore, if the information concerns negative environmental effects, producers are unlikely to reveal it, unless they are compelled by an authority. This hiding information about product qualities, such as environmental characteristics, generates a gap in the market mechanism. The information gap, will put pressure in the market, and may lead to a market failure. Not only withholding information creates market failures. In the case of environmental attributes of the products throughout their life-span the information may not be available because the information simply does not exist. This leads to the problem of information uncertainty. Inexistent or uncertain product information may also hinder or distort the market mechanism.

Since the 1970's economics of information theory has classified products into three categories based on the way consumers acquire information on quality: search, experience

and credence goods.² In recent years, some scholars contend that this classification does not comprise the new raise of 'sustainable' product attributes and have included further classifications such as 'Potemkin goods'³ and 'indeterminate goods', proposed by Sylvie Lupton.⁴

2.3 Information Asymmetries

The information gap between market actors has been named 'information asymmetry'. "Information asymmetry corresponds to an unequal repartition of information between two agents, which allows an opportunistic behaviour of the best-informed agent."⁵ When selling goods, the seller will always know more than the consumer. This creates an advantage of sellers over consumers. Beyond the 'unfairness' of this situation there is an actual loss in consumer welfare. "The quality offered at a given price is inferior to the quality level the consumer would have chosen if s/he had been perfectly informed"⁶. It is not expected that all products have the same quality, in all markets good and bad products co-exist. However, because of the lack of complete information market will be constantly confronted with problems of adverse selection and moral hazard. The information asymmetries between consumers and sellers vary accordingly to the product's attributes. The less observable the quality the bigger the information asymmetry. When consumers are presented with information that is not easily verifiable a certain degree of uncertainty arises. This uncertainty is inherent to consumers inability to discern the quality of the good that the seller is offering. Whether this uncertainty is inherent to the information asymmetry or if it is a phenomena worthy of independent analysis will be discussed in the following sections.

2.3.1 Search Goods

² This classification helped explain that consumer information about quality has "profound effects upon the market structure of consumer goods" at Phillip Nelson, **Information and Consumer Behavior**, pp. 311-329

³ See Jahn, Gabriele; Schramm, Matthias; and Spiller, Achim. A) **The reliability of Certification: Quality Labels as a Consumer Policy Tool**, B) **The Quality of Audits – A Comparative Study of Auditing and Certification Schemes in the Food Sector**, C) **Differentiation of Certification Standards: The trade-off between generality and effectiveness in certification systems**. Working Paper.

⁴ At Sylvie Lupton, **Shared quality uncertainty and the introduction of indeterminate goods**, pp. 399-421

⁵ Douadia Bougherara and Gilles Grolleau. **Designing Ecolabels In Order to Mitigate Market Failures: An Application to Agrofood Products**, p. 416.

⁶ At Sylvie Lupton, *Op.cit.*

With search attributes consumer information is plentiful and easily attained. Quality can be identified prior to purchase by simple inspection. With search attributes or goods the main issue is product selection. Gathering information from all the products available implies a “search cost” for the consumers. The more products in the market the higher the search costs for consumers. With respect to environmental attributes, they are normally not observable by simple product inspection.

2.3.2 Experience Goods

For experience attributes, the most cost-effective way to get the information is to consume the product. The quality of the product can only be ascertained until after the good is consumed. Frequency of transactions is relevant with experience goods. If a producer sells experience goods to one-time customers he has strong incentives to only sell goods that are at the lowest possible quality level acceptable to this one-time consumer. Therefore, there is moral hazard on the producer side. This problem can be overcome if the producer offers an adequate and enforceable warranty.

Another way to mitigate information problems in markets with experience goods is through repeated purchase. Consumers make repeated purchases of a product where their choices are based on prior experience with product quality. When the product has persistent quality, it earns a ‘reputation’ “and reputation commands a price (or exacts a penalty) because it economizes on search”. In this sense reputation transforms an experience good into a search good. In the long run this repeat purchase creates brand loyalty which in turn gives incentives to producers to continue producing high-quality otherwise consumers might punish him by switching to other brands.

A key factor in determining whether markets for higher quality experience attributes operate effectively is the success of quality signalling by producers to consumers. Improving information through means such as advertising and labelling may solve or mitigate the quality-signalling problem. Vendors are able to issue reliable quality signals by binding themselves through investing large amounts in advertising. Phillip Nelson, analysed the incentives producers have in revealing truthful information about their products. If the claims are misleading or untruthful, the producer will suffer the cost of non-credibility of future advertisements in addition to the cost of processing the lost costumers. With experience goods, the producer maximizes his profits by telling the truth as long as it is possible for him

II. Eco-labels' place in the market

to make the advertised statement true rather than false at no cost. However, producers will generally disclose only information advantageous to them. All producers have the same incentives. It is expected that producers who can make a quality claim will do so and consumers will assume that any firm not making a claim has low quality products.

For experience attributes, reputation models with quality signalling match how markets operate. Government is unlikely to become heavily involved in requiring informational labelling of these attributes because with repeated purchases the market can satisfactorily self correct. However, environmental attributes are not experience goods either.

2.3.3 Credence Goods

In 1973 Darby and Karni introduced credence goods to extend the information acquisition classification into a more precise taxonomy. The key factor that makes them credence attributes is that it is not practicable for individual consumers to assess the quality of the product, either because it is economically or physically unfeasible. The consumer cannot measure the quality and cannot learn it from his or her experience in consuming the product. "Economic models of quality hit dead end when they come to discussion of credence attributes or goods because information is so imperfect that these markets for quality simply do not function well." There is no market mechanism that solves the problem with credence goods because consumers cannot punish the producer by not purchasing the product in the future in response to false claims (in advertising or labelling). In the long run there is no market for high quality credence goods.

McClusky explains that "in this scenario, the consumer receives the same utility payoff whether the producer used environmentally friendly production processes or not. Therefore, if the payoff is larger than zero, the consumer will buy the environmentally friendly product. The producer will choose the lowest cost method, which is not environmentally friendly". The consumer cannot relate his payoff with the environmentally friendly characteristic and consequently will never know what the producer did in reality. Consequently there is no market for credence attributes because all the claims are potentially cheap talk.

Process-attribute differentiated goods fit well in the credence goods classification. They are not correlated with end-use attributes and, hence, an asymmetric information problem arises. These goods suffer an ex post information asymmetry. However, that view is just a simplified

version of the credence good problem. The ‘complete’ credence good problem involves two potential sources of information asymmetry. The first type of uncertainty rises when consumers are “unaware of the repair service to satisfy I given want”⁷. Only an expert can diagnose a consumer’s true needs⁸, for example only a doctor can determine whether you need your appendix taken out. Experts do not face uncertainty, therefore the uncertainty is unilateral (consumer) and consequently there is an information asymmetry. Which, makes fraud likely to occur, especially if the diagnostic by the expert and the rendering of the service are made jointly.⁹ The second type of uncertainty, appears when the consumer cannot detect the quality of the good or service.¹⁰ Only the seller may know the level of service actually provided.¹¹ Following Balineau *et al*, the first scenario will be referred as uncertainty type one (UT1) and the latter as uncertainty type two (UT2). Roe and Sheldon suggest that only UT2 is relevant for consumer products because consumers are likely to know their preference for a process attribute. In a sense, the consumer is a type of ‘expert’ and does not need anyone telling him his ‘needs’. If a consumer wants dolphin-free, not-animal-tested or bio-diversity favourable attributes because those are his preferences, then he would only face the UT2. Roe and Sheldon note that credence goods involving consumer products with ‘unverifiable’ process attributes is a special case, which potentially includes some UT1.

In credence goods the demand for quality information is very strong because they have no means to assess quality via search or experience. There is a need of a quality assurance mechanism. Warranties and brands work well for experience goods, but not for goods whose qualities cannot be evaluated through normal use. Consumers would have to look for the provider’s credentials. Licensing focuses on the inputs of the product, rather than the outputs (as the mechanisms for experience goods do). Licensing is normally addressed by government agencies, however private entities can also provide credentials, via certification.¹² The certifier would disclose the information to the consumer, in this particular

⁷ Darby and Karni, page 67

⁸ Brian Roe and Ian Sheldon, page 20

⁹ Gaëlle Balineau and Ivan Dufeu, page

¹⁰ Gaëlle Balineau and Ivan Dufeu

¹¹ Brian Roe and Ian Sheldon, page 20.

¹² David Drano and Ginger Zhe Jin, **Quality Disclosure and Certification theory and practice**, Working Paper 15644, National Bureau of Economic Research, January 2010.p.

case environmental information through an eco-label. The eco-label then would serve both as a brand and as a warranty of the product's environmental qualities. In many cases eco-label removes the uncertainty type 2. However, eco-labelled goods sometimes just infer the properties of the goods. For example, people who buy shade-grown coffee probably aim to conserve the birds and other animals in the tropical areas where coffee is produced, this is their 'want' according to Darby and Karni. Subsequently, the problem is that consumers may not be able to assess 'the ability of services to satisfy their wants'.¹³ In other words, the process attributes are seen as a means to achieving other goals. Consequently, consumers do not know if the eco-labels' standards can really achieve its goals. Which is different from knowing whether such standards were really met in the production process.

2.3.4 Potemkin Goods

Recently, the literature has included the so-called Potemkin goods. Potemkin attributes are characterized by the fact that neither the buyer nor external institutions are able to carry out controls at the end-product level. These are process-oriented attributes, such as organic farming, fair-trade or Geographical Origin. The problem of Potemkin goods is that they cannot even be detected in a laboratory analysis done by external third parties. Credence attributes, product contamination, fraud and mislabelling can be revealed by inspections. With strict third party monitoring and high disclosure rates credence goods could theoretically be treated as experience goods, such as Caswell and Mojuszka demonstrate. The information asymmetry that these authors relate to Potemkin attributes, however, cannot be bypassed by classical quality signals such as advertising, branding and guarantees. Quality characteristics are closely connected to the production process that is hidden to the outside observer. The only way to detect fraud is the direct monitoring of the company's internal production process. Direct monitoring, may be difficult because only public authorities are allowed to practice it. Furthermore, with self-regulatory practices such as eco-labels there is no legal basis to grant access to third parties for inspections.

With Potemkin goods, quality statements can be made with impunity. There are hardly any risks of discovery, due to the inability to learn about the opportunistic behaviour and verify marketing claims. What is needed to circumvent this process is an investigation scheme that

¹³ Darby and Karni, 67

covers the whole supply chain and ensures on-site inspections throughout the production process. Certifying systems are able to guarantee these inspections.

Credence goods also have a need to certify and monitor to assure that the good is actually being provided, as sustained and proved by McClusky. The existence of a market for credence goods depends on certification. Subsequently, in essence there is not much difference with a Potemkin good. The extent of the verification that is expected from a Potemkin good is life-cycle analysis. Whether this Potemkin goods are an entirely different classification of goods or they are just credence goods that require stricter certification processes can be debated. Furthermore, whether the producer's incentives differ in presence of normal certification to the life-cycle analysis, would have to be modelled and analysed. Notwithstanding the above, LCA with in-site visits and regular inspections is still certification, a more comprehensive and expensive certification, but certification nonetheless. Therefore, Potemkin goods should be considered a type of credence good.

2.4 Uncertain information and 'indeterminate goods'

One of the biggest problems with environmental quality of goods is that many times it is unknown. The interest about the effects of a product's life-cycle on the environment is fairly new, therefore much of the information is still undiscovered. This problem is not encompassed by asymmetric information because neither the buyer or the seller are aware of the products environmental attributes. It is a problem of information uncertainty. This type of uncertainty is shared by all actors in the market not just consumers. "The consumer, the producer (or seller) of the product, and all the agents linked to the market do not have a clear cut definition of the product." The information about the product is 'incomplete' and further scientific information would be required to make a better assessment. Lupton challenges the assumption in economics that "characteristics of the good are assumed to be known to the producer: products are identified *a priori* by the producer". In the former classification of search, experience and credence goods the products characteristics are clearly defined. The uncertainty thus lies in the consumer who has to acquire the information about the product's quality at certain costs. As already noted, the bigger the information asymmetry the higher the costs to obtain the information. Still, the information is known beforehand by the producer or seller, the uncertainty is entirely on the consumer. This view

makes the sellers seem omniscient, they know exactly what they are selling or producing. However, with environmental information, at least, this is seldom the case.

Shared uncertainty among market agents is represented (analytically) as information symmetry, a symmetric ignorance to be more precise. Symmetric information is considered analytically identical to perfect information. Consequently, there are no means to act opportunistically or strategically. It is only when one agent possesses more information than another that he can take advantage of the other's ignorance and act opportunistically. Shared uncertainty is a neutral element and theoretically should not disturb the market. However, Lupton suggests that shared uncertainty may create economic problems different to moral hazard or adverse selection. Based on this shared uncertainty on goods' characteristics Lupton suggests a new class of goods is need to be added to the former classification of search, experience and credence goods, precisely because these do not take into account bilateral uncertainty. Lupton proposes calling these goods 'indeterminate goods'. She defines indeterminate goods "as goods/services whose characteristics cannot be known either before purchase, or once they are consumed (directly after purchase), or again through additional costly information (credence goods). Information about the characteristics of these goods/services is not available, taking into account the actual knowledge at the time and is not possessed by any agent or group of agents". This definition only applies to certain situations where the information uncertainty creates market problems.

2.4.1 Indeterminacy of new products in the market

Lupton suggests that "with the creation of new products, it is possible that producers do not know exactly what to offer, and consumers have not yet formed their preferences since the goods or service are new".¹⁴ This happens when there is a strong rise in demand on a certain good (or service) and producers do not have knowledge on how to produce it. In response to this market demand, some producers would come forward to blindly supply the good. This becomes a learning experience for the producer who learns to produce the good or render the service 'on the job'. Consumers on the other hand, have no way to measure quality, because it is a new product or service, thus they do not know what to expect from it. Here the problem is not about informing or educating the consumer, but to do so for the producer. The low quality product is not due to opportunistic behaviour of the producer, it is

¹⁴ Sylvie Lupton. *Op. cit.*, p. 404.

due to his ignorance. Nonetheless, this uncertainty will not last forever as this is just a learning phase. There will be a discovery phase and at some point agents will 'renegotiate' and set standards and maybe even legislate. After the learning phase quality should improve.¹⁵

Lupton's explanation seems to clarify on how green markets appeared. There was a rise in demand of environmentally friendly goods and during this discovery phase many tools came into play to discover and communicate that missing information. Once markets acknowledged that there is a lack of information the discovery phase started and with it eventually adaptation and renegotiation came along. Ignorance and uncertainty regarding the product's environmental attributes is not something that can be dealt with once and for all. It is a trial and error process, where markets learn from the new acquired information. Eco-labels are one of the communication tools between producers and consumers that allow for this 'renegotiation' of standards and rule-setting. This is why eco-labels are conceived as open forums, where consumers can give feedback to the industry. Traditional economics, would suggest dissatisfied consumers would search different providers, and if they are all unsatisfactory the consumer would eventually leave the market. However, if there is a real demand and no good satisfies the consumer, the consumer instead of exiting the market would have to express its dissatisfaction. Expressing the dissatisfaction opens the door for improvement, which eventually would lead to the provision of a higher quality good.

2.4.2 Indeterminacy due to rival hypothesis concerning the past of the product

In this case, ignorance is not the problem. When a product's past is uncertain, doubts may arise regarding its quality. Therefore, an expert opinion or certification would take place to clarify the doubts and determine the products quality. However, expert opinion is not always unanimous. For example, an expert may argue that a product's environmental qualities can be scored with just its carbon output; whereas an other expert can claim that carbon footprints are not as accurate as cradle-to-cradle certification. In this case, one opinion is just as valid as the other one. This is because (at this particular moment) it is impossible to know the 'true' environmental impacts of the product. The uncertainty here rises due to rival hypotheses. "The hypotheses are rivals of each other in the sense that they all refer to the same question, and that only one of them can prove true." The problem here is that

¹⁵ See *Idem*, p. 404-406

II. Eco-labels' place in the market

environmental quality is not observable, expert opinions or certifications are crucial for the existence of the market. If there is doubt on the product's environmental attributes the market can be completely altered to a point of eliminating demand.

2.4.3 Indeterminacy concerning future impacts of the product

The product's future impacts are normally related to product safety. There is a keen interest in informing consumers of the potential risks, correct uses and disposal of the product to avoid personal or environmental damages. However, there is still room for uncertainty when there is no information regarding the impacts on health or the environment. In this sense, eating organic fruits and vegetables would be sensible because fertilisers and pesticides are chemicals that are easily linked to environmental and/or health matters. However, the problem lies in those products where this direct link cannot be made. Potentially dangerous substances may be identified, but there are limitations to scientific knowledge of their effects. Ulrich Beck, in his definition of 'risk'¹⁶, suggests that the effects of radioactivity, toxins and pollutants in the air, water and 'foodstuffs' evade human perceptive abilities, and have short and long-term effects on humans, animals and plants. "They induce systematic and often irreversible harm, generally remain invisible, are based on casual interpretations, and thus only initially exist in terms of the (scientific or anti-scientific) knowledge about them. They can thus be changed, magnified, dramatised or minimised within knowledge, and to that extent they are particularly open to social definition and construction."¹⁷ This type of uncertainty surpasses experience and credence attributes. The risk of this uncertainty, is precisely that it opens the possibility to anyone with 'some' information to fill in the gap. Specifically, this openness to definition, interpretation and construction of information is likely to create rival ideas in different social groups. Some groups might reject a product based on scientific data while others may reject a good for the lack of such data. Europe, for example, functions under the 'Precautionary Principle'¹⁸, according to which, measures should be taken to prevent, anticipate and attack serious or irreversible environmental damages, even if there is a lack of full scientific certainty. Institutions have to take measures to protect

¹⁶ Note from Lupton: 'sociologists tend to blend risk and uncertainty together, contrary to economists'. Economists have separated, risk can be measured whereas uncertainty cannot.

¹⁷ Ulrich Beck, **Risk Society: towards a new modernity**, 1986 translation 1992, Sage Publications, p. 22-23.

¹⁸ Whenever reliable scientific evidence is available that a substance may have an adverse impact on human health and the environment but there is still scientific uncertainty about the precise nature or the magnitude of the potential damage, decision-making must be based on precaution to prevent damage to human health and the environment

human health and the environment without having to wait for the consequences to be fully apparent. This has led to several restrictions in the importation of food. These restrictions have more than once created conflict in the WTO with countries that follow regimes that require scientific proof to create standards. However, the argument is strong and simple, when faced with uncertainty its better to be safe than sorry. However, these trade restrictions that originate from product refusal and bans do distort markets and create inefficiencies.

2.5 Placement of eco-labelled goods within the classifications

The classification of goods with environmental attributes is not a straightforward task. It is safe to say that there might be a few environmental attributes that can be considered 'search' or 'experience' attributes. Packaging, for example, leads to excessive waste. The consumer can ex-ante observe if the good comes with little or no packaging, and determine whether it will be more environmentally friendly (i.e., less waste). Regarding experience attributes for environmentally friendly goods, as example would be the recyclability of a good. The good states it is recyclable, but the consumer will not know if this is true, until s/he tries to recycle it. Notwithstanding the previous cases, environmental attributes are normally considered to be credence goods. Balineau and Dufeu go beyond the credence classification and suggest that, in some cases, environmental attributes¹⁹ can also be considered 'indeterminate' goods as suggested by Lupton.

2.5.1 Eco-labelled goods as credence goods

The uncertainty that environmental attributes generate is that consumers cannot assess if the environmental standards were met (UT2). However, Roe and Sheldon note that credence goods involving consumer products with 'unverifiable' process attributes is a special case, which potentially creates uncertainty regarding if the environmental standards actually work (UT1). This is an issue that is problematic because if consumers do not know if eco-labelled goods deliver on their promises (if they are effective) they would not buy such products. Consumers need to trust the entities that set the standards, in other words the eco-labels.

Eco-label organisations are complex entities that set standards, authorise certifiers and license the eco-labels to the suppliers of the good. Darby and Karni, the UT1 "is only an

¹⁹ In their work they analyse 'Fair-trade' quality not precisely 'environmental' attributes, however the analysis is very similar.

II. Eco-labels' place in the market

issue if informed experts consulted by uninformed consumers are also the sellers of the good or service about which consumers are seeking advice". This scenario of information asymmetry gives incentives for the 'expert-seller' to suggest unnecessary products to sell more. The mechanism suggested to avoid this opportunistic behaviour is to separate the diagnosis from the treatment. In the case of eco-labels, the standard-setter should be independent from the sellers of these goods. In the case for environmentally friendly goods, eco-labels create the standards and determine the course of action consumers must take to support the environment, therefore they are the experts. In order for them to preserve their credibility, they should not produce and sell their eco-labelled goods. The certifiers will be selected and authorised by the eco-label, however they preserve their independence from the sellers. The blurry line is between the eco-label and the seller, who after obtaining the certification, sign a license contract for the use of the eco-label logo on their products. Not to mention that this license agreement includes fees. In this sense, even if the eco-label is not selling the goods directly, it is being paid by the seller. The majority of the eco-labels income is precisely the membership and monitoring fees. Furthermore, the sellers are likely to participate in the establishment of standards. Points of potential fraudulent behaviour due to conflict of interests evidently exist within these mechanisms. However, eco-labels' income depend directly on the amount of licensees and the amount of eco-labelled products that were placed in the market. If an eco-label wants to expand it needs these fees, even if it leads to scrutiny about its credibility. The only solution to this lack of credibility is to create trust among consumers by being even more transparent.

2.5.2 Environmental qualities as 'indeterminate'

The problem of eco-labels' standards being effective to tackle environmental problems, or if LCA is sufficient to reduce negative environmental impacts of production is still at the research stage. At this moment there are many unsolved problems regarding the environment. People want to know the harmful effects of chemicals in the natural environment and on human health. However, there is simply no information because it does not exist. There is a shared uncertainty about products environmental qualities. Therefore, eco-labelled goods have an 'indeterminate' quality.

The market for eco-labelled goods (and for environmental attributes) is fairly new. Consumers expectations are being structured and the producers and eco-labels are looking

into the effectiveness of the standards to deliver better environmental attributes. Indeterminacy due to a new market is temporary. Eventually the information will be generated, generating a simple information asymmetry which can be solved with certification. Regarding the other type of indeterminate goods, as long as there is no 'true' information there will always be rival eco-labels which claim that their standards are more effective and complete than others. Preferences will be formed with the little information available and eco-labels will strive to satisfy them. Disagreements among rival eco-labels can be regarded as simple competition. Nevertheless, rivalry of standards may also serve as eco-labels worst enemy. As Lupton suggested, uncertainty can also be used strategically to 'discredit' eco-labels. If there is no true information eco-labels can easily be effectively foreclosed from the market.

Balineau and Dufeu point out that one of the implications of indeterminacy is the low consumption of eco-labelled goods. People are uncertain about eco-label's effectiveness, therefore even if they are willing to pay for a better environment, they do not trust eco-labels achieve their goals. Additionally, they suggest that with indeterminacy it is crucial to communicate the benefits (the known ones) of consuming the eco-label. To increase their impact, eco-labels have to increase their market share, and that can only be done if they communicate their achievements. The final implication is that if eco-labels are considered indeterminate goods, then the threat of market collapse is larger than from adverse selection. As long as there is no conclusive information regarding eco-labels effectiveness and competition between eco-labels increases "*the uncertainty will be used as a competitive weapon*". Regardless if the conflicts are between eco-labels or eco-labels and normal firms "*these conflicts will increase the level of indeterminacy of the environmental attributes. Criticism and scepticism will exacerbate doubts about effectiveness and could clearly cause the FT market to collapse*".²⁰ The market of eco-label goods is "*based on a fragile equilibrium which prevents players from starting a negative advertising war in which each FTO would try to discredit others*".²¹ In this sense, uncertainty is much easier to exploit than information asymmetry. The essential attribute of this market is uncertainty, therefore if an eco-label is attacked ALL eco-labels in the market will be questioned. Therefore, competition cannot be too aggressive because the risk of losing the market is high.

²⁰ Gaëlle Balineau and Ivan Dufeu. Are Fair trade goods credence goods?

²¹ *Ibidem*.

2.6 The eco-label organisations and the certifiers.

Certification is crucial for the existence of credence goods markets. Certification maybe the only way to provide information about products unobservable attributes. "*Certification is vouching for the truth of certain information. To certify is to proclaim certain, to declare, attest or assure about something by formal or legal certificate.*"²² This certificate is different from the certification mark. "The certificate provides assurance that some act has or has not been done, or some event occurred, or some legal formality has been complied with." It is awarded by a certifier. There is an implicit requirement that who ever certifies, is competent to do so. The eco-label organization will search for the independent certifiers and accredit them as such. The bigger the scale of the organization the more certifiers they will have spread out in the different geographic areas. Certification marks, are then, the eco-labels which are awarded by the eco-label organization.

Markets trust certifiers to provide precise and unbiased information about products quality. Therefore, there is a concern about the efficiency of third-party certification schemes. As pointed out in Chapter 1, eco-labelling programmes are complex sustainability certification schemes that create, promote and are at the centre of international certification networks. There is a variety of certification systems, generally an independent entity (the certifier) would inspect and evaluate a product based on the regulations or standards laid down by external organisations (the standard-setter). In the previous section it was pointed out that the standard-setter should not be the seller of the product to avoid opportunistic behaviour. In this case, the problem is inherent to the relation between the producer/seller and the certifier. Evidently, the certifier is independent from the standard-setter and the seller. However, the standard-setter in many cases is also the accreditation entity, it decides whether the certifier is competent to certify or not. However, this relation is unavoidable and very unlikely to incentivize opportunistic behaviour, given that eco-labels and certifiers depend on their reputations. The relation that is in question is between the certifier and the producer. The producer will pay the certifier to evaluate its product. The certifier has an incentive to favour the producer to secure future business. This means that the product does not meet the standards and would still get the eco-label. Therefore both the certifier and the producer would benefit.

²² Jeffry Belson, **Certification Marks**, Special Report, Sweet and Maxwell a Thompson Company, London 2002, p. 5

Eco-label organisations, are the standard setter's and also they are the ones who ultimately grant the licenses to use the eco-labels. It is the proprietor of the eco-label and as such it is responsible for controlling its use. The eco-label is on a delicate equilibrium, and for its market to exist there is an interest to monitor and exclude non-compliers, being these either certifiers or producers. A situation might arise when the eco-label organization is also the proprietor of the eco-label.

3. Eco-labels: branding and certification an IP point of view

It has been previously established that eco-labels are environmental certification marks. A certification mark "is a mark which indicates that certain characteristics of goods or services, in connection with which the mark is used, are certified. (...) Thus the certification mark is a guarantee that goods or services, in connection with which the mark is used, conform to certain standards".²³ In some countries such as the US certification marks are regulated within the intellectual property regulation. The World Intellectual Property Organisation (WIPO), along with Continental Europe and other civil-law countries, equally regulate geographical indications, which is a type of certification mark. Given the similarities to these intellectual property instruments, eco-labels can also be analysed from their perspective. Furthermore, trade marks and other collective mark's purpose goes beyond filling information gaps in the market. They have their own value and are a commodity by themselves.

3.1 Collective and geographic marks

Even though amphora (olive oil and wine) markings were a common practice in the Roman Empire, it was not until the Middle Ages that marking had a regulatory value. Certification marks, as such, may have their origin in the guild system.²⁴ Guilds were a type of trade association, they were entities that saw for its members' interests without carrying on a trade itself. The trade was carried on by individual members, who were independent but subject to the guild's bylaws. "By controlling, among other things, the use of markings on products, the guilds controlled, policed and enforced standards of workmanship, the quality of

²³ Jeffrey Belson, *Op. cit.*, p.1

²⁴ In Britain they were called guilds, however in Rome and Constantinople they were known as collegia or corpora. Originally, they were geographically localized confraternities or societies that provided mutual support for their members. They evolved to control specific trades, thereby protecting and advancing their members trading interests. Jeffrey Belson page 6.

II. Eco-labels' place in the market

merchandise, and weights and measures.” The mark represented the whole association, not its individual members. It resembles what today we know as collective mark.

3.1.1 Collective Marks

Collective marks are owned by an association for the use of its members. The association is proprietor of the mark and the members are entitled to use it, to indicate they are part of such association. Collective marks are not contingent upon the goods' or services' conformity to standards. They indicate membership to the association, in other words collective marks' access is limited to the members of the association.

Not all countries recognise the difference between certification marks and collective marks. In such countries, the mark would be registered as a collective mark. Such is the case of the Benelux Trade Marks Act of 1996, which states “(c)ollective marks shall be considered all signs that are thus indicated upon their application and that serve to distinguish one or more characteristics of goods originating from different enterprises applying the mark under the supervision of the proprietor”. In this sense, the characteristics of the goods are distinguished by the proprietor who somehow ‘supervises’ such characteristics. It is not clear whether this supervision is a simple verification or an actual evaluation of the product. The WIPO also follows the idea that collective marks serve to distinguish goods or services with common characteristics from goods without those characteristics. Nevertheless, it is different from a simple membership marking, by which the sole membership entitles marking. These laws refer to certification. This certification, is what is known as second party certification. The industry might condition their members to comply to certain standards for membership or renewal. The certification would be carried out by the association itself. Thus, it is a type of certification, though not third-party certification.

It can be concluded that collective marks can also be certification marks, if there is an evaluation of conformity to standards that go beyond association membership. If this is the case eco-labels could easily be registered as a collective mark. However, the collective mark strictly represents membership to an industry or association, then eco-labels as environmental certification marks do not conform to this instrument.

3.1.2 Geographical name certification marks.

The geographical name is another type of collective mark. It comprises the geographical name of the place from where the product originates. These are namely known as *Geographical Indicators*, or in the European Union they are regulated under the framework of *Protected Geographical Status*, which comprises specific regimes such as protected designation of origin, protected geographical indication and traditional speciality guaranteed. Regardless of the specific name or regime, a geographical name certifies the origin of the goods. “The desirability, for traders, of using geographical place names as certification marks may derive from valuable public association of the place names with special traditional skills or particular geographical features.”²⁵ The last part, indicates that the guarantee of the geographical name is a conformance to the expected attributes of the products of the region. The distinctive feature of geographical indications is that “the quality attributes of the goods they identify are considered to be inherently linked to the nature of the geographic location in which production takes place”.²⁶ These distinct features are what consumers are interested in.

Geographical indications are not homogeneously regulated. As collective property marks they of course are subject to registration, which denotes exclusivity. As a general rule, the proprietor of the mark cannot prevent *bona fide* use of the geographical name from a person whose goods originate in the involved area. In all cases, the right to use the name is only limited to those that actually produce in the implicated area. Some countries, namely those with roman-law traditions, also require proof of quality conformance, to the region’s standards. In other words it is not enough for the product to originate in the area it has to conform to quality standards. This system is *sui generis* known as an ‘*appellation*’ system, because of these two requirements.²⁷ This compliance to product specifications is a stronger type of certification than simple product origin.

3.2 Trade marks

The individual members of the guild also had markings, they were known as craftsman markings which served the purpose of tracing or policing the products back to their owner or

²⁵ Jeffreyey Belson, *Op.cit*, p. 25.

²⁶ Luisa Menapace and Giancarlo Moschino, **Quality Certification by Geographical Indications, Trademarks and Firm Reputation**, Iowa State University, Department of Economics, Working Paper No. 09024, November 2009, p. 5

²⁷ *Idem*, p. 6-7

II. Eco-labels' place in the market

manufacturer. Eventually, traders (or craftsmen) assumed personal responsibility for their marks and trade mark law developed to replace regulatory law²⁸ as the means of preventing unauthorised use of such marks. Just as in the middle ages, trademarks essentially serve to distinguish the goods or services of one individual source from another. Today the term trademark “*includes any word, name, symbol, or device or any combination thereof adopted and used by a manufacturer or merchant to identify his goods and distinguish them from those manufactured and sold by others*”.²⁹ A trademark has to be capable of distinguishing the product from one firm from those of other firms. To achieve the ‘distinction’ from other producers of similar products it is imperative the product the trademark covers has distinctive features, to build its identity.

The registration is designed to protect a trade mark when used as a badge related to specified goods and services. It endows the proprietor with a monopoly.³⁰ Trade marks are private and exclusive by nature. They serve to identify and distinguish the undertakings or competitors in the market. Distinctiveness is an indispensable property for trademarks. Consumers normally do not know what firm is behind what product, a trade mark becomes the link between producer and consumer. The exclusivity of the identity that the trade mark signifies and confers means that it can provide a focal point for a reputation and thus for goodwill.

Trade marks are not limited by the producers, the owner of the trade mark may be independent from who ever produces the good. The owner of the trade mark can use the trade mark or authorise its use to third parties. This gives trademarks flexibility and versatility, which has led to organisational structures such as franchising and sub-contracting. These organisational structures work precisely because consumers attach significance to the distinctive identity that a trade mark signifies, such that it can be a source of value to its owner.

3.2.1 Trade mark's quality reassurance

²⁸ Regulatory Law or regulation, within this context refers to the process by which governments impose requirements on enterprises, citizens, and itself. The objectives are normally to protect product quality and quantity, environmental quality, public health and safety. They encompass what today is understood as mandated standards. Jeffry Belson page 6.

²⁹ The Lanham Act 1946

³⁰ Jennifer Davis. **Between a Sign and a Brand**, in: Trade Marks and Brands: An Interdisciplinary Critique. Edited by Lionel Bently, Jennifer Davis, and Jane C. Ginsburg. Cambridge Intellectual Property and Information Law, p. 66

Trade marks influence consumer behaviour. They are expected to enable consumers to use their own experience as a source of information. Thus, inducing a repeated purchase mechanism,³¹ so consumers become faithful to the trade mark. For this mechanism to work, trade mark's need to acquire positive reputation, a positive image in the consumers eyes. "A good reputation can provide reassurance to consumers and reduce the risks and costs of a lack of information about the attributes of the product."³² On the other hand, owners have an equal incentive to maintain or improve the reputation of their trade mark, and they will do that by conserving constant quality. This alignment of interests of consumers and producers gives trade marks a 'self-enforcing' aspect.³³

3.2.2 Effects and affects on the market

Trade marks are also how firms compete in the market. In this competitive market scenario the size of the trade mark is measured by the presence not of the firm but of the trade mark. "In marketing, the power of some trade marks to catch the attention of consumers and attract them to products has been termed 'salience', It is the product of a number of factors including a trade mark's familiarity to consumers -which should be sustained by publicity and exposure- a high likelihood that consumers will notice and recall the trade mark, and a positive reputation. A positive reputation might be due to the trade mark's triggering of positive associations in the minds of consumers and not necessarily due to having earned a good reputation for the quality and reliability of marked products."³⁴ In this sense, salience is not market power it is selling power.

It has been argued that salient trade marks may weaken competition and thus reduce economic efficiency. The argument is that "trade marks distort the operation of the market and enable dominant firms to gain and consolidate excessive market power". Additionally, trade marks in conjunction with advertising, persuade consumers that products, which are essentially the same as lower-priced alternatives, are somehow superior and of charging them excessive prices accordingly. Thus distorting the effect of price-based competition and

³¹ As explained in section 1.3.2 Experience goods.

³² Andrew Griffiths. **A Law and Economics Perspective**, in: Trade Marks and Brands: An Interdisciplinary Critique. Edited by Lionel Bently, Jennifer Davis, and Jane C. Ginsburg. Cambridge Intellectual Property and Information Law, p. 248

³³ *Idem*, p. 248-249

³⁴ *Idem*, p. 251

“give the owners of familiar trade marks unfair market power”. Law and Economics has responded to this argument by suggesting that “all undertakings should be able to enjoy the benefit of premium prices through generating good reputation for their trade marks and providing the same quality of reassurance”.³⁵

3.2.3 Brands

There is no agreed definition of brand, either in marketing or legal discourse. At most it is suggested that a brand is the unregistered trade mark. However, brands are understood to have a value which transcends the product with which is it associated. Brands are regarded as constituting something more than a trade mark as it is legally defined. A useful way to conceptualise a brand is as an aggregation of assets which includes, but is not limited to a trademark. In this sense, a trade mark, geographical indications, collective marks and certification marks are all brands.

3.3 Certification Marks.

Certification may be regarding geographical origin, material, mode of manufacture of goods or performance of services, quality or accuracy, but it is not limited to such characteristics. They are for the use of multiple sources, provided that their goods or services meet the proprietor's required standards. Certification marks are collective by nature. The proprietor is the entity who registers and owns the mark, he is responsible for its use. The proprietor controls the use of the mark and ensures that his authorisation to affix the mark is not abused by the use on non-compliant goods. Certification marks cannot refuse certification to anybody who complies with its standards, certification is open access, which is contrary to both collective marks (limited to association members) and geographical indications (limited to regional producers). The proprietor is precluded from using the mark on his own goods and services. This is to guarantee the independence of the supply and certification processes. An additional function of the proprietor is to establish the standards/criteria by which products are going to be certified.

Just as trademarks, certification marks need to be distinctive, not only in the 'mark' but in the criteria behind the certification. Eco-labels, as seen in the previous chapter, normally demand for several criteria to be met and it might be true that they overlap with other similar

³⁵ *Idem*, p. 250

eco-labels, since they all want to achieve the same goal. However it is the mix of the criteria and the emphasis they put on one criterion over another that would give an eco-label its 'distinctiveness'. Furthermore, eco-labels could (like other certification or trade marks) eventually acquire a distinctive character to the public through use. For example, 'fair trade' immediately leads to think about social aspects of production, and C2C (cradle-to-cradle) certification would lead to think of LCA, regardless of the specific criteria or even if their criteria do contain that specific type of criteria. It is the consumer's perception what matters in the end.

3.3.1 Assurance of quality: trade marks vs certification marks

Both certification and trademark are bound up with quality perceptions, but in different ways. In trademarks quality is considered to be an assurance to the consumer of a consistent level of quality in the product as a whole, whereas certification mark's attest to attainment of an absolute level of quality. In practical matters, a trademark can alter the ingredients or nature of its product without any liability, as long as the quality remains reliable. Contrarily, certification marks act as a guarantee of particular and absolute level of quality, which cannot be altered precisely because it guarantees that the described traits are present in the product. It is bound to its criteria. This means that if a buyer can prove that the certified good does not comply with its description, as stated in the certification statement or mark, s/he can bring suit against the seller for breach of contract. Consequently, certification marks imply a quasi contractual standard of quality. This feature is precisely what takes certification marks to the level of guarantee, contrarily to a trade mark that depends on its reputation.

Trade marks are proven to solve problems regarding experience goods. When the quality cannot be observed at the point of purchase, the consumer will eventually discover the quality by actually consuming the good. In this sense, consumers will be able to identify whether the product is high or low quality, in economic terms they will identify the firm's 'type'. Once a consumer defines the 'type' then it can formulate its beliefs, and adjust whenever it receives new information. In this sense, trade-marks work as signals, and reputation is a type of signalling game. Certification on the other hand, is crucial for the existence of markets of goods with credence attributes. Certification relies on its credibility, which is (in this particular sense) its reputation. When the uncertainty is regarding actions of the firms or process attributes, reputation is modelled as a dynamic structure in which

'past' (good) quality is assumed to persist until the firm cheats by cutting its quality.³⁶ When an eco-label (or other certification schemes) earns credibility among consumers, it is as if he established a good reputation. Consequently, eco-labels strive to earn credibility and once that is established, it can search to be salient.

3.3.2 Are eco-labels certification marks?

Eco-labels are undoubtedly certification marks. However from the analysis of the framework regulating certification marks, legislation basically refers to collective marks and geographical indications. The concern is that these two instruments even though named certification marks, do not necessarily require a formal certification procedure. A formal certification procedure would simply be the process of evaluating the conformity to the pre-set criteria, either by an association or a third party entity. In the existing legal framework, when there is the pre-requisite of conforming to quality standards, the certification is deemed '*sui generis*'. Eco-labels, do require conformity to their criteria, it is what differentiates them from the more general 'environmental-claims'. It can be argued that eco-labels are certification marks just as collective marks and geographical indications. In particular, the European '*sui generis*' approach on geographic indications require producers to conform to quality standards in order to be awarded, in the same manner as eco-labels require firms to conform to production processes focused on the reduction of negative environmental impacts. Consequently, eco-labels could also be regarded as *sui generis* certification marks, and thus can be regulated as such. However, why Intellectual property has not been used to regulate eco-labels, under the supervision of the WIPO is not clear. Specially because it is obvious after this analysis, that eco-labels do share the legal and economic nature of other certification marks, specially those deemed as '*sui generis*' like geographical indications.

Trade marks and certification marks, have earned intellectual property protection because of their role in mitigating information related market failures. They need protection precisely because in order for them to work, they depend on their credibility. If they are not protected then they are nothing else than images and self-advertisements. In the same sense, following the argument that eco-labels also serve the purpose of palliating market failures as do other branding forms, they should also be protected by intellectual property.

³⁶ Luisa Menapace and Giancarlo Moschino, *Op. cit.*, p. 10

3.4 Reputation in relation with certification

The relation between reputation and trademarks has already been identified. However, whether certification marks (including eco-labels) and reputation have the same sort of relation is not that evident. As it has been previously addressed, trade marks function properly with experience goods. Shapiro stated that for the development of reputation it is necessary that both “the quality of the product is observable after it is purchased and that this information is communicated by other potential buyers”. Therefore, it can be inferred that reputation, will never be developed with credence attributes because consumers can neither observe the quality after its consumption nor communicate their findings with other consumers. This is true as long as the product is not certified, when the product is certified and obtains a certification-mark a new mechanism is triggered. Certification marks brand products and assure overall product quality to consumers. Therefore, if consumers trust the eco-labels, because they know the product is certified, then there is potential for reputation building.

Eco-label markets, are characterised by the presence of great uncertainty. The little information available not only needs to be reliable³⁷, it needs to have credibility³⁸. Consumers expectations about product quality are assured to be met, as long as the product is certified. The proprietor of the certification mark (aka the eco-label organization) has to be competent enough for it to be able to provide credible and reliable certification. The information conveyed in a certified good is quasi contractual, therefore the eco-label is bound to its quality. Deviating from the criteria would risk being held accountable for such divergence. Consequently, the eco-label's reputation depends on the proprietors ability to provide credible and reliable information. The proprietor's competence and consistency is what will build the eco-label's reputation. The proprietor is responsible in maintaining the quality of all the products that bare the eco-label. In this sense, eco-labels, also depend on reputation; however their reputation is conditional to the organisations' credibility. Certification marks have the advantage of portraying a degree of credibility precisely because of the assessment the product underwent to obtain it.

3.4.1 Building a reputation

³⁷ Something is reliable when it is consistently good in quality or performance.

³⁸ Credibility is the quality of being convincing or believable.

II. Eco-labels' place in the market

Reputation is a dynamic process in which, according to Shapiro, past quality becomes a signal for the products in the present.³⁹ In this sense, trade marks link products to quality, making it simple for consumers to identify the product with his preferred quality attributes. Menapace and Moschino, extended Shapiro's reputation model by introducing certification marks (geographic indications, specifically) with and without verification of minimum quality standards. These models can be easily adapted to the eco-label scenario, supporting the idea that eco-labels are *sui generis* certification marks that aid to solve informational market failures.

In Shapiro's setting, if a seller wants to enter the high-quality market segment, it has to make investments to earn its reputation. This investment has to be focused on producing high-quality products. During the first period, the seller has to lower its prices, even below cost. The entrance cost is the market price and the seller is a price taker. It is assumed that high quality products are more expensive to produce than average-quality products. However, in this first period consumers do not know whether the product is as high-quality as it claims. Consumers need to experience the good to determine the quality. Therefore, the price in this first period has to be the average product market price, which might be lower than the production costs of the high quality product. Ultimately, consumers will learn the product's quality, hence they would also expect that such quality will be constant in later stages. Once reputation is established, the seller can command high-quality prices (premiums). In the investment period the seller cannot command high-quality prices, because reputation is not yet established. In later stages, once reputation is established the firm might earn a flow of profits, that are according to Shapiro, 'merely a competitive return on their investments in reputation'. Sellers will theoretically seek to maintain their high reputation, so they can continue to benefit from the profit-flows that accompany their initial sacrifice.

The higher the quality produced, the larger the initial losses and the subsequent profits. The time lag between the initial investment and the moment the seller can start to command high prices will depend on the consumer's ability to detect the quality and the speed such information travels among consumers. In this sense, if the quality is hard to detect and consumers do not trust the claims (as it occurs with credence attributes without certification), the investment period can be extended indefinitely, including the losses. Only when

³⁹ Carl Shapiro. **Premiums for High Quality Products as Returns to Reputations**, p. 659-660.

reputation is established, and consumers learn the product's quality, can producers command the high quality price. The differentiated price can be charged as long as the high quality stays constant.

In equilibrium, once the reputation has been adjusted, consumers expectation about the product quality is formed. Because, the high quality firm can earn high quality prices over time (as long as quality is unchanged) they have an incentive to maintain such quality. Therefore, price must exceed cost to prevent quality deterioration. Good reputation is a valuable asset for firms, as it allows them to set prices, not just 'take' them. Shapiro's model is a steady state configuration in which firms maintain quality over time, fulfilling consumers' expectations and in which the price as a function of reputation is unchanging over time.⁴⁰ In this sense, consumers can easily observe prices and brand reputation, which reduces information costs. This cost reduction is an improvement over the non trademark scenario. Trade marks reduce information costs from experience to search. Consequently, the information asymmetries are smaller in a market where brand-reputation is observable.

Trade marks and certification marks are designed to shorten the lag (between investment and recoupment) and make it easier for consumers to learn quality. Reducing the lag by means of a trademark or certification, indeed elicits a higher investment cost, but the time between investment expenditures and premium profits will be shorter. Consequently, the producer can enjoy profits sooner than it would without them. In the case of eco-labels, if a firm invests in some sort of pro-environmental behaviour, searching to obtain an eco-label will be the shortest way for him to recoup its environmental investments. As it will brand the product with an already known brand, in this case the eco-label, which already has an established reputation among consumers.

⁴⁰ *Idem*, p. 665

II. Eco-labels' place in the market

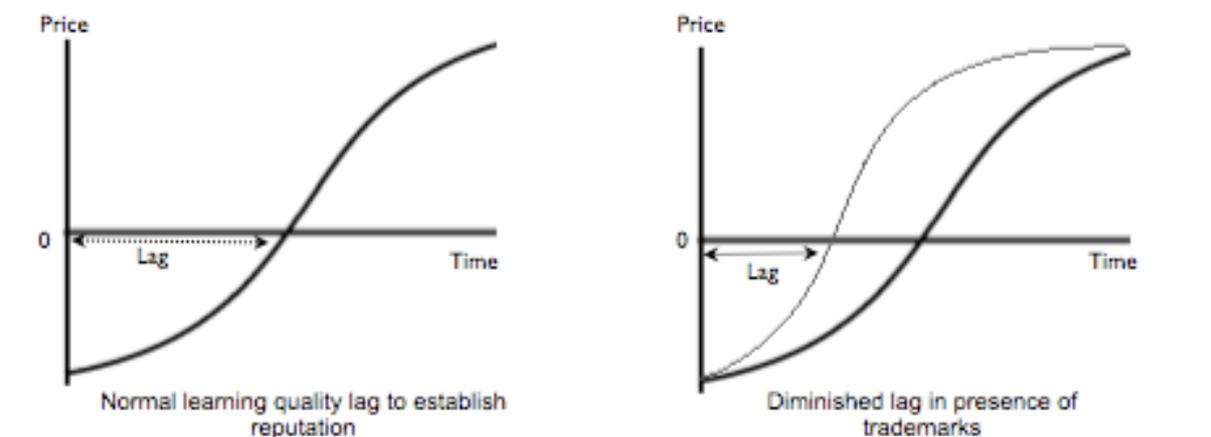


Figure 1. Difference in lags in presence of a trademark or certification mark.

3.4.2 Certification to lower costs of reputation building

Certification marks require that certain criteria be met for the firm to be allowed to use them. Therefore certification allows for costs to be reduced more than they are with trademarks. Shapiro pointed out that when a minimum⁴¹ quality standard is high, the price-quality ratio shifts. Because the price for the new minimum quality product is higher, it reduces the investment necessary to build up a reputation, and hence reduces the premiums for high quality products. Stringent quality standards raise the entrance price, so they reduce the cost of building up a reputation and hence reduce the value of a given reputation. This reduction of the value of reputation would be translated into lower prices for high quality products. Evidently, consumers who use high quality items benefit from an increase in the minimum quality standard. There is a positive 'informational externality' associated with raising the quality standard. Increases in minimum quality reduce the equilibrium price of high quality products, and hence increase consumer surplus for those using high quality products.⁴² Minimum quality standards are expected to face opposition from firms. It would be expected that the opposition would be by those firms whose quality is in the lower spectrum, but this is not so. Opposition comes especially from those that are already high-quality producers with established reputation. As they have already made the investments in reputation, and with a high quality minimum standard they will lose that investment and just seem over-priced as other products would now be similar in quality. Contrarily, competitors

⁴¹ He considered this minimum quality standard a government mandated quality standard, however, the same mechanism would apply to a voluntary high quality environmental standard set by an eco-labelling organisation.

⁴² Shapiro, *Op. cit.*, p. 674.

from the lower quality spectrum have not made any investment; therefore they have nothing to lose.

In comparison to the simple trade-mark reputation scenario certification “improves the ability of reputation to operate as a mechanism for assuring quality” because it reduces the divergence between the reputation equilibrium and the equilibrium under perfect information.⁴³ The gap between both equilibriums is represented by the premium, which is reduced with certification. Nevertheless, even if the price is reduced, this will not reflect on product quality. On the contrary, certification constrains the actions of the producers to the criteria. As long as certifiers duly verify that firms actions (such as production processes) follow the criteria, firms cannot deviate easily. When information asymmetries, are due to unverifiable actions, moral hazard problems are likely to follow. This is because it would be very easy for producers to act opportunistically once they obtain the mark. Certification constrains sellers moral hazard behaviour.⁴⁴ The moment the firm ceases to certify the good, consumers will notice and anticipate that the producer is cheating. Furthermore the certification mark’s proprietor has an interest to avoid opportunistic behaviour as the loss of good reputation falls on him, not the producer. In other words, “the presence of certification limits the cheating options for producers”.⁴⁵ It constrains the behaviour of the firms to their criteria.

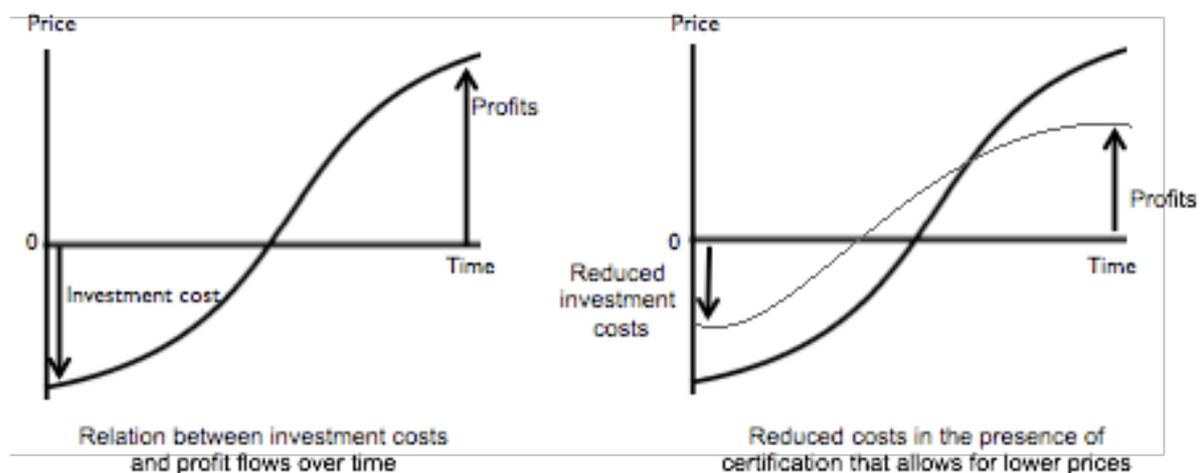


Figure 2. Cost Reduction with certification

⁴³ Luisa Menapace and Giancarlo Moschino, *Op. cit.*, p. 4.

⁴⁴ *Idem*, p. 3.

⁴⁵ *Idem*, p. 16.

3.4.3 Certification marks and their collective reputation

In the model presented by Menapace and Moschino, it is assumed that certification has no cost. However, eco-labels (as well as other certification schemes) imply a considerable cost. This cost, might even be comparable to pursuing earning a pro-environmental reputation with full investment costs. Regardless of the previous reasoning, some firms still pay the certification cost. This is because eco-labels (or other collective marks) have a pre-established reputation. Therefore, the firm merely adheres to the eco-label's reputation. Here the only lag is the one considered between the certification process and the time the eco-labelled products are placed in the market. This benefit, has to be sufficient to outweigh the option of pursuing pro-environmental premiums individually, through a trademark.⁴⁶ This is probably why salient brands, which already have invested in their reputations, opt for sustainable re-branding or use other corporate sustainability instruments. Salient brands, might not wish to share their reputation with other firms that might harm them. They have enough market presence to do so. However, smaller firms, with not so salient brands can achieve more salience by adhering to a salient eco-label. In this sense, they would brand their brand. Their individual brand will be tied to the eco-label's reputation, hence improving its own reputation.

3.4.3.1 The reputation commons problem

Eco-labels share their reputation among all the eco-label licensees. Their reputations become interdependent. Therefore any misconduct from any licensee will lead the others to be "tarred by the same brush". In sociology, this is known as "reputation commons problem". Just as any other shared resource, reputation can be prone to over-exploitation. Without a certification scheme, firms can free ride from the positive collective reputation. They would enjoy the benefits even while taking individual actions that may harm the reputation. It is a 'tragedy of the commons' as it happens with other common pool resources. Collectively firms want to maintain the positive reputation, privately they have incentives to overexploit it. Eco-labels have a key role of managing the reputation commons and certification is its best tool. Certification can assure that all the licensees' private actions will not harm the eco-label's

⁴⁶ There are also mixed brands, which mix a trademark with a certification mark such as an eco-label.

reputation. The cost of harming a collective reputation can be very high and all the firms that use the eco-labelled will be harmed.

3.4.3.2 Adverse selection problems

Adverse selection is also a common problem in the presence of a collective reputation. It may happen that the only firms interested in adhering to an eco-label are those firms who have the worst environmental performance. Paradoxically, these are the firms who are most likely to be attracted to programmes for improving their reputation. Certification is an institutional design that can overcome these problems, because it can distinguish the good apples from the bad.⁴⁷

In theory, a high entrance cost should deter the worst firms from entering the eco-label. Stringent criteria (high costs of complying plus certification costs) might not have the power to sort out good and bad firms. Firms that have already above minimum quality environmental practices might not go the extra mile to pursue an eco-label with a higher standard because the marginal costs would be too high. This is considering that they already have invested in their individual reputation. For firms in the lower range, the cost of adhering to a high environmental standard to obtain an eco-label are expected to be high. However if the minimum quality is also costly, then it might be worth to invest a little more and get the benefits of the shared reputation.



In this diagram, Firm A has a low environmental standard, compared to Firm B ($X_1 < X_3$). Additionally it is expected that the eco-labels standard is higher than the mandated minimum quality standard ($X_2 < X_4$). The eco-label would like that his members were all in the Firm B quality range, as they are already likely to have positive environmental reputation. However, for these firms going the extra mile (from X_3 to X_4) is very costly and the benefits are only marginal. Contrarily, firms in the lower quality range, that want a boost in reputation might be the ones seeking to adhere to the eco-labels standards. However, if the standards are too

⁴⁷ Tim Bartley. *Op. cit.*, p. 307

high they might be demotivated to even try. It might seem then that eco-labels are doomed to suffer from adverse selection problems. It may be that firms with good environmental reputation manage to reap the benefits with trademarks. Smaller firms might face difficulties signalling their quality, consequently delaying the reputation adjustment. Smaller firms risk incurring in extended investment (in reputation) costs as they cannot charge the high quality prices until their reputation is set. This is due to the credence nature of environmental attributes, which impedes consumers to learn product-quality. If a firm has made the investments and has not managed to establish a reputation, certification and adherence to an eco-label can do so. This is because the moment it adheres to the eco-label, quality is revealed, making quality signalling easy, thus reputation would be established almost immediately. Once the smaller firms are certified they can charge high-quality prices and recoup their investments. In conclusion, if credence attributes need certification for quality to be known, and environmental attributes are credence goods, therefore environmental attributes need certification too.

4. The Eco-label Market: Competition matters

Eco-labelling literature normally focuses on the possible market reactions in presence of an eco-labelling scheme. It is normally assumed that there is a single eco-label in the market. While this might be true in some markets, it cannot be generalised. Contrarily, it is expected that markets simultaneously host various eco-labels which compete with each other. They concur both in the geographical and product dimensions of markets. Eco-labels interact with other eco-labels as well as with other brands and trademarks. This concurrency could have indirect effects on competition and trade. Up to the present, eco-labels do not have the power to negatively distort the market and the changes (even if small) they trigger are normally desirable. However, taken to extremes eco-labels may have the potential to hinder competition. Single eco-label markets will share the same burden as those markets with monopolies. Eco-labels may also have certain market power and even a large market share in their relevant market. This does not mean that they will abuse or misuse their market power, but it is a possibility. Contrarily, eco-labels with high market presence, could also be positive for society. More eco-labelled goods, would imply that the market for 'environmental' goods is larger, initiating innovation and the rising the bar of government mandated minimum quality standards. For the environment this is expected to be good, as

firms would be constrained to act pro-environmentally and there would be a general awareness of their actions and products' life cycles.

4.1 Eco-labels and their vertical and horizontal restraints

Environmental certification systems may be constructed in a manner that secures the competitive advantages of its members and manage competition. In this case, if a firm has engaged in pro-environmental behaviour it holds as strong position in the market, however if it stands alone the signal to the market might not be strong enough, thus it might not succeed in the market. Such firm has an interest in constructing credible signals of its position. Joining an eco-label would make distinguishing the firm's brand and securing its position easier. Hence, there is an incentive for firms to cooperate with the eco-label. However, under certain market conditions the agreements between the eco-label and the members could indeed limit competition. Therefore, vertical and horizontal agreements, such as the ones created by eco-labelling mechanisms, are carefully monitored specially if they have the potential for 'cartelization'.

4.1.1 Vertical restraints, franchises and eco-labels

The eco-label has a licensing agreement with each member, which stipulates the use of the mark, the duration, monitoring and sanctions, as well as the fee structure. As the owner of the mark, the eco-label is likely to have the upper-hand in the relationship, making it a vertical relationship. In contrast, a franchising agreement, according to the European Commission is *"A special type of agreement whereby one undertaking (the franchisor) grants to the other (the franchisee), in exchange for direct or indirect financial consideration, the right to exploit a package of industrial or intellectual property rights (franchise) for the purposes of producing and/or marketing specified types of goods and/or services. This package typically relates to trade marks, trade names, shop signs, utility models, designs, copyrights, know-how or patents. A franchise agreement usually contains obligations relating to (1) the use of a common name/shop sign and a uniform presentation of contract premises and/or means of transport, (2) the communication by the franchisor to the franchisee of know-how, (3) the continuing provision by the franchisor to the franchisee of commercial and technical assistance during the life of the agreement."*⁴⁸ Even though franchises are much

⁴⁸ http://www.concurrences.com/article.php3?id_article=12269&lang=en

II. Eco-labels' place in the market

more complex than licensing agreements, there are still certain common elements with the license agreements signed in eco-labelling. The similarities are namely the use of the logo, conformity and standardisation of products according to pre-established criteria, as well as the continuous monitoring and assistance during the life of the contract. Moreover, franchises have the effect of creating a vertical structure between the parties and aids in the coordination of certain decisions which otherwise would be independent. Hence the name: vertical coordination. Nonetheless, there are important differences between the eco-label licensing and the franchise. Specifically, contrarily to the franchisee, an eco-label member is free, within the limits of the criteria, to produce, price and distribute their eco-labelled goods. Notwithstanding the above, close attention should be drawn to these agreements, as it may happen that under certain market circumstances these can lead to undesirable effects.

The greatest challenge for vertical relations is the problems that may arise with 'co-ordination'. Independence in the decision processes of the eco-label and its members is crucial, as it will determine quality, production costs, and prices. In other words, these decisions determine the economic efficiency with which the product is supplied. Therefore, if this independence is compromised economic efficiency would be too. The problem arises when members of the eco-label compete with each other. Brand competition can be either intra-brand competition⁴⁹ and inter-brand competition.⁵⁰ However, in eco-labels it has characteristics of both types of brand competition, it is a hybrid. It is deemed as a hybrid simply because even when the eco-label uniformly brands the members' products, each member still conserves and uses its own brand, therefore it remains distinct from the others. When the decisions of one member directly affects the profits of another member, the eco-label might be pressured to take action and coordinate certain decisions to alleviate these issues among its members. To lessen this type of intra-brand competition, eco-labels might grant exclusive geographic areas or specify minimum retail prices, practices which hinder competition and are generally not well regarded. However, coordination is tolerated as long as there is no 'control' over basic decisions inherent to each eco-label member and competition is not severely impaired.

⁴⁹ Competition among distributors or retailers of the same branded product, be it on price or non-price terms.

⁵⁰ Competition between firms that have developed brands or labels for their products to distinguish them from other brands sold in the same market segment. Although not perceived as being fully equivalent by consumers, branded products nevertheless compete with each other, but normally to a lesser degree.

4.1.2 Horizontal cooperation, cartelization and eco-labels

Members of the eco-label are likely to be competitors, and when competitors get together there is a risk that they might cooperate and collude. Under the eco-label structure, members only have an indirect relation with each other, they are linked by the eco-label. The eco-label in theory should not facilitate direct cooperation between its members. However, precisely due to its particular structure it may lead to cartelization if the market conditions are susceptible.

In simple terms, a cartel is an agreement between firms to not compete with each other. Cartels are not well regarded as they limit or restrict competition in the entire market. Cartels are normally forbidden, therefore it is common for them to be implicit (verbal and/or informal, known as soft-cartels), though they can be explicit (an actual written agreement, known as hard-core cartels) as well. The agreements may consist on price-fixing, bid-rigging, output quotas or restrictions and/or market sharing. Instead of competing with each other, cartel members rely on each others' agreed course of action, which reduces their incentives to provide new or better products and services at competitive prices. As a consequence, consumers end up paying more for less quality, in addition to having less options or variety to select from.⁵¹ However, cartel management is not simple and not all cartels are successful, certain sectors and markets are more susceptible of cartelization than others because of their structure or the way they operate. Cartels are more likely to succeed in markets where:

- There are few competitors (oligopolistic markets),
- Products have similar characteristics or are standardised, which leaves little scope for competition in quality,
- Communication channels or some sort of organization between competitors already exists , which would facilitate cartel management, and
- Inelastic demand, which allows cartels to set higher prices.

Notwithstanding the anticompetitive concerns of horizontal cooperation among competitors, it may also generate efficiencies. For example, horizontal cooperation often covers areas

⁵¹ http://ec.europa.eu/competition/cartels/overview/index_en.html

such as research and development, common schemes of production, purchasing, marketing or expanding. Cooperation thereto can offer a means of sharing risks, saving costs, pooling know-how and stepping up innovative activity.⁵² In this sense, eco-labels might fall into a type of horizontal cooperation scheme, not necessarily a cartel. Specifically, eco-labels mainly present advantages in marketing and distribution. In a lesser degree they can also pool resources for research and development, in eco-labels this would consist in evaluating the effectiveness of the criteria as well as creating new criteria to better suit the needs. In addition, the eco-label is a stable organization which gives it the possibility to learn. The eco-label learns which will make it more efficient, its criteria would be more suitable to their purpose which may lower the costs for its members. Notwithstanding that consumers would also learn about the eco-label's quality and reputation, making it easier for members to reap the benefits faster.

4.2 Eco-label's market segmentation and product differentiation

In the marketing and economics literature there has been discussion regarding product differentiation and market segmentation. In economics demand is usually aggregated from the individual to a market level, therefore there is always one demand for each market. Other disciplines, such as marketing, do exactly the opposite, they separate demand and identify groups within the demand which are called segments. Thus, product differentiation and market segmentation are consequences of the existence of market segments. They are regarded as management or marketing strategies designed to handle market segments.

4.2.1 Product differentiation

Under the perfect competition model firms sell homogeneous goods. Therefore, there are no incentives to differentiate to increase sales since they are able to sell as much as they want without the extra effort.⁵³ However, in imperfect markets demand is heterogeneous. "Heterogeneity in demand functions exists such that market demand can be disaggregated into segments with distinct demand functions."⁵⁴ In this sense, each segment has a distinct demand function. Consequently, differentiating goods is necessary to satisfy those different

⁵² Roger J. Van den Bergh, P.M. Camesasca. **European Competition Law and Economics**, p. 153.

⁵³ *Idem*, p. 143

⁵⁴ Peter R. Dickson and James L. Ginter. **Market Segmentation, Product Differentiation and Marketing Strategy**. *Journal of Marketing*, Vol. 51, April 1987, p. 4

demands. Product differentiation can be seen as a marketplace condition in which all products are not perceived as equal on each of the products characteristics, including price.⁵⁵ The essence of product differentiation lies in the variety in the characteristics offered by alternative goods. Differentiation can be both real, the product's characteristics can be distinguished, and perceived, which is the subjective appreciation of the product.⁵⁶ In this sense, consumers might find distinctiveness in aspects such as packaging or trademarks, as well as in prices.

Firms may also use 'product differentiation' as a business strategy. Such strategy consists in creating a state of product differentiation by offering a product that is perceived to differ from the competing products on at least one characteristic.⁵⁷ How each firm defines, frames and characterises the market segments, is likely to be unique and will form the basis of its marketing strategy. Consequently the accuracy of the firm's perception of market segmentation often is a critical determinant of competitive advantage."⁵⁸ If the product is perceived as to satisfy consumer needs more accurately, the consumer's price elasticity will diminish. Because the product is a better match to consumer's needs he will perceive the product as of higher quality, therefore he will not have any incentive to continue looking for an alternative. Therefore, even if firms eventually raise prices, consumers will still buy the product. Sellers differentiate their products to increase their appeal to consumers and such differentiation is only profitable if consumers value it. Hence, successful product differentiation must be classified as a form of efficiency. Its aim is to create value for the brand. However, this has troubled economists because it is unclear whether market segments are a natural market phenomena or whether they are artificially segmented by firms who want to appropriate consumer surplus.

4.2.2 Market segmentation

Market segmentation is a state of demand heterogeneity such that the total market demand can be separated into segments with distinct demand functions. Market segmentation thus is seen as a way of viewing the market rather than defined as a market strategy. In marketing a

⁵⁵ *Idem*, p.5

⁵⁶ Roger J. Van den Bergh and Peter D. Camesasca. *Op. cit.*, p. 143.

⁵⁷ Peter R. Dickson and James L. Ginter. *Op. cit.*, p. 6

⁵⁸ *Idem*, p. 5

II. Eco-labels' place in the market

'market segmentation strategy' usually refers to the use of information about market segments to design a programme that appeals to a specific existing segment.⁵⁹ By segmenting the market, firms are able to identify and target consumers more specifically, tailoring their product to consumer's needs. This will render the firms a competitive advantage in the market and consumers will pay with their loyalty.

Market segmentation and product differentiation are closely connected. Markets need product differentiation precisely because there is market segmentation. However, a "product differentiation strategy can be pursued with or without a market segmentation strategy, but a market segmentation strategy can be pursued only when product differentiation already exists or when accompanied by a complementary product differentiation strategy."⁶⁰ In this sense, firms can differentiate their products from their competitors for reasons other than market segmentation. However, to engage in a market segmentation strategy product differentiation is necessary for it to succeed. Additionally, if segmentation does not pre-exist, firms can create and develop market segments by differentiating their products. In other words, firms can actively alter or modify demand, so consumer needs adjusts to the product they offer and not the other way around.

One of the main concerns with market segmentation is that it can lead to demand alteration or modification.⁶¹ Theoretically, the objective of a segmentation strategy would be to identify and cater to the existing market segments rather than to alter or enhance differences in their demand functions. However, precisely because segmenting the market can be profitable firms have the incentive to artificially enhance and modify demand. Therefore, when product differentiation strategy is combined with a demand modification strategy, it is deemed 'unnecessary' and has been targeted by social welfare economists. Though the marketplace clearly likes the choice that product differentiation provides, among many economists 'product differentiation' has become a derogatory term used to describe what is 'judged' to be manipulative and/or wasteful competitive strategy.⁶²

4.2.3 Anticompetitive effects of product differentiation and market segmentation

⁵⁹ *Idem*, p. 6

⁶⁰ *Idem*, p. 9

⁶¹ Demand function modification: alteration of the functional relationship between perceived product characteristics and demand.

⁶² Peter R. Dickson and James L. Ginter. *Op. cit.*, p. 8

Advertising, plays a key role in product differentiation. Advertising may be used either to increase the objective knowledge of products or to create consumers' preferences for a particular brand, thereby making the demand for those products less elastic and market entry by newcomers more difficult. If the advertisement is successful in persuading consumer's into believing that one brand is better than the other, then demand will be altered. Even if advertising may artificially alter demand, it is not the biggest concern with product differentiation and market segmentation. The main concern is that these strategies can hinder competition by foreclosing entry and they may aid firms in gaining market power.

In a market in which product differentiation and market segmentation is large, consumers will eventually develop brand loyalty. This of course is firm's expected outcome, as it means that they are reaping the benefits of their marketing strategies. However, this consumer loyalty makes entry more difficult for new firms. In economic terms, differentiating products provide firm's with a first mover's advantage. Consequently, rival firms would have to either follow suit by offering similar products or coming up with a different strategy to make their good different. Both options are costly for competitors. Furthermore, in markets with strong brands (high consumer loyalty), new firms might never be able to position themselves and might be condemned to charge lower prices and invest more in establishing reputation. "If the presence of the incumbent raises the marketing entry costs of the second firm, then the first firm has a permanent advantage (a long-run barrier to entry) and can maintain high prices."⁶³ Even if consumers prefer established products to new rival products, entrants remain free to design their products as they wish. It all comes down to consumers' preferences.⁶⁴ In conclusion, product differentiation and market segmentation does impose extra costs on entry. However, to qualify as an entry barrier and not just as an impediment, the effects of advertising must last sufficiently long to enable incumbent firms to earn super-normal profits persistently.⁶⁵

4.2.4 Differentiating Eco-labelled goods

Eco-labels are used to differentiate environmentally superior goods from 'normal' goods and even other eco-labelled goods. Normally eco-labels have been determined to be vertically

⁶³ Roger J. Van den Bergh and Peter D. Camesasca. *Op. cit.* P. 144.

⁶⁴ *Ibidem.*

⁶⁵ *Idem*, p. 145-146

II. Eco-labels' place in the market

differentiated versions of 'normal' goods. This means, it is the same good but with higher quality. In this case, vertical differentiated goods, would depend on pricing and trademarks (reputation tools) to secure its market segment. Under this scenario, eco-labelled apples would be considered higher in quality than average apples. In consumer's perspective, they merit a higher price because its characteristics imply improved performance. The playing field of vertically differentiated goods is not the same, the players are not the same as in the normal markets, neither are the goods.

It can also be contended that eco-labelled goods are not vertically differentiated goods, but a different variety of the good altogether. This would mean that the eco-labelled goods are horizontally differentiated from 'normal' goods. For example, a multi-product firm may launch an eco-labelled variety of its product. In this case it would alter its production from the normal version, to adhere to the eco-label's criteria. The good would not be deemed as better as the others, it would simply be different. Under this scenario, the consumer will regard the eco-labelled apple as another option of apples as their traits would satisfy different needs than those a normal apple would. In the consumer eyes, the eco-labelled apple is different from a normal apple. In this case it competes in the same playing field as normal apples.

It is to notice that if a firm decides to create an 'environmental-friendly' line or to differentiate the high-environmental quality version, the firm's brand will be enhanced as a whole. The effort to join the eco-label will perm to its other 'normal' varieties. Therefore, it can cross-subsidise the investments on the eco-label with its other 'normal' lines and reap the benefits of an enhanced 'sustainable' brand for all the varieties.

4.2.5 Identifying the Eco-label's market segments

Numerous reports have attempted to identify the market segments by studying consumers attitudes and preferences regarding 'environmentally friendly' products (not specifically eco-labelled goods).⁶⁶ To identify market segments effectively, firms have to find the variable, or variables that split the market into actionable segments. Actionable segments are those that are measurable, substantial (segments must be large or profitable enough to serve), accessible and distinct from other segments. There are two segmentation variables named

⁶⁶ As noted in Chapter I, it is only until very recent that eco-labels have started to see their actual 'impact' in the market.

needs and profilers. Needs, as in consumer needs, is the basic criteria for segmenting a market. Consumer needs are paired with profilers, which are the descriptive, measurable consumer characteristics that can be used for segmentation.⁶⁷ The most common profiler variables are consumer behaviour, demographics, psychographics⁶⁸ and geography. A well defined market segment will allow firms to better match their products with the targeted consumers. Consequently, firms will strive to identify market segments individually, as this market research will give them an advantage over their competitors.

4.2.5.1 Eco-label market segmentation based on behaviour

Behavioural market segmentation is based on the way consumers respond to, use or know a good. It can be seen as the consumer's status regarding the good. This analysis will determine how the consumer uses the good (light or heavy user), if he has a preference for a specific brand (brand loyalty) and what type of user he is. It is based on consumers actions. Notwithstanding the preceding, some consultancies such as the Boston Consultancy Group (BCG) have prepared open reports which can shed some information about the state of the market. Specifically the BCG report is based on a survey conducted in 2008 to over 9000 adults over 9 countries. They divide consumers in 4 types. The first are consumers who systematically buy 'green', which comprise 14.66% of respondents. Next, there are the consumers who sometimes buy green, these are 33.33% of respondents. The smallest group are consumers who have bought green products in the past, but do not currently buy green, these are 11.6% of respondents. Finally, the largest group is formed by consumers who have never bought any green products, which are 40.8% of respondents.⁶⁹ This shows some light in how consumers are divided and distributed in the market.

⁶⁷ in http://tutor2u.net/business/marketing/segmentation_bases_introduction.asp on November 8, 2011

⁶⁸ Psychographics is the science of using psychology and demographics to better understand consumers. Psychographic segmentation: consumer are divided according to their lifestyle, personality, values. People within the same demographic group can exhibit very different psychographic profiles.

⁶⁹ The percentages are averages taken from Boston Consultancy Group: Capturing the Green Advantage for Consumer Companies, page 13. Their numbers are specific to 15 different product groups, these averages are of those product groups they analyse.

II. Eco-labels' place in the market

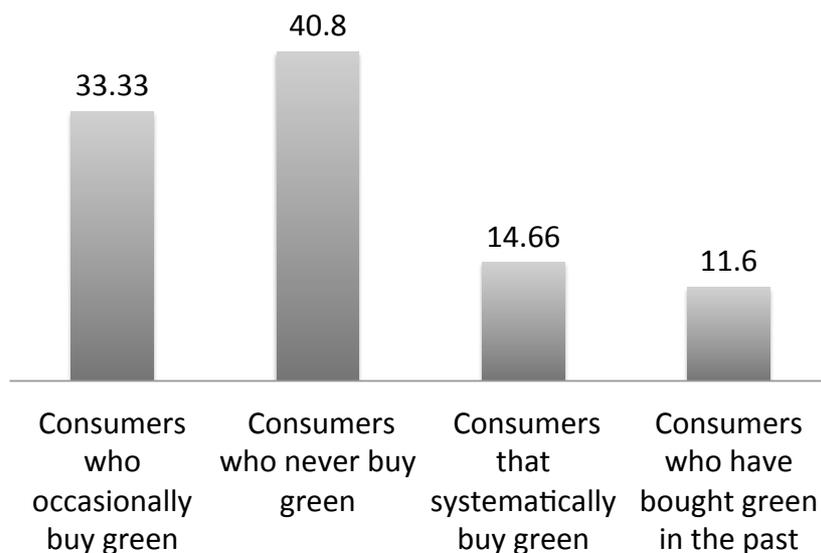


Figure 3. BCG Consumer Segmentation

4.2.5.2 Eco-label market segmentation based on psychographics

Psychographic segmentation⁷⁰ divides the market according to consumer's lifestyle. This segmentation considers a number of potential influences on buying behaviour such as attitudes, expectations, interests, opinions, as well as the consumers' activities.⁷¹ When it comes to eco-labels psychographic segmentation is the method of choice of the majority of research groups. Therefore, segmenting the 'green market' can be done in as many ways as there are research groups.⁷² In 2007, Yankelovich's report 'GOING GREEN' spurred attention in the 'sustainability' arena. The report was based on a survey of over 2,500 US adults ages 16+ and concluded that even if consumers are "aware of environmental issues due to the glut of media attention, the simple fact is that 'going green' in their everyday life is simply not a big concern or a high priority". At the most, there is a niche market for green products. Yankelovich illustrates the degree to which all consumers - from "Green-less" to "Green-Enthusiasts" - are likely to buy a product based on its green features. It is to note that attitudes do not always match behaviour, therefore analysing the characteristics of each group can lead interesting results, specially if consumer behaviour is to be modified.

⁷⁰ According to wikipedia psychographic variables are any attributes relating to personality, values, attitudes, interests, or lifestyles. They are also called IAO variables (for Interests, Activities, and Opinions).

⁷¹ <http://tutor2u.net/business/marketing/segmentation-psychographic.html>

⁷² For a brief summary of the 6 dominating 'green market' segmentation see: http://makower.typepad.com/joel_makower/2007/05/the_many_shades.html

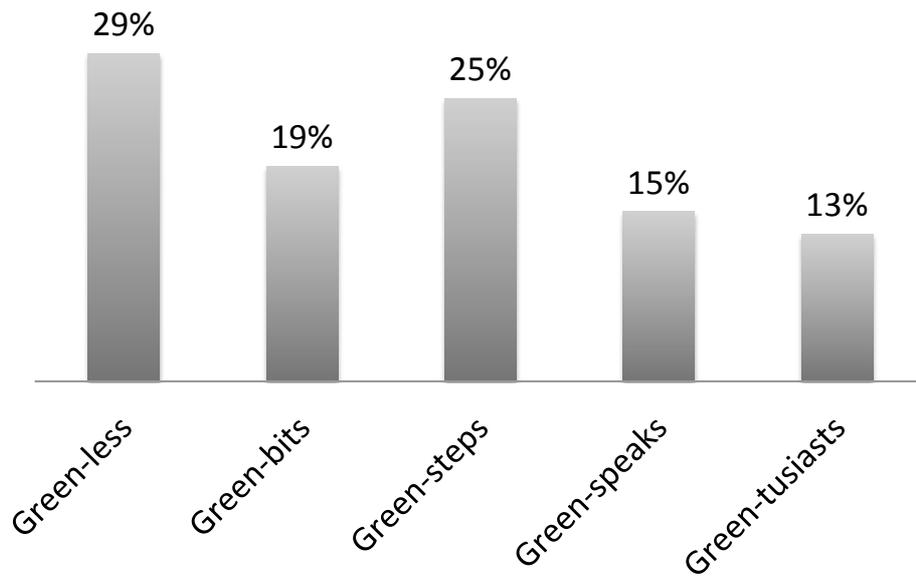


Figure 4. Yankelovich's consumer segmentation 2007

Another common segmentation is that done by the LOHAS market. The LOHAS is an acronym for Lifestyles of Health and Sustainability, a market segment focused on health and fitness, the environment, personal development, sustainable living, and social justice. Their classification is evidently oriented to serve their purpose, however it is a good example of a psychographics analysis that encompasses beliefs, values and actual purchasing criteria.⁷³ Their segmentation is based on research from the Natural Marketing Institute. The LOHAS segmentation consists of lohas, naturalites, drifters, conventionals and unconcerned.

⁷³ Precisely this point is what helps illustrate the complexity of segmentation.

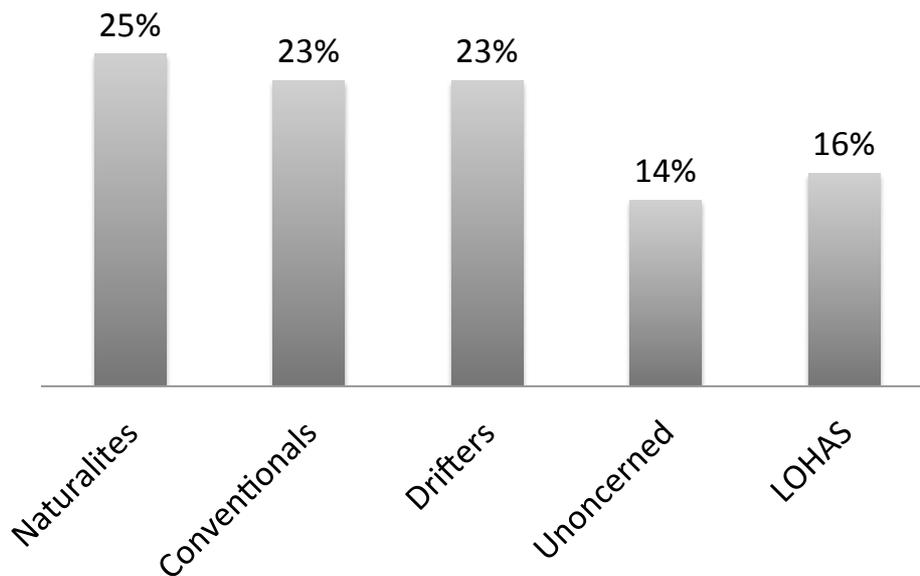


Figure 5. The LOHAS market segmentation

Lohas consumers in 2006 counted up to 16% of US adults. These consumers are very active and demanding. They are influential over friends and family, less price sensitive and more brand loyal. They have internalized the 'sustainable' values, and they are the target for many of the 'green' marketing strategies. The naturalites segment, is the largest, 1 out of every 4 US adults are in this group. They take care about their health, therefore they use many healthy and natural consumer goods. Their beliefs are matched by the consumption of ethical consumables. However, they are not committed to the notions of 'holistic sustainability'. Conventionals comprise 23% of the US population. These are attracted by 'fiscally-responsible' products such like energy efficient electronics, appliances, even sustainable construction. They occasionally use LOHAS products, as long as they are 'practical'. Behaviourally they might be more engaged than naturalites. Additionally, this group are more likely to donate money to environmental groups, get involved politically and recycle. Drifters are also 23% of the US population. Their beliefs are somewhat aligned to those of the DOHA market, though their behaviour lags behind. They are a younger segment, therefore they have more financial constraints and their value set is still under development. Almost half wish they could do more for the environment, but they are not convinced that their actions have an impact on the environment. Almost 50 million people are in this category, therefore this is the segment that represents the bigger opportunity for

'green' marketing. Finally, there are the unconcerned, which accounts for 14% of the population.⁷⁴

4.3 Eco-labels and tying

Some have identified eco-labels as 'clubs'. Clubs are characterised by their excludability. Excludability is the capacity to exclude people from using and enjoying the benefits of a good, in this case, the eco-label. The eco-label's right to exclude others or non-members from using the mark is a form of monopoly. However, having a monopoly over an eco-label does not restrict trade, as long as it does not unjustifiably discriminate to whom it awards the eco-label. If a firm has complied with the standards, and has obtained the certification, the eco-label has to review the case.

Eco-labels use their criteria to sort out which are the desirable members. Criteria have the potential to condition the certification to the use of specific brands, materials or technologies. This could be considered 'tying'. Tying occurs when the supplier makes the sale of one product (the tying product) conditional upon the purchase of another distinct product (the tied product) from the supplier or someone designated by the latter.⁷⁵ Therefore, if in order to obtain the eco-label firms are obliged to use specific technology or buy materials from specified providers or brands, it is plausible that the eco-label would be tying.

Tying may have both pro-competitive and anticompetitive effects. One of the anti-competitive effects is that tying enables price discrimination. For example, the specified brands or providers could raise their prices or force firms into taking unnecessary actions to obtain the certification. This type of phenomena is already happening with some eco-labels, for example in Mexico the LEED (Leadership in Energy and Environmental Design) eco-label has been introduced. This eco-label applies to the construction industry. However, obtaining this particular eco-label has become burdensome and expensive, even for committed environmental engineers and architects. This is because in its criteria it conditions or limits the type of materials as well as its providers. Therefore, these materials even if they are less toxic and are locally sourced (they make environmental sense) they have now become much more expensive than their 'unsustainable' counterparts. Furthermore, the fact that only a

⁷⁴ <http://www.lohas.com/Lohas-Consumer> as seen on November 10, 2011

⁷⁵ DG Competition Discussion Paper on the **Application of Article 82 of the Treaty to Exclusionary Abuses**, p. 54

handful of suppliers are accredited or approved allow them to impose higher prices or restrict supply in some other manner. On the other hand, tying can have important pro-competitive effects. In the same construction arena, eco-labels endorse local brands and materials, by recognising the superior environmental quality of their goods. Consequently, other providers may want to be endorsed by the eco-label so they may adapt their processes to obtain such endorsement. Additionally, the final eco-labelled buildings would be environmentally sound.

The scenario of the construction eco-label, could be worsened if such eco-label were the only one in the (geographical) area. In Mexico for example, there most salient construction related eco-label is LEED, if there are other options they do not play a significant role in the market. It can be argued that if there were other construction eco-labels, other criteria sets would be established giving opportunity to more firms to engage in environmentally sound construction. Thus, committed environmentally-aware architects and engineers could seek other eco-labels to recognise and amplify their efforts.

4.4 Eco-labels and Bundling

Bundling refers to the practice of selling two or more products together for a single price.⁷⁶ Tying and bundling are frequently used interchangeably. However, there is a slight difference. In bundling, the two or more products can be purchased separately or jointly (in a bundle), whereas in tying there is no such option. Eco-labels could be regarded as joint goods or bundled goods in the sense that they sell two goods: one private good and one public good. Contrarily to tying, both the private and public good can be acquired separately if desired. For example, shade-grown coffee, which is a coffee grown under the shelter of the tropical forests rather than in the open (growing in the open leads to deforestation), provides important refuge for tropical biodiversity. Thus, the production of shade-grown coffee has a joint product: the coffee and the conservation of biodiversity.⁷⁷ The environmental benefits of eco-labels, such as biodiversity conservation, will be considered as an independent good: an environmental good.⁷⁸ Consumers have the alternative of buying normal coffee and giving a donation to an environmental organisation that preserves wildlife in tropical countries. In this

⁷⁶ Van den Bergh, *Op. cit.* p. 264

⁷⁷ Matthew J. Kotchen. **Green Markets and the Private Provision of Public Goods**, p. 817

⁷⁸ From this point of view, the environmental characteristic is a good by itself. In the previous analysis, the environmental benefit was not considered an independent good.

sense, consumers can choose whether to consume the bundled good or to buy the two goods separately.

Among the pro-competitive effects of bundling is that it reduces costs and/or increases the value of the products by producing them together. For example, an NGO might not have the resources to produce environmental goods independently. Thus if such good is incorporated into a firm's production process it will make it easier and probably cheaper to produce. In addition, by bundling the environmental good with another good, it would allow the latter to enter the market, as it will piggy-back from the other good until it is noticed and manages to create its own demand. These bundled or joint products need to be differentiated from the normal goods to create awareness. Eco-labels are used as the link between the normal good and the environmental good.

The sort of environmental goods that will likely to be provided by means of a bundle are going to be biased to those environmental goods that consumers value the most (probably due to their popularity), and therefore will be more profitable for the seller. In addition, producers might only produce the environmental goods that are 'easier' to provide considering the accessibility and costs of production. This indicates that the environmental good that will be provided will not necessarily be the most socially valuable environmental good.⁷⁹ In other words, the popular environmental problems will have more attention whereas other environmental problems, which are maybe even more critical will not have as much attention.

4.4.1 Eco-labels as Impure Public goods

The aforementioned environmental good is essentially a public good. Public goods are non-rival and non-excludable.⁸⁰ Private goods (which are both rival and excludable) can be produced and exchanged through markets. Individual utility is maximized with the exchange and consumption of these goods. For public goods the market mechanism does not operate

⁷⁹ Mark Bagnoli and Susan G. Watts. **Selling to Socially Responsible consumers: Competition and the Private Provision of Public Goods**, MIT 2003, *Journal of Economics and Management Strategy*, Volume 12, Number 3, Fall 2003, 234-235

⁸⁰ Excludability means that it is technologically feasible and economical for one person to exclude another from appropriating the benefits of a good once it has been produced. Contrarily, non-excludability implies an impossibility (physical or economical) to prevent other individuals from consuming the good. Rivalry implies that if one person consumes a particular unit of good it is no longer available for another person to consume. When the goods are non-excludable it implies that anyone the consumption of the good by one person does not limit the other's consumption of such good.

II. Eco-labels' place in the market

as smoothly as with private goods. Individuals are not willing to incur private costs to produce a non-excludable benefit. However, excludability may be achieved through legal and political instruments. Thus goods can stop being purely public and become a hybrid: an impure public good. Cornes and Sandler's model impure public goods and they define it as a "commodity that generates both a public characteristic –a public good– and a private characteristic". Taking the same shade grown coffee example, the consumer who buys the coffee enjoys the private benefits of coffee but by consuming such coffee will jointly have a non-exclusive utility from the environmental improvements of the coffee's production process. Eco-labelled products are a case of impure public goods, as they bundle public attributes to private ones, thus creating excludability. With impure public goods, due to their excludability, the market switches to a quasi-conventional one as with private goods where environmental attributes (public goods) are provided as joint benefits. The purchase driver remains conventional private benefits and environmental attributes are bundled in the product. People purchase eco-friendly products because they enjoy the private attributes resulting from an environmentally friendly production. This works because consumers focus their attention on conventional and well known dimensions of the products attributes such as taste or performance. The environmental attributes will be credible because consumers use the verifiable attribute as an indicator of truthfulness.⁸¹

4.4.2 Eco-labels as impure public goods: effects

By analyzing eco-labels as a bundle that creates an impure public good, certain effects, that would otherwise go unnoticed, become evident. The most obvious effect is that costs and prices of a product will increase. The most expected effect of eco-labelling is that it produces an environmental good (which is a public good). An eco-label would be considered effective as long as it produces more environmental good (less damage or no damage to the environment) than its competitors. Therefore, as long as eco-labels increase such production, it would be considered a positive outcome. On the other hand, when considering eco-labels as bundle a private and a public good there is also the risk that the failures that accompany public goods follow their fate.

4.4.2.1 Prices and costs

⁸¹ Douadia Bougherara and Gilles Grolleau, *Op. cit.*, p. 422

The most obvious effect of bundling private and public goods is that they increase the costs of the provision of the private good. Bagnoli and Watts observe, that “when firms implicitly link provision of the public good to sales of the private good they offer, they voluntarily increase their fixed costs of providing the private good.” The costs of producing the public good would be incorporated into the firms’ fixed costs, in other words it becomes more expensive to produce. Therefore it is crucial for the firm to use eco-labels to link the public and private goods; otherwise the cost of providing the public good, will simply reflect in a higher price. To be competitive, firms seek to lower production costs not to increase them, if they do increase the costs it is only if it is believed that it will be profitable. Therefore, bundling must at least promise some profitable outcome if firms are to engage in such strategies. Bagnoli and Watts overlooked that if the eco-label is considered a bundle then there are two goods not one. It is true that the consumer will see a price higher than the private good alone, but this price is for both the private and the public good. It is not a mere increase in the private good’s fixed costs. There are two goods.

Bundling strategies are normally used as an effective way to implement price discrimination, as it attracts more consumers than the two goods sold separately. As a bundle, eco-labels have the potential to reach consumers that would be willing to buy both goods separately, but also those whose willingness to pay for the private good is relatively high, and therefore do not mind if the good comes with another good (the environmental benefit). Contrarily, other consumers who are willing to pay for an environmental good will do so, for a lower price and will additionally enjoy the private benefits of the product it was bundled with. Bundling, therefore targets consumers who are willing to pay for both goods separately, for those who are willing to pay more for a private good and those who are willing to participate in the provision of the public good. Bundling works precisely because consumers have different valuations on the goods, therefore, if the valuations are very different or even opposite, the consumer can always buy the individual good. Thus producers can reach all consumers making this strategy profitable, as long as the valuations among consumers are sufficiently different.

Since consumer’s purchase of the private good increases the amount of public good provided only marginally, this increased willingness to pay⁸² (hereinafter as WTP) must arise

⁸² In industrial organisation willingness to pay is understood as the reservation price. The reservation price is the highest price a consumer willing to pay for a good or service.

from the consumer's desire to participate in the provision of a public good. Through the sale of the private good the firm can, at most capture only that part of a consumer's willingness to pay for the public good that is associated with the consumer's value of participating in the provision of the public good, and not the value of the public good itself."⁸³ In other words, the price consumers pay for the provision of the public good is only a fraction of what the public good actually costs. The more bundled goods sold, the more public good can be provided.

4.4.2.2 Provision of the Public Good

One of the main purposes of eco-labelling is to increase the provision of the public good, i.e. improve environmental quality and promote sustainable development.⁸⁴ Economists have done their part by showing under which market settings the provision of the public good is increased and how it may be influenced. Bagnoli and Watts show that it is possible to provide too much of the public good. They find that firms that offer an eco-labelled good face a trade-off between a more efficient provision of the private good and more efficient of the public good. Specifically, they show that in a fairly competitive market (Bertrand or price competition) it is more efficient to offer a private good and the public good separately. This is because the prices of the private good are sufficiently low, therefore if a producer were to offer a bundle with an environmental good, the price would go up. Consumers would presumably not buy the more expensive product, thus there would be undersupply of the environmental good. Contrarily, in a less competitive environment (Cournot or output competition) the provision of the public good would be higher. This is because prices of the private good in this setting are already high, therefore introducing a bundle will encourage consumers to buy the bundle, which would lead to an increase supply of the environmental good.⁸⁵ Bagnoli and Watts clearly mention that there is an efficient level of public good that should be supplied and that it is possible that too much of the public good is supplied. However, this can be easily contended in a practical setting in the sense, that many times the eco-labels pay back the producers with the 'profits' that are obtained. Furthermore, in the environmental and social settings, limiting the amount of profits to an efficient level might be 'efficient' but not effective. On the other hand Kotchen calls these joint

⁸³ Mark Bagnoli and Susan G. Watts. *Op. cit.*, p 428

⁸⁴ It has been discussed in previous chapters that more empirical evidence is needed to determine whether eco-labels do in fact improve the environment.

⁸⁵ Mark Bagnoli and Susan G. Watts. *Op. cit.*

goods 'green markets', and shows that if it is a simple bundle with no technological advantage it will lead to no difference of public good output. Contrarily, if the joint product is achieved by using a green technology that compliments the private good, there will always be an increase in the supply of the public good. Additionally, he suggests that "individuals in larger economies are less likely to make direct donations, choosing instead to provide environmental quality through consumption of the green good". In other words in large economies, green markets crowd-out all direct donations, especially if the joint product is a substitute for the public good. In other words, if the joint good's public good is a donation to an NGO, consumers will buy the joint product and stop making direct donations to the NGO. Therefore, the NGO's actions are conditioned to the amount of people that buy the joint good.

4.4.2.3 Public goods problems and eco-labels

When it comes to public goods, low levels of contributions are expected. This is mainly due to free-riding and the 'sucker's payoff'. The problem lies in the public's (both consumers and producers) desire to participate in the provision of the public good. It is simple to see that an increase in the number of individuals who are willing to contribute by buying or producing the joint product will increase aggregate provision of the public good. In other words, the more eco-labelled products are sold the more public good will be provided. However, at the same time, each contributor has a greater incentive to free-ride and therefore contributes less. Free-riding is an opportunistic behaviour where the individual seeks to consume more than its fair share of the public good. Since public goods are non-excludable and non-rival, the individual will enjoy the good regardless of his contribution. Consequently, it is expected that individuals will not voluntarily cooperate to the provision of the public good. On the other hand, low contribution to public goods can also be due to sucker's payoff⁸⁶ or outcome aversion. The sucker's payoff occurs when the individual contributes while the others defect. Therefore, individuals do not want to participate because they fear that they will be the only ones participating, making their contribution insufficient to provide the public good altogether. Contrarily to free-riding, sucker's payoff aversion is a priori and results from considering peer

⁸⁶ The '*strong* [emphasis added] desire to avoid being a sucker' is supported by an empirical regularity that 'when a manipulation (...) has the effect of increasing the likelihood that the group's goal will be achieved, subjects are more likely to cooperate', See Douadia bougherara *et al.* (note below)

behaviour. In the end both free-riding and sucker's payoff aversion have similar results: low contributions to the public good.

The sucker's payoff can be attenuated when there is an assurance mechanism that affects the individual's expectations regarding the contributions of others.⁸⁷ Therefore, if an individual can be assured that others will cooperate and that the risk of him being a 'sucker' is low he will be more willing to cooperate. Following this idea it can be inferred that eco-labels could be regarded as this assurance mechanism. It has already been determined that eco-labels are not empty environmental claims, they are complex environmental certification schemes. Additionally, if we consider eco-labels as brands they would also depend on their reputation and salience. Therefore, if the brand is salient and holds a good reputation within a market, it could be assumed that a significant number of consumers are buying the product, consequently the risk of being a sucker is low. In essence, the eco-label's salience assures the individual that he is not the only one contributing, hence consumers are unlikely to face a sucker's payoff. The same applies to producers, in the sense that if only one producer joins the eco-label, even if it has good intentions the environmental goal might not be met. However, if there is more than one producer that complies with the eco-label the more likely the goal will be met.

5. Eco-label pricing and price premiums

Eco-labels allow concerned consumers to identify and reward firms for improving their environmental impact by paying higher prices for their goods. Under this premise, it is very attractive for producers to differentiate their goods with eco-labels because consumers are expected to pay a higher price for their good. Conversely, consumers are willing to pay a higher price because the eco-labelled good satisfies their environmental needs. In essence the eco-labelling mechanism is anchored on these 'high' prices or premiums⁸⁸ that accompany the eco-label. Additionally, one of the most important incentives for firms to engage in eco-labelling is precisely the significant price premium, which would consequently render higher profits. However, price premiums are not the same as profit premiums. A high price in a market does not necessarily signify that the firm is receiving 'premium' profits. To

⁸⁷ Douadia Bougherara, *et al.*, **Dealing with aversion to the sucker's payoff in public good games.**

⁸⁸ The premium is the gap between a benchmark price (normally it is the average market price) and the actual price (price it is sold) of a given good.

obtain high profits a 'sustainable' firm has to observe prices, production costs, market size and long-term supply, like every other firm.

It has been constantly pointed out, that not only consumers' willingness to pay is modest (compared to premiums in other markets such as the organic foods market)⁸⁹ but also the actual premium is quite small. "Some economists even deny that consumers are willing to pay any additional amount for a product that has general environmental benefits when compared with its competitor."⁹⁰ It is estimated that price premiums for eco-labelled goods are between 1 and 4%.⁹¹ This is a low premium, especially when compared to the 15% that organic goods can be able to claim.⁹² On the other hand, some recent experiments have shown that if the label does not come with a higher price, consumers will not buy the labelled good. In conclusion, the "circumstances under which eco-labels can command price-premiums are not fully understood."⁹³ In order to understand and determine said circumstances, it is necessary to look what justifies the higher price and the effects it has on the market (supply and demand of the normal good). Prices influence consumers perceptions of the eco-labelled goods. In markets with information asymmetries and uncertainty, such as green-good markets, prices are used to communicate to consumers product quality, status or even market dynamics (such as product shortages or excess inventories).

Eco-labels and certification have an effect on prices. There is no discussion regarding whether eco-labels should be able to hold a higher price than the normal products. There are several explanations to why this may be the case. What is concerning is that the literature talks about premiums and premium pricing strategies without justifying it over other pricing strategies. An explanation could be that managers normally use general rules of thumb when it comes to pricing; thus there is no clear data for academics to formulate a

⁸⁹ As pointed out by Vangelis Vitalis (note below), 'organic foods are perceived to have direct health benefits for the consumer, as well as having positive environmental impacts. These perceived health benefits may help explain the more substantial premiums the organic labelling industry attracts, when compared to other sectors'.

⁹⁰ Vangelis Vitalis, OECD. Round table on Sustainable Development. **Private Voluntary Eco-labels: Trade Distorting, Discriminatory and Environmentally Disappointing**, p. 7.

⁹¹ Vangelis Vitalis, OECD. *Op. cit.*, p. 8.

⁹² Nonetheless, in strong competitive markets, this small premium might be enough to give eco-labelled goods an edge or sales advantage. Furthermore, even if small, there is some value for eco-labelled goods in the market and therefore there is potential interest from producers.

⁹³ Magali Delmas and Neil Lessem, **Eco-Premium or Eco-Penalty? Eco-labels, quality and knowledge in the organic wine market**.

sound pricing theory. Specifically, the eco-label literature focuses on experiments that attempt to measure consumers' willingness to pay to see whether there is a viable market for eco-labels or if such premiums match the proposed willingness to pay. Therefore there is some anecdotal information collected but none of it is useful for managers that have to decide their pricing strategies. There is a large gap in the analysis of how eco-labelled goods are priced and the effects of such prices. In order to fill this gap, industrial organisation and marketing might shed some light.

5.1 Pricing strategies for eco-labelled goods

Pricing is a challenge for any brand and its managers. There are no clear-cut guidelines for pricing, normally managers use general rules of thumb that help them solve immediate issues without much theory behind their decisions. Managers are taught to deal with pricing in a linear manner, by isolating separate portions of the pricing decision without looking into their interrelations. Because these modules or 'steps' are not deemed as interactive, they do not take into account specific market circumstances. This leads to a mismatch between consumers and producers, which in the end can lead to an inefficiency.⁹⁴ Products can be over or under-priced which sends mixed signals into the market. In eco-label markets, the labels work with the prices to send the correct signals, therefore if the signal is confusing, consumers will not trust the label. Consequently, they will not buy the good and the eco-label mechanism will fail.

In theory market information should be correct, complete and accessible for all market actors. With this information firms could calculate prices based on their costs and the demand, so the price would reflect a market equilibrium. However, having complete, reliable and up-to-date internal information to calculate sophisticated pricing schemes is not realistic, considering many firms do not even compute basic break-even analysis. Larger firms might collect their own data and make sound pricing policies, whereas other smaller firms use rules of thumb to decide the price of their eco-labelled product.

5.1.1 Mark-up Pricing and other strategies used in practice

Ideally, firms would use a market oriented pricing strategy, in which a price is based upon analysis and research compiled from the target market. In practice the most common

⁹⁴ Charles R. Duke. **Matching Appropriate Pricing Strategy with Markets and Objectives.**

strategy is mark-up⁹⁵ pricing. This method uses average costs as a base to then use the mark-up. This system has the reputation of enhancing profitability and encouraging sales of volume products. However, this standard mark-up does not take into account demand, so it may penalize some products by putting too high a price on them and discourage sales. In addition average costing, which is the basis for a standard mark-up, can be misleading as costs (both fixed and variable) may change when demand is altered. Other methods such as target return pricing⁹⁶ and simple break-even⁹⁷ analysis are also flawed, as they are also based on total costs. If costs was the decisive factor for setting prices, it is true that eco-labels might enjoy higher prices. However, if the eco-label enjoys a higher price it is unlikely it is due to a standard mark-up.

5.1.2 Competitive and Product Line Pricing

It has been claimed earlier that eco-labels differentiate a product from other similar products. Because the eco-labelled good is a differentiated product it would be assumed that it would be reflected on the price. This is competitive pricing not differential pricing. Competitive pricing uses product prices to take advantage of a competitive position that exists with respect to similar products. Conversely, differential pricing consists of selling one product to different consumer segments at different prices. In essence the main difference is that differential pricing is with respect to the same product and competitive pricing is with respect to other similar, not identical, brands. On the other hand, product line pricing refers to the decisions single firms have to make regarding their sets of similar products, i.e. the product lines. Larger multi-product firms might share product lines, therefore they enjoy economies of scale. In this case the average costs might be significantly reduced. The different products can target different consumers and prices will help consumers identify the rank of the product, within the other products under the same brand. It is an instance of intra-brand competition.

⁹⁵ Mark-up is a sum of money (either a percentage or a fixed amount) added to the average cost of the product to create a profit.

⁹⁶ This method identifies the price at which a product will be competitive in the market, the producer has to define the desired profit, and then they compute the target cost for the product by subtracting the expected profit from the competitive price. The product will be manufactured under this cost limit.

⁹⁷ Break-even, is the point at which cost or expenses and revenue are equal: there is no net loss or gain. Break-even analysis, inserts different prices to obtain a number of breaking even points, one for each possible price. This alters the quantity of the good a firm has to sell to break even. Of course, the purpose is to profit, not to break-even, therefore the faster the company reaches a break-even point the more profits it can enjoy.

II. Eco-labels' place in the market

5.1.2.1 Competitive Pricing Strategies: price signalling and reference pricing

Both price signalling and reference pricing relate to price-quality issues. Consumers value quality, even though information about information quality might be difficult or expensive to obtain. On the other hand, information about price is much simpler to acquire. If the only information about a product were its price, all goods would be search goods. Thus, consumer's only indicator of quality would be prices. Although the previous statement is mere conjecture, in the consumers mind the relation is quite real: the higher the price, the better the product. Due to this belief, consumers often overpay to get the high quality they prefer. Reference pricing is a variant of price signalling, by which consumers compare prices between brands of the same product and uses them as a reference to determine the quality. Both the lower and the higher end of the price scale might be left out of the market and a medium price will prevail, as it will be deemed the customary price.⁹⁸ Reference pricing depends on consumers perceptions or the brand's salience, therefore if a product is so widely distributed and easily available it may develop a customary price, which will become an absolute reference point.

5.1.2.2 Product Line Pricing: Image pricing and premium pricing

In product line pricing, a firm must make decisions across a set of its own related products. By using prices firms can differentiate among their products according to their image or position. Firms take advantage of market segments by pricing according to preferences, for example higher prices position the product as 'high-end' whereas lower prices give the image that the product is 'generic'. Similarly, premium pricing addresses price-sensitive consumer demand differences by pricing substitutes at different levels (good, better, best). This premium price is artificial as it does not reflect the production costs, it is kept high to influence consumer perceptions.

The eco-label literature does not go in depth with respect to pricing strategies. Though it is clear after the brief overview of the relevant strategies, that the eco-label premium refers to a different, more general type of premium. Specifically, the premium is applied to all eco-labelled products, not only those from firms that have a product line in which the eco-labelled good is just another version of the normal good. In fact, eco-label premiums are a

⁹⁸ Some consumers purchase the high priced brand without regard to the extra financial risk involved (prestige pricing)

competitive price strategy, that signal that the good has an environmental quality that distinguishes it from the rest. Therefore, this eco-label premium is closer to a price signal than a position price.

5.2 The Eco-Premium and the price-quality relation

Eco-labels are associated with changes in the production processes that result in superior environmental goods. It is accepted to pay a higher price for a high quality product. What is not clear is whether this high price is due to increased production costs or if it is a 'premium' *per se*. In a broad sense a premium is the gap between a benchmark price (normally it is the average market price) and the actual price (price it is sold) of a given good. Premiums are usually higher than the average market price, though they can be negative too. In a strict sense, the premium is the sum added to certain goods to modify the consumer's view of the good, regardless of the quality or production costs.

The premium in eco-labels serves two purposes: to provide information about the quality of the good as well as signalling its position. A higher price aids the eco-label (the mark) to signal that the good is superior to its competitors. At the same time, it reflects the higher production costs of the eco-labelled good. For example, the Fairtrade Labelling Organization (FLO) divides the 'sustainable production costs' reflected in a 'Fairtrade minimum price' from the 'Fairtrade Premium'. This Fairtrade minimum price "is the minimum price that a buyer of Fairtrade products has to pay to a producer's organisation⁹⁹ for their product. It is not a fixed price, but should be seen as the lowest possible starting point for price negotiations between producer and purchaser."¹⁰⁰ It is set following research into producers' costs of sustainable production.¹⁰¹ The sustainable cost of production is based on information from the different production stages related to the establishment, operations, harvest and post harvest, transformation and/or processing, product preparation and/or packaging, central structure activities and export costs. The labour, inputs and investments from each stage are taken into account, and the average yield, representative of the producers organisation of that

⁹⁹ It is easier and better for communities to certify as a whole rather than independently. Therefore, they form geographical organisations that ease costs and procedures.

¹⁰⁰ http://www.fairtrade.org.uk/what_is_fairtrade/fairtrade_certification_and_the_fairtrade_mark/the_fairtrade_minimum_price.aspx

¹⁰¹ When the market price is higher than the Fairtrade minimum, the buyer must pay the market price.

II. Eco-labels' place in the market

particular region (which is important as it provides a baseline).¹⁰² It is a thorough cost assessment, that aims at internalising costs that would normally be left outside the average cost function, and that would otherwise be considered as externalities. The minimum fairtrade price would therefore be the 'real' price, or at least close to it. This minimum price that is paid to the producer is also a safeguard in case of scarcity. In addition to this fairtrade minimum price, there is the Fairtrade Premium. "The Fairtrade premium is a sum of money paid on top of the agreed Fairtrade price for investment in social, environmental or economic development projects."¹⁰³ The premium is established in the same way as the minimum price and remains unchanged, even if the producer is paid above the minimum price.¹⁰⁴ By separating and clarifying the nature of the fairtrade prices, consumers know the price is going back to the producer.¹⁰⁵ However, not all eco-labels have this clear definition, and many times it is unclear who keeps the premiums.

5.2.1 Eco-premiums and production costs.

Firms constantly seek to improve their bottom line¹⁰⁶, that is to increase their net income. This can be done by simultaneously growing revenues (by increasing gross sales) and increasing efficiency (or cutting costs). However, sustainable-oriented firms also consider environmental and social matters as they would economic ones. This is known as the triple bottom line or the three P's that stand for 'People - Planet - Profit'. When environmental and social matters are taken into consideration, keeping production costs low stops being the priority. In other words, firms are expected to operate "in ways that secure long-term economic performance by avoiding short-term behaviour that is socially detrimental or environmentally wasteful."¹⁰⁷ Furthermore, it has constantly been argued that 'sustainable'

¹⁰² Fairtrade Labelling Organizations International (FLO), **Guideline for Estimating Costs of Production (COSP)**, p. 7-8.

¹⁰³ http://livepage.apple.com/www.fairtrade.org.uk/what_is_fairtrade/fairtrade_certification_and_the_fairtrade_mark/the_fairtrade_premium.aspx

¹⁰⁴ The premium fund is typically invested in education and healthcare, farm improvements to increase yield and quality, or processing facilities to increase income.

¹⁰⁵ A UN Food and Agriculture Organization report on the banana market shows that a premium can reach anywhere between 50% and 200%, however the premium paid to the farmer is only 37,5%. The greater part of the premium is kept by the retailer and other middle-persons, even if it is the farmer who takes on the cost of switching to the organic production. For complete report see: <http://www.fao.org/docrep/meeting/x1149e.htm>

¹⁰⁶ Bottom line is a reference to the line at the bottom of a financial statement that shows the profit or balance. It is the ultimate or underlying criterion. In business it refers to the profit.

¹⁰⁷ Michael E. Porter and Mark R. Kramer. **Strategy and Society: The Link Between Competitive Advantage and Corporate Social Responsibility**, p. 3.

behaviour will increase production costs and that it would place them in a disadvantage in the marketplace. In essence it is expected that firms voluntarily increase the production costs, while their competitors lower them. However proponents of corporate responsibility claim that in the long haul, being sustainable is a better bet than keeping business as it is (or business as usual as the CSR literature calls it). However, a firm deciding whether to enter an eco-label (or any other sustainable endeavour) has to consider overall its profitability. The factors that directly determine profitability are yield, price and variable costs. In other words, premium prices alone are not always translated into positive profits.

5.2.1.1 Production Costs

A company that is committed to improve their environmental bottom line, strives to reduce its ecological footprint by, carefully managing its consumption of energy and non-renewables (such as water) and reducing waste. This might mean that firms will require new 'cleaner' technology, which represents large investments, practice older more 'traditional' methods that are less harmful but more expensive and risky (think agriculture without pesticides, which is what organic agriculture is doing) or reduce the scale of production to become more self-sustainable, in other words voluntarily reducing the yield. Other firms, that are in the extraction fields (such as fishing or logging) might do their part by harvesting only the necessary amount to avoid depleting the resource and reducing waste. By reducing the harvest, firms have less output, therefore the price has to be higher, otherwise it will have a loss. Furthermore, waste-management can be very costly, specially for certain sectors (chemicals, pharmaceuticals, oil), however they improve their impact by financing and handling their own waste, rather than leaving it to the government (which in the end is society through taxes) to take care of it. It is expected that firms internalize all these environmental costs which clearly affects their production costs. All the reductions, constraints and investments will be reflected on the production costs. Consequently, firms pass-on these costs on to the price, so in the end consumers pay for these endeavours and the firm would somehow recoup. However, recouping is not the same as earning 'premium' profits, it is a mere recovery of their investments.

For example, in the early 1990s the United States, introduced the 'dolphin safe' policy, which increased the costs costs from \$905 to \$1,153 per ton, which represents a 30 percent increase. Heinz, one of the companies who promoted this policy, spent approximately 9.2

II. Eco-labels' place in the market

million dollars for the implementation of the 'dolphin safe' tuna eco-label. Additionally, after the policy was introduced the small private firms had to leave the market, most of them at a loss, because they could not absorb the high costs of the environmental measure. Other larger firms had the capacity to find other less regulated oceans to fish. This investment was reflected in a higher price per can, which in hindsight proved that consumers were not that willing to pay for dolphin safety.

5.2.1.2 Certification costs

Eco-labelled goods additionally face certification costs. These costs are different to the costs incurred in complying with the criteria, which would be part of the production costs. These are very real costs for both suppliers and producers: fees associated with auditing, certification and licensing, disregarding the time it takes to compile and report data. They are such large costs that it has been speculated that they deter small producers from joining the eco-labels.¹⁰⁸ This is why eco-labels promote producer organisations in cooperatives or other forms so that they can cope with the costs collectively.

The Marine Stewardship Council (MSC) has an annual fee for those producers (supply chain, retailers and food-services companies) who use the MSC eco-label. The fee is calculated on the total value of the MSC certified products sold during a financial year. Additionally, if the product uses an eco-label on consumer facing products (packaging or menus) it would have to pay a royalty. The royalty is the .5% of the value of the seafood sold.¹⁰⁹ The MSC and other larger eco-labels have the resources to offer grants and other type of support to those producers that are interested in certification but do not have the financial means to do so. Nevertheless, there are other eco-labels that face even harsher costs. For example, the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) programme has been in the spotlight due its high costs. LEED certification costs include the project registration fee: \$450 for members and \$600 for non-members. In addition there is the certification fee based on the size of the project and square footage: \$1,750 to \$17,500 for members to \$2,250 to \$22,500 for non-members. Not to mention the fees of the commissioning agent, which starts at about \$15,000. All these without including extra costs such as consultants that help applicants through the whole

¹⁰⁸ Environmental Law Institute, *Op. cit.* p. 23

¹⁰⁹ <http://www.msc.org/get-certified/use-the-msc-ecolabel/costs#annual-fee>

process and of course the cost of sustainable materials and construction methods.¹¹⁰ These high costs may be useful in deterring the non-compliant producers, however it has also been argued that they deter the smaller producers, who are in many cases the same ones the eco-labels aim to address.

5.2.1.3 Environmental Advantage.

According to Porter and Kramer, sustainability can work in favour of a firm when its principles coincide with its economic or regulatory interests. They present the example of DuPont, who saved over \$2 billion from reductions in energy use since 1990. McDonald's is another example, just by changing the materials they use to wrap their food, they reduced their solid waste by 30%. Columbia Credit Union in Vancouver, Washington, has the LEED Gold Certification for one of its branches. According to the bank, the branch has used about half the gas and electricity and 40 percent less water on average than comparable branches in the first year. As Porter and Kramer express, "these were smart business decisions entirely apart from their environmental benefits."¹¹¹ However, if these results are representative of all the pro-environmental firms it is difficult to determine. However, what is true is that certain resources, such as oil and water, are becoming scarce and consequently expensive, therefore the firms who have invested in alternative energy sources will have lower costs, compared to the 'traditional' firms. Sustainable firms are likely to have an advantageous position in a near future, as other firms might be forced to switch technologies and make the investments the pro-environmental firms have done previously.

5.2.2 Quality-Informational Premiums

As it was suggested earlier, with certain goods it is difficult to determine quality. This causes informational problems that could in turn lead to market failures. It has been suggested by Shapiro, and others following his ideas, that high prices or premiums can be used to resolve informational matters. Specifically, "the size of the premium increased with the degree of the informational problem, which in turn depends upon the frequency of purchase, the delay and difficulty in detecting quality and the speed at which reputations are updated."¹¹² In

¹¹⁰ <http://www.environmentalleader.com/2009/05/13/green-costs-create-roadblock-to-leed-certification/>

¹¹¹ Porter and Kramer, *Op. cit.* p. 3.

¹¹² Luisa Menapace and Giancarlo Moschino, *Op. cit.*, p. 1

equilibrium, quality exceeding the minimum commands a premium above marginal costs, which Shapiro represents as a fair return on the private investment in reputation.

According to Shapiro, this premium can be viewed either as a return to reputation or as an incentive payment to induce quality maintenance. He notes that premiums for high quality products are like a taxes in that they open the gap between marginal production cost and price. This gap causes welfare losses relative to the full information outcome. However, the gap reflects the (information) costs associated with establishing reputation. Information costs are as real as production costs, therefore this gap is a cost due to imperfect information.¹¹³

The premiums have the crucial role of inducing sellers to maintain the reputations, and the high-quality products. "Without premiums for high quality items, sellers would find that a fly-by-night strategy of quality reduction would be profit maximizing." This strategy increases profits in the short run by reducing the quality of the products but maintaining the high-quality prices. This would yield immediate cost savings, and the reputation will not be harmed until later periods. Premiums in this case, induce firms to forego the opportunity to earn profits through quality reductions.

5.3 Effects of Eco-Premiums on the Market

In a market high prices can mean anything from high production costs, the presence of monopolies or other less-competitive market arrangements, low supply and/or high demand, the presence of patents, increasing input costs over the industry, or simply that the market has a high return on financial investments. To give an accurate picture of how markets react to the introduction and interaction of eco-labelled goods among other eco-labelled or normal goods would require targeted research. However, by taking into account simple microeconomic analysis some of the effects can be explained. For instance, it could explain why the presence of premiums is not evident in the market or if it is, why it is so small. In addition, empirical research can aid to obtain clearer (or murkier) picture of what goes on in the market. For example, experiments have shown that high prices are crucial for consumers to identify the good as 'better', and consequently decide to purchase the good. It is a paradox, because theoretic economic analysis suggest that premiums are not sustainable in the long run, if they exist at all. At the same time, if there is no price premium

¹¹³ Shapiro, *Op. cit.*, p. 674

consumers do not believe the eco-label and prefer not to buy. What's more, is that for both arguments there is also empirical evidence to support it. To make the analysis complete, time lags have to be included, since markets are dynamic. Recently introduced eco-labelled products might enjoy a premium, but for a limited time. In the long run prices will stabilize, brand recognition and loyalty would have developed, and the newcomers will have a difficult time because the premiums might not be available anymore. However if there is no price differential consumers, counter-intuitively, will stop buying the product.

High prices (premiums) are a key for eco-labelled goods' profitability. Nevertheless, premiums "...should always be considered in the context of long-term production costs and long-term prices. The evidence suggests that both short-term transition costs and short-term prices are higher than long-term averages."¹¹⁴ However, even if premiums are not sustained in the long-run they do exist in the short-term which maybe enough to recoup the investments and gain a competitive advantage, in addition to reputation and brand loyalty, which are valuable assets in the market.

5.3.1 Prices in a segmented market.

In markets where consumer segments already exist, price segmentation can be optimal. The difference between price discrimination and price segmentation, is that in the latter products differ in quality as well as in price. Theoretically, the production costs will differ among the segments, as the cheaper products will have lower quality and the high end products will have better quality. Nonetheless, environmental quality does not necessarily follow this convention. For example, Skin Deep®, evaluates the relative safety of personal care products, such as shampoos. The very worst, is also the most expensive of the list.¹¹⁵ Cosmetics are essentially chemicals, chemicals that might not only threaten health, but very likely to damage the environment. Therefore, high-end products are not necessarily the most environmental friendly. Consequently, eco-labelled goods premium prices do not signal high-end quality, just different attributes that cater to a specific segment. It is very likely that for the consumers in the segment, such eco-labelled products have the high quality,

¹¹⁴ Tom Rotherham, UNEP. *Op. cit.* p. 18-19

¹¹⁵ Daniel Goleman, *Op. cit.*, p. 121. For the shampoo listing see: <http://www.ewg.org/skindeep/browse.php?category=shampoo&showmore=products&start=0&order=webscore+DESC>

II. Eco-labels' place in the market

performance and status they seek. Keeping prices differentiated for each segment is key for consumers to identify the segment.

The eco-labelled segment and the normal segment are all part of the same market. The amount of consumers in the market is a constant, what differs is their preferences. Therefore, if there is a change in demand in one segment, other segments will face the consequences. An increase in demand in the eco-labelled market, may lead to a) an over-supply in the 'normal' good segment, which will make prices of normal goods to go down; and/or b) a temporary shortage of the eco-labelled good, which will temporarily rise prices. In the long run however, this shift will require producers from other segments to change to the eco-labelled segment or that the incumbent eco-label producers increase their output. Increasing the amount of output to satisfy demand will lead to lower prices, in the long-run. This might explain why real market data shows that if differentiated products (such as eco-labelled goods) do receive a differentiated price, it will still tend to be clustered around the average market price, i.e. the deviation will be quite small. Furthermore, if the remaining normal market is small, prices might even increase due to the shortage. Therefore, overall prices might be higher in a market with an eco-label segment.¹¹⁶

5.3.2 Excessive demand for eco-labels and the effects in prices.

If there were an increase of demand for an eco-labelled good, it would immediately make prices go up. This is because even though supply has not changed, the good is now relatively scarce. As mentioned above, to satisfy demand eco-labelled goods must increase, either eco-labelled firms increase their output or normal firms can try obtain the eco-label.¹¹⁷ This increase in output will place pressure on the prices which would eventually go down. However, if prices go down then the price differential might not be large enough. As seen previously, without the price differential consumers might not identify the good as being environmentally superior. Therefore it might be worth considering not increasing the output and take advantage of the high demand by charging high prices. Eco-labelled producers would have an advantageous position, as they will enjoy high prices and have secure sales,

¹¹⁶ Roger A. Sedjo and Steven K. Swallow, **Voluntary Eco-labeling and the Price Premium**, p.278.

¹¹⁷ Changes in demand and supply are not immediate. If there is an increase in demand for eco-labelled goods, firms cannot just enter the market. The reaction time lag as the average time to adapt and become certified is three years. Therefore, the price signals that firms followed are likely to be different by the time the producer actually manages to enter the market.

as long as the conditions remain unchanged. This might mean that some consumers might be left out of the segment, but the environmental quality would be maintained.

From a practical perspective, increasing supply of the product might not always be possible. For example, the Forest Stewardship Council, which is one of the oldest certification schemes, thus one of the most recognized eco-labels. FSC has faced the dilemma that it cannot cover global demand for certified wood.¹¹⁸ FSC has received criticism precisely because it is one of the few industries in which 'large scale' sustainability is expected. This pressure has led FSC to create new labels such as the *FSC Mixed Sources* label which indicates that the product is made from a mix of FSC certified and non-certified (but controlled) sources. By mixing certified wood with other wood, the amount of eco-labelled good increases. While some environmentalists might find this deceiving, as not all the product is sources from certified wood, the main concern is that FSC is forced to lower its standards. By lowering its standards, more producers can become certified. However, these practices hinder the environmental objectives of the eco-label. In addition, it can spur many 'empty' environmental claims that would trick consumers into buying a non-certified good. Overall this leads to an increase in consumption, which even for sustainable goods should be limited. Academics have argued that the environmental improvement per unit of product is cancelled by a consumption increase. Consumers care about the environmental impact of their per unit consumption; therefore they do not compute the overall impact of their consumption.^{119,120} Not only do they not estimate their overall consumption, evidently they do not consider the impact of society. At some point even sustainable processes can become harmful to the environment.

5.3.3 Over supply of eco-labels

Firms that decide to enter the eco-label market have to be aware that premiums might not always be available in all eco-labelled markets. Even if there is scope for premium pricing, there is a limited demand for these products, it is still a market segment, therefore new entrants might not be able to reap the benefits of adopting the eco-label. If the size of the

¹¹⁸ FSC certifies wood and other products derived from its fibre, such as carton and paper.

¹¹⁹ Douadia Bourgherara, *et al*, **Can Labelling Policies do more Harm than Good? An Analysis Applied to Environmental Labelling Schemes**, p. 6

¹²⁰ It is similar to the effect of 'diet', 'light' or 'fat-free' labels on food, they might have less calories, but more salt or fat (depending on the label), and consumers will feel safe, and consume more which normally ends in consumers eating more calories than they would have if the product was 'normal'.

II. Eco-labels' place in the market

segment is overestimated, producers either lower prices or sell in the normal market. In 2002-3 the median market price for Brazilian organic coffee was about three times higher than for conventional coffee. Many organic coffee growers could not place the coffee in the organic market and had to sell in the conventional market. In this case, the premiums existed, what happened is that there was an oversupply of the good. Therefore, it is not true that all certified products will have a price premium. It would be particularly difficult for new entrants, who will have to establish their reputation and make new relations within the new market segment they entered. Only established eco-labels may have the capability of allocating their products, leaving excess to be sold in other markets. This solution might seem harsh for the producer who has to sell his good in the normal good market. The alternative is to lower the price of ALL the eco-labelled goods, which would place all the segment at a loss. Furthermore, if there are many producers, prices might be pushed below the market price, which would be detrimental for all. Therefore, if faced with this particular situation, selling in the normal market is a reasonable solution, because even if they cannot sell with a premium, they can still try to obtain a fair price and other eco-labels would not be affected. For consumers this scenario is no problem, as consumers that do not care for the environment would still buy the product as long as the price is within the normal range.

If the situation ever arises, in which high demand were satisfied by many producers, eventually the high eco-label criteria would become the norm. At this point the bar should be raised as necessary to maintain the differential (of quality and prices). This might explain why eco-labels were envisioned as only 15% of the market. If there are too many, the prices cannot be sustained.

5.3.4 No price differential due to high prices for the normal goods

Since the origins of eco-labels surveys constantly point out that the majority of consumers would prefer an eco-labelled good over a normal one, other things being equal. Other things being equal, normally refers to availability, quality (performance) and prices. It has been suggested that if the price differential is not significant, eco-labelled goods would be preferred over the similar 'normal' good. In 2002 a group of sociologists from the University of Michigan set an experiment with athletic socks, one labelled and one unlabelled (otherwise the socks were identical). The initial cost of the socks was \$1, just like the unlabelled socks (which served as the control group). The cost of the labelled socks was to

be incremented by \$.5 until it reached \$1.40 and the researchers would measure the sales to spot consumers willingness to pay for the labelled good. One of the most surprising results was that when prices of both types of socks were equal only 43 percent of consumers bought the labelled socks.¹²¹ This was a shock because it has been reported that at 75 percent of consumers are willing to buy 'sustainable' products if they cost the same.¹²² The price differential tells the consumer that the product is different and reinforces the credibility of the eco-label. In brief, high prices cannot be sustained in the long run and if there are no high prices consumers will not buy the product.

Sedjo and Swallow point out that if there is no price differential, there is no incentive for the normal good producer to switch to the eco-label segment and face higher production costs and certification costs, when at least in the short run he can forgo those expenditures and sell at the same price. In the same line, marginal eco-label producers might return to the normal market and avoid the higher expenses of having the eco-label. Sedjo and Swallow suggest that same price scenario might be due to similar certification costs or production costs among the segments. Specifically, if the regulatory environmental standard is high, it is not costly for firms to obtain the certification. Prices could be considerably high for both products. Consequently the prices between segments will not be very different.

It has to be clear to producers that premium prices do not equal premium profits. However, there needs to be a price differential for the differentiation of the segments. If the price were similar in both segments, even by including all the production and certification costs the mechanism might not work. To solve this problem an artificial premium can be set, to distinguish the eco-labelled which would have the effects of a tax. Taxes will shift supply, making the product more expensive and it would reduce output. Alternately, certification costs can be increased, to deter opportunistic producers to change segments at their convenience. Furthermore, in the case of high regulatory standards, eco-labels should make their criteria even higher for their members. If adhering to the eco-label criteria were sufficiently costly, firms would not go back to the 'normal' segment. In an industry with high regulatory compliance costs, that has reasonably high environmental controls, voluntary

¹²¹ Hiscox and Smyth, **Is there Consumer Demand for Improved Labor Standards? Evidence from Field Experiments in Social Product Labeling**, p. 6-7

¹²² Other experiments have different results, Oregon State University researchers set an experiment at a Home Depot, eco-labelled items outsold the non-labelled goods two to one when prices were the same, but diminished when the prices increased. Example from Daniel Goleman, *Op. cit.*, p 118.

eco-labels might not be appropriate, as producers will not seek to join the eco-label. However, if the eco-label offered other non-financial incentives firms might still seek certification. These controls, might force to keep supply steady, even if some environmentally aware consumers are left out of the segment and forced to buy the normal good. Meanwhile in the normal good segment, the remaining producers might face losses as they face over-supply. However, if there are enough consumers in the normal good market, and only a few producers to cover the whole segment, prices might actually go up.¹²³ This might mean that overall prices will be higher in markets with an eco-label segment.

5.4 Effects of eco-premiums on consumers

Consumers are an essential part of the eco-labelling mechanism. At least some consumers must be willing to pay for eco-labelled goods. If this is not the case, environmental improvements would go un-rewarded, and probably only happen if required by law. At the core of the eco-labelling mechanism (or any other market transaction for that matter) is a willingness to pay¹²⁴ (WTP) computation. Consumers calculate “the maximum amount of resources that they are willing to give up in exchange for the object being sold. The WTP computation is used to evaluate whether a proposed trade is beneficial.” Consumers have to be able to assign a WTP to the eco-labelled good that is proportionate to the benefits that it will give them. Otherwise they would end up paying a higher price than what it is actually worth to them.¹²⁵ Therefore, it is not how much they are actually spending on the product, it measures the value of the eco-label in the consumers eyes. If consumers value the the pro-environmental actions of firms, it will affect how consumers make their purchasing decisions. It will determine and shape their behaviour.

5.4.1 Effects of the eco-label on consumers beliefs

When a product holds an eco-label, consumer's perception of the good is altered. The eco-label shifts consumers beliefs of the product. The consumer believes that the eco-labelled good has more or less environmental attributes than it has in reality. Normally consumers think in absolute terms. Thus, if the good has a positive trait the product as a whole is

¹²³ Roger A. Sedjo and Stephen K. Swallow. *Op. cit.*

¹²⁴ Willingness to Pay should not be confused with reservation price, which is the highest price a consumer is willing to pay for a good.

¹²⁵ <http://www.jneurosci.org/content/27/37/9984.full>

perceived as good, and vice-versa, if the good has even a single negative trait the entire product is bad. It is easier for consumers to equate small attributes to overall quality. Consumers use shortcuts or rules of thumb to make decisions, therefore they use simple and available cues to make decisions. If information is too complicated the consumer will find a way to make it simple. For example, many consumers expect eco-labelled products to taste better than their normal versions. Taste in this case is observable; it is the private benefit of the product, whereas the environmental benefit is not. Therefore taste becomes a proxy for the environmental benefit. Consumers, are more familiar with information about taste than they are about environmental characteristics. By translating the environmental characteristics into a familiar attribute, consumers are able to process the information easier.¹²⁶

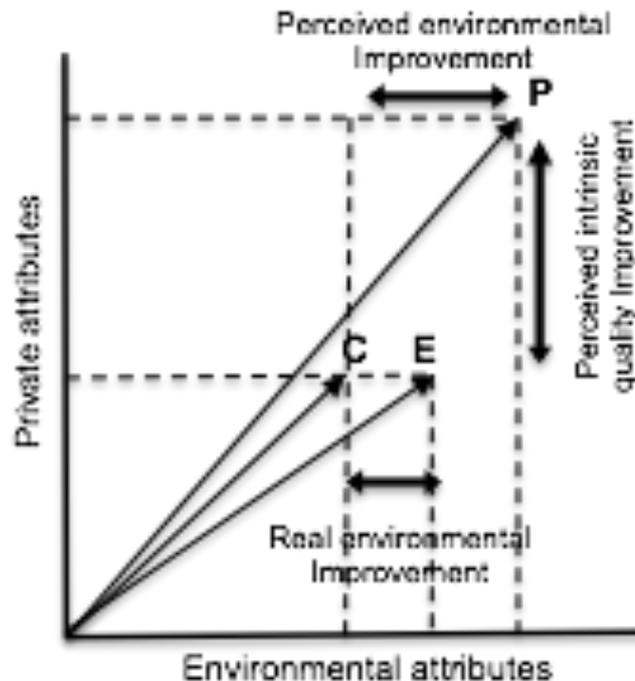


Figure 6. Consumer perception of eco-labelled goods.¹²⁷

In this figure C is the conventional product and E is the eco-labelled product. The eco-labelled product E does have an environmental improvement, however the consumer perceives such improvement far bigger than it actually is. This phenomena also occurs with private benefits. Therefore from the consumers perspective he is actually consuming product

¹²⁶ Douadia Bougherara and Gilles Grolleau. **Designing Ecolabels In Order to Mitigate Market Failures: An Application to Agrofood Products**, p. 422-433.

¹²⁷ Graph taken from Douadia Bougherara and Gilles Grolleau. *Op. cit.*, p. 422.

P rather than E.¹²⁸ The eco-label influences consumers perception of the product. Hence, if the consumption experience is positive (or negative), the consumer's beliefs about the product will be distorted in favour of (or against) the eco-label. The experienced pleasantness (private benefit of consuming the good or experienced utility) should only depend on its intrinsic properties of the product. Intrinsic properties involve the physical composition of the product. Therefore, the pleasure of consuming a good, such as a chocolate would depend only on its composition, therefore consuming any chocolate would be equally pleasurable (as long as the composition is the same). However, consumers' experienced pleasantness is also influenced by extrinsic information about the good, i.e. the brand, knowledge about the product (such as its environmentally friendly attributes) and/or price. Personal factors such as the information or involvement consumers have about the product can further influence consumers perceived quality. There is behavioural evidence suggesting that manipulating knowledge about the good can affect experienced pleasantness. For example, knowledge of a beer's ingredients and brand can affect reported taste quality and the reported enjoyment of a film is influenced about expectations about its quality (reviews or reputation of its participants). Notwithstanding the previous, neuroscience has demonstrated that knowledge of a particular brand does increase activities in parts of the brain that suggest retrieval of brand information during consumption experience.¹²⁹ Therefore, consumers' expectations about a products quality make the products better or worse. These processes are important because they become an element of the consumers' preferences.

People tend to gather small pieces of information (not all information) to make decisions. Eco-labels aid in this process as they reduce environmental information to a label. Even a single note of positivity or negativity can bias the consumers decision process.¹³⁰ Therefore marketing efforts all strive to make the consumer build expectations and have positive experiences of their products. Current experiences are registered by the brain and become available when faced with future similar decisions. Therefore to make good decisions in the future the brain has to carry out good measurements of the quality of previous experiences.

¹²⁸ *Ibidem*.

¹²⁹ Hilke Plassmann, *et al.* **Marketing Actions can Modulate Neural Representations of Experienced Pleasantness**, p. 1050

¹³⁰ Daniel Goleman, *Op. cit.* p. 119.

The prior knowledge about quality of an experience becomes key information.¹³¹ Eco-label existence depends on a delicate equilibrium, one negative trait and the credibility of the label could be shattered, unless consumers have already developed strong beliefs about the eco-label. New information about the eco-label will be credited or discredited, contingent upon consumers' previous beliefs or experience. If the consumers beliefs are positive, based on their own experience, negative information will be ignored or discredited. This behaviour aids eco-labels persist even when negative information (rumours or facts) is available to consumers.

5.4.2 Effects of prices on consumers beliefs

In an experiment set up by Hiscox and Smyth, they found that the effect of the eco-label is magnified when it is accompanied by an increase in price. The experiment was located in an upscale Manhattan retail store¹³² which is known for supporting 'ethical' or sustainable causes. One British brand and one Italian brand of towels were selected for the experiment. The British brand was selected to carry the 'social' label, whereas the Italian would remain equal, at a later stage of the experiment the roles were inverted. The prices of the towels from both brands varied from \$7 for a hand towel to \$60 for a bath towel.¹³³ A label was designed that read 'Fair and Square' in a rainbow background with a lotus flower (which was normally used in the store to identify 'sustainable' products). In addition a small text was added to the sign that explained the meaning of the label. Besides the label, the prices of the labelled towels were raised up to 20 percent, at different schedules. The experiment ran for five months divided in to phases with different experimental treatments. In the end, the data of the sales revealed that, in the second phase, when the towels were labelled the sales increased by 11.5 percent. In the following phases, when the prices where increased by 10% and then by 20% the effect "appears to have accentuated", as it generated further increases of 20.6% and 4.3% respectively, in terms of units sold. Besides, the 20 percent increase in sales when the price increase yielded a 62% sales jump.^{134,135} It has already been discussed

¹³¹ For further proof see. Hilke Plassmann, *et al.*, *Op. cit.*

¹³² ABC Carpet and Home is a prominent Manhattan retailer of fashionable, high-quality home furnishings located at 888 Broadway, one block north of Union Square.

¹³³ The experiment was also carried out in the same store but with candles, which could be considered a 'luxury' good in comparison to towels, which are more of a necessity.

¹³⁴ Roger A. Sedjo and Stephen K. Swallow. *Op. Cit.*, p. 12-13.

¹³⁵ Daniel Goleman, *Op. cit.*, p. 117-118.

that external factors such as brand and knowledge influence consumers perceptions. What this experiment suggests is that the higher price on the eco-labelled product alters perception of the eco-label by making it more credible.

The argument that consumers equate price and quality is not new. Consistently, empirical models have shown a positive correlation between prices and quality. The early conclusions were that this happened because consumers trusted that the forces of supply and demand would lead to a natural 'ranking' of products on a price scale (Scitovsky, 1945). Other statistical evidence showed that there is a general strong positive correlation between prices and quality, that is statistically significant. However, it was noticed early-on that consumers have more information available about the product than just the price. Therefore, prices are only a part of the equation and studies then introduced other extrinsic or intrinsic cues such as brand or store name to their experiments. However, if prices were the only information, without a doubt prices would be equated to quality. Nowadays, the price-quality argument has found new support. By using neuro-imaging techniques scientists now can literally see how people make decisions. Neuroeconomist Hilke Plassmann suggests that that "prices shape an expectation, which then biases our experience and our purchasing decisions."¹³⁶ In other words our brain, in a way to simplify complex informational processes simply equates price with quality. "A lower price lowers our expectations of a product and a higher one raises them."¹³⁷ Plassmann has carried out experiments on consumer decision making by wine tasting (because there is a wide range of prices and quality and is easy to give the sample while in the imaging machines). Subjects in the experiments are given different samples of wine. Much of the wine is identical, however the information the subjects receive about the price is modified. For example, subjects taste a wine thinking it is discount wine while in fact it is expensive, or vice-versa. The results show a clear tendency of subjects disliking what they think is discount wine and liking the expensive one more, even if it was the same wine. By using neuro-imaging Plassmann identified the parts of the brain that are activated when consumers have knowledge about the prices of the wines. This particular experiment showed that after tasting the wine information is not processed in the part of the

¹³⁶ Hilke Plassmann quoted in Daniel Goleman, *Op. cit.*, p. 119.

¹³⁷ Daniel Goleman, *Op. cit.*, p. 119.

brain where tastes are processed¹³⁸ but in an area that is known for processing hedonic experiences.¹³⁹ Plassmann concludes that “Price makes us feel a wine tastes better...but that is just a cognitive bias that arises from computations in the brain that tell me to expect it to be better, and then shape my experience so that it does, indeed, taste better.”¹⁴⁰ Further research in this area could show if environmental attributes might have the same impact on the brain into making favourable decisions.

6. Negative effects of Eco-labels

Eco-labelling is an environmental and market tool whose purpose is to incentivise markets to become more sustainable. The premise is that pro-environmental behaviour is going to be rewarded by the market. Consequently, firms that change their attitudes by becoming sustainable will reap the rewards. Consumers will fuel the mechanism because of their willingness to pay for such ‘green’ products. Consumers will be in charge of rewarding or punishing the firms behaviour. As a result green markets have rapidly expanded over the last years. The value of these markets is estimated at \$230 billion and is predicted to grow to \$845 billion by 2015.¹⁴¹ It comes with no surprise that along with the ‘greening’ of markets came ‘green’ advertising. ‘Green’ advertising has increased almost tenfold in the last 20 years and nearly tripled since 2006. Thus it is no surprise that greenwashing has grown simultaneously with the green markets. TerraChoice¹⁴² defines greenwashing as the “*act of misleading consumers regarding the environmental practices of a company or the environmental benefits of a product or service*”.¹⁴³ In economic terms, greenwash are opportunistic behaviours firms undertake due to the informational failures¹⁴⁴ in the environmental-good market.¹⁴⁵ Greenwashers are the free-riders of the environmental market, as they reap the benefits without incurring any of the costs. More informal

¹³⁸ The areas that register primary tastes are the insula cortex, the ventroposterior medial nucleus of the thalamus, or the prabrachial nuclei of the pons.

¹³⁹ The medial orbitofrontal cortex (mOFC) to be precise.

¹⁴⁰ Hilke Plassmann quoted in Daniel Goleman, *Op. cit.*, p. 119.

¹⁴¹ Numbers taken from: Magali Delmas and Vanessa Cuerel Burbano. **Drivers of Greenwashing**, p. 3

¹⁴² Terrachoice is an environmental marketing and consulting firm creators of the ‘seven sins of green-washing’ which are the base for many research in CSR and related subjects.

¹⁴³ <http://sinsofgreenwashing.org/>

¹⁴⁴ This topic has been discussed earlier in section _ Information

¹⁴⁵ Helmut Karl and Carsten Orwat, **Economic aspects of environmental labelling**, p. 116

interpretations of greenwash add that such disinformation “is perceived as being unfounded or intentionally misleading”. In this sense, misleading is intentional, producers know that the information is distorted, incomplete or simply false and they still disseminate it. Which is a different context from ‘unknown’ information, in which the information simply does not exist.

Since 2007 TerraChoice has made annual reports on greenwash in the US and Canada. Their 2010 report found 79 percent more ‘green’¹⁴⁶ products than in 2009. For their study 4,744 products were registered as ‘green’, of which only 4.5 percent came through with their claims. In other terms 95 percent of the claims were misleading. Producers have incentives to misrepresent their processes if they can get away with it. If they can maintain minimum (or current) environmental performance but increase the prices anyway, they will do it. The more popular eco-labels become, more misleading claims will arise.¹⁴⁷ This is quite a riddle, as eco-labels (seen as sustainable certification schemes) and other forms of corporate environmentalism are considered the root of greenwashing whilst simultaneously being its solution.

6.1 Types of greenwashing

TerraChoice has identified the most common greenwashing strategies and has called them “*the sins of greenwashing*”. These ‘sins’ represent the most common ways that firms distort information.

Sin of hidden trade-off. These claims suggest that a product is green based on a narrow set of attributes without attention to other environmental issues. In this case single-attribute environmental claims are constantly on the watch, especially if they offer no proof. Eco-labels could help support the claim.

Sin of no proof. These are claims that cannot be substantiated by easily accessible supporting information or by reliable third party certification. The proof does not need to be on the product, however the information should be available to the public.

Sin of vagueness. This claim is so poorly defined or broad that its real meaning is likely to be misunderstood by the consumer. The use of fluffy language or

¹⁴⁶ They term ‘green’ those products that claim to offer an environmental benefit, not those that actually offer one.

¹⁴⁷ Hiscox and Smyth, *Op. cit.* p. 5

complicated scientific terms is no mistake, it is intended to confuse consumers. For example, the 'all natural' or 'eco-friendly' claims have no clear meanings.

Sin of Worshipping false labels. This refers to fake labels. Products place a label that gives the impression of third-party endorsement, where such endorsement does not exist. This 'sin' is currently on the rise according to the TerraChoice 2010 report.¹⁴⁸

Sin of irrelevance. Claims that even if true are not important or are unhelpful for consumers. For example, the claim 'CFC-free'¹⁴⁹ might have been important in the 1980s but today CFC's are banned by law, therefore no product in the market contains it.

Sin of Lesser of Two Evils. These claims might be true within a certain product category, however they distract consumers from the greater environmental impacts of the category as a whole. Organic cigarettes or fuel efficient sports cars, might be good examples of this sin.

Sin of fibbing. False environmental claims. Products that falsely claim to be in a programme when they are not or simply make up attributes. This could extend to products that have lost their license (either it expired or bad conduct) and still use the labels.¹⁵⁰

The most common problems are 'vagueness' and 'no proof'. In this aspect countries (in particular those with common-law traditions) have responded with a wave of 'green marketing' regulations.¹⁵¹ However, eco-labels go beyond marketing since they are environmental certification schemes. While they might be a type of brand, their role in the market is much more transcendent. Because environmental claims (as in words, phrases or prefixes) are being slowly identified and regulated, firms have switched to the use of labels (logos, signs or images). More than 32% of products in the TerraChoice's report carried a fake label. These 'green'-labels (made up, imitation or look-a-like labels) can be bought easily over the internet and printed on the product's packaging. This increase in labels,

¹⁴⁸ The 'sin of worshipping false labels' increased from 23.3% to 30.9%. TerraChoice 2010 report.

¹⁴⁹ Chlorofluorocarbon. Chemicals that have been currently phased out by international agreements because they contribute to ozone depletion.

¹⁵⁰ TerraChoice, **The Sins of Greenwashing: Home and Family Edition. A report on environmental claims in the north american consumer market.**

¹⁵¹ This topic will be duly addressed in Chapter V

regardless if they are real or false can lead to a label overload, which leads to consumer indifference.

6.2 Motivations for greenwashing

One of the reasons firms consider greenwashing is because there is external pressure on the firm to disclose its environmental information. It is deemed that firms have knowledge about their environmental impacts. They have first-hand information regarding their production processes and products. Therefore it is up to them to communicate such information. The generation of information can be costly for firms. However, once the information is produced, disseminating it is quite easy. If the environmental information about a firm's performance is positive, the firm should have no problem making it public. However disclosing private information to the public (not governments), such as environmental performance (even if it is positive) is left to the firm's discretion. However, if the results of the environmental impact are uncertain or negative, firms would not like to disclose them to the public (competitors, consumers, investors, NGOs). Disclosing negative impacts would be very costly for firms, as they would earn a bad reputation. Notwithstanding the previous, in today's market there is pressure to disclose environmental information. Governments, NGO's, investors, consumers and industry pressure firms into disclosing their environmental information. Faced with this pressure producers have to decide whether to keep silent or disclose the information that is 'not that bad' and hide the rest. Lyon and Maxwell, conclude that "greenwash can be characterized as the selective disclosure of positive information about a company's environmental or social performance, while withholding negative information on these dimensions."¹⁵² This strategy can be very rewarding, especially if the information that is being disclosed is true and verifiable. Furthermore, as long as the firm does not draw negative attention to itself by blending in the array of environmental claims, it can safely navigate in the 'green' market.

The biggest motivation for greenwashing is that it is easy to get away with it. Because eco-labels are currently considered 'advertising' and not certification schemes, their regulation remains uncertain¹⁵³ and consequently lax. This "lax and uncertain regulatory environment is

¹⁵² Thomas P. Lyon and John W. Maxwell. **Greenwash: Corporate Environmental Disclosure under Threat of Audit.**, p. 5.

¹⁵³ Therefore, up to date the lawsuits presented in the United States have been against environmental claims, not specifically eco-labels.

both a direct and indirect driver of greenwashing”.¹⁵⁴ Not only there is limited (or no) regulation about green washing but its enforcement is extremely uncertain. Because it is a market mechanism, it is thought that the market will ‘punish’ the wrongdoers; therefore there is no need for regulation. This punishment would be in the form of reputational damage, such as boycotts or negative advertising campaign, or any other activity that damages the firm’s or brand’s value. A negative corporate image can be very damaging, however it is not enough to deter this behaviour. Moreover, firms are allowed to manipulate information not only to consumers, but also to the government. For example the US the Department of Energy’s Voluntary Greenhouse Reporting programme allows participants to choose to report emissions reductions at the ‘project’ level or the ‘entity’ level. The former allows firms to report only the outcomes of successful projects, while remaining silent about its overall performance. It is not surprising that the data of such programme shows that from 1995-2003 the reported reductions of greenhouse gases of the participants was significantly reduced, but their actual emissions rose.¹⁵⁵ This is precisely what makes environmental disclosure and eco-certification different from mere advertising. The distortion created by greenwashing has serious environmental externalities. The environmental effects will go unnoticed, precisely because the information is supposed to reflect the actions made to lessen such effects.

6.3 Economics of Greenwashing

In the literature there are conflicting results regarding the relationship between voluntary disclosure and environmental performance. On the one side, some studies show that firms with the worst environmental performance are those that also have the highest levels of disclosure. On the other side, there are studies that show that firms with better environmental records have the highest environmental disclosure levels. In general firms’ environmental performance would fall along a spectrum that goes from low environmental impact, which is considered to be ‘good’ or green. On the other side of the spectrum are firms with high environmental impact which are considered ‘bad’ or brown. Firms know at which point they stand within such spectrum. However, firms will have to decide whether to disclose their position and make the information public or to simply remain silent. This will

¹⁵⁴ Magali Delmas and Vanessa Cuerel Burbano, *Op. cit.*

¹⁵⁵ Thomas P. Lyon and John W. Maxwell. *Op. cit.* p. 5.

lead to four types of firms: greenwashing firms, silent brown firms, publicly green firms and silent green firms.

Disclosure of Environmental Performance	Environmental Performance		
		BAD	GOOD
	DISCLOSE	i. Green washing firms	ii. Publicly green firms
SILENT	iii. Silent brown firms	iv. Silent green firms	

Figure 7. Typology of Firms based on Environmental Disclosure¹⁵⁶

In this case, silent firms have no problem. Since their activities are not 'actively' deceiving anyone. Silent brown firms might face penalties before authorities for their bad performance, but the public will not condemn them for that. The attention will be on the firms that disclose their information. Because it is highly unlikely that brown firms voluntarily and publicly disclose their position, all the information is going to be positive. Therefore, all the environmental claims are expected to be positive claims. It is not to say that the claims are false, they might actually be true. The problem is that firms have selected what information to disclose, therefore they can mimic the green firms and obtain the benefits of such. By mimicking the green firms, these greenwashers will try to charge the premiums and compete with the green firms. However, with so many green claims on the products, it would appear that there is sufficient supply (or maybe even over-supply) which will draw prices down for all the 'green' products. If the prices are too low, the real 'green' firms will lose their premiums, and might have to charge the normal prices. Making the 'green' strategy not very profitable for the truly green firm. Therefore the firm might leave the market or not join in the first place.

6.3.1 The green washing model

Lyon and Maxwell have built an economic model for greenwashing.¹⁵⁷ They suggest that before engaging in a greenwashing strategy firms will conduct a cost-benefit analysis of such strategy. The cost benefit ratio of greenwashing will be the result of dividing the

¹⁵⁶ Table taken from Magali Delmas and Vanessa Cuerel Burbano, *Op. cit.*, p. 31

¹⁵⁷ Thomas P. Lyon and John W. Maxwell. *Op. cit.*

expected penalty of greenwash between the maximum value the firm could possibly obtain from a successful greenwashing strategy. When the expected penalty for greenwash is zero the cost-benefit ratio is also zero. In other words if there is no penalty for greenwashing the brown firm will always engage in greenwash. Contrarily, when the expected penalty rises to the amount that equals or exceeds the maximum value the firm could possibly obtain from greenwash, the cost-benefit ratio is then equal to one. In this case, because the firm is likely to get caught and penalised, the firm is likely to avoid greenwashing. Therefore, to deter greenwashing the probability of being caught and successfully punished must increase. It has been proposed that the role of the 'auditor' who will catch and punish the greenwashing firm is an activist. According to this analysis, activist attacks always reduce greenwashing. However, increasing the probability of getting caught and punished might lead to less disclosure. "There is a real possibility that the threat of public backlash for greenwash will cause some firms to 'clam up' rather than become more open and transparent." In addition, not all firms have a perfect environmental record; it is likely that their environmental performance is mixed. Therefore, firms might opt for withholding all information to avoid being punished for disclosing only positive results.¹⁵⁸

Many firms that engage in a form of corporate environmentalism join a programme or adopt an Environmental Management System (EMS). Even though eco-labels are not an EMS *per se*, firms that have an eco-label must have a management system that allows them to track their environmental impacts. This is brought up because Lyon and Maxwell's analysis leads to a new rationale for encouraging firms to adopt EMSs. They acknowledge that EMS are unlikely to make a difference in the actual environmental performance. Nonetheless, EMS do improve internal information about the firm's environmental performance. Therefore EMS complements the activities of the activists. Where strong EMS's are in place the signals are very clear: if there is no disclosed information, the firm is hiding something. EMS produces information, therefore there is no excuse for not disclosing as the information is there. Consequently, activists could accurately target firms that have not disclosed their information.¹⁵⁹ Eco-labels also require firms to have complete and current environmental and managerial information. Therefore, if firms do not provide this information the eco-label organisation can directly punish the noncompliant firm. Eco-labels would additionally act as

¹⁵⁸ *Idem*, p. 12-14

¹⁵⁹ *Idem*, p. 27-28

the 'activist' that audits and punished noncompliant firms. On the negative side, if being part of an eco-label or EMS will place a firm on the spotlight because the information is easily accessible, firms might prefer not to join the programmes and remain 'ignorant' about their performance.

6.3.2 Game-theoretic approach to greenwashing

It has been suggested earlier that "a fly-by-night strategy of quality reduction would be profit maximising" if premiums do not compensate firm's investments in quality.¹⁶⁰ Premiums are supposed to be an incentive to maintain high quality. Therefore if there are no premiums firms would reduce the quality and maintain the high quality price. This would be very profitable in the short-run and can be sustained as long as consumers do not detect it. However, in an environmental good market quality cannot be observed. If the firm stops producing the environmental attributes, the market will take a long time to notice it, if it does at all. Therefore, fly-by-night in an environmental good market would be very likely. However, pro-environmental firms have to invest many resources in becoming green. As seen earlier, becoming green is a long-term strategy. Consequently, the more investments a firm has undertaken to become green the less likely it will leave the environmental good market, at least not in the short run. Once again pro-environmental firms are not the problem, the problem are the greenwashing firms.

Brown firms have not made any investments in 'green' production methods, therefore their costs are lower than their 'green' counterparts. However, because 'green' attributes are credence attributes there is no way consumers can verify if the attributes are present or not. The greenwashing firm would forego the costs altogether and by mimicking its green counterparts they will enter the 'premium' market. The greenwashing firm might reap the benefits of being in this segment as long as it is not caught. This greenwashing strategy is even more profitable than fly-by-night as the firm does not spend anything in quality. It simply allocates itself in the premium market and blends in. In a very simple example, period 1 represents the normal quality. In period 2 the firm decides to engage in greenwashing which comes at no cost therefore the profits are enjoyed almost immediately. The firm will

¹⁶⁰ This strategy increases profits in the short run by reducing the quality of the products but maintaining the high-quality prices. This would yield immediate cost savings, and the reputation will not be harmed until later periods. Premiums in this case, induce firms to forego the opportunity to earn profits through quality reductions.

continue to enjoy the profits until a period n when he gets caught and probably will be punished and maybe even have to leave the market.

	Period 1	Period 2	Period n
Cost	80	80	80
Price	90	100	100
Profit	10	20	0

Figure 8. Profits of greenwashing

The longer firms extend the greenwashing strategy the higher the profits they can obtain. Simultaneously, the longer they maintain the greenwashing, the probabilities of been caught also increase. However, by mixing periods of high quality with periods of low quality the likelihood of being caught is diminished. This of course means that the investments in quality must be made every time the firm decides to increase quality. However, in practice that might not be feasible, as investments in 'green' technology for example are quite significant and once the firm has the technology, there is no sense for greenwashing. Still, instead of alternating periods of increasing quality, firms could just invest the minimum they need to reap the benefits. In this sense, by mixing environmentally sound inputs with normal inputs of a product will allow it to 'legitimately' make the environmental claim, without all the costs.

		Brown firm	Green firm	Greenwashing Firm
Cost	'green' input	--	80	40
	Normal input	60	--	30
Price		70	100	100
Profit		10	20	30

Figure 9. Compared profits of different types of firms

This has already been tried by firms such as Cadbury's ¹⁶¹ in the 'green palm oil' incident.¹⁶² Both firms have been heavily criticised for these strategies. The problem is that consumers

¹⁶¹ <http://www.guardian.co.uk/environment/cif-green/2009/aug/20/cadburys-palm-oil>

¹⁶² FSC mixed sources uses a similar strategy, but in their case it is not done for profits, it is done because there are not enough certified wood resources to cover demand. However, many criticise that it is still greenwash because consumers do not see the difference.

normally do not see the difference between a normal eco-label and a 'mixed source' eco-label. Therefore consumers believe that they are consuming an 'environmentally friendly' product as a whole. Consumers do not like to find out ex-post that the product was actually just 'half' environmentally friendly. In any case, this shortcut can also be considered greenwash and will suffer from consumer backlash if it were uncovered.

6.4 The Harm of Greenwash

Eco-labels might be effective market and environmental tools. However, they stand on a delicate equilibrium as they are highly vulnerable to market failures. Consumers need to trust the eco-labels in order for them to pay a higher price their products. Greenwashing erodes consumer confidence on the eco-labelled products. Without consumer confidence the market for green products is greatly threatened. Additionally, greenwashing can also affect investor confidence, therefore eroding the entire socially responsible investing capital market. Firms might be able to fool consumers and investors. However, if consumers and investors are aware of the ongoing greenwashing they will be "discouraged to the point of indifference" towards eco-labelling. As long as there are no salient eco-labels that consumers can clearly distinguish and trust (brand-loyalty is developed), all labels will be tarred by the same brush as the fake ones. In this sense, if one eco-label is deemed false consumers will stop trusting ALL unknown eco-labels. Surveys in both sides of the Atlantic share the concern that greenwash might destroy the green market. "Nine out of ten UK consumers are sceptical about green claims from Government or business."¹⁶³ Consumers do not know what to believe and they want claims to be 'backed up by verifiable proof'. "The situation is similar in the USA as seven in ten Americans either 'strongly' or 'somewhat' agree that 'green' is essentially a marketing tactic and therefore should not be trusted."¹⁶⁴ This is serious, as the green markets (consequently 'the' green economy) depends on demand, but "*greenwash leads consumers to distrust all green claims no matter how well justified they may be*".¹⁶⁵

7. Conclusions

¹⁶³ Ed Gillspie. **Stemming the tide of 'greenwash'**, p. 81.

¹⁶⁴ *Ibidem*

¹⁶⁵ *Ibidem*

This chapter has provided a thorough analysis of eco-labelling viewed from the perspective of the market as a whole. Other chapters will be focused on eco-labels from the supply and demand side specifically. Nonetheless, by analysing eco-labels from a market perspective it was shown that eco-label's role is much more complex and important than simple information dissemination tools as they were once considered. First certification is crucial for the existence of markets of credence goods. Environmental attributes have a credence nature. Hence the only way they can have a market is if there is a certification mechanism that tells the market that such attributes are real. Moreover, environmental information is also uncertain, as it is possible that still there are many things that are not known about the environmental effects of goods. Hence, until such information becomes known the market for environmental goods will also be characterised by a high degree of uncertainty. One of the largest implications of uncertain information is that it will make the 'available' information prone to interpretation (or misinterpretation). Hence the credence and uncertain nature of environmental goods leave them in a very delicate position. However, certification can solve this dilemma by providing a degree of certainty in the market. Furthermore, it was shown that certification marks share some characteristics with trademarks. Hence, eco-labels may have a branding effect on the product. This branding effect, will allow the use of reputation to enhance the eco-label's position in the market.

The second finding, is that eco-labels are in fact certification marks from an IP perspective. This finding makes a big difference in the analysis as will be demonstrated in Chapters V and VI. What is interesting is that not many authors consider eco-labels as certification marks and those that do, are not lawyers hence they are not interested in how they are regulated. On the other hand, legal scholars who analyse certification marks are not necessarily interested in the environmental arena. Therefore, this opens the possibility to address eco-labels as certification marks from an IP law point of view. This will be the central subject of Chapter V.

The third finding is that there might not really be a 'eco-premium' for eco-labels; even though theoretically there should be. Pricing in eco-labelling is a puzzle. On the one hand, it was thought that one of the main drivers for firms to engage in eco-labelling is that they will be able to charge a premium. However, data shows that such premium might not exist or it is too small. On the other hand, it has also been assumed that consumers will always prefer lower prices. Again, recent experiments show that the opposite is true for eco-labelled

II. Eco-labels' place in the market

goods. If a good has an eco-label the consumer will believe it more if it has a higher price. This is because consumers relate price with quality (at a neurological level!). In addition, the underlying problem with environmental-good pricing, is that if it is true that pro-environmental behaviour will reduce costs (because resource allocation is more efficient) then the goods would be cheaper not more expensive. But if they are priced cheaper then they are not believable. The pricing puzzle is still not solved, hence there is still room for further research from a variety of disciplines.

Above all what this analysis has brought to the table is the analysis of greenwashing. Greenwashing can be considered the greatest side-effect of eco-labelling. Firms will want to obtain the benefits of eco-labels without committing to pro-environmental behaviours, hence they will cheat the market. It is extremely easy to cheat the eco-label market because it is a credence good market. However, with the presence of greenwashing the eco-labelled market are doomed to an adverse selection scenario, which may ultimately drive eco-labels out of the market. This matter will be re-addressed in Chapter VI with the aim to find a solution.

At this moment though, the analysis will shift to the supply side of the market. Eco-labels are voluntary, hence it is intriguing to see that some firms go beyond their legal environmental obligations. Corporate Social Responsibility or Corporate Environmentalism have been widely used to describe an array of pro-sustainability actions by firms. Pro-environmental activities are puzzling because it might not be true that they are profitable. This idea comes up precisely because price-premiums are thought to be the source of such profits, however it has been pointed out that such premiums might not really exist. Hence, it is not clear why being pro-environmental is profitable. In addition, if it were true that pro-environmental actions were profitable the rational thing to do for all firms would be to become pro-environmental. However, this is not the case. Hence the following chapter will try to discover what motivates firms to engage in this type of activities.

CHAPTER III

Eco-labels and Business

1. Introduction

The aim of this chapter is to look into the firms' motivation to join an eco-labelling scheme. To do this it is necessary to look into the firms motivations. In essence there are two main reasons a firm would do anything, either it is mandated by the law or there is an economic benefit. If the environmental actions are mandated by law, then the motives of a firm are not really in question; it is obliged to follow. If it does not comply with regulations, it may receive a sanction by the authorities. The focus of this chapter is on the economic motivations or incentives firms have to undertake actions that could allow them to join an eco-label (or engage in other forms of corporate environmentalism). Specifically, when these actions go above and beyond what is required by the law. The implementation of pro-environmental processes and methods, the certification and license to use an eco-label can be rather costly. Therefore, the firm must have very strong beliefs that such strategies will be beneficial in some way before committing to them. These 'benefits' are the ones that will be analysed in this chapter.

Pro-environmental (as well as pro-social behaviour) has been dealt with by the literature in Corporate Social Responsibility and that of Sustainability. These two strands of literature, overlap in some points. However, there is a difference in the origin and the type of discussions they face. Sustainability literature is much more recent; it was spurred by the environmental movements of the 1970s and then adopted as a global policy from the United Nations. In sustainability, when referring to actions undertaken by firms regarding the environment, it is known as corporate environmentalism. The main difference between CSR and corporate environmentalism is that the latter is regarded as a business strategy and not as 'philanthropic' gesture such as CSR. Furthermore, corporate environmentalism, in this sense, is focused on environmentally beneficial actions whereas CSR actions' range from human-rights, transparency (financial), conformity to legislation, taxes, product safety, social, labour and environmental matters. When a firm pursues any action beyond and above the legal requirements it can chose to communicate it or keep silent. If the firm decides to communicate its pro-environmental actions, it can use different tools, such as eco-labels. In

short, eco-labels are a tool of both CSR and corporate environmentalism, it is just a matter of the context.

This chapter analysis will be complemented by other disciplines. Pro-social and environmental behaviours have also been studied in psychology and other social and natural sciences. These other disciplines highlight different aspects of pro-environmental behaviour that can potentially be applied to firms. This interdisciplinary approach hopefully will lead to a better understanding of the incentives as well as the disincentives firms have to engage in eco-labelling. The chapter is divided in two main sections, the first will address Corporate Social Responsibility and corporate sustainability. The second part focuses on the corporation's motivations for eco-labelling.

2. The relation between Eco-labels and Corporate Social Responsibility

Traditional economics relies on the market to make use of the individual's pursuit of self-interest to the pursuit of efficiency. When the invisible hand leads to market failures the State would step in to correct them and redirect them to efficiency. Furthermore, markets will not distribute wealth and income accordingly to society's needs. Therefore, the State should take these tasks into its hands and it does so by means of redistributive and environmental taxation as well as anti-trust or prudential regulation. "In a nutshell, following Pigou (1920), the state and not the citizens or firms, is in charge of correcting market failures and income or wealth inequality."¹ Nevertheless, the State can fail to redistribute the wealth in society. These market and redistributive failures have led society to pressure firms to undertake these activities that were supposed to be fulfilled by the state. Corporate Responsibility or CR is generally understood as firms taking on environmental and other social responsibilities, that would otherwise be in hands of the State.

Corporate Responsibility has become somewhat of a 'catch-all' phrase from a variety of concepts. It embraces a wide range of behaviour from being employee friendly, respectful of communities where firm's plants are located, giving to charity (arts, universities and other causes), having good internal practices (audits, transparency, accessibility to information, taxes) and of course being environment-friendly. For all these activities to qualify as CR they have to go beyond the corporation's immediate legal and contractual obligations. These

¹ Benabou and Tirole, **Individual and Corporate Social Responsibility**, p. 1

activities are costly and are borne (financially) entirely by the firm. Precisely because there is no obligation to make these expenses CR has been regarded as a sacrifice of profits in the social interest.

2.1 The Different Views on Corporate Responsibility

The concept of CR is not new. However, over time different it has been viewed and analysed from different stand-points. These views, do not contradict each other, therefore they can be regarded as layers, that have been formed over time, the first layer being the oldest view. The first view or layer of CR is closely related to corporate philanthropy, it is about giving back to the community because it is “the right thing to do”. This is the classic approach that has been severely criticised by people such as Milton Friedman.² Despite those criticisms, today corporations allocate about 1% of pre-tax profits to ‘worthy causes’.

In the 1980s there were several environmental disasters that left corporations’ behaviour exposed to the world. When bad behaviour is under scrutiny signing checks is no longer enough. Hence the second tier of CR became popular, which is related to risk management. With each disaster corporations’ reputation was negatively affected. Oil and other chemical companies were on the spotlight, but other sectors were also tarred with the same brush. Pharmaceutical companies were hit by refusing to make drugs available for developing countries, in particular with the costly HIV/AIDS medications. Clothing corporations were criticised due to their over-seas labour practices (child labour, under-payment, bad working conditions). Food companies were being held responsible for the world-wide obesity crisis. Corporations evidently tried (and still try) to manage the risks by talking to governments and NGOs. They created codes of conduct and other common rules designed to spread risk and shape opinion. It is in this stage that the original eco-labels appeared.

While the previous views of CR prevail, the third, most recent, layer is the most common one: CR is just good business. It has been suggested that there is a business case for good corporate behaviour as it creates value. CR is viewed as a ‘Win-Win’ strategy or ‘doing well by doing good.’ Since the introduction of this ‘strategic’ motivation for CR more companies are investing in CR strategies.³ This approach is very appealing to executives because CR is

² Milton Friedman’s view of CR is very clear in the article “*The Social Responsibility of Business is to Increase its Profits*” which will be highlighted below.

³ The Economist, Special Report: Corporate Social Responsibility. **Just Good Business**, January 17th 2008.

the smart thing to do as well as the right thing to do. However, if CR were indeed profitable, all firms would engage in CR and there would be no need for discussion. The fact is that there is up to date no proof that engaging in CR leads to higher profits.

A newer, and not very widespread view is that CR “is an aspect of taking care of a company’s reputation, managing its risks and gaining a competitive edge. This is what good managers ought to do anyway.”⁴ However, if CR was boiled down to good management there would be no need for discussion. Furthermore, sustainable practices are slowly becoming part of business as usual. Corporations that voluntarily adopt sustainability measures are considered “a distinct type of modern corporation.” These new corporations do not really care for CR because their governance structure already takes into account the environmental and social performance of the company, in addition to its financial performance.⁵ In the end this is the purpose of CR, that it is so embedded in the corporation’s culture that it is not necessary to have ‘specific’ discussions about it. For these companies what matters is their sustainable measures.

2.2 Criticisms to CSR

As noted before corporate responsibility can be seen as a sacrifice of profits in the social interest. It is precisely this view, that has spurred heated debates since the concept of Corporate Responsibility gained popularity. The most notorious critic was Milton Friedman.⁶ Friedman explains that the only social responsibility of business is to increase its profits. Profits are the purpose of businesses in society and those should be their sole responsibility. Just as schools and hospitals have a clear cut role in society, business should not confuse theirs. Business decisions are taken by corporate executives, who are agents to the corporation who is the principal. Therefore, corporate executives should act in the interests of the corporation, not society. Managers (especially in public firms) are not the owners of the firms they work for, they are mere agents. They are the agents to a principal, which in this case is the firm. They are entrusted with the care of assets belonging to others, the firm’s shareholders. Whatever these businessmen, as Friedman calls them, do in their private life, with their own resources, it is up to them. If they decide to support good causes

⁴ The Economist, Special Report: Corporate Social Responsibility. **Do it right**. January 17th 2008.

⁵ Robert G. Eccles, Ioannis Ioannou and George Serafeim. **The impact of a corporate culture of sustainability on corporate behaviour and performance**, p. 5.

⁶ Milton Friedman. **The Social Responsibility of Business is to Increase its Profits**.

with their own resources it would be admirable.⁷ However, supporting good causes with someone else's money is not. Friedman relates this activity with theft; corporate executives that spend the corporations' money on social causes are stealing from the shareholders. On the other hand if these actions are a reflection of the managerial or shareholder preferences and attitudes then this would not be a problem.⁸ Therefore, as long as shareholders are mandating these actions, and the by-laws allow it, managers are still within their obligations.

This counter argument has spurred another line of criticisms. Specifically, the claim that sustainability incentives distract managers to issues that are not core to the company's overall strategy and business model. In addition, these companies might experience higher costs (by paying above minimum wages to workers or mitigating environmental externalities beyond the limits of the law). These self-imposed values might also lead them to lower profits as they pass-on investment opportunities or other options that could be profitable. Furthermore, they might lose customers to competitors due to their high prices. "In other words, companies with a culture of sustainability face tighter constraints in how they behave. Since firms are trying to maximise profits subject to capacity constraints, tightening those constraints can lead to lower profits."⁹ In the end "a truly responsible business never loses sight of the commercial imperative. It is after all, by staying in business and providing products and services people want that firms do most good. If ignoring CSR is risky, ignoring what makes business sense is a certain route to failure."¹⁰ In short, when businesses constrain themselves they are in a disadvantage with respect to their competitors, just like a handicap.

2.3 The Profitability of CR

The claim that companies can 'do well by doing good' has been more of a "management consultants' promise of a 'free lunch'" as it has not been elaborated and lacks supporting evidence.¹¹ The claim has been based on the belief that meeting the needs of other stakeholders directly creates value for shareholders. In addition to the belief that not meeting

⁷ The Economist, Special Report: Corporate Social Responsibility. **Two faced capitalism**, January 17th 2008.

⁸ Benabou and Tirole, *Op. cit.* p. 9-13.

⁹ Robert G. Eccles, Ioannis Ioannou, George Serafeim. *Op. cit.*, p. 27

¹⁰ The Economist, Special Report: Corporate Social Responsibility. **Two faced capitalism**, January 17th 2008.

¹¹ Benabou and Tirole, *Op. cit.*, p.7

the needs of other shareholders can destroy shareholder value due to boycotts, attracting less talented employees or be subject of government fines or other legal actions.

The term CR has been traditionally linked to a sacrifice, as companies would give their money away without any reward. In 2001, David Baron introduced the term 'strategic CSR'. Strategic CSR "consists in taking a socially responsible stance in order to strengthen one's market position and thereby increase long-term profits."¹² In other words, it allows CR to be profitable, thus eliminating the 'sacrifice' aspect. It is true that no corporation wants to be less profitable while simultaneously destroying the environment, however not destroying the environment while being profitable, is largely discussed. Exhaustive academic reviews over the last decades have concluded that there is "in fact a positive link between companies' social and financial performance- but only a weak one. Firms are not richly rewarded for CSR, it seems, but nor does it typically destroy shareholder value."¹³ In an interview with analysts from Goldman Sachs they admit that they use CSR as a "proxy for the management of companies relative to their peers." In addition, they claim CR is a good indicator of long-term success.¹⁴ In concrete, firms that engage in CR activities might profit, but only in the long-run.

In a recent study from the Harvard Business School analysed 180 US firms to measure whether if being a 'good corporate citizen' had any impact on the firms' bottom line. These 180 firms were analysed over the course of 20 years to capture the 'long-term' effect. They compared the financial performance of firms that exhibited high sustainability behaviour against firms with low sustainability behaviours (or simply traditional firms). The two groups at the time of the matching (early or mid 1990s) were operating in exactly the same sectors, were almost identical in size, capital structure and operating performance. The high sustainability firms were first selected based on the environmental and social policies they implemented since the 1990s. Subsequently, they were matched with traditional or Low Sustainability firms, which have almost no sustainable policy in motion. The data shows that Sustainable firms, are fundamentally different from the traditional firms "with respect to their governance structure, the extent of stakeholder engagement, the extent of long term

¹² *Idem*, p. 10

¹³ The Economist, Special Report: Corporate Social Responsibility. **The next question: Does CSR work?**. January 17th 2008.

¹⁴ The Economist, Special Report: Corporate Social Responsibility. **The next question: Does CSR work?**. January 17th 2008.

orientation in corporate communications and investor base, and the measurement and disclosure of non-financial information and metrics.”¹⁵ The main finding of the study is that after tracking the corporate performance for 18 years “sustainable firms outperform traditional firms in terms of both stock market and accounting performance.”¹⁶ Moreover, “this out-performance is more pronounced for firms that sell products to individuals (i.e. Business-to-customer, or B2C companies), /probably because they/ compete on the basis of brands and reputation, and make substantial use of natural resources.”¹⁷ However, this study only finds a correlation between sustainable firms and financial performance, it did not find causality. This means that it could be that these sustainable policies implemented almost 20 years ago, have made firms more profitable in the long run. Alternatively, it could mean that the firm that is more likely to adopt sustainable policies is also the firm that is more likely to be profitable in the first place. Which is also what the people at Goldman Sachs believe. Nonetheless, this analysis is one of the first reliable studies in the matter as it covers a long-term period. Hence it is safe to say that the saying that firms can do well by doing good is true.

2.4 Corporate Responsibility and Eco-labels

It is expected that firms that seek to eco-label their goods do so because they have pro-environmental activities in place. These pro-environmental or sustainable activities entitle them to seek certification to obtain such eco-label. Thus the eco-label simply communicates such pro-environmental behaviour to the market. It is expected that sustainable firms would enhance reliability and credibility of their non-financial information to some form of objective, third-party audit or assurance. This is normal for financial reports; however, sustainable firms give greater importance to non-financial metrics. Accordingly, sustainable firms would be committed to having third-party verification of their non-financial information. Nonetheless, according to the Harvard Business School study this is not the case. The data from such study suggests that only very few sustainable firms have implemented the practice of measuring their performance on relevant external standards and programmes (only 16.3% of high sustainability firms do so, compared to the 2.7% of normal firms). The explanation

¹⁵ Robert G. Eccles, Ioannis Ioannou, George Serafeim. *Op. cit.*, p. 5-6.

¹⁶ *Idem*, p. 7.

¹⁷ *Ibidem*.

could be that there is not yet the technology to measure environmental impacts and other non-financial information. In addition, environmental reporting and auditing are still in the early stages and have only recently gained force. Furthermore, the eco-label criteria are still in the learning stage. Hence, it is unclear whether these criteria will be effective to face the environmental adversities, or if it will just be good will.¹⁸ Despite the results of the Harvard Business School study regarding sustainable third-party verification, the numbers are not surprising. It has been estimated that only 15% of products in the market carry some type of eco-label, the study in question suggests that 16.2% of sustainable firms comply and measure according to relevant external standards and programmes. Therefore, it is not surprising, especially because not all firms will choose to communicate their pro-environmental actions via eco-labelling.¹⁹

Eco-labelling is one of many communication tools firms use to signal their pro-environmental behaviour. There are other communication tools: they can invest in their own sustainable branding, they can commit to environmental reporting or they can choose to keep silence and not communicate their actions at all. In theory, all eco-labels will be on products that emanate from sustainable businesses. Furthermore, not all sustainable firms have products that go directly to the consumer. Eco-labels work best in consumer products as they are the targets of this tool. Firms that do not sell to consumers directly, use other tools to communicate their sustainability. For example, it is shown that sustainable firms do use standards and certification when it comes to selecting and monitoring suppliers.²⁰

Corporate Responsibility and sustainability are not synonyms, as it has been established. However, a small part of CR is focused on pro-environmental behaviour. Similarly, businesses have an important role in sustainability matters, which also focuses on environmental issues. Sustainability policies can be both mandatory and voluntary. Therefore, eco-labels are a tool that communicate the voluntary pro-environmental behaviours that firms are pursuing, whether they are doing it under the CR or Sustainability flag.

¹⁸ *Idem.*, p. 23-24

¹⁹ There are alternatives for communicating environmental information, a few examples were addressed in Chapter I.

²⁰ Robert G. Eccles, Ioannis Ioannou, George Serafeim. *Op. cit.*, p. 22

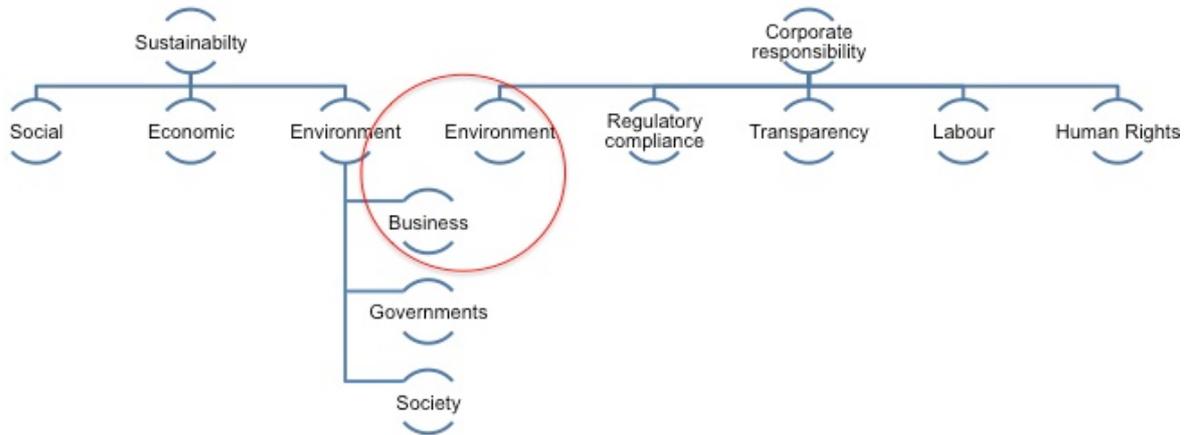


Figure 1. Overlap between Corporate Responsibility and Sustainability.²¹

3. Corporations Motivations for Eco-labelling

At a very basic level there are two main reasons a firm does anything, either it is mandatory or there is an economic benefit to do it.²² If there is an economic justification, there will be an incentive or motive for firms to voluntarily join an eco-label. Joining an eco-label is regarded as a pro-environmental action because it goes beyond the legal requirements. Pro-environmental behaviour is achieved by improving the firm's sustainability of operations and products or services. If such improvements are in line with an eco-labelling scheme's criteria, the firm could attempt to obtain such eco-label. The motivations firms have to engage in pro-environmental behaviour have been divided into intrinsic, extrinsic and image rewards. Each of these motivations could independently explain why a firm would engage in costly pro-environmental activity. At the same, time these three motivations also interact with one another, which may lead to unintended consequences. For example, when observing a pro-environmental activity, the addition of extrinsic incentives makes it more difficult to see whether it is being done to do good or to do well. In other words, if it is done to benefit the environment or oneself. Consequently, the reputation of the individual behaving pro-environmentally can be damaged as he will be seen as greedy rather than good.

3.1 Intrinsic Motivations

²¹ The selected area shows where eco-labels have a role.

²² Tom Rotherham, UNEP. **The trade and environmental effects of eco-labels: Assessment and Response**, p. 13.

“Intrinsic motivation is the value of giving *per se*, represented by private preferences for others’ well-being, such as pure altruism or other form of pro-social preferences.”²³ In strict sense CR is driven by altruistic motives and is always unprofitable, therefore it is deemed as a profit sacrifice. Altruism is also considered a sacrifice, by benefiting others at one’s own expense. Therefore it is easy to relate CR with altruism. Being altruistic and behaving pro-socially (or pro-environmentally) is often seen as “good”, whereas being selfish or greedy is not. However, behaving pro-environmentally does not necessarily mean that the individual is altruistic. Behaving in a pro-environmental manner implies acting in a way that benefits (or harms less) the environment, whereas being altruistic implies benefiting others at one’s own expense. Therefore, pro-environmental behaviour could be considered a type of altruistic behaviour. However, in pure altruism the act is performed without expecting any compensation in return. Contrary to altruism, pro-environmentalism does pay-off (in theory), even if it is at a later stage. Nonetheless, if altruism is taken in a broad sense, as just benefiting others at ones own expense, then pro-environmental behaviour is an altruistic-type of act.

3.1.1 Altruism and Corporations

From a rational economics perspective altruism is a theoretical ‘anomaly’ as it is not rational for the individual to sacrifice itself to benefit others. Altruism contradicts the basic assumption of traditional economics: economic actors are selfish and are motivated by greed. Altruism has been amply studied in biology and psychology, where though intriguing it is not abnormal. It is only until the recent development of the behavioural economics discipline that these traditional views have been questioned and tested.

True altruistic acts are actually quite rare (for example, someone giving his life to save a stranger). However, altruistic-type behaviours are easily observed in organisms (both humans and animals and even corporations). Altruism by definition benefits others at the cost of depleting the giver’s resources needed for survival, reproduction or kin care.”²⁴ This need to survive and reproduce is known in biology as fitness. Fitness is the base of evolutionary sciences (as in *survival of the fittest*). Therefore, when an animal sacrifices its

²³ Dan Ariely, *et al.* **Doing Good or Doing Well? Image Motivation and Monetary Incentives in Behaving Prosocially**, p. 544.

²⁴ Vladas Griskevicius, *et al.* **Going green to be seen: status, reputation and conspicuous conservation**, p. 394.

fitness to increase that of a peer, it is expected that in a future moment other peers would sacrifice fitness for it too. This is called reciprocal altruism, which may explain altruistic behaviours between kin and social allies. However, it does not explain altruistic acts between strangers or towards individuals that cannot reciprocate.²⁵ Taking out the biological factor, it is still a fact that non-biological entities, such as corporations, do engage in pro-environmental behaviour and spend considerable amount of resources in doing so.

Corporations are the only non-human entities that have been granted legal person-hood. Due to this legal fiction corporations can enter contracts or own properties. The benefits of this person-hood extend even to basic legal and human rights. However, corporations are non-human entities, they are institutions not people. Corporations were created as a vehicle for building large pools of capital to finance enterprises. The enterprise is financed by shareholders. Therefore corporations place the interests of the shareholders above all other interests. This obligation is mandated by law. Corporations are created to serve their shareholders. It is true that it can include other interests, as long as they do not go against the shareholders will.²⁶ In other words, because Corporations are not human, they cannot be either rational or irrational. Furthermore, corporations do not have feelings, therefore they do not feel remorse, guilt or fear, consequently their decisions are not affected by emotions, as with humans. There are no psychologists for the corporation as it does not have a psyche. If a psychiatrist were to evaluate a corporation it would be diagnosed as a psychopath, as suggested by Joel Bakan. "The corporation is constituted to be profoundly self-interested, unconcerned with others, incapable of feeling guilt and remorse, criminal if it can get away with it, disdainful of social conventions - the very definition of a psychopath. Another characteristic of human psychopaths is their ability to portray themselves as benevolent and charming".²⁷ Corporations need to be regarded as part of society, and they will spend money to polish their image and become compatible with social interests. If a firm were to show its true face in society it would be a scary beast. "A lot of money has been spent on generating an image of the corporation as fundamentally benevolent and as capable of

²⁵ Vldas Griskevicius, *et al. Op. cit.*, p. 394

²⁶ Joel Bakan, **Charming Psychopaths**, in: Deborah Doane, [The Myth of CSR: The problem with assuming that companies do well while also doing good is that markets don't really work that way](#), p. 26 - 27.

²⁷ *Ibidem*

actually caring about others.”²⁸ It is no mistake that people place a ‘personality’ to brands; corporations invest money to appeal to the consumer. Nonetheless, this is part of the corporation’s nature; it is their purpose. It is the society that feels deceived when it realises that the friendly corporation is taking away their income to make profits. Therefore, it needs portray itself as friendly, so it can continue with its activities.

Corporations are not people. Milton Friedman made a clear point “A corporation is an artificial person and in this sense may have artificial responsibilities, but “business” as a whole cannot be said to have responsibilities, even in this vague sense.”²⁹ A corporations’ sole responsibility is to make profits. Keeping in business and doing well is how corporations fulfil their social role. A firm’s survival rate depends on its profitability. A fit firm is a profitable one. Therefore, considering corporations as altruistic in strict sense would be wrong, as it is against the firm’s nature to sacrifice profits on purpose, especially to benefit someone else. By describing the situation of a cruise ship that could get out of its route to rescue a stranded boat, Landes and Posner argue that it is highly unlikely the cruise would stop. Altruistic acts by firms are normally “*undertaken in a competitive market (...) the costs of altruism to the rescuer tend to be very great; the firms very survival may be at stake because altruism implies the bearing of uncompensated costs that a non-altruistic competitor would avoid. A closely related point is that altruism is not a trait with a positive survival value in a competitive market. On the contrary, competition will tend to weed out the altruistic seller, just as it tends out to weed out any other type of high-cost seller.*”³⁰ Therefore, firms cannot be altruistic in a strict sense. In a broad sense, it could be that corporations present altruistic-type behaviours, which are selfish by nature. These altruistic-type behaviours have different characteristics than pure altruism and they do not imply a ‘sacrifice’ in profits. On the contrary, if a firm does engage in a pro-environmental activity it is surely because it sees a profit opportunity. If in the end the firm lost money to this pro-environmental endeavour it is more likely it was due to a mistake or miscalculation rather than a selfless act.

3.1.2 Internal motivations for eco-labelling: profits

²⁸ *Ibidem*

²⁹ Milton Friedman, *Op. cit.*

³⁰ William H. Landes and Richard A. Posner. **Altruism in Law and Economics**, p. 8

Economic incentives associated with eco-labelling refer to the impact of eco-labels on profit margins and the predictability of future revenues. The firms' decision to obtain the eco-label should be regarded as an investment decision. As with any investment there is always a trade-off between its rate of return and the predictability of profit. Therefore, a firm will always calculate its profit expectations before making an investment such as shifting production to obtain an eco-label. The impact of eco-labels on profit margins depends on the firm's production costs and its prices. Eco-labels are supposed to enjoy a price premiums, which is arguably the main economic incentive for eco-labelling. Nonetheless, the availability of price premiums is not enough for a firm to base its decision to eco-label as it should also consider the predictability of future revenues. Future revenues are also related with production costs and prices, but it includes the characteristics of future markets, specifically consumer's willingness to pay in the future and the size and entry conditions of the environmental-good market.

3.1.3 Long run profitability

Sustainable firms may outperform their traditional counterparts, as discussed previously, however "this outperformance occurs only on the long-term. Managers that are hoping to gain a competitive advantage in the short-term are unlikely to succeed by embedding sustainability in the organization's strategy. Similarly, investors in High Sustainability firms must be patient ones."³¹ This presents an issue, especially because businesses (and businessmen) in general do not think in the long-term. Businesses today are run based on short-termism. In essence, short-termism refers to an excessive focus on short-term results at the expense of long-term interests.

Sustainability requires the adoption of a longer-term time horizon. However, short-termism is very well rooted in the business culture. First, monetary incentives often place more weight on short-term than on long-term performance. Second, decisions by boards and shareholders about whether to keep current management, change it or alter the scope of its activities are also necessarily based in part on recent observation. If manager's rewards and even their jobs depend on their short-term performance, it is evident that managers will focus on the short-term. Furthermore, by pushing managers to make decisions that deliver short-term performance it is also likely that it comes at the expense of long-term value

³¹ Robert G. Eccles, Ioannis Ioannou, George Serafeim. *Op. cit.*, p. 34

creation. In this sense, focusing on the short-term may result in a failure to make the necessary strategic investments to ensure future profitability.³² In practice, short-termism often implies both an inter-temporal loss of profit and an externality on stakeholders. That is, managers make decisions that increase short-term profit, but reduce shareholder value and hurt workers and other stakeholders.³³ Short-termism is a vicious cycle.

3.2 Extrinsic Motivations

Extrinsic motivations are another type of motivations firms may have to engage in pro-environmental behaviour. “Extrinsic motivation is any material reward or benefit associated with giving, such as thank you gestures and tax breaks.”³⁴ Receiving material rewards for pro-environmental behaviours is a sound motivation for firms. Governments, for instance, may use ‘incentive-based’ regulations, in the form of tax breaks or other material benefit, to achieve certain behaviours from individuals. These instruments are very popular as they are less restrictive than command and control regimes. “The State can impose either negative or positive taxes, or deploy grants and subsidies from the public purse. Thus not only can taxes be used to penalize polluters but rewards can be given for reductions in pollution or financial assistance can be given to those who build pollution-reducing mechanisms into their production or operational processes.”³⁵ In this sense, if firms received some type of tax-break or even financial aid due to its adhesion to the eco-label it would be a clear motivator. Extrinsic rewards can also be provided by private parties or even the market. For example a large multinational can include smaller cooperatives that have high pro-environmental standards into their supply chain or sign a long-term contract with them. These are also material rewards that can motivate firms to behave pro-environmentally.

3.2.1 A Pigouvian tax or subsidy for eco-labels

Pro-environmental behaviour is considered a positive externality or an external benefit. Firms will at their own expense internalize the costs of their negative externalities until (eventually) they create positive externalities. From a pigouvian perspective, taxes on pollution or other socially harmful behaviours should equal at least their net social cost; and

³² *Idem*, p. 18

³³ *Ibidem*

³⁴ Dan Ariely, *et al.*, *Op. cit.*, p. 544.

³⁵ Robert Baldwin and Martin Cave. **Understanding Regulation: Theory, Strategy and Practice**, p. 41-42

subsidies for pro-environmental behaviours should be set at their net social benefit.³⁶ In this sense, eco-labelled products benefit the environment therefore firms should be compensated because it is doing a good thing for society, on the other hand if a firm pollutes it should be punished (either through a tax or a fine). In theory, eco-labelled goods do receive a financial reward for their positive externalities: the price premium. This premium is paid by consumers at the time of purchase. One of the functions of this premium is to compensate the firm for whatever pro-environmental action the producer of such good undertook. Therefore there is no need for an additional tax-break or subsidy from the government. If there were such governmental compensation in addition to the price-premium the firm would be doubly compensated for the same action. This would be a waste of resources. Furthermore, this government expenditure could be avoided altogether if the price premium mechanism were strong, in the sense that it (as suggested by Pigou) at least equals the social benefit. Therefore, the firm could choose between an eco-label with a price-premium which would make its product more expensive or it could choose the eco-label with a positive tax or a subsidy, with no price premium. Though it must be clear that the second option would come from public funds, which would make it an expensive alternative for the government, though the product would be cheaper in the market.

3.2.2 Intangible benefits

Sustainable firms have a long-term perspective which allows them to engage in certain practices that other firms cannot afford. They are willing to invest more time and resources in screening their suppliers and commercial partners. "Some producers have expressed a willingness to sacrifice a price premium for a longer-term supply contract. In some sectors such as coffee, a long term supply contract can greatly improve the lot of the producer and therefore provide a powerful incentive to adopt an eco-label."³⁷ Unilever for example will not commit to a price-premium but will give a preference to suppliers of eco-labelled fish (specifically the Marine Stewardship Council eco-label). "This is also the concept behind the FSC Buyers Group. FSC certification helps a timber products company gain access to a 'members only' procurement club."³⁸ For some producers, market access is much more

³⁶ Benabou and Tirole, *Op. cit.*, p. 7

³⁷ Tom Rotherham, UNEP, *Op. cit.*, p. 18

³⁸ *Ibidem*

important than a price-premium. Eco-labels provide a structure under which these type of long-term commitments are assured.

The downside of these intangible benefits is that the claims are purely anecdotal. “While there is a significant amount of anecdotal evidence suggesting the increasing importance of procurement policies and preferred supplier contacts, and the theoretical underpinnings are sound, the data on which to base a more comprehensive policy analysis is inadequate.”³⁹ In essence larger companies do receive certain intangible benefits by using eco-labels. Nonetheless, it is true that these firms’ influence through-out the supply networks are crucial. Their CR commitments motivate up-stream producers to change their practices and obtain certifications. By creating long-term contracts and preferential dealing they create external benefits for producers who would otherwise face tremendous uncertainty. Whether these benefits could actually motivate a firm or a producer to join in an eco-label might be feasible. However, it still needs to be documented and confirmed.

3.3 Reputation or image motivations for eco-labelling

Image or signalling motivations refer to an individual’s tendency to be motivated partly by others’ perceptions. Image motivation therefore captures the rule of opinion utility, i.e., the more the individual is liked and accepted the higher its utility. When individuals seek to gain social approval of their behaviour, they invest in actions that signal traits defined as “good” based on the community’s norms and values.⁴⁰ There is no doubt that firms invest many resources in image management. How the public perceives a corporation can increase or decrease a company’s value. Therefore, if the environment is part of the community’s values, then engaging in pro-environmental behaviour signals to others that one is good. Furthermore, the eco-label serves as the signal that implies that the brand/firm behind the eco-labelled product is pro-environmental. However, if the community does not show this environmental preference, the reception of the signal would be quite low, and probably will not create as much value as in a pro-environmental community.

There is ample evidence suggesting that individuals are more likely to behave in a pro-social manner when the act is public than when it is private. “The fact that most charitable donations are not anonymous and, indeed, that many donors seem quite avid to obtain

³⁹ *Ibidem*

⁴⁰ Dan Ariely, *et al. Op. cit.*, p. 544.

publicity for their gifts suggests that the desire for publicity or recognition is an important factor in charitable giving.”⁴¹ In fact only 1% of the total number of donations are anonymous. Furthermore, contributions in philanthropy in the arts and education are normally ‘bunched’ above the cut-offs for each category. In this sense, if to obtain a recognition the minimum amount is ‘x’ the contributions are normally x or a little above, just enough to get the recognition. In the experimental field, for example, subjects in a standard dictator game⁴² are normally willing to sacrifice at least a small amount to benefit others, proving their altruistic traits. However, when the subjects are given the option to not know whether their actions affect others, they normally take advantage and behave more selfishly.⁴³ In a laboratory setting Griskevicious, Tybur and Van den Bergh show that it is imperative to have an audience for the signals to work. When people are buying in a public setting they are more likely to buy a pro-environmental product over a luxury product. Whereas in a private setting, subjects preferred the luxury product. This shows that when actions go unobserved people behave more selfishly.⁴⁴ Changing the visibility of the actions, changes the levels of pro-social behaviour. Image depends on visibility, and image is a consequence of what others think. For the signal to work there needs to be an audience for it who interprets the act (or the intention behind it) as altruistic, and uses this information to form a judgement about the giver. Ideally, they would pass on this information to multiple others in the form of reputation.⁴⁵ Therefore if the image value from a pro-environmental behaviour is positive, increasing the number of observers (by making it even more public) would lead to higher efforts and a higher value.⁴⁶

3.3.1 Reputation and Status

Reputation and status are not entirely economical by nature. Both reputation and status depend on what others believe about an individual. Believing is involuntary, therefore it

⁴¹ William H. Landes and Richard A. Posner. *Op. cit.*, p. 7

⁴² In the standard dictator game a subject called the ‘proposer’ has to split or allocate an endowment that has been given to him, the other subject is the receiver, who’s function is simply to receive the part of the endowment that the proposer decided. It is used to challenge the ‘rationality’ of economic behaviour.

⁴³ Benabou and Tirole, *Op. cit.*, p. 3-4.

⁴⁴ Griskevicious *et al*, *Op. cit.*, p. 397.

⁴⁵ Mark Van Vugt, Gilbert Roberts, Charlie Hardy. **Competitive Altruism: Development of Reputation-based Cooperation in Groups.**

⁴⁶ Dan Ariely, *et al*. *Op. cit.*, p. 546

cannot be purchased.⁴⁷ Status and reputation cannot be traded there is no market for them, however their presence affects markets. This is because they are forms of capital that are acquired indirectly (not purchased) and give the 'holder' certain advantages in different markets.⁴⁸ The fact that they are capital goods, suggests that a change in them can alter subjective utility, even if though, objectively nothing changed.⁴⁹ The main difference between status and reputation is that the status is hierarchical (it can be higher or lower); whereas reputation is good or bad, bigger or smaller, it is not a rank. Furthermore, reputation is a way to obtain status.⁵⁰ In this sense, there is value in obtaining and maintaining a good reputation. The value of reputation could be a good motivator for firms to engage in pro-environmental activities.

Firms might seek to join an eco-label to increase their reputation and create a 'green halo' for themselves. The halo effect or the halo error is "the idea that global evaluations about a person (e.g. she is likeable) bleed over into judgements about their specific traits (e.g. she is intelligent)."⁵¹ In other words, people's general impressions or judgements about someone or something are likely to "spill over" to its specific traits. Hence, a green halo would be formed when pro-environmental behaviour spills over and creates the impression that such individual is 'completely' pro-environmental. Eco-labels, reinforce this halo effect by portraying the brands (or the firms) that carry eco-labels as entirely green. This is a cognitive bias because it is an illusion. This illusion, however, is valuable as it is how the market portrays the eco-label that is going to give it value. In short, the green halo aids in building a green reputation. Firms with a green reputation, therefore, have a certain status within the market, that again could be of value for the firms.

3.3.2 Status and Stigma

Stigma is the opposite of status. In the study of social norms, there has been a large focus on stigma. Stigma is understood as the 'negative' label upon a perpetrator of a given social norm. In a way it can be understood as a 'negative' reputation. The importance of stigma is

⁴⁷ Gertrud M. Fremling and Richard A. Posner. **Status signalling and the law, with particular application to sexual harrasment**, p. 2.

⁴⁸ *Idem*, p.3

⁴⁹ *Idem*, p. 5

⁵⁰ *Idem*, p.3

⁵¹ <http://www.spring.org.uk/2007/10/halo-effect-when-your-own-mind-is.php>

that it has been proven that it can provide incentives for compliance. In criminal law, for instance, by stigmatising the offender it is possible to stigmatise the actual behaviour, hence it would have a deterrent effect. Faure and Escresa point out that “stigma could impose additional costs on the perpetrator which could hence amount to an additional penalty, in addition to the sanction which is formally imposed through the criminal legal system.”⁵² Hence, if stigma is the opposite of status it can be inferred that status provides an additional reward for the ‘right-doer’. In other words having a positive environmental reputation such as a ‘green-halo’ or will create value. There is plenty of evidence suggesting that corporate misbehaviour in environmental arena or other arenas will lead to a decrease in market value. Hence the ‘reputation effect’ can be traced for negative acts, hence the ‘stigmatization’ is clear. However, the opposite effect, which would be named the ‘status effect’ has not been found (due to inconclusiveness). Again, this opens the scope for further research on the matter. Specifically, this effect has been studied in different disciplines, which will be addressed below. However, law and economics have not yet focused on the possible effects of ‘over-compliance’ on social norms. This means that just like stigma can aid in the shaping of social norms by deterring wrong-doings, status can do the same. With the difference that instead of having a deterring effect, they might provide a compliance-type incentive.

3.3.3 Competitive altruism and costly signalling

It has been previously discussed that firms are not altruistic. If altruism were considered a sacrifice in profits to benefit others, as it has traditionally been considered, discussions would tend to be very short. However, firms do engage in pro-environmental behaviour which is an altruistic-type of behaviour. In this sense, firms invest in acts that benefit the public good at their own expense. By equalising pro-environmental behaviour with altruism, it can explain why firms act like they sometimes do.

Being regarded as altruistic can lead to status. Status is in other terms a rank that confers certain benefits to those that have it. Therefore individuals will compete with each other to obtain such status. When individuals “compete for status by trying to be seen as relatively more altruistic”⁵³ it is deemed competitive altruism. Competitive altruism is different from

⁵² Michael Faure and Laarni Escresa, **Social Stigma in Production of Legal Rules**, p. 206

⁵³ Vladas Griskevicius, *et al.*, *Op. cit.*, p. 393.

standard notions of altruism as it is self-interested in the traditional sense. A competitive altruist contributes to the public good in order to attain status that can generate economic rewards and intrinsic value. It is a practice that occurs both in the animal world and in the human world.

When these 'altruistic' actions are executed to seek a higher ranking within the group, the quality of the signal becomes important. For the signal to be valuable it should be costly. "Because altruism is by definition costly, altruism is particularly likely to have evolved into an honest signal."⁵⁴ Altruism just like pro-environmental behaviour signals resources. By engaging in costly altruism, people signal that they can afford to help others rather than themselves. In the same sense firms signal that they can afford to increase their costs, while still remaining profitable. This signals that the individual has sufficient time, energy, money and resources to manage to give away such resources without negative impact on its fitness (profitability, in the case of firms). In Biology incurring in costly behaviour or even developing physical features is called "the handicap principle". These behaviours or attributes develop because they are naturally reliable signals. Zahavi & Zahavi named it after observing how "organisms sometimes engage in self-handicapping acts as a way of signalling honest information about themselves. The peacock's tail is often cited as an example, because having a long and colourful tail is extremely costly for the animal as it makes it difficult to move around and escape predation."⁵⁵ In addition these features are very difficult to imitate if they do not have the good genes to grow such an ornament. The reward of course is that they will have more opportunities to be selected as a mate from their female counterparts. If this example is translated to eco-labelling, eco-labelling should be costly enough to show the commitment to pro-environmental behaviour. Therefore eco-labels are costly signals that allow the holders to access markets or form alliances that would strengthen their position within the market.

Having an altruistic or pro-environmental behaviour has to have long-term benefits for the individual otherwise it would not be worth it. It has been suggested that access to coalitions could be one such benefit. In Biology it has been observed that "while cheaters and non-reciprocators are at risk of being increasingly ostracised from groups, altruists are in huge

⁵⁴ Mark Van Vugt, Gilbert Roberts, Charlie Hardy. *Op. cit.*

⁵⁵ *Idem.*, p. 701.

demand as coalition partners in future social exchanges like sharing food. Some altruists recoup their actions by increasing their attractiveness as a mate, thus being able to attract more and better sexual partners.”⁵⁶ As the case of the peacock. Furthermore it has been suggested that groups with altruists perform better in competitions than groups with less altruists.⁵⁷

3.3.4 Conspicuous conservation

Conspicuous conservation is a term taken from “conspicuous” acts and conservation as in the pro-environmental attitudes. In economics, conspicuous behaviour has been studied in the terms of consumption. Veblen explained how consumption in excess of the subsistence minimum is characteristic of high-class. However, when consuming in excess became common (as the industrial revolution made consumables more accessible to all the population) consuming expensive or exotic food or wine was not enough. As wealth accumulated, people started to show-off their wealth and power by consuming goods that were costly and unproductive (or unnecessary, such as the peacock tail).⁵⁸ “In order to effectually mend the consumer's good fame it must be an expenditure of superfluities. In order to be reputable it must be wasteful. No merit would accrue from the consumption of the bare necessities of life.”⁵⁹ With no doubt certain conspicuous behaviour can be socially wasteful. However, if the object of the behaviour were to have social or environmental benefits, then even conspicuous behaviour would be positive and it would not be wasteful.⁶⁰

Today's heightened concern about environmental damage and climate change has led to costly private contributions (both from corporations and individuals) to environmental conservation. Sexton and Sexton suggest that environmental conservation acts confer status to the ‘right-doers’ that was once afforded only through ostentatious displays of wastefulness (or conspicuousness).⁶¹ It is their hypothesis that individuals undertake costly

⁵⁶ *Idem*

⁵⁷ *Idem*

⁵⁸ Thorstein Veblen, *The Theory of the Leisure Class: An Economic Study of Institutions* in: <http://www.fordham.edu/halsall/mod/1902veblen00.asp>

⁵⁹ *Ibidem*

⁶⁰ Gertrud M. Fremling and Richard A. Posner. *Op. cit.*, p. 7

⁶¹ Steven E. Sexton and Alison L. Sexton. *Conspicuous Conservation: The Prius Effect and Willingness to Pay for Environmental Bona Fides*, p. 1.

actions in order to signal their type as environmentally friendly or 'green'. This leads to actions that while still being good for the environment (such as installing solar panels), are not used as effectively, as they are used strategically so that their peers can observe and not in the way the environment would be most benefited (for example, installing such panels facing the streets or where the others can see, which is not where the sun shines the most). The difference with conspicuous conservation compared to other conspicuous acts is that these acts are not wasteful as they do create environmental benefits.

In their paper, the Sextons analyse the case of the Prius (from Toyota) which is a hybrid car with a very particular design. The US market of hybrid cars is composed of 24 models and the Prius has 48% of the market. The main difference between the different hybrids is not the environmental performance, but the fact that the other cars look like an average car; it is only possible to tell they are hybrids because of a small badge that says so. The Prius design makes it very easy to identify, therefore it is "the most powerful signal of the owner's affinity for the environment of any vehicle in the U.S."⁶² Their results show that "private provision of environmental preservation need not rely on altruism in the traditional sense, but can be achieved by those with traditional neo-classical utility functions who seek economic and non-economic returns from status achieved by signalling "green" type."⁶³ In other words, conspicuous conservation is rewarded in the reputation and status gained among peers. The 'green' signal is only valuable when peers are also concerned about the environment. Therefore it is expected to find more Prius' in areas where environmental concern is high, and other type of cars such as Hummers in other areas where the environment is not part of the values. The Sextons use political ideology as a proxy for environmental concerns as these two are highly correlated. In the U.S. Republicans are less concerned with the environment than Democrats. For example, communities with more registered Democrat party members are home to more Priuses., whereas communities with more Republicans have more Hummers.⁶⁴ This clustering of Priuses, increases the halo effect, not only of the owner of the Prius but also of all the community. Therefore, these signals are very valuable in communities that care about their 'green' reputation.

⁶² *Idem*, p. 2.

⁶³ *Idem*, p. 3.

⁶⁴ *Idem*, p. 7.

3.4 Interaction between the incentives

Individually intrinsic, extrinsic and image incentives could be enough to trigger pro-environmental behaviour. Eco-labels could potentially aid firms reap the benefits of pro-environmental behaviour by allowing the product to have a price-premium, which theoretically can lead to increased profits. Furthermore, by joining an eco-label there is the possibility of creating a green-halo to the firm's image, which in turn benefits the firm's reputation and increases its status. These firms will have access to niches and will have preferential treatment that normal firms do not have. It is intuitive to believe that if intrinsic and extrinsic incentives work well separately, together they might potentialize the incentives. However, it has been shown that this might not occur. On the contrary, the interaction of these incentives might have undesirable consequences.

3.4.1. Crowding out effects of material incentives

By following one of the most fundamental economic principles it can be assumed that raising monetary incentives will increase supply. However, this is not always the case, under some circumstances the contrary occurs: by using material incentives supply shrinks. This is known as the crowding out effect. Crowding theory suggests that when there is a systematic interaction of extrinsic and intrinsic motivation it is possible that the latter is altered. Economic theory usually only considers extrinsic motivations (monetary incentives such as tax benefits or subsidies). Psychology on the other hand emphasizes the internal motivations. If external motivation raises intrinsic motivation, then the benefit will be increased; this would lead to a *crowding-in effect*. In contrast when the external motivation undermines intrinsic motivations it affects the agents' marginal benefit from performing, thus it reduces the performance level. External interventions crowd-out intrinsic motivation if the individuals affected perceive them to be controlling. In that case, both self-determination and self-esteem suffer, and the individuals react by reducing their intrinsic motivation in the activity controlled. External interventions crowd-in intrinsic motivation if the individuals perceive it as supportive. In that case self-esteem is fostered, and individuals feel that they are given more freedom, thus enlarging self-determination.⁶⁵

⁶⁵ Bruno S. Frey and Reto Jegen. **Motivation Crowding Theory: A survey of empirical evidence.**

Notwithstanding the above explanation, it is incomplete as it does not consider image or reputation concerns. As seen above, how others perceive the individual alters its value as well as its motivations. With this third element, the crowding effects do not necessarily correspond to the previous predictions. Tirole and Benabou point out that when image concerns are high, “an unusual phenomenon occurs over some interval, the supply response to incentives flattens out, and eventually becomes downward-sloping.” This violation of basic price theory results from what psychologists call the over justification effect, and economists call a signal extraction problem. When there is little to no reward, a pro-social act is interpreted as genuine altruism. In the same manner firms that voluntarily engage in eco-labelling create a ‘green halo’ for themselves which is interpreted as ‘good’. By introducing substantial material incentives it becomes difficult to interpret or extract the signal of the pro-environmental act. This changes the ‘meaning’ or intention of the act. Therefore the value of the signal (of the pro-environmental attitude) is weakened, offsetting or even reversing the direct effect of the material incentive. This means that instead of looking pro-environmental the individual might just look greedy as he wants to take advantage of the material rewards.

3.4.2 Interaction of Private incentives with Image rewards.

Individuals value the ‘green halo’, the more the others think of him as a pro-environmentalist, the greater is the image value of the pro-environmental acts or signals (such as the eco-label). However, it has been observed that when private monetary incentives are introduced instead of observing an increase in pro-environmental (pro-social) acts there is actually a decrease. Private monetary incentives partially crowd-out image motivations. In other words, when the image of being pro-environmental is valuable already, individuals will make an effort to be perceived as pro-environmental. When monetary incentives are introduced, the pro-environmental acts will be publicly rewarded, not with reputation but with money. Therefore the intentions of the pro-environmental will be blurred: is he pro-environmental because he is committed to the environment or is he just looking for the monetary rewards? Engaging in pro-environmental acts to receive extrinsic rewards lowers the image value of the activity.⁶⁶ Therefore there will be less effort in engaging in pro-environmental activities in the presence of extrinsic rewards. However, the interaction only occurs when the extrinsic

⁶⁶ Dan Ariely, *et al. Op. cit.*, p. 546

reward is made public. Publicity of these rewards reduces the image motivation. Hence the more publicity the less effective is the reward. For example, if a firm were to engage in pro-environmental activities but does not communicate them to the rest of the market, i.e., it keeps them private, and there is a tax-break for doing so, it would not matter because the pro-environmental act is private. However, if the firm engaged in those pro-environmental acts made them public by means of an eco-label, and additionally received tax breaks, the value of the eco-label as a signal would be diminished. Ariely et al, to explain this behaviour suggest that “extrinsic rewards are less effective the greater the visibility of the pro-social act.” This implies that the detrimental effect of extrinsic incentives is more likely to occur for a visible pro-environmental effort than for a private one.”⁶⁷ Eco-labels give publicity or visibility to the firm’s pro-environmental acts. Therefore, granting additional rewards for eco-labelled goods might not be a good strategy as the eco-label’s benefit is mainly reputational.

Taking into account this phenomena, it is plausible that this is the reason public eco-labels are not as welcome in the market as private eco-labels. Government sponsored eco-labels are basically the same as private ones, with the difference that the organization behind it is the government, not an NGO or other private entity. Many countries, and even the European Union have their own eco-label, however, these are not very popular (at least not for consumer goods). Consumers when they observe these ‘official’ logos do not know if it represents a regulation that all products have to observe or if it is voluntary. Therefore, when there is an information gap the signal will be interpreted by the receiver.⁶⁸ The most sensible interpretation is that if it is a government seal, the firm is probably just complying with regulation. Hence, the green halo is not created as the signal would be weak. However; this is a conjecture; proper research could be done on the matter.

3.4.3 Price dilemma

In some circumstances, some conservation acts might be regarded as ‘lower status’, not higher (this might be the case for recycling or using public transport). In this scenario status may distort environmental acts that do not seem of ‘high status’. Griskevicious, et al., suggest that in order to increase the status of the pro-environmental act, it is necessary to increase the price or make it more costly in general. Because if it is the same price there will

⁶⁷ Dan Ariely, *et al.*, *Op. cit.*, p. 547-549.

⁶⁸ Sylvie Lupton, **Shared quality uncertainty and the introduction of indeterminate goods**, p. 414.

be no status benefit. Costly signalling theory suggests that lowering the price of green products creates an important reputational dilemma: buying a cheaper (green) product might explicitly signal that a person cannot afford the more expensive product. "If altruism functions as a costly signal in part because it signals one's wealth, then increasing the price of a green product might actually lead that product to be more attractive for individuals motivated to gain status. Indeed consider that economic experts predicted that abolishing tax credits for hybrid cars in the U.S. would decrease their sales because of the increase in cost of the car. Yet after tax credits for Prius expired in late 2006, sales actually went up 68.9%."⁶⁹ The same phenomenon happened to the luxury Lexus hybrid, which was launched at a price of \$100,000. The sales of this Lexus exceeded expectations by over 300%. Even though affordable green products can be equally or even more efficient at helping the environment, the purchase of such inexpensive green products might undermine a person's ability to signal his or her wealth via pro-environmental acts.⁷⁰

3.4.4 The Distortions created by social signalling

Energy economists have suggested that inconspicuous investments (those that cannot be observed) are generally more cost-effective than other energy producing or conservation acts that are more conspicuous. Conspicuous conservation acts are those that are meant a) to benefit the environment, but more importantly to b) signal to others your environmental preferences. These social signals distort private incentives and generate conservation investment that is wasteful or at least not as effective as it could be. For instance, economists have begun to question whether home-owners over invest in residential solar power because of its conspicuousness and under invest in home insulation improvements, energy efficient heating and cooling systems, and window sealing because of the relative inconspicuousness of these investments (they cannot be observed) This distortion is precisely what the Sextons refer to as 'conspicuous conservation'. Instead of motivating firms to engage in meaningful or useful pro-environmental behaviour, it biases their decisions towards those behaviours that can be shown-off.

3.5 Policy implications

⁶⁹ Vldas Griskevicius, *et al.*, *Op. cit.*, p. 398

⁷⁰ *Ibidem*

Conspicuous conservation is still conservation. The environment is benefited by these acts, even though they might not be as cost-effective as they could be. This reputation mechanism allows firms and consumers to engage in pro-environmental activity voluntarily. They will recoup their investments by increasing their reputation. In that sense, it has previously been noted that when a product holds an eco-label there is no need for a tax break or subsidy as it would be a double reward for the firm. In the same sense, it has been amply suggested that “if a government confers a tax benefit policy to facilitate the adoption of a new environmentally friendly technology, it should expect the policy to be more successful for promoting a non-visible technology, such as environmentally friendly water heaters, relative to a visible technology such as hybrid cars.”⁷¹ In this case water heaters or window insulation are not visible therefore they do not create any signal, i.e., they are inconspicuous. “Subsidies should be targeted toward inconspicuous conservation in order to achieve an optimal mix of conservation effort.”⁷² The government could create a tax break policy for pro-environmental behaviour that is private and simultaneously let individuals invest in the pro-environmental acts that improve their reputation. By doing this, more areas of conservation will be targeted. With the market biased towards those acts that serve as signals and government focusing on private efforts, the range of activities will increase. “However, policy makers should be mindful of the potential to crowd-out intrinsic motivation with extrinsic rewards like taxes and subsidies. Because conspicuous conservation goods enable their purchasers to signal their willingness to sacrifice to enhance the environment, the public subsidy of such goods diminishes the value of such goods as social signals. Subsidies may, therefore, have the perverse effect of reducing demand for conspicuous conservation.”⁷³

4. Conclusions

This chapter provides a different approach to CSR and corporate sustainability. Corporate practices are key to eco-labels as it is the firms who engage in pro-environmental activities, hence it is them who ultimately impact the environment. The reason why CSR and its literature is only limited to this chapter is because pro-environmental behaviour is a small

⁷¹ Dan Ariely, *et al.*, *Op. cit.*, p. 554

⁷² Steven E. Sexton and Alison L. Sexton. *Op. cit.*, p. 21

⁷³ *Ibidem*

part of CSR. Furthermore, the focus of this chapter was the pro-environmental behaviour of firms. It was clearly pointed out that pro-environmental behaviour should not be considered pure altruism. However it can be considered as an altruistic-type behaviour. This is because while pure altruism acts without expecting anything in return, altruistic-type behaviours do. While it is not a finding per se, it is worth reminding that when a firm engages in a pro-environmental activity it is surely because it sees a profit opportunity. If in the end the firm lost money to this pro-environmental endeavour it is more likely it was due to a mistake or miscalculation rather than a selfless act. It is just how firms are created. This leads to the second point, that is worth reminding: firms are not humans. Firms were created by humans to aid them in their economic activities. However, because firms interact in society, along with humans and governments they are subject to certain social norms. Furthermore, in order to keep their place in society firms have to be particularly careful with their image. Hence, firms have huge image motivations.

The literature from other disciplines also provides great insights on what happens when different motivations interact with each other. This can become very relevant as 'external motivations', such as the ones that governments use to incentivise certain behaviours, can have the opposite effect when it interacts with internal or image motivations. Therefore, this chapter can serve as a word of caution to governments that wish to intervene in a market. If it is deemed necessary, the motivation behind the specific behaviour has to be properly understood.

Many of the insights regarding internal, external and image motivations, are borrowed from other disciplines that normally focus on humans. Therefore this analysis (section 3 in particular) can also be applied to the 'human' side of eco-labelling: the consumers. The following chapter will shift the focus to the demand side of eco-labels. Consumers are the trigger of the eco-labelling mechanism. Hence there is an interest to understand what makes consumers buy eco-labelled products. Just like firms, consumers have different motivations to buy eco-labels. Buying eco-labels, is considered a pro-environmental activity for consumers. The interest in understanding consumers is crucial for firms, for the certification entities as well as for the governments. As once they manage to harness consumer interest they will be able to increase the interest in eco-labels, thereby increasing their overall impact.

CHAPTER IV

Eco-labels and Consumers

1. Introduction

The eco-labelling mechanism can only be triggered if there is a demand for environmentally-sound products. Therefore, the key for the functioning of the mechanism is the consumer. Consumers have to be motivated to buy the eco-labelled goods. Just like corporations¹ people can have intrinsic, extrinsic and reputational motivations to consume eco-labelled goods. In addition, there are some that suggest that consumers may even be a-motivated, that is that the person does not receive any satisfaction from the behaviour and is unsure why s/he is performing it.² However, there is a big difference with businesses. Businesses have profits in mind, that is their main motivator. Therefore a business engaging in sustainable behaviour is doing so because it believes that indirectly it will increase its profits. It is true that economists have simplified consumers' motives to "utility maximisation" in which case they are no different than businesses. However, consumers are not so "simple". Consumers internal motivations are complex, to say the least. Their beliefs and their behaviour do not necessarily match. If a consumer has pro-environmental preferences or intent it does not imply that s/he will act on those beliefs. Specifically, buying eco-labelled products would be a type of pro-environmental behaviour regardless of the consumers' intent.

Eco-labels, as environmental tools have the potential to improve the environment significantly. However, they depend on consumers for them to work. A single sale of an eco-labelled good will not spur great change, however in the aggregate consumers can pressure industry to become more sustainable. Therefore, it is imperative to understand how consumers make their choices at the point of sales both at an individual and at group levels. Eco-labels can aid consumers in matching their intent with their behaviour. To make eco-labels reach their potential it is important to know consumers' limitations as well as their strengths. Precisely because consumers are the core of this chapter, it is important to know

¹ As seen in Chapter III Eco-labels and Business

² Erin McDonald and Jinjuan She. **Seven cognitive concepts for successful sustainable design**. p. 9

their behaviour in “large worlds”, not just in the artificial “small worlds”³ that are normally used in economics. This can only be achieved by integrating knowledge from other disciplines such as psychology, marketing, sociology and even neurosciences. Nonetheless, this chapter is a specialised summary. This is because its whole purpose is to collect information from other disciplines to obtain a clear understanding of consumer behaviour. The purpose of this is to be able to draw insights for the subsequent chapters in which policies have to be drawn with this information. Furthermore, because of the discipline and methodology that this work follows, it cannot be expected to have original findings or insights.

This chapter will first start with the difference between *homo-economicus* and *homo-sapiens*. Subsequently, it will build on the literature on bounded rationality, where it is pointed out that additional to bounded rationality, humans have bounded self-interest and limited information-processing capabilities. Therefore under this light it will be seen how eco-labels affect consumers decision making processes by simplifying it. Hence, eco-labels reduce the ‘cognitive’ costs at the point of purchase making it easier for the consumer to make a decision.

2. Understanding the Consumer

Dan Ariely, uses the term “human-incompatible technologies” to describe systems such as health-care, stock markets, education or environmental incentives that are not in line with human fallibility. “As a consequence, we inevitably end up making mistakes and sometimes fail magnificently.”⁴ Therefore, when analysing a policy tool such as eco-labelling it is important to verify if it is consumer-compatible in order for it to function. By understanding how consumers really operate, their biases can be more easily observed as well as how they influence their decisions. Only then can policy makers make consumer-compatible policy tools. Otherwise, the tools would not work due to “behavioural failures.” Consumers would “fail” to behave like they were expected, namely because the expectations of their behaviour was inaccurate or even unrealistic.

³ Small worlds are those used in a lab, where everything is controlled and certain. Small worlds are needed for optimisation. Whereas Large worlds are those that have uncertainty, there is a large number of variables that cannot be controlled.

⁴ Dan Ariely, **The upside of irrationality: the unexpected benefits of Defying Logic at Work and at Home**, p. 9

It is inevitable at this point to make a distinction between Neoclassical Economics and Behavioural Economics. “Behavioural economics is the sub-field of economics that borrows from psychology, empirically tests assumptions used elsewhere in economics, and provides theories that aim to be more realistic and closely tied to experimental and field data.”⁵ The separation between neoclassical economics and psychology was intentional and prominent in the twentieth century. Milton Friedman argued that “unrealistic or even obviously untrue assumptions (like all behaviour can be modelled as resulting from decision makers solving constrained problems) are perfectly legitimate, so long as they produce accurate predictions.”⁶ Therefore, using the same example as Friedman, when a billiard player is selecting shots, he is doing so as *if* he were solving a set of equations using Newtonian physics. Evidently, most billiard players do not have enough knowledge of Newtonian physics to actually apply it on each shot (if they have any knowledge at all). From Friedman’s perspective, this model, though based on wrong assumptions, should be judged based on its predictions, not on the realism of its assumptions. Behavioural economics on the other hand tries to find the realism of assumptions, by testing them empirically and adjusting the theory to the observed results. In this sense, behavioural economics tries to model the process that leads to the eventual outcome (the behaviour). Therefore, if the billiard player did not use equations to solve his problem he must have used a different set of tools or capacities that allowed him to solve the problem. These cognitive tools, when identified, can also predict human behaviour in a more “realistic” approach. Law and economics traditionally follows the neoclassical assumptions of human behaviour. If we regard the law as a social institution and the assumptions of the subjects’ behaviour are incorrect, it is likely that the law will be flawed. Therefore, understanding and predicting behaviour in a realistic way will allow us to make better institutions, policies and laws.

2.1 Rational Behaviour and the *Homo Economicus*

The neoclassical model assumes an economic man, or *homo economicus*. The main assumptions are that this man is “infinitely self interested, infinitely capable of processing information and solving optimisation problems, and infinitely self-disciplined or consistent

⁵ Nathan Berg. **Behavioural Economics**, in 21st Century Economics: A Reference Handbook, Vol. 2, p. 3.

⁶ *Ibidem*.

when it comes to having the willpower to execute one's plans."⁷ Hence, the *homo economicus* is "rational". The laws of logic and probability theory are the same criteria that determine the rationality of judgements and decisions. "These laws of logic and probability are called coherence criteria because they are primarily concerned with the internal logical coherence of judgements."⁸ These coherence criteria, suggest that people have rational preferences; meaning that they order and rank things. Ordering and ranking is known as transitivity. Hence if all the outcomes were in a list ordered by preference from high to low, the outcomes from the top will always be preferred to the lower ones. In other words, if an individual prefers A to B and B to C, then he will prefer A to C. People are assumed to have rational inter-temporal choices. A person can be infinitely patient or infinitely impatient, but never the two of them. Finally, people are expected to have rational risk preferences. In economics people can be completely risk adverse or risk loving, but not both. In addition, probabilities should always sum 1 as the probability laws dictate. In this sense a person can believe with a probability of 90% that Climate Change is a myth and 10% that it is a real environmental threat. In this case the beliefs of this person are coherent, as they add up to 100% as the laws of probability dictate.

By following these coherence criteria to determine rationality, people could claim (and they have done so) things like: "Monkeys are rational!" following the observation that squirrel monkeys make choices that conform to transitivity.⁹ Not only monkeys, but Artificial Intelligence technology is basically based on these laws of logic and probability. Furthermore, everything can be rationalized as long as it is consistent. Consistently strange behaviour can be rational as long as it is consistent. Spending ones pay-check in one day and struggle until the next one can be strange. However it is rational, as long as every time the person receives a pay-check he does the same thing. On the other hand, inconsistent or random behaviour is irrational even if such behaviour is a positive step in the persons' well-being. Furthermore, there is no proof that people following these rules ("rational" people) are wealthier, happier, healthier or more successful than people who are "irrational".¹⁰

⁷ *Idem*, p. 4.

⁸ Gerd Gigerenzer and Peter M. Todd. **Fast and Frugal Heuristics: The Adaptive Toolbox, in Simple Heuristics that Make Us Smart**, p. 21

⁹ Brendan McGonigle and Margaret Chalmers, **Monkeys are Rational!** The Quarterly Journal of Experimental Psychology Section B, Vol. 45, Iss. 3, 1992

¹⁰ Nathan Berg. **Inconsistency Pays**. Seminar at 9th Summer Institute on Bounded Rationality – Foundations of an Interdisciplinary Decision Theory, Berlin. July 7 2010.

People are constantly faced with trade-offs. However the process of how such trade-offs are solved is still a mystery. What can be observed is the outcome of the trade-off, not the reasoning itself. How people processed the information, what cues they used, how they made the calculations is subject of many studies in different scientific fields. Rationality can be seen from different perspectives. From the neoclassical perspective rationality can either be unbounded or it can have some limitations, which lead to optimisation under constraints. These limits to rationality could be interpreted as bounded rationality. However bounded rationality and optimisation under constraints are not the same. Bounded rationality in behavioural sciences does not use “rationality” (as understood in neoclassic economics) as a threshold whereas optimisation under constraints does. Behavioural economics uses other tools to understand the process behind the trade-offs.

2.1.1 Unbounded Rationality

In the world of *homo economicus*, rationality is unbounded. It is assumed that people have unrealistic mental abilities such as boundless knowledge, infinite access to information and infinite time. While acknowledging that these assumptions can be far-fetched, the proponents argue that humans act as if they were unboundedly rational.¹¹ In this sense it becomes an aspiration or an ideal. However it makes real human (*homo sapiens*) look flawed and irrational in comparison. In order to execute or calculate optimisation without constraints would imply infinite calculations and information gathering. Every single consequence of choosing one option has to be computed as well as all the consequences of the alternative (or alternatives). It would be close to impossible to make any decision. Furthermore, to maximize subjective expected utility, all the variables would need to be in the same currency. All beliefs and desires would have to be valued in quantitative probabilities and utilities. For economists that defend this view “this theory exhibits mathematical beauty and convenience.”¹² In other words, it makes modelling easier. However, the world does not always conform to this. Sometimes reasons cannot be converted to a single currency, as there are something’s that are considered incommensurable. “The greatest weakness of unbounded rationality is that it does not

¹¹ Gerd Gigerenzer and Peter M. Todd. *Op. cit.*, p. 5.

¹² *Idem*, p. 5

describe the way real people think.”¹³ Specifically, it does not say anything about the process of decision making, which is what interests policies that depend on people’s free-will. Of course, the outcome of the policy is important, but with instruments such as eco-labels the decision process the consumer undergoes is crucial. Understanding the consumers’ processes and preferences, as well as their limitations can make any tool effective.

2.1.2 Optimisation Under Constraints

People make inferences from the information they have. This information could be internal, as in our memory or our feelings, or the information could be external. This information can be either available for the consumer or it has to be discovered. Searching for information can be a costly process; nonetheless it is what allows people to form their judgements and make decisions. In optimisation, a person should calculate the costs and benefits of searching for more information, until the costs outweigh the benefit. Only at that point should the person stop searching for more information and make a decision. The problem is that it requires as much computation as unbounded rationality. Furthermore, nothing is optimal *per se*. To optimise, the maximum and the minimum have to be calculated under specific circumstances or conditions. If the conditions are changed so does the optimal. This means that every new cue leads to a change of circumstances, which will require starting the computation all over again. It is true, that optimisation can be accurate, in a world with controlled variables (small worlds). However, as more variables are introduced, the more complex the world becomes.

2.2 Bounded Rationality and the *Homo Sapiens*

Sapiens, is the Latin word for wise, sensible or judicious, therefore the species *homo sapiens* is literally the wise man not the ‘rational man’. Humans are capable of learning and adapting. Herbert Simon, is the “father” of bounded rationality. His views are based on the idea that behaviour should be based on what is known about the human mind, not fictitious and convenient assumptions. Optimal strategies are unknown or unknowable, because of the minds limitations. Hence, humans need to use approximate methods to handle most tasks. These approximations or shortcuts are called heuristics. The human mind has a repertoire of strategies (the ABC research group for example describes it as a tool-box) that

¹³ *Idem*, p. 9

a person can select according to their situation. The more refined the cue selection is the better he will be able to adapt his strategies. For instance consumers have to select cues to determine a purchase. They can search for information in their memory, if they recognize the brand they have bought before; alternatively they can see what other people (friends, family and/or neighbours) are doing; finally they can search for objective cues like price or contents. The key is the moment the consumer stops looking for more cues and decides. This is called the stopping rule. As seen in optimisation, the stopping rule is when the costs outweigh the benefits. Whereas in bounded rationality the stopping cue can be as simple as a “hunch” (of course the trick is understanding that “hunch”). In the end, “cognition is the art of focusing on the relevant information and deliberately ignoring the rest.”¹⁴

2.2.1 Automatic and Reflective systems

There is no definitive conclusion on how people think; it is still work in progress. However, it is possible to make a distinction between two kinds of thinking, “one that is intuitive and automatic, and another that is reflective and rational.”¹⁵ The first one is known as the Automatic System. This system is rapid and is or feels instinctive, and it does not involve what we usually associate with *thinking*. It is associated with older parts of the brain (i.e. the repertoire of strategies we have stored), the parts we share with other animals. The second is the Reflective System, which is more deliberate and self-conscious. Sometimes it is not easy to distinguish which system is active while thinking. People many times get ideas while in the shower or while biking, but not when they are actively thinking about the idea. In this case, the automatic system would be responsible for these random outbursts. Sometimes people follow their “hunches” which are also reflections from the automatic system, and then try to rationalize them with the reflective system. People that are learning use their reflective system (sports, languages, math), after some-time and repeated exercises, the automatic system starts to kick-in. Therefore, simple actions like turning off lights or unplugging electric appliances can become an effortless habit. Traditional economics suggests that decisions are made with the ‘reflective’ system, people are supposed to think, weigh their alternatives, calculate costs and benefits and then make a decision. While this process might be optimal it is still not accurate. Many times, both the reflective and the automatic system intervene in

¹⁴ *Idem*, p. 21.

¹⁵ Richard H. Thaler and Cass R. Sunstein. **Nudge, Improving Decisions About Health, Wealth and Happiness**, p. 19.

making decisions.¹⁶ The interaction of these two systems is what creates people's heuristics and biases.

2.2.2 Heuristics and biases

Another way behavioural economists explain how people think and make decisions, is by heuristics and biases. Heuristics are simple, general, efficient rules that develop through experiences and are hard-coded via evolution.¹⁷ Heuristics use simple search-stopping rules to find useful cues to make 'fast and frugal' decisions. Therefore, "when we face a complicated decision, our minds make what seems like a good enough choice, given the options at hand."¹⁸ This is known as satisficing, a term coined by Herbert Simon, which is a combination of "satisfy" and "suffice". This is the kind of mental short cut people go through in the supermarket aisle.¹⁹ Heuristics generally lead to good decision outcomes, but they can also lead to irrational and/or erroneous judgements and decisions. Heuristics are associated with biases. These are mental mechanisms that deviate from the laws of probability, hence they are little signs of "irrationality". Hence they have a negative connotation. However it is the interaction of heuristics and biases that can predict how people will react in a situation, where the reflective system might take too long or does not know what to do. Consumers in a grocery store are more likely to use biases and heuristics at the point of purchase than if they are deciding which university to attend.

Erin McDonald, from Iowa State University, points out that heuristics are not well-calibrated for sustainability matters.²⁰ The concerns for the environment are recent and people still have not incorporated sustainability or environmentalism in their automatic systems. Some heuristics may have negative implications for sustainable product purchase decisions. The public's concern for specific environment threats is not aligned with the actual risk posed by these environmental threats. In this case, she illustrates how people misjudge the risk of getting sick by drinking tap water,²¹ so the drink bottled water. By doing this they shift the

¹⁶ *Idem*, p. 19-21

¹⁷ Erin McDonald and Jinjuan She. *Op. cit.*, p. 6

¹⁸ Daniel Goleman, *Op. cit.*, p. 78

¹⁹ *Ibidem*.

²⁰ Erin McDonald and Jinjuan She. *Op. cit.*

²¹ This example, might not be applicable to all countries, in some countries tap water is really not safe. However, in those places there are still alternatives to plastic bottles.

attention away from the real environmental threat: the waste produced from the bottles. “One explanation is the availability bias and heuristic: people assess the likelihood of a given event occurring based on the ease of recollection of similar events.” Environmental disasters such as oil spills, nuclear plant accidents or poisoned drinking water receive a lot of media attention. Therefore, it is easy to recall these environmental disasters. “Thus people assess the resultant threat to the environment as more likely and possibly more severe than less exposed environmental problems.”²² However, eco-labels might not be the right tool for solving large environmental problems such as oil spills or poisoned drinking water. Nonetheless they are well equipped to deal with other long-term problems such as raising awareness about the plastic waste of bottled water, which might not need such immediate attention.

2.2.3 Bounded rationality, behavioural economics and Irrationality

Behavioural economics studies bounded rationality. However, “behavioural economics is often portrayed as a branch of economics that points out to systematic *irrationality* in human populations and in markets in particular. Indeed, many behavioural economists in their writing, especially when discussing their results verbally, use ‘rational’ as a synonym for behaviour that conforms to standard economic theory and irrational as a catch-all label for behaviour that deviates from standard neoclassical assumptions.”²³ Behavioural economics studies the limits of rationality, not irrationality. In neoclassic economics people are rational and are assumed to have infinite self-interest, information processing capabilities and willpower. In behavioural economics, rationality is limited and people have bounded self-interest, bounded information-processing capacity and bounded willpower.²⁴

3. Bounded Self Interest and Pro-environmental Preferences

Pro-environmental preferences are a type of social preferences. It has been observed that people care about the well-being of others (material and immaterial) as well as about their own. People care about utility of others. Therefore, the assumption that people are infinitely self-interested is incorrect. This is what is understood as bounded self-interest. The degree of concern varies from individual to individual, but it is there. Feelings such as spite (feeling

²² Erin McDonald and Jinjuan She. *Op. cit.*, p. 6.

²³ Nathan Berg. **Behavioural Economics**, in *21st Century Economics: A Reference Handbook, Vol. 2*, p. 11.

²⁴ *Idem*, p. 11

happy when others are worse off), altruism (being happy when other people are better off), inequality aversion and preferences for social welfare (happiness when the group is better off) are all forms of bounded self-interest. In essence, it means that people are not indifferent between different payoff allocations for all members in a group, even if their own payoff is unchanged.²⁵ Therefore, if people care about the well-being of others it could well be that people could also develop a preference for the environment. There is evidence suggesting that it is more likely to find environmental concern among individuals with “pro-social” social-value orientations rather than in people with individualistic or competitive orientations.²⁶ Nonetheless, as seen in the previous chapter, people also have image motivations. These motivations will move people to act in certain ways in order to be approved or increase the standing within a group.

3.1 The dilemma of environmental preferences and attitudes.

Caring for the environment is not something that comes “natural” to humans. It is true that if your neighbours are littering or the river that used to flow by your town becomes polluted you will be concerned and be very motivated to do something about it. It is not the same when the problem is half way across the world and it does not really affect you directly, people are not really going to care. It is just not how people work. “Joseph Stalin once said, *One man’s death is a tragedy, but a million deaths is a statistic*. Stalin’s polar opposite, Mother Teresa, expressed the same sentiment when she said, *If I look at the mass, I will never act. If I look at one, I will.*”²⁷ For some reason people are very sensitive to the suffering of one individual, but when it comes to higher numbers they become indifferent.”²⁸ Therefore, if there is an environmental problem such as an oil-spill, it is going to get attention. “This is known as “*The identifiable victim effect*: once we have a face, a picture, and details about a person, we feel for them, and our actions - and money - follow. However, when the information is not individualised, we simply don’t feel as much empathy and, as consequence, fail to act.”²⁹ This effect is due to three psychological factors: closeness (not just physical but a feeling of kinship with the victim); vividness (the problem needs to be vivid, clear or descriptive so the

²⁵ *Idem*, p. 4.

²⁶ Paul C. Stern. **Toward a Coherent Theory of Environmentally Significant Behaviour**. pp. 411-412

²⁷ Dan Ariely, *Op. cit.*, p. 238-239 (1)

²⁸ *Idem* p. 241

²⁹ *Ibidem*

person can relate emotionally);³⁰ and the third is called *drop in the bucket effect*, (it has to do with your faith in your ability to single-handedly and completely help the victims of the tragedy). If the problem is too big, such as climate change, there is only so much a person can individually solve. Consequently, people likely to shut down emotionally to it, as there is no point in worrying. "Saving hypothetical people from potential future disease is too abstract and distant goal for our emotions to take hold and motivate us to open our wallets."³¹ However, if we consider the oil-spill example, with today's technology and information flows, people can identify the problem and relate to it, the images of these disasters move people to act because it targets these three factors. Thanks to the media these events are made very vivid for the spectator, furthermore, by showing images of the victims, the towns and animals, people will feel close to the victims and finally, it is an oil-spill the actions to solve the problem are clear.

According to Ariely, the global warming problem is the toughest kind to get people to care about. "First of all, the effects of climate change are not yet close to those living in the Western world: rising sea levels and pollution may affect people in Bangladesh, but not yet those living in the heartland of America or Europe. Second, the problem is not vivid or even observable - we generally cannot see the CO₂ emissions around us or feel that the temperature is changing. Third, the relatively slow, un-dramatic changes brought by global warming make it hard for us to see or feel the problem. Fourth, any negative outcome will arrive at most at people's doorsteps in the very distant future (or, as climate-change sceptics think, never)."³² Therefore environmental policies should be individualised and separated into smaller more manageable problems that people can feel they make a significant change. In spite of this gloomy outlook, a few percentage of consumers still care to some degree about the environmental issues that surround them.

3.2 Pro-environmental preferences and behaviour

There is not a given definition of pro-environmental preferences or behaviour. Pro-environmental intent is a persons' desire to change the environment. In behavioural sciences, intent would be more accurate than preferences, as environmental preferences

³⁰ *Idem*, p. 243

³¹ *Idem*, p. 251

³² *Idem*, p. 251-252

could be interpreted (in economics at least) as a utility derived from the environment's 'well-being'. Similarly, environmental psychologists refer to environmentalism, to describe the attitudes or actions that are undertaken with pro-environmental intent.³³ For these psychologists, environmentalism is an independent cause of behaviour (it is not pro-social or altruism attitudes). They also highlight the possibility that environmental intent may fail to result in environmental impact. Pro-environmental behaviour (or PEB), on the other hand, can be defined as a behaviour that is undertaken with the intention to change (normally, to benefit) the environment.³⁴ PEB are actions taken to internalize some of the negative externalities of consumption. These actions can be either curtailing actions, by which a person reduces his impact by reducing or eliminating polluting behaviours (biking or walking, instead of driving). It can be political behaviour, which is demonstrated by protesting, voting or boycotting the product/producer. Alternatively it can also be by being a good environmental citizen who supports policies that increase environmental taxes or prices for environmental products. Finally, there is efficiency behaviour, by which a person substitutes the product with a pro-environmental one.³⁵ Stern classifies this efficiency behaviour simply as consumer behaviour.³⁶

3.2.1 Norms and pro-environmental preferences

Since Roman times, Customary Law was considered as a source of law (when no specific law was available local-customs could be used as a substitute). Customs were composed by two elements: *inveterata consuetudo* and *opinio iuris seu necessitatis* (roughly translated as old habits that are believed to be Law or that should be Law). In this sense, what Romans (and legal systems with Roman background) considered Customary Law is very similar to what social scientists consider *social norms*. In simple terms, a "social norm is an obligation backed by social sanction." And an "obligation is a statement about what people ought to do."³⁷ In a more formal approach, Bicchieri suggests that a "system of norms specifies what

³³ Paul C. Stern. *Op. cit.* pp. 411

³⁴ Impact oriented environmentally significant behaviour can be reasonably defined as the extent to which it changes the availability of materials or energy from the environment or alters the structure and dynamics of ecosystems or the biosphere itself. Paul Stern *Op. cit.*, p. 408.

³⁵ Erin McDonald and Jinjuan She. *Op. cit.*, p. 2.

³⁶ Paul C. Stern. *Op. cit.*, p. 411.

³⁷ Robert Cooter, **Three Effects of Social Norms on Law: Expression, Deterrence, and Internalisation**, p.6

is acceptable and what is not in a society or group.”³⁸ She further explains that norms are based on conditional preferences and two types of expectations: empirical and normative. “By empirical expectations I mean the belief that enough other people in a similar situation obey the norm (or have done so in the past). By normative expectations I mean the belief that enough other people think we ought to obey the norm in that situation, and may even be willing to sanction us in a positive or negative way depending on our choice to obey or contravene the norm.”³⁹ Therefore it is important to notice that the notion of ‘norm’ will always be accompanied by a sanction. However, because social norms do not follow a definite or formal process to be created (as opposed to a Law) people might tend to disagree about its existence.⁴⁰ Furthermore, this means that many times social norms are not clear or they are in conflict with other social norms. In these scenarios, people will conform to the norm in a manner that better suits them (according to their preferences). Social norms influence the perception of what is good, fair, immoral, antisocial and other social values. Moreover, social norms alter the costs of behaviour. This is because complying with an obligation is costly, it might be unpleasant, risky or require effort. Hence, a person who has internalised a norm is one who is willing to sacrifice something to obey it.⁴¹ Since a person is introduced to society, the repeated and long-term interactions with others lead to learning and internalisation of the norms of the group.⁴² “Internalisation is conceived as the process by which people develop a psychological need or motive to conform to a set of shared norms.” Internal norms will place a weight on our actions (moral cost or benefit of actions). Therefore norm-abiding behaviour will be perceived as good or appropriate (a benefit), and people will typically feel guilt or shame at the prospect of behaving in a deviant way (a cost).⁴³

Preferences are normally influenced and shaped by social expectations and individual’s psychological dispositions. The difference between a preference and an internal norm is that

³⁸ Cristina Bicchieri, **Social Norms**, The Stanford Encyclopedia of Philosophy, 2011. Open access at: <http://plato.stanford.edu/entries/social-norms/>

³⁹ Cristina Bicchieri, **Norms, Preferences and Conditional Behavior**, p. 3

⁴⁰ Robert Cooter, *Op. cit.*, p.6

⁴¹ *Idem*, p.7

⁴² Cristina Bicchieri, **Social Norms**, The Stanford Encyclopedia of Philosophy, 2011. Open access at: <http://plato.stanford.edu/entries/social-norms/>

⁴³ *Ibidem*

preferences are conditional to different factors, which makes them flexible. For example, a person has an environmental preference and wants to buy an eco-labelled good. If there is no competing or no stronger preference, then the person is likely to buy the eco-labelled good. However, if the person has reasonable belief that other people are not buying eco-labelled goods because they are a new way of corporate manipulation, he will doubt his preference, and other preferences will start to compete. In the end the person could follow his preference or follow a different preference. If such person had environmentalism as an internal norm, he would have not hesitated in buying the eco-labelled good, regardless of other people's behaviour or rumours.

The global sustainability agenda would be much easier to implement if environmentalism were a social norm. The environmental impact of an individual's behaviour is very small. "Individual behaviours have environmentally significant impact only in the aggregate, when many people independently do the same things."⁴⁴ Hence if environmentalism were a social norm, more people would behave in a pro-environmental manner. Then the question that would be raised would be, why not create a social norm to achieve pro-environmental behaviour? The creation process of a social norm is not definite, which makes it rather unreliable if certain goal needs to be met in a short period of time (such case a law might be better option). Nonetheless, governments and other parties can accelerate the social-norm assimilation and internalisation process to have a more permanent behaviour change. For example, in big cities such as Mexico City, access to clean water can be a serious issue. Therefore, since several years ago the government has had 'intense' water-scarcity awareness campaigns. People have understood that wasting water is bad not only for the environment but also for the city. Today, neighbours will point out and correct when a person is misusing or wasting water. Furthermore, many people feel guilty if they waste water in small tasks like washing the car or brushing teeth. This has been possible due to awareness, information and first-hand experience of population (for example, water shortages over periods of time). They believe the environmental threat is real, and that its consequences affect their well-being. Therefore, they adapt their behaviour. Again the key is breaking down the environmental problems into smaller more limited issues and start by creating awareness in small groups, preferably those that are closer to that problem.

⁴⁴ Paul C. Stern. *Op. cit.*, p. 410.

3.2.2 Other people's behaviour and Pro-environmental behaviour.

Robert Cialdini, claims that “If we're uncertain about what we should do in a situation, one shortcut way of knowing what's probably the right thing for us to do here is to look at what our peers are doing.”⁴⁵ The behaviour of others is not only a fundamental guidance tool, it is also an important motivator. It is simple to think that if others are doing it, it must be right. Experimental evidence suggests that other people's behaviour is a crucial factor in pro-environmental behaviour. For example, in hotels where they want to implement a re-use towel system, the most significant motivator were descriptive norms “the majority of guests reuse their towels” rather than general environmental or conservation appeals.⁴⁶ Similarly, a recent experiment showed that making individual consumption information “public” was the best motivator to induce reduction. This experiment was set in the residence halls of the University of California Los Angeles, which was convenient because students in the residence halls do not pay for electricity. Hence they had to rely alternative motivators to prices. The purpose was to see which strategy would make students reduce their individual electricity consumption. Over a nine-month period students were given real-time feedback on their consumption as well as social norms (what is expected of them and why) over room's electricity usage. A subset of students also had their energy usage made public in the form of posters that described their room as being an above/below average energy conserver. The results showed that the private feedback alone did not have a significant impact on conservation. Whereas the students who had their information made public (in addition to private) had reductions of up-to 20%, especially from the high users.⁴⁷ In this sense, shaming taps into a person's reputation. This in turn sanctions the individual for not complying with the social norms. Not only will a person ‘feel bad’ but also it would additionally make the other members of the group know he is a non-complier, which will have a ‘stigmatizing’ effect.⁴⁸ Individuals have reputation-motivations (as seen in the previous Chapter) which are social by nature. People may conform to the pro-environmental

⁴⁵ Stephen J. Dubner, **Riding the Herd Mentality**: a New Freakonomics Podcast, 21-6-2012, 9:01 a.m., at <http://www.freakonomics.com/2012/06/21/riding-the-herd-mentality-a-new-freakonomics-radio-podcast/>

⁴⁶ Noah J. Goldstein, *et al.* **A room with a Viewpoint: Using Social Norms to Motivate Environmental Conservation in Hotels.**

⁴⁷ Magali Delmas and Neil Lessem. **Saving Power to Conserve Your Reputation? The effectiveness of private versus public information**, p 4.

⁴⁸ See Section 3.3.2

behaviour, not because of the sanction but because other people are doing it (or it is expected that they do it). In reference to social norms, for some people the presence of sanctions is not enough to motivate actions; however, the belief that a “significant amount” of other people are acting, is. Therefore as long as the belief that other people are acting the person will act, the moment the belief ceases, so will the behaviour.⁴⁹

3.3 Altruism and environmentalism

Altruistic behaviour has also been used to explain environmentalism. This approach, “presumes that because environmental quality is a public good, altruistic motives are a necessary for an individual to contribute to it in a significant way.” Thus, like altruistic behaviour, PEB occurs in response to personal moral norms. People with environmental preferences will react when the individual believes that certain environmental problems pose threats to others and that their actions could avoid the consequences.⁵⁰ In this case the value is in other’s well-being, therefore it would make sense if the person bought eco-labelled coffee that benefits people in another part of the world.

Even though pro-environmental attitudes do not imply an altruistic preference as such “researchers have found a relationship between willingness to pay for sustainability and altruism”.⁵¹ Altruism, as seen previously, implies a ‘sacrifice’. Therefore, if environmentalism is regarded as a type of altruism it would bring the idea of sacrifice. PEB would have “the implicit message that living with less will result in an impoverished and joyless future.”⁵² This idea hinders with the purpose of eco-labels, as eco-labels depend on consumption. Eco-labelled goods as other sustainable products have to be seen to serve both a self-interested and an altruistic purpose. In western society, there is a perceived link, between higher levels of consumption and greater happiness. “A sustainable product reduces consumption: people may believe this implies a reduction in product performance.”⁵³ In the 1990s when eco-labels spurred eco-friendly or green products were in-fact inferior in quality and higher in prices. Therefore, it is imperative that if eco-labelled goods are to compete with other goods in the

⁴⁹ Cristina Bicchieri, **Norms, Preferences and Conditional Behavior**, p. 298.

⁵⁰ Paul C. Stern. *Op. cit.*, p. 412.

⁵¹ Erin McDonald and Jinjuan *Op. cit.*, p. 8

⁵² Stephen Kaplan, **Human Nature and Environmentally Responsible Behaviour**, p. 495.

⁵³ Erin McDonald and Jinjuan She. *Op. cit.*, p. 7

market they have to be regarded as a joint product. The eco-labelled goods offers something more not something less. Eco-labels should not be linked with a sacrifice, as that deters consumption.

3.4 From pro-environmental intent to Pro-environmental Behaviour

“One may think that positive feelings for the environment would be an indicator of likelihood to perform PEB; however, environmental attitude alone is not a good predictor of PEB.”⁵⁴ It has been suggested that environmental concerns and PEB are only weakly correlated. To increase the purchase of eco-labels it is suggested that incentives should be short-term and small in size. Rewards for PEB have to be just sufficient to initiate a long-term behavioural change. Bigger and more powerful rewards cause a person to concentrate on the reward, not on the behaviour.⁵⁵ This is what happens with extrinsic motivations, the motivation is the external reward not the behaviour. On the other hand, if a person can accredit the behaviour as his own free will, the motivation can change from external to internal, thus reducing the costs of the action. This is possible with small repetitive incentives that would be immediate to the consumption (or the consumption it-self) so consumers can identify the link. This transition is important for achieving repeat sustainable product purchase and effective use.⁵⁶ From the impure public-good model for eco-labelled goods it could be inferred that the private benefit of the good could be the small, immediate reward. For example, the Honda Insight (which is also an hybrid) is fitted with a smaller gas tank. It is very fuel efficient (high MPG). However because of the small tank it is likely it would need to be filled as much as the normal cars, with the difference that the owner will pay much less, as the car only has capacity for 10 gallons. Every time, the owner goes to fill-up the tank, he will be rewarded for his environmental action.⁵⁷ This is a small, repetitive reward which is likely to alter behaviour in the long-run

4. Bounded information-processing capacities and eco-labels

⁵⁴ *Idem*, p. 3

⁵⁵ *Idem*, p. 11.

⁵⁶ *Idem*, p. 10.

⁵⁷ *Ibidem*.

Bounded information-processing capacity is another large area of behavioural economics. People have limited attention, limited memory, limited perception capacity and distorted beliefs, among other things. Additionally, decision and inferences processes do not follow many principles of logic and probability theory. Moreover, information is likely to be incomplete, uncertain and asymmetric. These are external factors that individuals have to face, while expected to make “optimal” decisions. Informational failures are a characteristic of the environmental arena. Therefore informational instruments and policies such as eco-labels and environmental reporting are designed to provide more accurate information to the individuals, so that their decisions can be better based. However, “the average American citizen has limited understanding of environmental problems and risks. They also have limited understanding of the tools engineers use to try to explain relevant information, including eco-labels and Life-Cycle Analysis.”⁵⁸ When it comes to environmental decisions, even sensible and reasonable people can feel overwhelmed by their complexity. Professor Stephen Kaplan “asserts that, because of the way humans evolved, we gravitate towards situations where our information processing capabilities are useful and avoid situations in which they are not useful. Too much environmental information led to anxiety and confusion.”⁵⁹ In other words if the decision is too complicated, the person might avoid such decision altogether. People might shift responsibility to other people or to the community (drop in the bucket effect), or they could simplify the decision by restructuring the problem. However, for the producer of eco-labelled goods and other sustainable products, restructuring is not desirable as it may remove the environmental concerns from the decision.

Barry Schwartz’s warns that giving consumers more product choices actually lowers their purchase satisfaction. Schwartz reasons that having too many options makes people fear they missing out, which causes anxiety, analysis paralysis and regret. On the one hand, consumers might not see this as a problem. When surveyed consumers claim that they have “just the right amount of information” and “just the right amount of choice.” Yet when their actions are analysed their actions suggest otherwise. For example, consumers spend far longer researching products today than they did in the past. Even after making the purchase, one fifth of consumers continue to research the product to check if they made the right

⁵⁸ *Idem*, p. 5

⁵⁹ *Ibidem*

choice. Forty percent, meanwhile, admit to feeling anxious about the purchase decision they made. From this information Freeman, et al, interpret that consumers are actually overwhelmed, unable to effectively process the flood of product information and choices. The problem is cognitive overload -the result of excess demands on our cognitive powers that lead to poor decision-making.⁶⁰

4.1 Information and consumption.

The standard model of consumer consumption is called *the purchase funnel*. It was invented by St. Elmo Lewis in 1898. He proposed that consumers go from awareness to interest to desire to action, gradually reducing the number of options or brands they consider along the way.⁶¹ While this model has been the standard across industries and over time, it is now fading. Today's consumers are flooded by information, and have to adapt their shopping habits to cope with the noise. "A recent survey shows that the funnel is no longer the most common purchase path. In fact, only one third of consumers now use the funnel approach when they shop. The decline, according to research is cognitive overload."⁶² Consumers have responded, according to the survey,⁶³ by anxiously embarking on an open-end purchase path, where they add and drop brands, continuously looking for alternatives. Another, response was by abandoning the search altogether and simply zero in on a single brand. This last response is called the tunnel. "The tunnel is not an expression of brand loyalty, rather it was a response to overload, a way to simplify what's become a frustratingly complicated process."⁶⁴ In other words, much of what is known in marketing circles as "brand loyalty" is really just a peculiarity of cognitive inertia. Consumers have simplified the decision process to a point where they are making poor decisions (randomly picking up brands) or not making any decision at all (selecting a single-brand). This is bad news for all brands, including eco-labels: consumers are not looking for alternatives, they are not paying attention to the information.

⁶⁰ Karen Freeman, *et al.* **If Customers ask for More Choice, Don't listen.** *Harvard Business Review, Blogs.* 9:20 am Monday May 14, 2012.

⁶¹ Karen Freeman, *et al.* **What do Consumers Really want? Simplicity.** *Harvard Business Review, Blogs.* 11:36 am Tuesday May 1, 2012.

⁶² *Ibidem.*

⁶³ Survey conducted by the Corporate Executive Board, Harvard Business School, over 3 month period, to more than 7,000 consumers in the u.S., UK and Australia.

⁶⁴ Karen Freeman, *et al.*, *Op. cit.*

It has been empirically tested, that excess information impairs decision-making. The classic response to overload is forgoing the purchase altogether. This is supported by experimental evidence, being the most notorious by Sheen Iyengar. She set out pots of jam on supermarket tables in groups of either six or twenty-four. The results were that the people who were given six choices bought ten to one times more jam than those who were presented with twenty-four choices. Therefore it has been concluded and supported that “an excess of input leads to angst, indecision, regret and ultimately lowered satisfaction with both the purchase process and the products themselves.”⁶⁵ Therefore, maybe more information is not necessarily better for the consumer. Consumers need simple, clear information so that they can use it to make a decision. Once consumers pay attention to the information, their purchasing experience becomes satisfactory. Therefore, it might be important to know whether eco-labels simplify consumers’ decisions or they complicate it even more.

4.1.1 Filling the informational gaps

The available environmental information is uncertain, incomplete, sometimes asymmetric (someone has more and better information) and potentially incorrect (either involuntarily or on purpose). However, when people do not have direct personal knowledge they make inferences such as *where there is smoke, there is fire*.⁶⁶ When people do not have first hand evidence to support a claim, they might end up believing such claim when other people also believe it. This is problematic because it happens with both true and untrue claims. People will accept and support claims depending on their prior convictions, or because it confirms people’s own fears or hopes.⁶⁷ With uncertain information, or if the accuracy of the information is uncertain people will fill the gaps with their own inferences and opinions. In addition, people might also interpret the information when the information is not understood properly. Therefore a simple opinion, could be regarded by others as a truthful claim and they might spread this information as if it were true (because they believed it). The spreading of positive and truthful information, such as positive reputation for an eco-label or sustainable efforts of a big corporation might be very beneficial. The problem is when the

⁶⁵ Patrick Spenner and Karen Freeman, **To Keep Your Customers, Keep it Simple**. Harvard Business Review, May 2012.

⁶⁶ Cass R. Sunstein. **On rumours: How falsehoods spread, why we believe them, what can be done**, p. 5.

⁶⁷ *Idem.*, p. 6.

information circulating is not positive, it is inaccurate or false, because this information makes individuals lose faith in the eco-label or brand and it might hinder overall pro-environmental behaviour.

4.1.2 How information spreads

According to Cass Sunstein, rumours spread through two different but overlapping processes: social cascades and group polarisation. “Cascades occur because each of us tends to rely on what other people think and do. If most of the people we know believe that Nike uses children to sow the footballs because their small hands are more precise, we tend to believe it too. If a person lacks information, he will accept the views of others.⁶⁸ “A cascade occurs when a group of early movers, sometimes called bellwethers, say or do something and other people follow their signal.” It only takes a few people to spread a rumour. Propagators might be spreading information on purpose or with a specific intention or they could just do it inadvertently, in good faith. In the end, a person with pro-social preferences (altruistic even) might feel the responsibility of communicating the information he believes, so others can take it into account. Rumours such as the Nike one will tend to spread faster because they are likely to trigger emotions such as fear and disgust. And if a person believes this information about Nike it will affect its purchasing decisions. In a sense, bad news *does* travel fast. Information that triggers strong negative feelings will spread faster than positive information. In addition, when like-minded people get together, they will end-up taking an extreme view from what they originally had. This is called group polarisation. Groups will tend to think alike, but when the information is incomplete, they will aggregate other people’s opinions and start filling in the gaps. Therefore the claim they originally believed will be reinforced (regardless if the information is true or not).⁶⁹

4.1.3 Assimilation of information

While today people are faced with an informational overload, they are very capable of discerning information and forming their opinions and beliefs. Information assimilation and processing is subjective. People do not process information in a neutral way. This is called biased assimilation.⁷⁰ The simple idea is that people process information in a way that fits

⁶⁸ *Idem*, p.7-8

⁶⁹ *Ibidem*

⁷⁰ *Idem*, p. 10

their own preferences.⁷¹ Whether people believe certain information depends on what they thought before they had access to it. “In this sense our beliefs are motivated. Accepting certain propositions makes us feel good or better, and rejecting them would make us feel bad or even miserable.”⁷² On the other hand accepting a claim that contradicts our beliefs would cause a sense of unrest, which is known as cognitive dissonance. A person’s previous knowledge and predilections will influence the processing and acceptance of new information.⁷³ Therefore if a person is aware of fishing techniques or even is aware of the problems with dolphins and tuna, when he sees that there is an eco-label that tackles that problem, he will happily accept the eco-label, as it is in line with what he previously knew.

Another important factor is what the people surrounding the individual believe. Once a certain number of people believe a claim, others will believe it too. Unless they have stronger information sources that proves the claim is wrong. People are affected by the visible choices of others. This was tested in a sociological study in which an artificial music market was created. The study had over 14,000 participants. A list of unknown songs was created, and the control group was able to listen to the songs, rate and download the songs they liked the most. The control group made these decisions independently. The others were assigned one of the eight possible worlds. Within these worlds participants could see how many times the songs had been downloaded. The hypothesis was that different music would become popular in different worlds because of the information that was given to the participants. It turned out that people were dramatically influenced by the choices of their predecessors. In every one of the eight worlds, people were far more likely to download songs that had been previously downloaded in significant numbers - and far less likely to download songs that had not been so popular. “When people think that songs are popular, songs actually become popular, at least in the short run.”⁷⁴ This type of cascades could be beneficial for eco-labels and other PEB. If people suddenly make certain environmental behaviours “cool”, “trendy” or “popular” people will follow because they do not want to feel left out. This is closely linked to the last factor for people accepting new information:

⁷¹ *Idem*, p. 45

⁷² *idem*, p. 17

⁷³ *Idem*, p. 19.

⁷⁴ *Idem*, p. 25-26

reputational concerns. People not only want to be part of the group, they like to blend in.⁷⁵ Therefore extreme views or strong commitments could make them stand-out and maybe even isolated from the group (stigmatized).

Another part of biased assimilation is the fact that an individual's emotions can alter their perceptions, which in turn can alter their reactions. The most illuminating studies here demonstrate that the emotion of disgust helps to ensure that rumours spread. New information is selected and retained in the social environment in part based on their ability to tap emotions that are common across individuals.⁷⁶ For example when information is given in a way that produce strong emotions -disgust, anger, outrage- people are far more likely to believe. For example, that is why Al Gore's movie *an inconvenient truth* had so many images of "likeable" (polar bears) animals suffering because of climate change. Emotional selection helps to explain why some information is accepted and other discarded (not because it is wrong, simply it does not receive attention). However, many times the information that survives emotional selection may not always be the most correct one.

4.1.4 Framing the information

How information is presented to individuals can have a great influence on how he assimilates such information. How information may influence a persons' behaviour depends on how such information is presented or 'framed'. If people thought in mathematical logic, the order of the factors would not alter the outcome. $A + B + C = D$ is the same as $B + C + A = D$. However, it is not accurate. It is not the same to say that "Molly fell down the stairs and died" than to say "Molly died and fell down the stairs". The content of the information does matter in how people assimilate it. Precisely because people have biased assimilation it is crucial to understand how information interacts with emotions and limitations so people can make accurate or better choices.

4.1.4.1 Affect heuristic.

Information can tap into certain emotions. Therefore how information is presented can trigger different emotions and have different impact on the individual. It is not new that

⁷⁵ People believe that others pay close attention to what they do, this is called the spot-light effect. In reality, much less people pay attention to the individual, than what the individual thinks. That is why people like to conform to the social-norms and behaviours. Being the spot-light (unintentionally) can be awkward, because of this non-conformity to the group. (Thaler and Sunstein, *Op. cit.*, p. 61 -62)

⁷⁶ Cass R. Sunstein. *Op. cit.*, p.58

different emotions can influence people's behaviour. However, the affect heuristic uses the affective response as a cue to take action. In people's minds risk and benefits are two different concepts. When a person makes a decision that will have a high reward (benefit) people do not associate it with high risk. This means they might be negatively correlated. This happens because of the person's feelings that intervene in the judgement of a hazard. Therefore if the person likes (has a positive feeling about it) an activity, it will not be regarded as risky; while if said activity is disliked (it is associated with a negative feeling), it is likely to be associated with high risks.⁷⁷ Therefore, when a person has to evaluate the likelihood of a decision outcome, if the outcome is described or framed in a positive way (focusing on the benefits) the person will tend to think of it as low risk. Therefore, framing of the outcome of the decision is crucial. In the sustainability arena information is normally framed negatively. They focus how products and consumption degrade the environment, which leads to people to see all the risks. This will deter consumption, as people do not see a benefit from the activity. Such doomsday approaches to environmental problems will lead to a *drop in the bucket effect*.

4.1.4.2 Environmental Information and Statistical Illiteracy

Numeracy is the ability people have to reason and apply numerical concepts. It is expected that people know how to count, add, subtract, multiply and divide. It is a basic ability to survive in the modern world. However, numeracy might not be enough. H.G. Wells predicted statistical thinking would be just as important for modern democratic societies as counting or reading and writing. Today most of the information presented to the people (by governments, media, corporations) is normally in statistical (proportions, probabilities, percentages and other ratio expressions) terms. Statistical reasoning is the ability to understand information about risks and uncertainties. By understanding is meant the ability to draw accurate conclusions and interpretations of the information. Hence, risk literacy, is the ability to accurately interpret and act on information about risk. All people have the potential to develop these abilities; the problem is that not many people are trained to do so. It is different than illiteracy in that it is not a matter of the general uneducated people, statistical and risk illiteracy happens at all educational levels. People have an emotional need for certainty when none exists. When people believe something is certain even if it is not, it is

⁷⁷ Melissa L. Finucane, *et al.* **The affect heuristic in judgements of risks and benefits**, p. 1-2.

called the “illusion of certainty”. The problem with this illusion is that it oversimplifies causes and consequences, and leaves no room for considering alternative possibilities.⁷⁸ This can all be solved by framing information in a way that is ‘user friendly’.

One of the most representative examples of the perils of statistical and risk illiteracy was the 1995 Contraceptive Pill Scare. “In October 1995, the U.K. Committee on Safety of Medicines issued a warning that third-generation oral contraceptive pills increased the risk of potentially life-threatening blood-clots in the legs and lungs twofold- that is, by 100%.”⁷⁹ The information was passed on to general practitioners and other healthcare providers. However it was also presented as an emergency announcement to the media. The news evidently caused great anxiety and many distressed women stopped taking the pill. The average woman thought 100% is the same as certain, therefore ‘if I take the pill I will get blood clots’. The studies on which the warning was based on showed that for every 7000 women on the pill, about 1 presented thrombosis. With women who took the third generation pill, this number increased to 2 (one more). “Therefore the absolute risk increase was 1 in 7000, whereas the relative increase was indeed 100%. Absolute risks are typically small numbers while the corresponding relative changes tend to look big.”⁸⁰ The toll of this pill scare led to an estimated 13,000 additional abortions in the following year in England and Wales. Evidently, as women lost faith in the pill, their sales fell sharply. And for every additional abortion, there was also an extra birth. The increase of both abortions and pregnancies was in teenage girls. The cost of this scare has been estimated in about 46 million pounds. This was all due to the fact that the average citizen does not know the difference between a relative increase (100% higher) and an absolute increase (1 in 7,000).

This is relevant in the environmental arena because much of the information that is handled is uncertain. This uncertainty is two fold. First, regarding the information about the environmental threats. The problem is that environmental problems are hard to predict. Therefore, whether climate change will be a problem in 10 years or a 100 is just an estimation. It does not mean that scientists know nothing about it. It means that it is impossible to foresee with precision what is going to happen. The second source of

⁷⁸ Paul Bolton, **Uncertainty and Risk. Statistical Literacy Guide**, p. 3.

⁷⁹ Gerd Gigerenzer, *et al.* **Helping Doctors and Patients Make Sense of Health Statistics**, p. 54.

⁸⁰ *Ibidem.*

uncertainty, is that many environmental programmes and policies (both private and public) have uncertain effects. In this sense there is no proof that can assure that eco-labelling decreases environmental impact. If there were data that supported the effectiveness of eco-labels, it would probably in relative terms. The environmental information needs to be framed in such a way that the data is understood properly. Using absolute terms when possible, and aiming to create a sense of certainty and predictability. Consumers will feel comfort in knowing that their actions will have an impact on the environment. Because they know what are the risks of not doing anything. Of course, some might suggest that it is manipulating information, however, framing and manipulating are not the same. In framing, the information is just set so it can be assimilated correctly. Manipulating, on the other hand, is aimed at influencing the assimilation.

4.2 Cognitive Dissonance and Guilt to change behaviour.

Whenever there is an inconsistency between attitudes (preferences, beliefs or norms) it may result in an uncomfortable psychological state, which is known as cognitive dissonance. The individual will be motivated to resolve such state. In theory, cognitive dissonance can be relieved by (i) changing the behaviour so it becomes consistent with his attitudes; (ii) changing his attitudes; or (iii) change the perception of the action. This last option is achieved by rationalising the dissonant act by taking into account new information that will make the behaviour more compatible.⁸¹ However, this can also lead to people ignoring information, to avoid cognitive dissonance altogether. For example, Frank (2006) shows with a simple model that people can increase their net utility by ignoring information about process attributes.⁸² In this case, the 'bliss of ignorance' state might be preferred because, it is in-fact a bliss. For example, once consumers were aware that tuna fishing killed dolphins, or that their favourite chocolate-bar kills orangutans, regardless of their final decision, the utility they receive through the consumption is necessarily less than when they remain ignorant. If they buy the eco-labelled chocolate, because of their pro-environmental attitudes, they will feel bad for the tuna or orangutans. On the other hand, if they don't buy the normal version, they will also feel bad because they did not do anything for the tuna or orangutans. A consumer can be better off by ignoring information to avoid a cognitive

⁸¹ Antoine Beretti, *et al.* **How cognitive biases can affect the performance of Eco-labeling Schemes**, p. 6.

⁸² *Ibidem.*

dissonance state.⁸³ In this sense, eco-labels can be used to induce cognitive-dissonance and induce pro-environmental behaviour. People would buy eco-labelled goods to reduce the cognitive dissonance or avoid it. Eco-labels remind them of the environmental problems, and for a person with environmental preferences the moral cost of not buying such good will be too high. However, inducing cognitive-dissonance can back-fire as people seek out and believe information that they find pleasant to learn, and avoid and dismiss information that they find disturbing.

4.2.1 The power of guilt

Guilt is a powerful feeling. Its purpose can be both as a self-regulatory emotion, but it can also serve as a motivator to correct behaviour. For Freud guilt functioned to keep in line with moral standards and punish impulsive transgressions. Therefore if a person goes against his internal norms he will feel guilty, and be motivated not to transgress them again. On a social level, guilt is a negative affective experience evoked when one's behaviour falls short of societal standards, and motivates reparatory behaviour.⁸⁴ These two purposes make guilt a complex and dynamic feeling, because it triggers different behaviours. Normally, feelings have one purpose or effect. Happiness, for instance, motivates people to approach others while sadness causes people to retract. Guilt motivates withdraw (due to the negative affective experience) and then at a second stage, approach. This second stage is what induces behaviour. Cognitive dissonance and guilt are very similar, and some even use them as synonyms, and they are even used to explain one-another. However, cognitive-dissonance can be triggered by transgression of preferences, beliefs or social norms. For example, littering for someone with environmental preferences, can cause a negative feeling, but if the person is an environmentalist, he would not litter and if he did, he would repair his wrong-doing. In guilt, the action that triggers guilt can be identified as it goes against the person's internal norms. Therefore, guilt is a stronger feeling that could change behaviour.

4.2.2 Offsetting eco-guilt

⁸³ *Idem*, p. 7

⁸⁴ David M. Amodio, *et al.* **A Dynamic Model of Guilt, Implications for Motivation and Self-Regulation in the Context of Prejudice**, p 524.

Firms could (and probably do) encourage people to relieve guilt through the purchase of a given eco-labelled good. Eco-labels can induce a state of cognitive dissonance by reminding the consumer at the point of purchase that certain products have negative effects on the environment, and that there are products that make it better. Therefore every time a consumer sees the 'dolphin-safe' label, he is reminded that tuna fishing kills dolphins. Michael Kotchen, analyses off-setting eco-guilt by purchasing carbon off-sets. He suggests that carbon offsets would be like indulgences in the Middle Ages. Christians would buy indulgences, to secure their place in heaven, but kept on acting normally (sinning like always). This means that if people were allowed to buy their way out of eco-guilt (knowing that they have to reduce emissions but don't do anything about it) it may lead people to pollute even more.⁸⁵ He suggests that guilt alleviation is not necessarily a bad thing. Mathew Kotchen is one of the proponents of considering eco-labelled goods as impure public-goods. Therefore guilt alleviation could be the "private benefit" of such impure public good. In general, people that will buy eco-labelled goods are those people that care about the environment. Thus, it is likely they are already polluting less. Therefore if they buy eco-labelled goods and carbon offsets, then the reduction will be real and there will really be a benefit in the environment. However, there could also be a 'rebound effect', because they know they are buying eco-labelled goods and carbon offsets, they lower their guard on other behaviours. Offsetting via eco-labels is much easier than restraining consumption. People could travel more by plane or use the care more or they can buy a bigger house. Paying to alleviate guilt did lead to worse behaviour in one well-known study of parents of children in day care. Uri Gneezy and Aldo Rustichini experimented with charging parents a fee when they were late picking up their children. The surprising result was that the number of late pickups increased -more than doubling, when parents could pay a fine for being late.⁸⁶ This was because the external motivation (the fine) crowded out the intrinsic motivation (picking up the kids). In a same way, paying to compensate bad environmental behaviour might crowd out the pro-environmental behaviour. A negative consequence of eco-guilt and cognitive dissonance is that people might choose to ignore all the information. In this case, eco-labels would not work. Furthermore if greenwashing were also to be taken into account, the effects are far worse. This is mainly because not only there would be loss of interest,

⁸⁵ Matthew J. Kotchen. **Offsetting green guilt**, p. 26

⁸⁶ *Idem*.

crowding-out and eventually anger (because of the deception if greenwashing is revealed) from the consumers; but also, there would be no positive environmental impact at all. With eco-labels at least there is some pro-environmental behaviour which will benefit the environment, but with greenwash not even that.

5. The Role of Eco-labels in Consumers Decisions.

From a theoretical point of view, how a consumer chooses one product over another must be a very complex process. Therefore it comes with no surprise that marketers strive to find ways of simplifying this process. Eco-labels are expected to simplify this decision process. However here is one of the big dilemmas of eco-labels and consumption. Theoretically, eco-labels should provide to consumers sufficient, standardised and simple environmental information about the product, so consumers can be informed and make better decisions. On the other hand consumers are already facing information over-load, which leads them to stop making optimal decisions because they cannot process all the information. Therefore, eco-labels become one more variable that consumers will have to consider for their decision. It is easy to assume, that as well as other information and other labels, eco-labels will be ignored and consumers will make their purchase decisions guided by other variables. For eco-labels this is not the ideal outcome.

Baba Shiv, a neuro-marketing researcher at Stanford Business School, points out, that consumers have been given information about calories, nutrition, allergens, trans-fats, sodium or what ever they consider relevant. Despite these efforts, sales have not changed on the basis of the information alone. Information alone does not change consumption habits. Label-induced market changes can take months or years, because it takes many shoppers that long to notice the change in the first place, let alone to do anything about it.⁸⁷ Eco-labels need to be noticed before they can create any change. In other words, they need to sell. If consumers see eco-labels as a brand, then they should be treated like a brand in all senses.

5.1 Consumers decision processes

The modern shopping experience for the consumer is a sensory clutter and a cognitive fog that hinders their ability to take notice of little details. They browse around shops and

⁸⁷ Daniel Goleman, *Op. cit.*, p. 76-77.

supermarkets in an automatic state, that can be described as a *shoppers trance*. Purchases are based on prices, packaging and habit. In other words shopping is done by inertia, there is no active decision making. “The moment a customer pauses, exits the shopper’s trance, and pays full attention to some attribute of a product, the mental ground shifts significantly.” Only when a consumer pays full attention he can notice new things.⁸⁸ At that moment, the consumer will start making real decisions. The key is getting noticed.

5.1.1 Classic Consumption Models

According to the *funnel*⁸⁹ once the consumer is aware of the product or brand, the consumer will be interested, and then they will act. There needs to be a trigger that makes the consumer decide to buy. However, even this simple model might not work due to all the cognitive-overload consumers face. Hence it is suggested that consumers are currently using a purchase *tunnel*. This implies that consumers ignore all the options and zero in to one brand. Not because of brand-loyalty but because of an overload. The tunnel scenario will leave consumers dissatisfied because they did not make a decision. Though it might describe what consumers actually face.

Satisficing has also been suggested as process consumers undergo to make a decision. In this model a consumer has several alternatives encountered sequentially. From such alternatives the expectation is adjusted (to what is available) and the individual will choose the one that is above the expectation. Therefore, consumers settle for something that is the best among the available options, even if it does not meet the consumer’s original expectations. Another popular model is Multiple Criteria Decision Making.⁹⁰ This model basically assumes consumers consider the attributes (or criteria) of the product/brand, and assigns them different weights. Eventually, the weights assigned will be added up, and the highest one will be the one the consumer buys. Nonetheless, for most of consumer decisions there is no clear decision matrix. Even following these models, in the end the

⁸⁸ *Idem*, p. 96-97

⁸⁹ As seen in Section 4.1

⁹⁰ In this model consumer has a list of possible alternatives. Each alternative should be described in terms of attributes or criteria, which are assigned (according to preferences, beliefs or even biases). Subsequently, each attribute should be assigned a value or utility. By doing this, the qualitative judgements are transformed in numerical values. Each attribute is then multiplied by its assigned weight. Finally all the weighted values are added and the one with higher number will be the best option.

consumer might end up with a tie between product A and B. These models still do not explain how the consumer determines whether A is better than B or vice versa.

5.1.2 Emotionally charged decisions.

Normally, all products have some good and bad features. People might like the sustainability attribute, but dislike the design or the performance. “In a trade-off decision like that, our emotions settle it. The option that will win or lose is the one associated with the stronger emotion, negative or positive.”⁹¹ In this sense, emotions have a very important role, as they create emotionally loaded thoughts, which can drive consumer decisions.⁹² Moreover, emotions are more likely to out-rule cognition when they are involved in a decision. It is the Automatic response, the ‘gut’ feeling that is likely to direct purchasing decisions.⁹³ Not the reflexive response. This implies that all the information a person has about a brand (or eco-label) as well as personal and social beliefs will influence these emotions. Therefore, it is crucial that eco-labels preserve a good reputation to avoid negative emotions in consumers.

5.1.3 The neuro-science behind brand recognition

This emotional response has already been studied by neuroeconomists. In their experiments, they identified a part of the brain that connects our thoughts with our feelings.⁹⁴ “When a product brand fails to impress or repels us, our brain shows a lessening of activity” in a particular part of the brain. This lowering of activity is a “distinctive neural brain signature seen also when people feel disinterest, boredom or disgust.” Furthermore, if the feeling of disappointment is very large, then other parts of the brain come into play, registering the feelings of fear and aversion (in a very automatic level). “On the other hand, simply seeing the logo of a brand we like creates the opposite pattern, with the key orbitofrontal strip becoming more active in the brain reaction that promotes sales.” In the words of Hilke Plassman, “this boost indicates the ‘neural signal for brand preference. It creates the experience ‘this is the brand I like’.”⁹⁵ With this information it can be speculated that if negative information about a product, such as the tuna-dolphin unfortunate relation, a similar

⁹¹ Daniel Goleman, *Op. cit.*, p. 99-100.

⁹² *Ibidem.*

⁹³ *Idem*, p. 163

⁹⁴ It is a strip in the orbitofrontal cortex.

⁹⁵ Daniel Goleman, *Op. cit.*, p. 165

neural signal of disinterest or disgust would appear.⁹⁶ If negative information triggers strong negative feelings such as disgust, the reaction goes beyond psychological uneasiness, it is an actual neurological reaction. "Getting distasteful information about an item elicits the brains response for disgust."⁹⁷ Furthermore, if there are other products, there could be a contrast effect. If there is a product that causes a negative feeling to the consumer, and he has the option to buy one with a better profile, because of this contrast effect, he will have an even stronger preference for the better one (even if it is slightly better) because the other one seems so bad. The value is shifted because of the contrast.⁹⁸ In this sense, when consumers are sensible to the issues the eco-label targets, placing eco-labelled goods next to normal goods, will increase the consumers value of the eco-label. . However, if consumers do not know the eco-labels or understand them, none of these effects will occur.

5.1.4 Simplification of Information: The Halo Effect

Consumers, when evaluating a product or brand, are very likely to fail to discriminate among its distinct and independent attributes. The result is that individual attributes will be rated in a very similar way.⁹⁹ Consumers will unconsciously cluster all attributes in a small range. This is known as the Halo effect (as seen in Chapter III). "It is important to note that consumers often avoid active processing of product information. These "cognitive misers" eschew the intellectual effort of making attribute-by-attribute evaluations and instead form overall affective impressions."¹⁰⁰ This effect might be unwanted in some fields such as professor evaluations by students (or student evaluations by professors). Students (unknowingly) allow general attributes of a professor (such as accents or image) spill over to his particular attributes such as teaching skills and even his appearance¹⁰¹ Politicians, movie stars and marketers, on the other hand, take advantage of it.

⁹⁶ *Idem*, p. 165-166

⁹⁷ *Idem*, p. 166-167

⁹⁸ *Ibidem*

⁹⁹ Lance Leuthesser, *et al.*, **Brand equity: the halo effect measure**, p. 58.

¹⁰⁰ *Idem*, p. 59

¹⁰¹ This was shown in an experiment documented in: Richard E. Nisbett, and Timothy D. Wilson. **The halo effect: Evidence for unconscious alteration of judgments**. *Journal of Personality and Social Psychology*, Vol 35(4), Apr 1977,

Eco-labels signal that a product is eco-friendly or sustainable. This signal is valuable, because of the effect it has on consumers. Eco-labels create a green-halo to the product that carries it. Therefore the whole product is branded as green. The few pro-environmental qualities spill-over to the other qualities and as a result the whole product is considered green, regardless if it is organic, fairtrade or bio-diversity friendly. Consumers simplify the information as a single cue: greenness. For example, a person can buy an ice-cream that is vegan and organic. Those are the salient attributes of the product. However in the persons mind, that ice-cream is also going to be tastier and healthier as well. This is the effect that eco-labels (and other brands) want to achieve in consumers mind. When a person recalls the eco-label he will see it as sustainable, healthy, above all a good product. Creating a positive feeling for the brand, which might lead to repeat purchasing.

5.2 Simplifying the Decisions

It has been found that ‘decision simplicity’ might be one of the biggest drivers of consumption. Decision simplicity, is understood as the ease with which consumers can gather trustworthy information about a product and confidently and efficiently navigate their purchase options.¹⁰² If a consumer has too many options, with too much information (especially if its contradicting), the consumer will shut it out and decide without taking such information into account. However, if consumers have simple credible cues, they will be able to make better choices. In theory eco-labels have that potential. Nonetheless, there is a concurrence of information on the product package that may complicate the decision process.

5.2.1 Concurring eco-labels

Concurrence of eco-labels in markets, to some degree is expected. Each eco-label has a specific focus with its own set of criteria. Therefore it makes sense that producers can choose which eco-label with their pre-set criteria they want to conform to. In theory, consumers know that eco-labels are synonyms to third-party multi-criteria environmental certification schemes. Hence, they would understand that such labels are reliable signals of sustainability and should be credible. However, there are a variety of labels that compete for the consumer’s attention. This competition can happen both at market and product level.

¹⁰² Karen Freeman, *et al.* **What do Consumers Really want? Simplicity.** *Harvard Business Review, Blogs.* 11:36 am Tuesday May 1, 2012.

IV. Eco-labels and Consumers

On a product's package consumers can find anything from mandatory health and safety labels, to nutrition and allergen labels, to those that indicate recyclability, plus all the environmental claims, declarations and any other voluntary standard the product might comply to. In addition to the product's brand and the information about the products attributes. The average consumer does not distinguish between all these labels. When a consumer looks at the environmental credentials of a product he might encounter several small symbols that even if they look familiar do not have any value. When the consumer is faced with so many symbols, it is unlikely he will be able to interpret the signal of the eco-label.

One of the reasons this happens is because products are destined to go to several markets. If each market has its own eco-labelling schemes, which the product can obtain (due to its environmentally friendly process), the producer might as well seek all the certifications. Consumers in each market will receive the signal, when they identify the eco-label they know. However, this means that a single product will have to have all the eco-labels concurring on the product's package. This may, in the best-case scenario, lead the consumer to think that the product has many credentials therefore it must be good. On the other hand, people will not understand why there are so many symbols and get confused. However, this is also deceiving because more is not necessarily better. In this case, the eco-labels are very likely to have similar (if not identical) criteria. This would be as if a product said it was vegan, vegetarian, as well as dairy and egg free. This type of concurrence is not useful for consumers. It is a waste of resources, in the sense that producers have to spend money in each certification or licensing process. Plus they diminish the value of all labels, as consumers will not understand them and are likely to get confused. If there were a system of eco-label recognition or homogenisation between different markets, much of this futile concurrence will be avoided.

Eco-label competition in a market, however would be desirable. Producers and consumers could decide which eco-label they prefer and "stick" to it.¹⁰³ Ideally, each eco-label would have their own criteria, therefore they would be actually be complements, as they would focus on different aspects. For example, FSC focuses on forests and the MSC on fisheries, while the Rainforest Alliance focuses on agricultural products and Fair Trade focuses on the

¹⁰³ "stickiness" is the customers' likelihood of following through on a purchase, buying the product again, and recommending it

human factor. It is true that in their criteria, they have general elements of sustainability. Still, they are clearly distinct. They are expected to have different results. In this sense, eco-labels really do function as brands, and should be able to be protected as such.

5.2.2 A single environmental score or rating

Many consumers would be happy to buy an eco-friendly product, if they knew which product to buy they would. Nothing would be simpler than a label that read, "this product is environmentally friendly."¹⁰⁴ Consumers would not need to worry about anything. Simple and straightforward information does not need to be interpreted or inferred, no signals would need to be extracted. However, not only does that label not exist, environmental information is not that simple and straight forward (at least not for now). However, what has been considered is giving products a score or rating to indicate their sustainability. In this case, the score or ratings would be derived from a complex logarithm which would incorporate the products environmental impact at different stages, it would attach some weights and process everything into a single score that would indicate aggregate environmental value. This score or rating would be communicated to consumers, and consumers would know how eco-friendly the product really is.

The Carbon Reduction Label indicates on the label the volume of all greenhouse gasses emitted during a products life-cycle. It is expressed in grams, kilograms or tonnes per serving and for simplicity it just uses the CO₂ nomenclature while it refers to all greenhouse gases. Furthermore a company or product could eventually become carbon-neutral (there is a label for it too). The appeal of this label is that it is very simple to understand and it can be used among a variety of products and services. The problem however is that only 600 companies have been certified since 2007 (when it started) and it has been heavily criticised as it does not include other environmental factors such as water or waste management. However, retailers such as Tesco in the UK, have reported that it is too time consuming. Tesco, was on board with the Carbon Reduction Label, since the beginning. However after four years, it decided to stop as it did not gain 'critical mass'. For the label to work properly, the majority of products would have had to be certified so consumers could compare the labels at a level playing field. The process for each product took several months and a lot of

¹⁰⁴ According to the a SustainAbility report on eco-labels 51% of American Consumers wish there were one overarching universal seal. SustainAbility, **See Signed, sealed...delivered ? Behind Certifications and Beyond Labels.**, 2011, p. 9

resources. In the end, for Tesco it was not worth it. Nonetheless, other large corporations are still committed to pursuing carbon labels for their products.¹⁰⁵

Another supermarket (Hannaford, in the US) created a three-star ratings nutrition guide. Products would earn points for vitamins, whole grains, fibre, and the like; they lost points for ingredients like bad fats, sugars and salt. It evaluated 25,500 products based on the food's ingredients lists and their nutrition panels. Many products that the food companies promoted as "healthy choices" in fact received no stars, the worst rating, mainly because they were too high in sugar and salt. "Only 28 percent of items on the store's shelves earned any stars; the rest got no rating at all." In this case customers paid attention. "In the first year the three-star system was deployed, the stores saw marked sales gains for the most nutritious foods, those with three stars, and losses for those with two, one, or none."¹⁰⁶ For example, lean meat cuts with three-stars increased sales in 7%, while ground beef with no stars dropped 5%.¹⁰⁷ These types of numbers say a lot of what type of systems consumers understand.

In both the Carbon Reduction Label and the Nutritional Star-rating system the retailer (the supermarket) was framing the information for the consumers. That allowed consumers to have a better shopping experience. However, by delegating the effort and the costs of certification and rating to retailers will leave producers with no incentive to incur the costs themselves. Retailers that have an interest in selling pro-environmental products should seek suppliers with optimal environmental credentials, such as certification or verification with certain eco-labels to begin with. This is precisely the point Coase made in the *The nature of the firm*. In essence, tasks should be performed by those who are more efficient. If the external agent can do it more efficiently than the firm should allow them to perform the task instead of doing it itself. In the present example while the carbon initiative had good intentions, it might have been worth to consider that maybe the retailers are not the most efficient certifiers. At first glance it might have made sense, as they are they have the largest reputation incentive as well as they are likely to be in a good position to obtain information from producers. However, the costs of certifying were too high and the consequences are that retailers are leaving the programme (like Tesco). Based on Coase, the solution would

¹⁰⁵ <http://www.thegrocer.co.uk/companies/supermarkets/tesco/frustrated-tesco-ditches-eco-labels/225502.article>

¹⁰⁶ Daniel Goleman, *Op. cit.*, p. 123

¹⁰⁷ *Ibidem*

have been simple: outsource certification to the most efficient agent. In simple terms, the retailer could simply buy the pre-certified and eco-labelled goods.

6. Conclusions

The insights that can be drawn from this chapter can be extremely useful for designing an environmental policy as well as for eco-labelling organisations that wish to improve their performance. This concluding section will serve to point out what things can be taken from this chapter as policy recommendations, as well as future research.

6.1 Policy Recommendations

It is true that consumers do not always make the rational choices the regulator expects them to. Occasionally these deviations cause economic or regulatory tools to fail. However in the case of eco-labels, consumer behaviour does not head to an unexpected or undesired outcome. On the contrary, eco-labels are designed to communicate to consumers in simple terms. While the terms are simple they aren't too simple as to undermine the consumers capacities. They aid consumers in providing credible signals in a very noisy environment.

The inefficiency of the environmental information market is not due to consumers decision making, it is due to the nature of the information. Nonetheless, consumers awareness about the existence of eco-labels could be enhanced. This can be done via education, which has been done for some time now. Specifically the consumer should understand the impact of its actions, as an individual and as part of a community, on the environment. Consumers need to be aware of product's life cycles so they can discern what eco-labels or claims are more appropriate from their point of view. In addition to environmental education, consumers need to be media literate. This means that they need to understand that corporations and advertising are not always truthful in their claims. Furthermore, consumers need to know how to spot true eco-labels and other claims from false ones.

To complement the educational efforts of individuals, governments need to aid consumers by reducing the noise in the market. Eco-labels are clear signals that can aid in deterring greenwashing, but as long as there is more greenwashing than true eco-labels in the market, consumers will have a hard time differentiating between them. To achieve a critical mass of consumers that will tip the balance in favour of eco-labelling there are two options. The first option is via choice editing. Not necessarily by the government, but by retailers.

Some supermarkets already specialise in 'sustainable' products. In this scenario, the retailers pre-select the products they put on their shelves so no matter what the consumer chooses it will be sustainable. This chapter did not look deeply into choice editing by intermediaries even though there is a large debate on the matter (in the UK for instance). This work considers these intermediaries as consumers (because they buy from the producers). The motivations these retailers may have are probably more akin to 'corporate social responsibility' as seen in Chapter III. Nonetheless, these 'sustainable' intermediaries create proper environments for a market for environmental or sustainable information. It is appropriate because this type of private choice editing helps to align consumers preferences with the goods that meet them. The consumer's decision will be between different sustainable characteristics, prices and eco-labels (which will act as brands) which is exactly like a normal market. The second complement to education, could be a legal mechanism to accuse false environmental labels or claims, or in other words enforcement. However, the type of enforcement (public or private) that is required is not a matter of this research.

6.2 Future Research

This chapter is built on research from many fields. However, one of the points that would be very useful to develop is regarding neuro-science. It was discussed that through neuro-imaging, scientists have already been able to establish that both the price-quality ratio and brand-recognition have neurological responses. Hence, this field could be extremely useful in other consumer matters. Hilke Plassman even suggested that it is possible that negative or positive environmental information may have a neurological reaction that shapes decisions. Furthermore, it would be extremely interesting, though maybe far-fetched, to attempt to map social and internal norms on a neurological level. However, these topics are not only out of the scope of this work but also out of our field of study.

6.3 Final Remarks

Overall the central message of this chapter is that policies (public or private) and policy instruments such as eco-labels cannot assume that the consumer is rational. Specially if such policy depends on consumer behaviour for it to work. Designing a policy instrument or strategy assuming that consumers are rational, *homo-economicus* type beings will not be recommendable. It is not to say that such strategy will fail, however it might limit the tool's

performance. For example, it has been pointed out that consumers will pay more attention to a problem that they have experienced first hand; hence, an eco-label can adapt its criteria and focus on that specific problem. While this chapter is not meant to be a 'does and don'ts' guideline for designing an eco-label, it does provide several useful insights. It is worth taking these behavioural peculiarities into account because they will allow for eco-labels (or other instruments) to perform better. For example, how the information is framed on the eco-label can make a huge difference on how consumers perceive the information.

From this chapter it can also be inferred that behavioural failures might be contributing to the sub-optimal performance of eco-labelling. Eco-labels provide consumers with accurate, verifiable and simple information, hence they have the potential to crowd out greenwash. However, this has not been the case. Whether this is because the environmental-good market is still too noisy due to too many labels, uncertainty regarding results and other greenwashing. All of which undermine the whole eco-labelling system by making it less credible. Or whether such sub-optimal performance is due to behavioural failures is not clear. It is possible that even when eco-labels provide credible signals consumers are unable to identify them due to the large amount of information they has to process.

This chapter does not suggest that because of the behavioural 'peculiarities' of consumers states should intervene to protect them. Consumers have the capacity to learn and to overcome obstacles and interventions might alter this process. There will an adjustment or learning period after which the market will reach a stable point or equilibrium. If the mistakes are systematic and do not disappear, it might be a sign that some behavioural matter was overseen in the design of the instrument. It does not mean that the State has to intervene. Furthermore, as seen in this chapter education and information play a key role in forming consumer preferences and social norms. Hence, if there were to be any normative prescription derived from this chapter, it would be that consumers should be kept informed and educated in environmental matters.

Up to now this work has been in essence a positive analyses of eco-labels from a market or economic perspective. First, in Chapter II it saw eco-labels role in the market as a whole. Chapter III focused on the supply of eco-labels by focusing on businesses. This Chapter, on the other hand, analysed consumers, as the demand side of the eco-label market. However, to complete the story of eco-labels the focus will shift to a more normative side. Hence, the

IV. Eco-labels and Consumers

following chapters will focus on determining the role of law in eco-labelling. The next chapter will analyse what the current role of law in eco-labelling is. This will aid in answering the underlying questions of this work. As it will determine whether the current role of law is appropriate or if it needs to be modified.

CHAPTER V

Eco-labels and Law

1. Introduction

Ideally, all environmental information would be certified and easily available for consumers by means of a mark or eco-label. It is a way to guarantee that the environmental information on a product is true. In addition, it would level the playing field as all producers would bare similar costs; therefore, it would enhance competition and free-trade. As seen in Chapter II, almost all environmental attributes have a credence nature; thus they require certification for their market to function. Nonetheless, some environmental goods might have search or experience characteristics. These do not need certification to communicate their attributes, since advertising, in theory, covers the function of providing information. This implies that there are two ways of communicating environmental attributes: advertising and certification.

Advertising, will work specifically for those goods with environmental qualities that have a search or experience nature. On the other hand, certification is needed for products with environmental attributes of a credence nature. This means that there is a duality in the market for environmental goods which will have to be treated in different manner as they represent different issues. Some legal systems, such as the Anglo-American or Common-Law system this duality can be observed. Regulations for environmental information take the form of guidelines or voluntary standards for marketers (producers or sellers) that use environmental claims. These are generally issued by the advertising, standards or trade authority. In other words, they are dealt with by public laws and authorities. On the other hand, certification marks, are regulated by trademark laws. In previous chapters it has been detailed that eco-labels are considered certification marks; therefore the laws applicable to certification marks can be applicable to them too. The core of the matter is that certification is a private institution not public like advertising. Hence as long as the good is certified it remains within the private sphere without public intervention. Hence the role of the law and of the government are distinct in each case. However, the current legal structure has a major drawback: there is no process for eliminating false claims. As seen in Chapter II, false and misleading claims are deemed greenwashing. Greenwashing is a problem that weakens the whole environmental information market and stopping it should be a priority. Nonetheless, the regulations that are in place have not prevented or deterred greenwashing.

The chapter will first focus on environmental self-declarations, as how ever they are regulated will indirectly affect eco-labels. The second part of the chapter will deal with the laws applicable to eco-labels. At this point, the EU Eco-label and the US Organic food label will be briefly reviewed as examples of labelling laws. In addition, the different ownership structures of eco-labels will be pointed out as well as their benefits and pitfalls. The fourth part of this chapter will be a brief discussion of eco-labels within the WTO. Finally, the last section will develop the legal aspects of certification marks. Many jurisdictions do not have a specific eco-label regulation, however some do regulate certification marks. Hence it will be argued that certification mark laws could potentially be applicable to eco-labels too.

2. Dealing with Type II eco-labels or environmental self-declarations.

According to the ISO-14021 environmental claims are statements, symbols or graphics on product package labels or in other forms such as product literature, advertising, technical bulletins or other sources of product information regarding the environmental friendliness of the product. These claims are made directly by manufacturers, importers, distributors, retailers or other stakeholders without third-party certification.¹ Due to their characteristics, these environmental claims are considered advertising. While this type of claims is not the specific topic of this analysis, how they are regulated affects the eco-labelling sphere, because they share the same market. Therefore, if there were mistrust in environmental claims, eco-labels will also be mistrusted. In addition, if there were mechanisms to ensure that eco-labels functioned properly and were credible to consumers, they would be undermined if environmental claims were left unattended, and vice-versa.

2.1 Rationale for regulating environmental advertising.

Advertising is not explicitly the topic of this analysis. However, because greenwashing comprises all environmental information that is available to the consumer it is important to know how it is regulated. Furthermore, eco-labels could potentially be considered as environmental advertising too. Hence, a brief review of why and how environmental advertising is dealt with is appropriate.

Advertising is a very powerful instrument as it literally has the capability of modelling (manipulating) consumer preferences and values. Therefore it can be concluded that such

¹ See Chapter I, section 2.2.3 as well as Richard Bonsi, *et al. Op. cit.*

power over consumers should not be left unregulated (controlled, limited or even banned). However, advertising, specifically environmental advertising, is still desirable and beneficial. First of all, as long as environmental advertising is focused on providing information about the environmental attributes, consumers will maximise their utility as they will purchase products with their preferred characteristics. Furthermore, there are benefits from the free-flow of ideas, even if the ideas are from advertising. This is because consumers are exposed to environmental issues and the 'real' costs of their consumption (even if information is contradicting it can gain consumer's interest). In this sense, even if consumers do not buy the product and push producers to alter their production methods into more friendly ones, they will become aware of the issues.² Because of the overall benefits and the need the market has for advertising (lowering information costs), advertisements are normally protected or shielded from ordinary suits or claims, both from consumers and competitors. Different jurisdictions address advertisement in different manners (either by precedent doctrines or statutes), but in general they all agree that it is illegal to deceive consumers into buying a product. Deceptive advertising laws are available in most jurisdictions and their aim is to protect consumers and to limit sellers.

2.2 Environmental claim guides or standards

Environmental claims are normally regulated by standards. Specifically, voluntary standards are regarded as guidelines. This means that it is not mandatory to have environmental claims on the product, but if there is an environmental claim on the product, the standards should be observed. Among the countries that have environmental claim guides are the United States, United Kingdom, New Zealand and Australia.³ These guide-lines have a public nature, as it is the trade or environmental authority who enacts and enforces them. However, some guide-lines, such as the ISO 14021,⁴ have a private nature. The ISO standards are enacted by a non-governmental international organisation,⁵ which is what

² John M. Church. **A market solution to Green Marketing: Some Lessons from the Economics of Information**, p. 269-270.

³ The European Union discussed implementing these type of guides in 2008 when they reviewed their EU eco-label however they decided that enacting environmental claim standards would go against the voluntary nature of the claims. At Jeffrey Minnetti, **Relational Integrity Regulation: Nudging consumers toward products bearing valid environmental marketing claims**, 1363.

⁴ The ISO 14021 refers to environmental self-declarations and symbols, they are known as Type II Eco-labels. This was discussed in Chapter I.

⁵ This point can be discussed further because the ISO, while is not a government body per se, it is comprised by representatives of governmental bodies of different countries. However, it does not have public authority.

makes them private. Nonetheless, other private entities such as industry associations may also have their set of guidelines which are to be followed by the members of such association. This type of standards fall within the definition of self-regulation.⁶ The strength of the Standards varies dependent on whether the standards are enacted and/or enforced internally or if they have the backing of an authority. When the guidelines or standards have the backing of the authority, then it becomes co-regulation rather than mere self-regulation (though in practice the difference is dim). This is the case of the United Kingdom's Advertising Standards Authority (ASA), who has enacted, within its advertising codes, specific standards for environmental claims. These are supposed to be met by the advertising industry and can be sanctioned if not followed. This allows the authority to keep a closer eye on their members.

These guidelines, usually provide key principles marketers should observe when making an environmental claim. Specifically, any environmental claim that is on the product has to be backed or supported with sufficient and adequate documentary evidence. Furthermore, if the science is inconclusive, the claims should not imply that they are facts. Absolute claims or wide-range claims, such as “environmentally-friendly” or “100% recyclable” are considered deceptive *per-se*, hence they should not be used. Finally, many of these guides or standards provide a wide variety of definitions such as “local”, “biodegradable” and “recyclable” which are common terms used in the claims. The definitions in this type of guides are non scientific. They are based on what consumers are likely to understand from the term. They do not define the terms in scientific or technical terms because doing so would risk creating environmental policy rather than advertising policy. In essence they are ‘safe harbours’ for marketers who want certainty on how to make environmental claims.⁷ It is worth mentioning that once there is third-party certification (an eco-label), this type of regulation would no longer be a problem. This issue only concerns self-declarations or industry/supply-chain declarations.

2.3 Environmental Claims and Trademarks

⁶ Self-regulation as well as other forms of regulation will be discussed in depth in the following Chapter, on Law and Economics analysis of eco-labels.

⁷ Jamie A. Grodsky. **Certified Green: The Law and future of environmental labelling**, p. 157

One of the most important tools of advertising is the use of trademarks. As seen in Chapter II trademarks serve to identify and distinguish competitors within a market. Moreover they are the direct link between consumers and producers. Thus if the producer were to change consumer perception of its brand it would do so through its advertising and trademarks. In simple words, if producers want to appear 'green' or 'sustainable' they would communicate it in their trademarks and advertisement. This type of behaviour can be observed in the United States Patent and Trademark Office (USTPO); where in recent years there has been an increase of trademark filings for environmental claims. "By the end of the third quarter of 2011, the USTPO search system database contained over 2000 pending applications and registrations that contain the term 'organic', over 4000 pending applications and registrations that contain the term 'natural' and over 500 pending applications and registrations that contain the term 'sustainable.'"⁸ The terms organic, natural and sustainable were left out of the US's Green Guides (the environmental claims standards mentioned in the previous section) definitions. "Organic" products have their own regulation, however it is independent from a trademark. Trademarks obtain their protection by distinctiveness, not by their characteristics. Therefore, a product can obtain the organic certification, in accordance to the law and additionally ask for trademark protection. The USTPO does not check whether the product is in fact organic or not. At most it can refuse granting the trademark if it is not distinct enough. However, there is not much it can do to prevent greenwash.

The USTPO is not the competent authority to deal with environmental claims. However, in order to prevent potential greenwashing, if an application contains any of these 'green' terms and it is used for food products, cosmetics, cleaning preparations or pharmaceuticals, the USTPO will increase the reviewing standard. Specifically, it seeks to scrutinise these marks under the scope of false and deceptive trademark applications. However, false and deceptive trademarks⁹ are not the same as false and deceptive advertising. The USTPO can refuse granting trademark protection if the mark misdescribes the character, quality, function, composition or use of the goods; if such misdescription misleads prospective purchasers and the misdescription affects the consumer decision to purchase significantly. However,

⁸ Jennifer M. Hetu and Anessa Owen Kramer. **It's not Easy Being Green: use of the Terms 'Organic', "sustainable" and "Natural, in Trademarks and Advertising.**

⁹ A deceptive mark may be comprised of a single deceptive term, a composite mark that includes a deceptive term in addition to non-deceptive wording and or design elements: a term or a portion thereof that alludes to a deceptive quality characteristic, function composition, or use, the phonetic equivalent of a deceptive term, or the foreign equivalent of any of the aforementioned marks.

trademark applicants can overcome deceptiveness refusal by amending the identification of goods or services. Therefore, in the application when the applicant has to indicate what goods or services his mark will cover, instead of using the general term he has to use the 'relevant' term. For example, "in the trademark application for a mark that includes the term organic, specify the application covers 'organic coffee' rather than just 'coffee'."¹⁰ The USPTO will not verify the percentage or if the feature is present in the goods or services. Therefore, a greenwasher can obtain a trademark for organic coffee, when his product is normal coffee. There is not much the USPTO can do to address this problem, unless it is required to ask for verification prior to registration. However, when there is verification from a third-party it stops being a trademark and it is a certification trademark. However, certification trademarks are not for individual use and are an entirely different tool.¹¹ A possible solution to this, is that third parties "question or challenge the use of a mark by another party that includes the term organic, natural or sustainable where the product is not as defined by the particular industry, or is only marginally so."¹² In other words, an industry or even an eco-label organisation could challenge a trademark if the term is already defined and the trademarked product does not adhere. A final concern regarding the use of trademarks, is that environmental claims describe attributes or characteristics, whereas, trademarks protect distinctiveness; therefore, it is not good to have many trademarks that say the same things as they will lose distinctiveness.

3. Laws applicable to Eco-labels

In conveying environmental information certification outperforms advertising. This statement is true when the environmental characteristics have a credence nature (as the majority of them do). As seen in Chapter II certification is crucial for the existence of credence goods markets as they are the only way to provide unobservable information. Thus environmental certification schemes have to be able to ensure that their programmes are credible and rigorous.¹³ To do so, the first challenge is to select a proper ownership and organisational structure. This structure should allow an inclusive process for selecting the criteria and

¹⁰ Jennifer M. Hetu and Anessa Owen Kramer. *Op. cit.*

¹¹ Certification Trade Marks or Certification Marks will be duly analyzed below.

¹² Jennifer M. Hetu and Anessa Owen Kramer. *Op. cit.*

¹³ Jamie A. Grodsky. *Op. cit.*, p. 193-194

guaranteeing independent certification of the products. Furthermore, it should have the capacity to manage and monitor the use of their certification mark. The second challenge is protecting the certification mark. Certification schemes are valuable precisely because of their function in information markets. Consequently, there is an incentive to forge and counterfeit these marks (as seen in Chapter II, false labels are increasing in the market). Certification marks need to be protected because counterfeit and fake eco-labels reduce their credibility.

3.1 Organisational matters of eco-labels.

Certification schemes¹⁴ in their simplest form, would consist of a firm with a product it wants to certify and an independent certifier who evaluates the product. Once the product is approved the certifier can give the firm either a) its mark (the right to use it), or b) a certificate to prove to others that the products/services are certified. In the case of eco-labels, the firms would go to the eco-labelling scheme, only after their product is certified by the independent certifier. At that point the eco-labelling scheme will authorise the firm to use the eco-label. Under this structure, the eco-labelling scheme establishes the criteria, grants the eco-label, monitors its use and sanctions in case of transgression. However, today's large eco-labelling schemes also "accredit the certifiers." In this sense, eco-labelling schemes control all the process: the establishment of standards, the assessment for compliance with the standards, the certification mark (the eco-label), the accreditation of the certifiers and the compliance monitoring. The eco-labelling scheme is the certification body. While it does not necessarily perform the certification assessment it-self, it is in charge of appointing and authorising/accrediting certifiers. The certification body and the certifier are independent entities. It is the eco-labelling schemes' responsibility, via accreditation, to ensure and guarantee that these independent certifiers are competent, independent and impartial.

Eco-labelling schemes or environmental certification schemes own and control the environmental certification mark or eco-label. All certification schemes (not only sustainable ones) need to have certain characteristics (both legal and practical) to work properly. Regardless of the legal form the environmental certification entity takes (profit, non-profit, governmental or hybrid), because it is the owner of the certification mark or the eco-label, it

¹⁴ See Chapter I. Section 3.2 the modern international sustainability certifiers and eco-labels

needs to comply with certain conditions dictated by the law. At a very basic level, the certification scheme needs to be incorporated. It has to be incorporated so that it has the legal capacity to own. In other words it needs to be able to own the certification mark or eco-label. It can take any legal form it deems convenient. However, it has to take into consideration that owners of certification marks or certification trademarks¹⁵ have certain legal limitations.

(a) The first limitation is that the owner of the certification mark is precluded from using the mark for the certified good, or services it covers. Therefore, it has to be independent of manufacturers, retailers and any other organisations involved in the trade of the certified goods and services.¹⁶ This principle is derived from the notion that it would not be in the public interest (or it would not be fair) for a person carrying on a trade in the goods or services certified, to act as a certifier.^{17 18}

(b) The second limitation is that the owner must have ‘authority to certify.’¹⁹ However, not all the legislation explain what ‘authority’ or ‘competence’ to certify means. It can either imply that the scheme is competent to manage the certification mark or/and it can suggest that the scheme is competent due to its technical expertise on the field of certification. New Zealand, for example, calls it ‘competency’, and it refers to the applicant’s competence to certify the goods and services and to operate the certification regime. “Competency is a question of the applicant’s ability to monitor and control the users of the certification mark.”²⁰ The owner should have mechanisms to ensure that the certification mark will be properly used and safeguard the reputation of the mark. It further defines internal and external competence. Internal competency refers to the ability to control the use of the mark and that is has the skills and resources to ensure certification is authoritative. External competency, refers to “the confidence of the wider

¹⁵ In Australia and New Zealand they are known as certification trademarks

¹⁶ Jamie A. Grodsky. *Op. cit.*, p. 193

¹⁷ Jeffrey Belson, *Certification Marks*, p. 32.

¹⁸ Australia is the only exception, as it allows owners of certification marks to use their own marks

¹⁹ Not all countries that regulate certification marks ask for this requisite. Countries such as China, India, Israel, New Zealand and Taiwan do ask for this ‘authority’ requisite.

²⁰ New Zealand, Intellectual Property Office, **Trade Marks Practice Guidelines** available at: <http://www.iponz.govt.nz/cms/trade-marks/practice-guidelines-index/practice-guidelines/15-certification-marks/6-additional-examination-requirements/6-2-competency>

section of the relevant trade in the owners ability to certify the particular goods or services.”²¹ Therefore he has to prove his good reputation within the trade. Due to the legal differences among countries, competence, authority or expertise does not mean the same, therefore certification entities should prepare a document “summarising the certifying body’s history, size, experience, special knowledge, and equipment, in hope that the information will satisfy the authority/expertise requirement.”²²

3.2 Ownership structure of eco-labels

The ownership structure of an eco-label does not really have a substantial impact on the eco-label itself. The process for setting the criteria, when done properly, is very similar in the different regimes. In very simple terms, the main difference between private and public eco-labels “consists in the absence or presence of public intervention for the definition, the certification/or the monitoring process.”²³ However, this ‘simple’ difference makes a large difference, specially in the legal and regulatory arenas. “Strictly private eco-labelling... will by its nature remain a market phenomenon.”²⁴ Whereas in public-eco-labelling “the system is defined and/or organised by some regulatory authority.”²⁵ The fact that there is a government body involved in the eco-labelling transforms it from a market phenomenon into a policy tool. Nonetheless the reality is that there is no clear cut distinction between private and public eco-labels. Collaboration between public and private entities is likely to happen at some point.

The institutional design of the eco-label impacts the brand-reputation or the perception of the label. Firms looking to apply for an eco-label should place more weight on complying with the criteria, and less on the ownership structure of the eco-label owner. Nonetheless, many times the opposite is true. This might be because firms believe that their stake-holders will regard public eco-labels as “mechanisms to reduce the costs of monitoring and enforcing

²¹ http://www.iponz.govt.nz/cms/trade-marks/practice-guidelines-index/practice-guidelines/15-certification-marks/multipagedocument_all_pages

²² B. Brett Heavner and Michael R Justus. **World-wide Certification Mark Registration A Certifiable Nightmare.**

²³ Nicole Darnall, Matthew Protoski and Aseem Prakash. **Sponsorship matters: assessing business participation in government- and Industry- Sponsored Voluntary Environmental Programs.**, p. 7.

²⁴ John M. Crespi and Stephan Marette. **Eco-labelling economics: is public involvement necessary?**, p. 93.

²⁵ *Ibidem.*

environmental regulations.”²⁶ This can be seen as an advantage in certain industries that are prone to close governmental supervision (chemical, oil or hazardous waste). On the other hand, government-led eco-labels could be mistrusted due to their credibility. Governments are susceptible to be captured by the industry which would bias the criteria and might be undesirable for some firms. Private or non-profit eco-labels could be regarded as mechanisms to enhance environmental reputation, which would be desirable. However some firms believe that NGO sponsored eco-labels “are populated by environmentalists who lack concern about how their environmental goals affect the regulated community’s profit seeking objectives.”²⁷ On the other hand, the fact that environmentalists endorse the eco-label could be advantageous from a reputation perspective.²⁸ The ownership structure can have other consequences independently of what the prospective firms might think. The following figure illustrates how eco-labels are going to be divided for the purpose of this analysis.

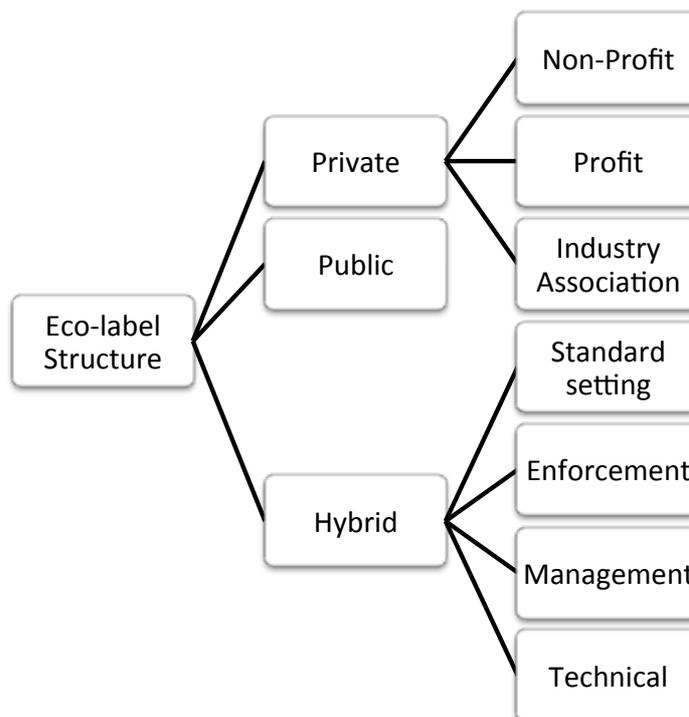


Figure 1. Eco-label Ownership Structures

²⁶ Nicole Darnall, Matthew Protoski and Aseem Prakash. *Op. cit.*, p. 7

²⁷ Nicole Darnall, Matthew Protoski and Aseem Prakash. *Op. cit.*, p. 7

²⁸ Industry eco-labels, while considered popular in the 1990s create skepticism because their role is to protect and benefit the economic well-being of its members. Furthermore, they cannot own a certification mark. Industry marks are protected as 'collective' marks, which follow a different set of rules that certification marks, hence they are not part of this analysis.

3.2.1 Private eco-labels

Private eco-labels can either have a non-profit or for-profit status. The for-profit eco-labels are basically businesses that certify products for a price. Whereas non-profit eco-labels do not. The main advantage of private eco-labels is that they are capable of maintaining autonomy. Their structure will allow them to support industry or other stakeholder opposition. This is a benefit, as it allows the eco-label to be strict with the application of the criteria without secondary consequences. In short, a private certification firm is a business, which has the purpose to manage the eco-labels' reputation.

3.2.1.1 Eco-label schemes as Non-profit entities

According to the Global Eco-label Monitor 2010 fifty-three percent of eco-label schemes are non-profits. Grodsky explains that the non-profit structure is advantageous for certifiers as the trade authority (she refers to the FTC in the United States) does not have clear authority over them. Adopting a non-profit status can be advantageous over other forms. As seen above, a requisite to register a certification mark is that private environmental certifiers cannot participate in the production or sale of the certified goods. Because non-profits, by definition, do not engage in commerce it will be easier for them to qualify for registration. Furthermore, to obtain non-profit corporate status and tax exempt status it is required to disclose financial relationships and other documentation for public inspection. Therefore, any potential or actual conflict of interest will be made evident which in turn will enhance credibility. Finally, the fact that the FTC does not have jurisdiction over non-profits can be relevant. It could imply that non-profits are likely to be less monitored by the FTC than private firms. However, courts could determine on a case-by-case basis that some non-profits are *de facto* corporations subject to the FTC Act.

3.2.1.2 Advantages of Private Eco-labels

Competition of eco-labels can only arise in a market where there are private eco-labels. Government eco-labels, because of their regulatory nature are likely to monopolise the market. However, the multiplicity of eco-labels will allow for the market to select what are the environmental matters they care about the most. As said in previous chapters, not all environmental problems are suitable to be addressed via eco-labels. The government should focus on the issues that go beyond eco-label's scope by creating command-and-

control or minimum standard regulations. It is true that too many eco-labels will also exacerbate consumer confusion. Nonetheless, eco-labels could specialise on different niches to avoid overlapping of criteria. Furthermore, dominant or salient eco-labels will eventually arise allowing consumers to focus on them.²⁹ Alternatively, cooperation among eco-labels could occur, sharing know-how or even creating 'franchise' type arrangements. Specialisation and dominance could control the quantity of eco-labels in the market. Furthermore, as seen further below, certification is extremely costly. Therefore, certification bodies can benefit from economies of scale in the certification 'business'. They are likely to have better criteria implementation strategies as well as monitoring and compliance. This specialisation and economies of scale translate into lower costs for consumers. On the other hand, these high costs can also lead to a concentration of certification bodies. Hence, entry costs can also prevent the proliferation of eco-labels.

3.2.1.3 Difficulties for Private Eco-labels

Certification is "characterised by high start-up and monitoring costs."³⁰ However, one of the most costly parts of the eco-labelling scheme is the actual 'certification' (the evaluation or verification of the criteria). The actual evaluation of products is done by the "appointed" certifiers. Thus, eco-labels have the responsibility to verify that such certifiers are independent and impartial. Furthermore, large eco-labels are likely to have more than one accredited certifier, which creates a type of 'intra-brand' competition. Certification is a highly lucrative business, therefore there are strong financial incentives to certify as many products as possible. However, the business depends on the marketers decision to obtain the eco-label. Therefore, "in order to attract more customers, certifiers impose the least stringent standards they can, and often ignore failings and defects that would prohibit certification."³¹ This is a potential conflict of interest that hinders the certifiers independence and impartiality. Furthermore, it could impair the reputation of the eco-label. In theory, these practices could make the certifier lose its accreditation with the eco-label. However, it would have to get caught first. The eco-label not only has to monitor the users of the eco-label, it also has to monitor and sanction the certifiers.

²⁹ Jamie A. Grodsky. *Op. cit.*, p. 211

³⁰ *Ibidem.*

³¹ Environmental Law Institute (ELI), **Harnessing Consumer Power: using Certification systems to Promote Good Governance**, p. 19.

This potential conflict of interest can lead to another problem private eco-labels face: credibility. As it has been argued along this work, specifically in Chapter II, eco-labels depend on their reputation. In this case credibility and reputation go hand by hand. Just like firms will make investments for their reputation, they also make them to strengthen their credibility. Once these investments have been made it becomes too costly for firms to cheat the market, thus making them more credible. It is no coincidence that the most salient eco-labels (at a global scale) are part of meta-standardisation organisations such as the International Social and Environmental Labelling Alliance (currently known as ISEAL Alliance). In other words these well-known certification schemes as well as accreditation bodies, are certified as certification schemes by a private meta-regulator. This 'meta-regulator' sets the 'standard for standards' by developing codes of good practice for these certification and accreditation schemes. This type of organisations have self-regulated, which has allowed them to reach a good credibility level. As mentioned before, the type of eco-labels that are part of this ISEAL Alliance are coincidentally those most that have the most representativeness in the global market. Such labels include the UTZ certified, Fairtrade International, Marine Stewardship Council, as well as the Forest Stewardship Council, among others which are less known³² but also equally important.³³ Investments to be an accredited certifier or accreditation entity are quite costly and signal commitment and credibility. However, these type of investments might not be suitable for smaller certification schemes from a national or regional level. Finally, these meta-regulators can only enforce the credibility of those that seek it, but do little in preventing greenwash which is what undermines the simple reputation mechanism in the first place.

3.2.1.4 Private eco-labelling scheme's liability

Eco-labelling schemes are complex certification schemes. From a broad point of view, they are considered certifiers. It is possible for them to certify directly or to appoint and accredit an independent certifier or certifiers. Therefore, eco-labelling schemes, just as any other certifier, can be held liable for the representations they make about a product's attributes.³⁴

³² These less known accreditation schemes have that status because they limit their scope to accrediting certifiers or other accreditation bodies, therefore their mark is not seen on the end product.

³³ Fabrizio Cafaggi and Andrea Renda. **Public and Private Regulation: Mapping the Labyrinth**, p. 28; and for further reference to the ISEAL Alliance their website: <http://www.isealalliance.org/>

³⁴ Product liability and the liability of certifiers is a very large and interesting topic on its own, however it is not going to be thoroughly analyzed as it is beyond the scope of this work.

Eco-labels and other certification marks convey the message that the product has been examined and that it complies with certain criteria. Therefore, “consumers and other parties could challenge environmental certifiers for misrepresenting product performance and competitors or public interest groups could challenge certifiers for making endorsements based on incomplete or inappropriate testing procedures.”³⁵ These actions are based on negligent representation.³⁶ In these cases, normally plaintiffs have to prove that the misrepresentation caused a harm or physical injury. “Parties raising negligent misrepresentation claims against environmental certifiers would face the same causation, damages and reliance problems plaintiffs face in misrepresentation suits against advertisers.”³⁷ However, it will be difficult to prove that the harm or physical injury was due to false environmental attributes. This might explain why cases against certifiers are normally in the safety and quality arena, not environmental. Consequently, plaintiffs could attempt “to prove that the representation was general enough to constitute a broad affirmation of quality, rather than a more limited environmental endorsement.”³⁸ By arguing that the affirmation was a broad affirmation of quality, it is easier to prove reliance. In other words, the decision of buying depended on such representation. Nonetheless, even if the plaintiffs were able to prove negligent misrepresentation, recovery of damages would be extremely difficult because, “in most cases, damages from misleading advertising are non-physical and minor.” Furthermore, proving economic losses is much more complicated than proving physical injury. This is because plaintiffs need to show that the certifier had a pecuniary interest in the transaction.³⁹ However, the most difficult part is that “the injured party must prove that reliance on the advertisement caused the damage.”⁴⁰ Normally, this type of high cost involving minor damages are better solved through a class action remedy.⁴¹ This is because for the individual, private enforcement mechanisms are too burdensome and might not outweigh the individual benefits. However, pursuing the action might benefit the public at large, especially if it is translated into the environmental arena. Therefore, it would

³⁵ Jamie A. Grodsky. *Op. cit.*, p. 202-203

³⁶ Depending on the certified product, the claim could also be for “product liability”.

³⁷ Jamie A. Grodsky. *Certified Green: Op. cit.*, p. 202-203

³⁸ *Ibidem*

³⁹ Non-profits would have an advantage over for-profits in this case

⁴⁰ Jamie A. Grodsky. *Op. cit.*, p. 161-162

⁴¹ *Idem*, p. 162

make sense to use these type of private enforcement mechanisms to correct this type of behaviour.⁴² Regardless of the potential complications for suing a private eco-label it is still preferable to not having any recourse against deceptive eco-labels. Specifically, it is not clear what type of recourse would an individual have if a public eco-label were deceptive.

3.2.2 Public eco-labels

Public eco-labels are those eco-labelling schemes in which the government assumes an active role. "The scope and type of government involvement, however, varies among programmes. In the Japanese program, for example, the government provides all technical, research and administrative support. In the German and Canadian programs, the government personnel and certification authorities share responsibilities. In Sweden, Finland and France, standardisation institutes oversee the process from developing product categories and criteria to executing contracts with manufacturers who seek to use the label. The Austrian and Canadian programs require that the environmental label jury submit recommendations on product categories and criteria to the minister of environment for final approval."⁴³ It is easy for governments to find technical expertise at the time of creating and evaluating the standards. It has more resources (financial and human) to access current technologies and environmental information. In addition it is a good forum for the democratic and inclusive process of setting the standards, as it has the capacity to bring the relevant stakeholders to the discussions.

3.2.2.1 Advantages of a public-eco-label

Overall the biggest advantage is the government's capacity to endure high expenditures. As mentioned before certification can be very costly. However, governments use public funds, therefore they might have to justify such expenditures. Although public eco-labels offer other advantages over private eco-labels in terms of credibility, accountability, and some times, technical expertise.

Firms may also find the advantages in public eco-labels. Their voluntary nature presumes good will from the firm and the intention to be compliant. The relation between firms and governments can be complicated and firms might not want to willingly entangle themselves

⁴² For more on the discussion on class actions and other enforcement mechanisms please see: Franzisca Weber, **Towards an Optimal Mix of Public and Private Enforcement in Consumer Law** (forthcoming).

⁴³ John M. Church. *Op. cit.*, p. 318

even more with regulatory matters. “Nevertheless, under some conditions, organisations may believe that the benefits derived from increased goodwill with regulatory stakeholders exceed the costs of additional oversight.”⁴⁴ If firms are in good terms with the government, the latter might be inclined to monitor less frequently, or if there were a small compliance problem they might consider it a mistake. This type of reasoning is part of what is known as cooperative enforcement. With this type of approach (which can take several forms) compliance is achieved through cooperation between regulators and regulatees. Regulatees will cooperate with the authority, as opposed to being its adversary, which may result in higher compliance levels in comparison to other enforcement mechanisms.⁴⁵ Thus participating in a public eco-label might be interpreted as a sign that the firm is willing to cooperate.

It is suggested that eco-labels and other similar programmes can preempt more stringent regulations. In theory, firms signal that they are already doing more than the minimum, therefore there is no need to create more stringent rules. In the same sense, firms that join public eco-labels may want to convey the image that they do not pose a major threat to the environment.⁴⁶ Finally, adhering to a public eco-label is a strong commitment (stronger than with private-led eco-labels) for two reasons: first, it can be held accountable to the new criteria he is committing to; secondly, exiting the eco-label might be a problem as they will invite unwanted attention from the government.⁴⁷ Not being able to comply with standards once the eco-label is awarded will not be well seen.⁴⁸ On the other hand, to avoid this moral-

⁴⁴ Nicole Darnall, Matthew Protoski and Aseem Prakash. *Op. cit.*, p. 290

⁴⁵ For more on Cooperative Enforcement see Sharon Oded, **Inducing Corporate Proactive Compliance: Liability Controls & Corporate Monitors**. 2012, (*Forthcoming*).

⁴⁶ Nicole Darnall, Matthew Protoski and Aseem Prakash. *Op. cit.*, p. 8290

⁴⁷ *Idem*, p. 20302

⁴⁸ This unwanted attention brought upon leaving an eco-label is not exclusive to government eco-labels. In summer 2012 L'Occitane and Yves Rocher (among others) lost the Leaping Bunny mark, which recognises that cosmetics are free from animal testing. These brands lost the mark for non-compliance to the criteria (which was recently updated). This led to a large amount of negative publicity. It would be interesting to measure if this led to any tangible losses, which can be an interesting case to study in further research.

hazard type behaviours public eco-labels would have to invest in monitoring and compliance.⁴⁹

3.2.2.2 Difficulties of public eco-labels

Certification is meant to be a 'reward' for firms or brands that have high environmental performance. Their purpose is to distinguish high performance firms from their competitors. Hence, they are not meant to be granted to all firms within an industry or sector. Consequently, "it would be extremely difficult for a governmental program, bound by formal review and comment procedures, to withstand industry opposition to selection criteria that could deny certification to a high percentage of products in a given industry."⁵⁰ This is due to the voluntary nature of eco-labelling. Nonetheless, governments have other tools at their hands such as mandatory minimum standards and other command-and-control approaches.⁵¹ In the environmental arena "command and control-regulations have led to impressive reductions in pollution levels."⁵² Governments have the resources and the information to tackle many imminent environmental threats and have many times succeeded at abating environmental threats altogether. The eco-labelling mechanism is not immediate and depends entirely on consumer interest. Hence, if the environmental problem is critical or significant other approaches might be called for. Some industries will benefit more from an alternative mechanism, such as eco-labels, than others. This means that the type of environmental threats, industries and markets involved will all have to be taken into consideration when determining if an eco-label is appropriate. For example, in the Dolphin-Tuna situation discussed in Chapter VII, it can be observed that the United States opted for a voluntary measure while Mexico opted for a mandatory minimum standard. The result is that by volume of tuna fished, Mexico has almost zero dolphin by-catch while in the United States those numbers cannot be attained because the measure is voluntary.

⁴⁹ Nonetheless, the evidence presented in this particular paper suggests that organisations that participate in industry-sponsored VEPs endure a greater number of regulatory inspections. One reason for these findings may be due to the generally unpleasant relationship between organisations and regulatory stockholders. See Nicole Darnall et al, *op cit*, supra. An alternate explanation could be the Adverse Selection that these type of schemes are prone to, in the sense that the firms seeking to 'cooperate' are those that are not compliant in the first place. However, this statement is a deduction, there is no empirical evidence to support it.

⁵⁰ Jamie A. Grodsky. *Op. cit.*, p. 206-207

⁵¹ Japan and Germany for example have imposed affirmative duties on companies to reduce waste. Japan's recycling law mandates recovery rates of nearly sixty percent for most discarded materials. While Germany's Waste Disposal Law, places responsibility for disposal on trade and industry. See John Church, *Op. cit.* p. 319.

⁵² Nicole Darnall, Matthew Protoski and Aseem Prakash. *Op. cit.* p. 290

3.2.3 Public-private or hybrid eco-labelling scheme

There are no limits in how an eco-label can be organised as long as it is considered capable of owning a certification mark. From the previous sections it can be inferred that private eco-labels are better at managing the eco-label, while governments are better in providing resources. Moreover, government endorsement gives eco-labels an additional measure of credibility and public visibility.⁵³ Government participation could also take the form of approving and registering the existing eco-labels, so it can have control over their criteria (avoid overlapping criteria) and also to control quality of the eco-labels. In Australia, for example, the application of the certification mark has to be reviewed and approved by the Australian Competition and Consumer Commission. This example shows that governments could enact a type of mandatory reviews to back or endorse eco-labels. In addition, during the negotiation of criteria it is possible to seek support of the governmental agency on the specific topic. For example, if the eco-label is concerning fish the competent fisheries authority should be included. What's more, these agencies could have some sort of participation in the eco-label board, to make the link even stronger. Governments as well as public academic institutions could provide valuable technical expertise for eco-labelling schemes. Furthermore, these arrangements prove that governments do not have to invest so many resources in creating an institutional structure to manage eco-labels. Managing and other tasks can be easily delegated to private entities, while the government participation is limited to certain decision-making aspects. Hybrid eco-labels would be a desirable design for eco-labelling as they take advantage of the public and private capabilities.

3.3 Other labelling models

There are other certification and labelling regimes that due to their peculiarities provide insights on how eco-labels could be designed or even regulated. It is important to notice that the United States and Europe have had different approaches in these matters. In the United States eco-labels are normally private, whereas Europe has a tradition of governmental certifications (though there are private eco-labels in the market). This is probably due to the need to create uniformity of standards that would allow market access within the European

⁵³ Jamie A. Grodsky. *Op. cit.* p. 208

markets (specially in its earlier stages). A clear example is the CE mark.⁵⁴ The CE mark is a mandatory conformity mark.⁵⁵ It is a declaration by the manufacturer that his product meets all relevant European safety, health and environmental protection requirements. Its purpose is to enable free movement of products within the European market. Following similar motivations as the CE, public-eco-labels are dominant in the European market, starting with the German 'Blue Angel'. The Blue Angel has served as a guide for other governmental eco-labels including the EU Eco-label or flower, which will be briefly analysed below. This clearly shows a tendency and the weight that European countries give to harmonisation of criteria.

The United States does have labelling laws in place. For example, the *Nutrition Labelling and Education Act*, along with the *Federal Food, Drug, and Cosmetic Act* (FD&C Act) and the *Fair Packaging and Labelling Act* are all Federal laws governing labelling and packaging for food products under FDA's jurisdiction. These regulations are not voluntary, every food, drug and cosmetic sold in the US has to follow its provisions.⁵⁶ It is an example of a labelling law. Nonetheless, the US provides a good example of a regulation of a voluntary certification scheme, which is the Organic Foods Production Act of 1990 (hereinafter OFPA). The OFPA creates the USDA Organic label, which is the sole organic label in the United States. This USDA organic label will also be briefly analysed below.

3.3.1 The USDA Organic Label

Organic products share many similarities with eco-labels, so much that they could be considered an eco-label. The main difference is that their purpose is to appeal to health and wellness benefits of a product rather than to its environmental benefits. The products might have environmental benefits, but they are secondary. Nonetheless, the average consumer's "willingness to pay a premium for products bearing the 'organic' label is based, in significant

⁵⁴ The CE mark that stands for "Conformité Européenne" which means "European Conformity". Its purpose is to provides firms with an easier access into the European market to sell their products without adaptation or rechecking. Its use is mandatory for certain categories such as electronics, medical devices and toys. However, it is in essence a 'self-certification' or declaration scheme (there are exceptions that ask for third party review/conformity assessment). The manufacturer must carry out a conformity assessment, set up a technical file and sign an EC declaration of conformity. The documentation has to be made available to authorities on request. Because, of its laxity any infringements or misuses to the marking involve administrative and even penal sanctions.

⁵⁵ Decision No. 768/2008/EC

⁵⁶ Normally statutes that use definitions have a provision to include other words within its scope such as: "any variation or synonym if any of those words." This act however has a clever mechanism to prevent manufacturers from using modified terminology to circumvent federally defined terms. It simply prohibits the use of descriptors that have not been defined by the FDA and bars any health claims unless pre-approved by the agency.

part, on the perception that s/he will receive a product with special attributes.”⁵⁷ These special attributes create a brand image that justifies the increased cost. In this sense, the mechanism is exactly the same as eco-labels (the difference is in the consumer’s preferences and motivations). Organic products are much more popular and can command a higher price than eco-labels. However, this was not always the case. “Prior to 1990, there were no regulations governing organic standards or product labelling; instead, private companies created their own standards and certifications.” At some point, there was an immense proliferation of organic products that confused consumers and retailers to a point that they became reluctant to purchase organic products. “Consumers were unable to find organic food in major supermarkets because of ‘large food distributors’ skepticism regarding organic claims and their inability to work directly with growers on certification.”⁵⁸ Consequently, the United States Congress enacted the Organic Foods Production Act of 1990 to solve this confusion. In essence the OFPA establishes standards governing the marketing of agricultural products as organically produced; it assures that organic products are consistent with the standard; and it facilitates interstate trade. These national standards allow that “farmers know the rules, so that consumers are sure to get what they pay for, and so national and international trade in organic foods may prosper.”⁵⁹ This standard does not promote “the healthiness or nutritional quality of organic products;”⁶⁰ it is simply a marketing oriented statute designed to reduce consumer confusion.

The responsibility of the establishment of the standards was delegated by the OFPA to the US Department of Agriculture (USDA). The Act also created the National Organic Program. “The NOP created standards with the input of the National Organics Standards Board, which was composed of farmers, handlers, retailers, consumers, environmentalists, and scientists appointed by the Secretary of Agriculture.”⁶¹ It was only until December 2000 that the standards were made available. “These Standards replaced a jumble of state rules and varying private certification standards, providing a national definition of the term ‘organic’ by detailing the methods, practices, and substances that can be used in producing and

⁵⁷ Jessica E. Fliegelman, **The Next Generation of Greenwash: diminishing consumer confusion through a national eco-labelling program**, p. 12

⁵⁸ Jessica E. Fliegelman, *Op. cit.*, p. 13

⁵⁹ *Ibidem*

⁶⁰ *Ibidem*

⁶¹ *Ibidem*

handling organic crops, livestock, and processed products.”⁶² The criteria also include prohibitions, therefore if a product is to be considered organic it cannot use genetic engineering, antibiotics, ionising radiation, and/or sewage sludge during production.⁶³ For example, the criteria do not allow the use of petroleum based fertilisers or other common fertilisers (even if they are biodegradable or compostable). To protect their plants from diseases, farmers are allowed to use copper (to treat fungal diseases). However, copper is toxic and stays in the soil forever, unlike biodegradable pesticides. Therefore, there is no guarantee that the organic product is safer or healthier.⁶⁴ Furthermore, not all pesticides are bad and the risks the farmers take for not using pesticides can be quite high, which is also reflected in the prices.

To complement the standards, the USDA can accredit state or private entities, the USDA-accredited agents, to certify farms or handling operations that produce organic products. “Only products that originate from USDA certified farms or handling operations can be labelled as ‘organic.’”⁶⁵ Therefore, the organic producers are able to select their own ‘accrediting agent’ to obtain the organic certification.⁶⁶ The USDA accredited certifiers or agents can suspend and revoke certifications. Additionally, they have to “conduct annual on-site inspections of each certified operation, and may conduct unannounced inspections and residue tests of organically grown produce at any time.” Nonetheless, once the product has the certification, it is allowed to use the USDA Organic Seal. The statute provides for civil penalties up to \$10,000 for fraudulent labelling.⁶⁷ An important criticism of the USDA accredited certifiers, is that like any other private certifier they may have a conflict of interest. To solve this problem a “fourth-party” certification model has been proposed. In this model “manufacturers seeking certification pay into a general fund administered by the government or a third-party partner of the government, which then randomly assigns a certifier to a project and pays the certifier from the general fund.”⁵³ This simple mechanism would ensure

⁶² ELI, *Op. cit.*, p.7-8

⁶³ *Ibidem*

⁶⁴ *Ibidem*

⁶⁵ *Ibidem*

⁶⁶ Jessica E. Fliegelman, *Op. cit.*, p. 13

⁶⁷ (a), SEC. 2120. [7 U.s.c. 6519] Violations of a Title, Organic Foods Production Act of 1990 [As amended Through Public Law 109-97, Nov. 10, 2005].

the impartiality of the certifier. Furthermore, as the government is already managing the programme it might as well manage it financially.

The statutes have created controversy within the organic farming community. "In particular some farmers, whose standards from organic production exceed that of the USDA's, worry that the national uniform standards will compromise their ability to differentiate their products in the marketplace and therefore eliminate their competitive edge over other organic producers."⁶⁸ These producers claim that the mandatory standards are not stringent enough. Furthermore many argue that the main problem is that they eliminated competition among the certification systems, thereby eliminating "market based incentives for more progressive and cutting edge standards for organic farming."⁶⁹ This is precisely the risk of creating a universal eco-label. That by tying it to governmental mandate, the review and actualisation of standards can become increasingly complicated and eco-labels with more stringent or higher quality criteria will not be able to differentiate themselves from others who 'barely' meet the standards. Finally, the widespread use of the organic mark can dilute its 'distinctive' effect. "Thus, brand owners should think twice about the merits of adopting these types of marks going forward."⁷⁰ Specially if the product has a higher quality than that mandated by the law.

3.3.2 The EU Eco-label

In 1992, the EU launched its EU "Flower" eco-label to serve as a uniform certification scheme for "green" products and services.⁷¹ In 2008 it underwent a thorough impact assessment or review which has led to several important modifications. The assessment concluded that the EU eco-label was 'unable to achieve its objectives' because it suffered from low awareness (consumers and industry alike), low industry uptake, uneven geographic coverage and 'excessively bureaucratic processes and management.' In 2008 only 754 licences had been issued⁷² and it had even lower consumer acceptance (or

⁶⁸ ELI, *Op. cit.*, p. 8

⁶⁹ *Idem*, p.7-8

⁷⁰ Julia Anne Matheson and Anna Balishina Naydonov. **The greenwashing effect: Americans are Becoming Eco-cynical.** E-commerce Times, January 29, 2009. <http://www.finnegan.com/resources/articles/articlesdetail.aspx?news=f20457ef-4912-41c4-9427-54af06aacbb3>

⁷¹ The scheme constructed under regulation 1980/2000.

⁷² <http://ec.europa.eu/environment/ecolabel/facts-and-figures.html>

awareness). “The EC noted that the strongest economic benefit arising from an eco-labelling scheme is the ‘promotion of innovation in both process design and production techniques’ that arises when consumers demand green products.”⁷³ Therefore, it was decided to review and modify the eco-label to increase both its supply and demand. The numbers indicate that the changes have had a positive outcome, as the number of licenses to use the eco-label in January of 2012 had increased to 1,300.

EU’s regulation basically focuses on setting processes and procedures in place rather than legislating specific standards for firms to obey. The measures adopted in 2008 to increase the market uptake of the EU eco-label include:

- Increasing the label’s scope and the number of product groups;⁷⁴
- Encouraging harmonisation of the scheme with other national, regional and even private or industry (such as ISO) eco-labelling schemes, speeding up the criteria development process;⁷⁵
- Simplifying assessment and verification schemes;⁷⁶
- Lowering annual fees;
- Increasing eco-label marketing efforts and funding; and,
- Modification of the logo.⁷⁷

Among the biggest changes is that member states have to designate a Competent Body. These competent bodies are regulated by Article 4 of the EU Eco-label Regulation and its Annex V.⁷⁸ In essence competent bodies can be public or private but they must be independent of the organisation or product it assesses.⁷⁹ Competent bodies must have the

⁷³ Jeffrey J. Minneti. *Op. cit.*, p. 1358

⁷⁴ There are currently 12 product categories under development, including food and beverage, and cosmetics.

⁷⁵ The criteria for the product categories can be proposed and developed by different stakeholders, including private firms. This reduces the bureaucratic process of developing standards and brings it closer to the market.

⁷⁶ Delegating to Competent Bodies, which are certification bodies appointed by each member state

⁷⁷ Rugile Balzekaite, European Commission. “**The New EU Eco-label Regulation**” Global Eco-labelling Network, Presentation prepared for annual meeting, November 19, 2009, Kobe Japan.

⁷⁸ Regulation (EC) No 66/2010 of the European Parliament and of the Council of 25 November 2009 on the EU Ecolabel.

⁷⁹ Number 1, Annex V, EU Ecolabel Regulation.

necessary technical expertise, experience, and means to perform conformity assessments or certification. However they must be independent from the trade of products or services it certifies. In other words, they are not allowed to design, manufacture, supply, install, purchase, own, use or give maintenance to the products they assess.⁸⁰ Competent bodies including their top management and personnel have to guarantee their impartiality. To ensure this impartiality the Regulation states that “The remuneration of the top-level management and assessment personnel of a competent body shall not depend on the number of assessments carried out or on the results of those assessments.”⁸¹ By creating this rule, the Regulation attempts to reduce potential conflict of interests that are due to arise in normal certification processes. By delegating all these responsibilities to the competent bodies, the European Commission has no direct “enforcement mechanism to ensure that parties charged with responsibilities under the regulation... conform their actions to the Regulation.”⁸² In other words it cannot inspect, monitor or sue the member states.⁸³ In essence, the role of the Commission has been reduced to reviewing and assessing the criteria for each product category.

4. Possible Legal Issues with Public Eco-labels within the WTO ⁸⁴

Since the apparition of the first eco-labels many commentators immediately had international-trade concerns. It has been continuously argued that eco-labels could impair market access and impose an unnecessary burden on manufacturers, especially on those from developing countries.⁸⁵ International trade is governed by the World Trade Organisation (WTO), which has a set of treaties and rules that control the trade-flow among its members. “The WTO’s stated objective is to prevent impediments to free-trade, and because certification systems often have the effect of restricting trade based on how a product was

⁸⁰ Number 2, Annex V, EU Ecolabel Regulation.

⁸¹ Number 6, Annex V, EU Ecolabel Regulation.

⁸² Jeffrey J. Minneti. *Op. cit.*, p. 1362

⁸³ Similarly, citizens do not have a mechanism to bring suit against non-compliant regulated entities (competent bodies) and can only bring suit against governing bodies in limited circumstances.

⁸⁴ While the WTO issues are not a topic of this thesis, they are worth a minimum review to understand the possible issues that might arise with government-based programmes on an international level. The main reason they are not going to be fully reviewed is that there is a vast literature and specialized terminology. Furthermore, it can be argued that the WTO solely applies to public policies and many eco-labels have a private nature.

⁸⁵ Specifically, developing countries have resisted Process and Production Methods or PPM-based labelling because they claim they limit their market access based on environmental and social standards of developed countries, making it impractical for them to comply.

made, they can give rise to claims that a specific system or regulation poses a barrier to free trade.”⁸⁶ Whether certification goes against the principles and rules of the WTO is still of major concern and there is no definitive standing on the matter.⁸⁷ The most relevant WTO Treaties for certification matters are the General Agreements on Tariffs and Trade (GATT) and the Agreement on Technical Barriers to Trade (TBT). The GATT is more general and it contains the basic rules and principles of the international trade system. These principles are:

- Most Favoured Nation (contained in Article I), which prohibits any measures that discriminate between like products from different member countries. In simple terms, what ever benefits you grant to a member country should be extended to the other members (of course there are exceptions that allow the creation of Free Trade Agreements/Zones between limited members, Art XXIV).
- National Treatment (Article III), prohibits measures that discriminate between foreign and domestic “like products”.
- Article XI prohibits quantitative restrictions, such as bans, quotas, or import licenses, on the import or export of ‘like products’. In essence, only taxes and duties (other charges that arise from import or export of goods) are allowed to ‘control’ international trade flows.

The GATT also provides an ‘umbrella’ or ‘chapeau’ of exceptions to the general rules, including the three main principles (Article XX).⁸⁸ Specifically, it permits measures to protect human, animal or plant life or health.⁸⁹ It also allows the use of measures relating to the conservation of exhaustible natural resources, aimed at preserving such natural resources.⁹⁰

⁸⁶ ELI, *Op. cit.*, p. 24

⁸⁷ In the latest case on the subject, United States - Measures concerning the importation, marketing and sale of tuna and tuna products, it was found that the criteria of the US ‘dolphin-safe’ labelling is considered a Technical Barrier to Trade. In addition the programme was found to be more trade restrictive than necessary to fulfil the legitimate objectives of avoiding consumers deception and dolphin protection. The issue remains because it is not clear that all eco-labels’ criteria are a technical Barrier to trade. The Dolphin policy in the US is, but that eco-label in particular is not a common type of eco-label, hence it would be incorrect to apply such analysis to other programmes. For further discussion see Chapter VII.

⁸⁸ With the condition that they are not applied in an arbitrary or unjustifiable way, or as a disguise for a restriction to trade.

⁸⁹ Article XX(b), GATT

⁹⁰ Article XX (g), GATT

The TBT further regulates the use of non-tariff barriers to trade. This treaty specifically regulates both mandatory technical regulations and voluntary standards, even if they are imposed by non-governmental organisations. Measures restricting non-product related PPM's have often raised controversy over their WTO-consistency. "Although government eco-labelling requirements are generally considered legitimate 'technical regulations' under the TBT Agreement, potential trade disputes can arise with respect to eco-labelling requirements based on on-product related PPMs."⁹¹ In essence 'technical regulations' are mandatory standards enacted by the government, whereas 'standards' are defined as voluntary, approved by a recognised body and intended for common and repeated use. The TBT allows the use of non-governmental certification systems. These certification systems are unlikely to raise any WTO concerns, because they are voluntary and they are developed by non-governmental actors and they do not depend on government participation. Moreover, **"only governments are required to comply with GATT."**⁹² Government or public certification systems are more susceptible to WTO conflicts. However, if there were a conflict there is still room for arguments and interpretation. In addition, the WTO is much more cautious with measures such as bans or embargoes than with less restricting measures such as eco-labelling requirements. Labelling requirements, in general, are much easier to justify under the article XX 'chapeau' than a ban. "However, government eco-labelling requirements are certainly not immune from claims of WTO inconsistency." The criteria would have to be properly defined to avoid being bluntly discriminatory or protectionist.⁹³ In addition, hybrid eco-labelling schemes, would also have to consider carefully how the government intervenes and to what degree. In the tuna-dolphin case, which is described in Chapter VII, originally the US supported a private labelling programme by backing it up with a public law. This action, in addition to other measures managed to create a *de facto* ban on Mexican Tuna in the US. Not all co-regulation will lead to the Tuna-Dolphin scenario, nonetheless it is important for governments to foresee the impacts of its interventions. Governments need to understand their obligations before these international entities before committing to support, participate or create voluntary certification schemes. In other words,

⁹¹ ELI, *Op. cit.*, p. 26

⁹² *Ibidem*

⁹³ *Idem*, p. 26-28

co-regulation or hybrid schemes have to be carefully analysed to determine whether they comply with WTO or other applicable laws.

The recent dispute regarding the Tuna-Dolphin conflict is regarding eco-labels. However, as it will be seen in Chapter VII it is not possible to draw general conclusions from it, as it is a very peculiar situation. This is because the eco-labels involved are public and single-criteria eco-labels. Specifically, both the Inter-American Dolphin Conservation Programme and the United State's Dolphin Consumer Information Act eco-labels are created and managed by governmental bodies. Therefore, it is not possible to compare these two very specific programmes to eco-labels such as the Marine Stewardship Council (MSC) eco-label. The MSC (as many others) is a private certification body administered by an NGO. Furthermore, the 'dolphin-safe' eco-label is a single-attribute eco-label. Single attribute eco-labels are not very common, as they are very limited in their scope (one industry, one product). All this makes 'dolphin-safe' labels very specific and different from commonly used eco-labels. Consequently it is not possible to derive the WTO's standing on eco-labels with this case. Nonetheless, eco-labels have been in the WTO's agenda for quite some time. However, the recent negotiations have had more urgent difficulties to solve and there is still no final 'official' stand on eco-labelling.

5. Eco-labels as Certification Marks

In Chapter II it was concluded that eco-labels are environmental certification marks.⁹⁴ In this Section we will recall and build on the findings of Chapter II regarding certification marks from a legal perspective. Furthermore, a brief analysis of the current legislation will be presented with the purpose to possibly build-in or modify it in light of the specific needs of eco-labels.

5.1 Legal Rationale for Certification Mark Regulations

The rationale for protecting certification marks is that their registration and protection is in the public interest. This is because eco-labels (as well as other certification marks) provide a type of proof or guarantee that the good has the attributes it claims it has. This proof can become very valuable, specially when consumers are faced with so much environmental information. Eco-labels have an important function in the environmental information market.

⁹⁴ As analysed in Chapter II's 'Eco-labels: branding and certification an IP point of view'

Hence, they “must be protected from counterfeiting and infringement through the world’s existing trademark law systems.”⁹⁵ Eco-labels are very easy to imitate, and as mentioned before, there is a large incentive to do so. Counterfeiting and other illicit use⁹⁶ of eco-labels damages eco-labels credibility compromising the effectiveness of the entire system. Notwithstanding the above, some argue that eco-labels and certification marks promote a more substantial public interest: “it promotes ‘free and open competition’ amongst the producers and distributors of certified products. Based on simple economic principles, such competition in turn results in the best price and quality for consumers.”⁹⁷ Therefore it is not only a matter of protecting certification marks, but it is also important to give them a regulatory environment that ensures a maximum competitive advantage for the certification bodies. Eco-labels would benefit from this type of environment as they would be able to manage the eco-labels properly, thereby strengthening their credibility and their informational function as well.

With the increasing popularity of eco-labels and the demand for ‘proof’ of environmental quality, eco-labels (as well as other certifying entities) “are finding that the growing market for new certification marks has outpaced the ability of many countries’ legal systems to effectively protect certification marks.”⁹⁸ It is precisely this increase in the interest in certification marks that has shifted the focus of many firms to Intellectual Property protection. However, the use of certification marks is not as widespread as other industrial property tools such as trademarks or geographical indications. It has been pointed out that many firms are attempting to register their environmental logos (both claims or eco-labels) as trademarks. This means, that they understand that IP protection is the adequate type of protection, what they do not consider is that trademarks are not the right tools. Certification marks, which are the right instrument, are considerably unknown. Not all countries contemplate them in their legislation; and, even countries, such as the United States, that do contemplate certification marks still face a large number for trademark applications. While ignorance is a good explanation, it might not be the only one. It is possible that marketers

⁹⁵ B. Brett Heavner and Michael R. Justus, *Op. cit.*

⁹⁶ Use in the course of trade a sign identical or similar to the registered certification mark in relation to similar goods or services, that is likely to confuse or create an association with the registered mark.

⁹⁷ B. Brett Heavner and Naresh Kilaru. **Small Potatoes: Resolving Conflicting Trademark Laws in the United States.** Trademark World, October 2004.

⁹⁸ B. Brett Heavner and Michael R. Justus, *Op. cit.*

know the marketing impact of an eco-label and try to reap its benefits without certifying (or changing anything). In other words they know and willingly greenwash. To finalise, they will register the slogan or mark they will use in their 'green' campaign as a trademark to legitimise it. The problem is that the trademark authority cannot do much to prevent this type of scenarios, as it is completely out of its jurisdiction.

5.2 Certification Marks: Legal Implications

As mentioned earlier, the Common Law legal systems have included certification marks in their legislation. They are normally, included in the Trade Mark Laws and share many of their procedures.⁹⁹ On the one hand the analysis of certification marks from a legal perspective can lead to discussions regarding their liability, their contractual or quasi contractual nature and the role the proprietors play in the enforcement of greenwash. On the other hand, the actual Laws that govern certification marks are very pragmatic. As it will be reviewed ahead, the laws mainly deal with registration matters.

5.2.1 Certification Marks' guarantee function

Regarding eco-labels as certification marks makes them different than traditional information disseminating or marketing tools. Certification marks have a statutory function of a guarantee. Certification marks indicate that the goods have been certified to approved quality standards. Therefore, the criteria that have been certified become part of the product's characteristics (description and quality). This assurance of quality is similar to the notion of quality in a contractual setting. In other words, the certified criteria become part of the contract terms. "As a matter of law every item in a description which constitutes a substantial ingredient in the 'identity' of the thing sold is a condition."¹⁰⁰ For instance, biodiversity protection becomes a substantial ingredient in a specific product when there is a certification mark on it. However, if the same product has some label suggesting it protects biodiversity (environmental marketing) but it is not certified, this characteristic does not become a substantial ingredient. This of course has serious implications for the producer and the certifier. If the certified characteristics are considered contractual terms and their

⁹⁹ It is noteworthy that collective marks and geographical indications are normally processed and registered before other authorities. The reason why they are not processed in the same place is unclear. In some countries, such as India there is a specific registrar for Geographic Indications, whereas other countries such as Mexico, it is done before the Economic Secretariat

¹⁰⁰ Jeffrey Belson, Certification Marks, p. ___

product does not meet the criteria it can be considered breach of contract or breach of warranty. Non-certified environmental labels do not grant this type of security (cause of action); hence, for certification marks the consequences for misrepresenting the mark are much more severe. Therefore it is an incentive for the mark to be truthful. Moreover, as the assurance goes beyond reputational matters, it gives certification marks credibility.

To add to the credibility, at the time of registration the proprietor of the mark has to deliver the criteria that will be subject to certification. By the mere registration process, the criteria and all the other regulations become available to the public. Therefore, the criteria are public and they can be considered part of the product's description and quality, as in any other contractual setting.

5.2.2 Use of the certification mark: contract

In addition to the quasi contractual nature of the certified criteria, there is also an explicit contract between certifier and the manufacturer (or marketer). As it can be recalled from Chapter II, the eco-label organisation, which is the owner of the certification mark (certification mark proprietor) licences the use of the mark to the people that have obtained the certification by an accredited (or recognised) certifier. In this sense, the manufacturer or marketer of the certified product is obliged for the duration of the contract to see that the criteria are met. If the licensee is found at fault, it is simply considered breach of contract. When breach or any other fault occurs, the eco-label will be entitled to sanction the wrongdoer as it was agreed beforehand.

5.2.3 Responsibility of the certifier

It has been a common discussion that certifiers cannot vouch for the totality of the goods the certifier sells. Therefore they cannot be held responsible when a particular product does not have the characteristics it is supposed to have (that is manufacturer's responsibility). At most certifiers can be negligent for non-detection of the faults in the criteria or of the overall product design. While this might be true for certain products, with eco-labels this discussion is not very relevant. Eco-label criteria are normally process-based criteria or non-product-related production methods, which do not reflect (as the name suggests) on the final product. Therefore, the eco-label and its accredited certifiers normally vouch for the process the product undergoes and/or the conditions under which it is produced. Therefore if the a

farm is certified under an eco-labelling coffee it is likely that all the coffee from that farm will conform to the standards. In the circumstance that the end product cannot guarantee that the 100% of the product is certified it normally says so, by stating that it contains a percentage of certified product or it comes from mixed sources.

5.2.4 Differences between certification marks as intellectual property and deceptive advertising

In the countries in which certification marks are regulated it is normally comprehended within trademark law. When considering eco-labels as certification marks under Intellectual Property Law, consumer welfare takes a secondary role. “The mainstream perception is that certification marks -like trade marks- exist primarily to protect traders or groups of traders from each other and have only an indirect bearing on consumer protection.”¹⁰¹ The main purpose of Intellectual Property rights is to recognise and endow the mark’s proprietor with actions to protect their interests against competitors. In this sense, the owner of a certification mark, “through his right to sue from infringement, is cast by trade mark law in the putative role of guardian of the consumer’s interests as well as his own.”¹⁰² In deceptive marketing actions, which might not be clear cut, the government or some agency will have to represent consumers interest. With intellectual property rights, consumers interest is ensured indirectly through traders rights. This is an advantage over deceptive marketing actions as the burden of challenging false or deceptive marks is transferred to the owners of the certification marks and their licensees. Owners and users of the certification marks have high incentives to avoid greenwashing (infringement of their marks) and keep high competitiveness. Furthermore, by recognising intellectual property rights, the monitoring and enforcing costs of faulty marks or greenwash is shared between governments and industry. Moreover, this monitoring will be done among peers or competitors, thus it is horizontal. Horizontal monitoring, is more spread out through the market than top-to-bottom monitoring from the government. Hence, detection of infringements is facilitated. The government’s role is to allow the owners of certification marks to bring suit to those who they believe are infringing their rights. If these rights are strongly recognised and enforced by the owners of

¹⁰¹ Jeffrey Belson, *Op. cit.*, p. 73.

¹⁰² *Idem*, p. 79.

certification marks and by the governments, competition will be enhanced as infringement of the marks will be deterred.

5.3 Application for a Certification Mark

The application for a certification mark is normally done by the certification body (who is the owner). As mentioned earlier, the certification body is normally the owner of the certification mark. The certification body has to gather all the documentation and pay the fee to the trademark and patent office of the country it attempts to register its mark in. Once all the documentation has been handed in and all the fees have been paid the trademark authority will examine the application. The objective of the examination, as with normal trademarks, is to ensure that the mark is sufficiently distinct from other trademarks (registered and priority rights).¹⁰³ However, the distinctiveness of a certification mark is different from that of ordinary trademarks. The certification marks have to meet much more requirements than normal trademarks. Therefore, its examination is much more strict. The examination consists of two distinct phases. The first phase is just like the trademark evaluation, which consists in determining distinctiveness. The application is analysed under both absolute grounds (the marks' distinctiveness and deceptiveness) and relative grounds (distinctiveness with respect to other marks or rights). The relative examination, is done by comparing the certification mark and logo with the rest of registrations and applications to see that it has not already been used or whether it is similar to a pre-existing one to the degree that it can cause confusion. The second phase is regarding the examination of the regulations that govern the use of the certification or collective mark.¹⁰⁴ This phase is different from that of trademarks. Countries that regulate certification marks normally examine regulations. Some of those countries, additionally require that such regulations be approved by other authorities, before granting the registration.

5.3.1 Absolute and relative grounds for refusal

As with trademarks, certification marks have to prove their distinctiveness. In essence a trademarks distinctiveness is its capability of distinguishing goods or services of one

¹⁰³ In trademark law, when there are two or more competing equitable interests, the equitable maxim *qui prior es tempore potior est jure* (he who is earlier in time is stronger in law) is applied. In other words, if there is a previous application, even if it is still in process, such application will have priority over the subsequent application(s).

¹⁰⁴ Document from the UK Trademark Office that explains the procedures.

undertaking from those of other undertakings. In addition, certification marks have not only to be able to distinguish themselves from their competitors, but a certification mark also has to be able to distinguish goods and services which are certified from those who are not. Therefore, a trademark, as well as a certification mark, that is not capable of distinguishing itself will be refused.¹⁰⁵ In addition, certification marks can be refused if it is “of such a nature as to deceive the public.”¹⁰⁶ Certification marks can be refused “if the public is liable to be misled as regards the character or significance of the mark, in particular if it is likely to be taken as something other than a certification mark.” Therefore it is recommended that the mark (the symbol or logo) states that it is a certification mark, to avoid this confusion.

When applying for a trademark or even a patent, it is customary to do a search within the trademark or patent databases to make sure that the mark has not been previously been used. Authorities will be emphatic on similar marks within the same classification and secondarily on similar marks in other classifications. If these type of objections arise, the applicant will have to prove to the authority that the mark is sufficiently distinct and does not cause confusion. Specifically in the case of certification marks, the authority will also verify the previous registrations or rights of the proprietor. This is done to confirm that the proprietor of the mark is not in the trade of the goods and services that it pretends to certify.¹⁰⁷ If the authority discovers that the applicant is in fact the proprietor of an earlier trade mark in the same classification of the goods or services of those of the certification mark, it “will be taken as a *prima facie* indication that the proprietor of the certification mark also carries on a business in the supply of the goods certified.” If this is the case, the authority will object the application. The applicant, in response has to submit a declaration in which it states that it does not carry on a business in the goods or services certified. Otherwise, the applicant would have to withdraw or surrender the trademark in order to register the certification mark. Furthermore, even after the certification mark is granted, third

¹⁰⁵ The general grounds for refusal are a) a mark is incapable of distinguishing goods or services of one undertaking from those of another; b) the mark has no distinctive character; c) if they are descriptive; d) if they have become customary in the current language or in the practices of the trade.

¹⁰⁶ UK, Trade Marks Act 1994, Part I, 3. (3)(b).

¹⁰⁷ As noted before, certification mark proprietors are restricted from participating in the trade they pretend to certify. Therefore if the certification mark is for agricultural products, the owner of the certification mark cannot be a farmer, as it will be considered unfair and a potential conflict of interest could arise.

parties can apply for a revocation or invalidation of the certification mark if they can prove that this statement is false or has become false.¹⁰⁸

5.3.2 The Certification Mark Regulations

Objectively, the certification mark regulations are a summary of the criteria that the potential users have to meet, as well as other internal rules and procedures. However, they represent what a certification mark stands for or signifies. In most countries these regulations are subject to examination, therefore they have to comply to certain requisites. Furthermore, these examinations will be kept in public record, which implies that the general public, prospective users and even competitors will have access to them. Moreover, the applicant will be bound to these regulations, if it is found that the owner does not observe them properly, the certification mark can be revoked.¹⁰⁹ The specific content of the regulations may vary from country to country, however in general they must have the following:

- 1) Details concerning the applicant. It has already been stated that the applicant cannot be engaged in the trade of the goods or services that he certifies. It is “the owners’ function is to *control* use of the mark by those he authorises, thereby ensuring that their products meet his required standards.”¹¹⁰ Consequently it has to be ‘competent’ to manage the certification process as well as to control the use of the certification mark. Furthermore, the applicant has to have an authority or expertise to certify the goods and services for which the mark is to be registered.
- 2) Persons authorised to use the mark. The regulations will have to enlist the requirements that an “approved user must meet to use the certification mark on its goods or in relation to the services it provides.” An important feature of certification marks (at least in the Anglo-American system) is that “certification may not be refused to anybody who complies with the required standards.”¹¹¹ This ‘open door’ policy is implemented to avoid that certification becomes a restrictive trade practice. Hence the importance of the pre-established criteria. Pre-established (and registered) criteria is an anti-discrimination

¹⁰⁸ This can happen if after the certification mark is granted the proprietor begins to trade in the goods or services he is certifying.

¹⁰⁹ Schedule 2, Paragraph 15, (c) and (d), Trademark Act 1994, U.K.

¹¹⁰ Jeffrey Belson, *Op. cit.* p. 32

¹¹¹ Jeffrey Belson, *Op. cit.* p. 32

measure, as the owner will be unable to use 'non-objective or secret criteria' to unfairly favour certain producers over others.¹¹²

- 3) Characteristics to be certified by the mark. The regulations have to point out the specific qualities or characteristics of the goods or services that are certified under the mark. To understand what this means it is easier to see what it does not mean. It is not a list of the goods and services that are going to be certified. It is not a general statement that does not say anything in particular about the nature of the certification. It is not the list of the specific criteria that have to be met to obtain the certification either. Therefore, this requisite should be a statement, that is clear and objective that allows "anyone reading them to know precisely what characteristic is being certified." For example, in its regulations, the Australian certification mark "APIA Free Range Certification Program" complies with this point as following: "*The Program covers the farming practices and related activities such as feed production, the slaughtering process, transport and traceability required to be implement for chicken or turkey meat to be allowed to be sold as APIA Free Range Accredited.*"¹¹³ Without saying what the criteria are specifically, it does make clear that in order for the chicken and turkey meat to be considered free range several aspects of the production process will be taken into consideration. This simple statement limits the scope of the programme, in a sufficient degree to understand what it does.
- 4) Testing and supervision of the mark. The regulations include an explanation of how the holder will test the presence of the characteristic. Testing does not need to be carried out by the holder itself. If this were the case, an explanation of the characteristics and duties of the authorised certifiers will be needed. Including, how the certification body can guarantee the independence and impartiality of these certifiers, as well as their technical expertise. In addition the owner has to explain the procedures for supervising the use of the mark. Including the procedures for non-compliance.
- 5) Fees connected with the operation of the mark. The certification, license and/or royalties have to be disclosed (or at least how they are calculated if it is not a fixed sum). The fees

¹¹² B. Brett Heavner and Naresh Kilaru. *Op. cit.*

¹¹³ The regulations of this and other Australian registered certification programs can be found and downloaded from: <http://www.ipaustralia.gov.au/get-the-right-ip/trade-marks/types-of-trade-marks/certification-trade-mark/certification-rules/?doc=APIA-Free-Range-Certification&view=Detail>

should be proportionate to the nature of the certification (even if it is a for-profit). Excessive fees could prevent potential users from accessing the scheme, which would restrict trade. Certification can be a costly process, therefore many NGOs offer schemes for allowing communities (from developing countries) to obtain certification as a community, so they share the costs. Additionally, governments and other agencies could support certification with subsidies to make certification more accessible.

6) Dispute settlement procedures. Certification schemes should all have a process that covers disputes about whether goods and/or services meet the criteria or any other dispute concerning the certification mark. Both potential and current users should have a clear appeal system. This appeal system can be either internal and/or external. For example, if the certification body does not perform the certification itself, it could potentially mediate between the potential user and the certifier. Nonetheless, if the dispute is regarding behaviour of the certification body, a third-party mechanism (such as mediation or arbitration) might be more appropriate.

The certification marks' rules can be amended after the certification mark has been awarded. Nonetheless, the amendments are also subject to evaluation, in the same manner as with registration.

5.3.3 Invalidation and Revocation of certification marks

Once the certification mark is awarded the owner of the mark has the obligation not only to use the mark but also to make sure that it is used properly. Furthermore, regardless of the credibility and reputation consequences of mark misuse, the mark can also be revoked or invalidated. It can be invalidated if certain circumstances come to light (after the certification is granted) about the certification mark or the certifier that would have impeded the registration in the first place. This could be the case if it was discovered that the owner carried the trade from before the certification mark was awarded and did not cease once the mark was registered. Revocation on the other hand, can occur when there is a change in circumstances such that it does not allow the certification mark or certifier to continue to meet the conditions to keep the registration. The grounds for revocation are:

- (a) The owner begins to carry on the trade of the goods and services it certifies;
- (b) The manner in which the mark is used is misleading the public on the nature of the mark;

(c) The owner does not observe the regulations or it is not capable of securing their observance;

(d) If the owner is no longer competent to own a certification mark.

In addition, just like trademarks, certification marks have to be 'put in genuine use' after a determinate period after the registration. If a certification mark cannot prove this, it will lose the registration. The opposite occurs if the certification mark were to become too general, to the point that it loses its distinctiveness.

5.3.4 Registration of Certification Marks in countries that do not contemplate them

In countries that do not provide a specific registration of certification marks, but that have a widespread use of 'collective marks' it is possible that 'collective marks can denote certification.'¹¹⁴ It can be noted that some legislations do not use the word 'association' or an equivalent when defining collective marks. Consequently, the owner of the 'collective mark' is not limited to associations, which as noted earlier is the main difference with certification marks. For example, Chapter 8 of the Benelux Convention in Intellectual Property Matters states "*collective marks shall be considered all signs that are thus indicated upon their application and that serve to distinguish one or more characteristics of goods originating from different enterprises applying the mark under the supervision of the proprietor.*"¹¹⁵ In no place is the proprietor restricted to an association nor are the applicants restricted to being part of such association. Therefore, it can be interpreted that in the Benelux Act collective marks indicate certification.

There are some countries that do not contemplate collective marks at all (not even with room for interpretation as above). In such cases, mark owners "are forced to register the [trade] mark either for 'quality-assurance services', or for the goods or services being certified."¹¹⁶ As mentioned before trademark protection is not the appropriate tool for protecting certification marks and doing so might cause different problems. For instance, "the mark may not be enforceable in an infringement context because the actual use does not precisely

¹¹⁴ Jeffrey Belson, *Op. cit.*, p. 21.

¹¹⁵ Article 2.34 "Sont considérés comme marques collectives tous signes ainsi désignés lors du dépôt et servant à distinguer une ou plusieurs caractéristiques communes de produits ou services provenant d'entreprises différentes, qui utilisent la marque sous le contrôle du titulaire." Translation Jeffrey Belson, *Op. cit.* p. 21

¹¹⁶ B. Brett Heavner and Michael R. Justus, *Op. cit.*
<http://www.finnegan.com/resources/articles/articlesdetail.aspx?news=a1905c59-1aeb-41df-b295-050bf5ba0a60>

match the goods and services listed in the registration. Second, the owner may register the mark for 'quality-assurance services', only to have the application rejected because the marks are really used "on the certified goods" rather than for applicant's certification services." In the second example, the application would not even succeed because the mark is used on the certified goods by someone other than the certifier. The trademark in this case covers the certification services, but the mark is used on the certified goods, which is a completely different good. In the first scenario even if the trademark is granted it will be useless as it would be unenforceable. This is, precisely because the mark protects the certification services and not the goods. For clarity, let's consider an eco-label that certifies shade-grown coffee (as seen before this is good because it protects wild-life). If the application were for the coffee (shade-grown, fair-trade, organic or any type of coffee including substitutes), the registration of the mark would be under Class 30 in conformance with the Nice Classification.¹¹⁷ However, the owner of the eco-label does not sell coffee; it sells or provides certification services. This type of services is Class 42 which is the one that corresponds to services of engineers (other professionals) who undertake evaluations. While it may sound like a game of words, this can represent a serious problem. If the trademark is registered for Class 42 it cannot be used on the coffee. Or if it uses it, it will not be protected against infringement. Moreover, a third person could lawfully register the mark under Class 30 (coffee). In this scenario the certification mark owner (and all the licencees) will be limited to use the mark on the coffee as trademark belongs to a third party. While this can be disputed, because of the difference in classes, the certification mark owner's case will be weak.

5.3.5 Uniformisation of Laws

The use and legislation of certification marks is not widespread. This might be because, different from geographical indications, certification marks are not specifically regulated by the Paris Convention¹¹⁸ nor in its subsequent revisions (or any other similar international instrument). As a result, many countries do not include them in their laws. To complicate the scenario even more, the countries that do regulate them, do so in different ways. This

¹¹⁷ The Nice Classification is based on a multilateral treaty under the auspices of the WIPO. The Treaty that creates it is called the Nice Agreement Concerning the International Classification of Goods and Services for the Purposes of the Registration Marks, of 1957.

¹¹⁸ The Paris Convention for the Protection of Industrial Property of 1883 is the base for worldwide industrial property laws.

patchwork of regulatory differences can make it very difficult for eco-labels (and other certification systems) to expand to other jurisdictions. This is because their marks will not be protected,¹¹⁹ which will put the mark at risk in those countries which could potentially weaken their reputation and credibility. Thus the potential of eco-labels as international environmental schemes would be significantly impaired. Because of this legal practitioners have called for law harmonisation or centralisation. International conventions such as the Paris Convention, have the advantage that they are like a contract between all the signatories. Moreover, they create homogeneity among the different jurisdictions which can facilitate transboundary transactions. However, the desire to create homogeneity and practicality are not enough to advocate for law harmonisation. In this particular matter, neo-classic economics has had an ongoing discussion between competition and centralisation of laws. While there is no clear cut rule on when it is convenient to have competing or uniform laws there are certain criteria that can be considered. Centralisation would be welcome if there is a need to internalise externalities across jurisdictions. Another criteria would be if there is a danger of a “race to the bottom”. This type of scenario happens when competition among laws force laws to lower standards in order to keep a competitive level. When there is a country with extremely lax regulations, it is possible that countries with stricter standards suffer losses. If centralising the laws helps achieve scale economies and/or reduce of transaction costs it would also be beneficial.¹²⁰ Homogenisation of certification mark laws would reduce transaction costs and create scale economies for those marks that wish to expand internationally. This is because they will be granted legal certainty, the risks will be lowered and they will be able to maintain their processes and organisation. In addition, while decentralisation does not create a ‘race to the bottom’ scenario it does make a difference in the jurisdictions the mark decides to expand to. It is logical that owners of certification marks will prefer to operate in countries that recognise their rights; whereas, greenwashers will prefer to operate in places where there are no certification marks. This will hinder the expansion of legitimate eco-labels or certification marks, not only from a practical perspective, but it will also be likely that those countries which are not used to certification marks will not take advantage of its benefits.

¹¹⁹ The certification mark laws vary from country to country, reason why this analysis will stick to the generalities presented by the World Intellectual Property Organisation (WIPO) as this is not meant to be a comparative study.

¹²⁰ Roger Van den Bergh, **Towards an Institutional Legal Framework for Regulatory Competition in Europe**, p. 436.

If certification mark laws were to be centralised or harmonised it can be done either by lobbying for changes on a country-by-country basis, or by holding a diplomatic conference with a goal of reaching an international agreement with respect to certification marks.¹²¹ An international agreement or convention with respect to certification marks would be to most effective way to address the problem. However, this solution is also the most difficult one. Nonetheless, the rising concerns regarding certification marks has already spurred a series of seminars and workshops under the auspices of the WIPO. However, it might not be necessary to create a whole new distinct Treaty for certification marks, but it might call for amendments of the current ones. For instance, such amendments could be either in the geographical indications or trademark contexts. Nonetheless, compared to other intellectual property issues (such as trademarks) certification mark problems are relatively small. In the sense that very few owners are affected by the problems with certification marks, therefore “it may be difficult to generate a critical mass of interested countries.”¹²² Precisely because only a handful of countries contemplate certification marks, they are the only ones who see the benefits and the problems of the current system. It would take a lot of lobbying from their part to make this issue stand out in an international forum such as the WIPO. This same reasoning applies for the alternative solution of country-by-country lobbying. Nonetheless, certifiers should lobby in the countries where their products are being produced (developing/tropical countries). In these countries, eco-labels and other certification marks have a clear interest in that their rights be recognised. First, because they are also the countries in which they are more likely to be counterfeited. Secondly, to give certainty to the producers/communities that they are really what they claim they are.

There is a strong case for the harmonisation of certification marks laws. However, at this stage it would be more valuable to create awareness of the existence of certification marks as legal tools. Notwithstanding the above, it is also true that the market is outpacing the law. The focus on sustainability and other environmental matters have accelerated markets and environmental marketing to a point that there is an imminent need for intervention. The fact that marketers are seeking trademark protection is a clear sign that there is a need for protection. However, it is imperative that they chose the right instruments so the protection is

¹²¹ B. Brett Heavner and Michael R. Justus, *Op. cit.*

¹²² *Idem*

complete. In addition, by doing it correctly it will aid combat greenwashing, specifically when it comes to false or look-a-like marks.

As it has been, the laws governing certification marks are not uniform. Hence, only their common-rules have been discussed up to now. Nonetheless, some systems stand-out from the rest, such as the Australian system. Due to its peculiarities it will be discussed in depth in the following section.

5.4 Certification Trademarks in Australia

Australia's legislation regarding certification trademarks is worth pointing out as it differs from other Anglo-American systems in very clever ways. There are minor differences such as the fact that in Australia the owner of the mark is allowed to use the certification mark or that the criteria of the certification are published along with the regulations. The real differences emerge from the fact that in Australia the application is not only reviewed by their Registrar of Trade Mark but also by the Australian Competition and Consumer Commission (ACCC). The ACCC has to make sure that the certification trade mark and its rules meet certain criteria before it is registered. The criteria are based on the principles relating to competition, unconscionable conduct and consumer protection.

The owner of the mark should submit the application and the certification trademark rules to the Registrar of Trade Marks. There the application will be reviewed as any other trade mark application. If the application has all the requirements, the Registrar will forward the application, including the certification mark rules, to the ACCC. Once the ACCC receives the application and the rules, it will write to the applicant to notify the reception of the application, a time schedule (to set conference dates) and require additional information. The ACCC proceeds to do an initial assessment of the application which will be published in the Official Journal of Trade Marks.¹²³ Any interested party (the owner of the mark or any one else) can object the initial assessment¹²⁴ by written submission and they are entitled to request the ACCC to hold a conference to make an oral submission. Once all the parties have been heard (either in writing or in conference), the ACCC will emit its final assessment. If it is satisfied with that the certification mark meets all the relevant criteria it would provide certificate stating that it is satisfied. If the ACCC is not satisfied that all the criteria have been

¹²³ It takes approximately 3 months from the reception of the application.

¹²⁴ They have one calendar month to object.

met it must notify the applicant and the Registrar of Trade Marks. The refusal of the ACCC to give a certificate can be reviewed by the Administrative Appeals Tribunal.

Since the initial application until before the initial assessment, there is an open consultation period for all interested parties to comment upon the certification mark applications. Since 2007 all the applications and certification mark rules are available online from IP Australia's website.¹²⁵ Therefore, all interested parties can submit comments on the Certification Trade Mark, its criteria or its rules. However, it is not limited to parties that voluntarily submit their opinions and comments. The ACCC can actively seek the "views of interested parties or parties that are considered likely to have expertise relevant to a CTM application." This step makes a huge difference from the other certification mark applications. Because, the ACCC can call upon experts (relevant authorities) in the field to verify the criteria of the certification mark. In this sense, using the example of the "APIA Free Range Certification Program", the ACCC can call upon the farming authority to verify that the criteria are indeed appropriate for the intended use of the mark. Furthermore, it can verify how strict the criteria are (using the applicable laws as the baseline). It is not clear whether they compare the criteria of the applicants with the criteria from the programmes that are already registered. If it is, then this mechanism could also avoid criteria overlapping. If two programmes share the same criteria, the authority could point this out and maybe suggest a merger or another type of arrangement between the programmes.

6. Conclusions

The contribution of this chapter can be seen from two aspects. First, it allocates eco-labels within a legal framework and it points out what is missing. This chapter only considered positive public law. This is law that is contained within different statutes. While it is true that there is no specific law for eco-labels, it was found that there are laws that could be applicable to them. However, as will be pointed out in the following chapter, there is still a very large gap to cover. Specifically, the current system has done very little to deal with false, misleading and deceptive environmental claims and labels. This does represent a real problem especially considering that greenwashing outnumbers true eco-labels 9 to 1. That is proof that something is wrong in the system. Eco-labels do have a positive role in the market

¹²⁵ <http://www.ipaustralia.gov.au/get-the-right-ip/trade-marks/types-of-trade-marks/certification-trade-mark/certification-rules/>

for environmental goods, certification even with its inherent problems still plays a pivotal role. However, all of this is undermined with the presence of false labels and other forms of greenwashing.

Notwithstanding the above, some countries do have statutory regulation of certification marks. These countries do not have salient or dominant public eco-labelling programmes in place, their eco-label industry is comprised of private parties and maybe some hybrids. In addition it can be observed that there is much more competition (more presence, variety and scope of products) than in countries that have large public eco-labels. Hence, Intellectual Property protection becomes pivotal to incentivise the industry. Without this protection industry will not invest in certification and there would be an underproduction of eco-labels. On the other hand, countries with large public eco-labels, normally do not contemplate certification marks in their statutes. In this case governments do not need to worry about underproduction of eco-labels as they have the control. By giving eco-labels (seen as environmental certification marks) statutory status governments recognise their property rights as well as the right to defend their rights in court. This system will prove much more effective than using the normal deceptive advertising route. Furthermore, eco-labels when seen as certification marks, have a different legal nature than other forms of green marketing. Hence it would be wrong to try to address them as green marketing tools when they are not. If there is a specific rule this is the one that should be used. It is not to say that green advertising should be completely discarded. It is just a different matter.

This chapter however has shown that there is not only scope for law in eco-labels, there already is law for eco-labels. At this moment however, it is time to take these findings as well as those from previous chapters and use them to answer the underlying questions of this research: *Do eco-labels call for legal intervention? And if so what type of intervention would be the most appropriate?* At this moment, the status quo of eco-labels is clear. Thus, the following chapter will determine whether given the current situation there is a need for legal intervention, and if so, how should the law look like to improve the current status.

CHAPTER VI

The Law and Economics of Eco-labels

1. Introduction

Up to now this work has focused on telling the story of eco-labels from a descriptive, economic, business, behavioural and legal perspective. At this point all the relevant problems of eco-labels have been determined. Therefore, it is time to answer the underlying questions of this work: do eco-labels call for legal intervention? And if so, what type of intervention would be the most appropriate? This chapter will attempt to solve both questions. Hence, it is necessary to recall and point out the different market failures that follow eco-labels. Eco-labels are meant to solve informational market failures, however in doing so they create new failures. This has become evident recently, hence it is necessary to in favour or against regulation of eco-labels from a Law and Economics perspective. Once this is done, the second question will be dealt with. To create an efficient regulatory design for eco-labelling different options have to be considered. Whether eco-labels can be regulated without government intervention or the degree of the intervention will also be determined. In addition, because eco-labels share their market with simple environmental claims (that are not certified, hence they are not eco-labels), their regulatory structures are bound to interact. Hence, this will also be considered, as regulating eco-labels alone is unlikely to achieve optimal results. Unregulated environmental claims or marketing will hinder their performance by creating noise in the market.

This chapter will first address the law and economics motivations for eco-labels. In other words, it will address why there is the need for eco-labels in the first place. It will be seen that the environmental good market has informational failures that cannot be corrected on their own. Hence, there is a need for eco-labels. Subsequently, a brief assessment on eco-labels will be performed. It will be shown that eco-labels out-perform the price mechanism, because it provides better information. In addition, the pitfalls of eco-labels will be pointed out. These pitfalls, are the main rationale that there is still a need for law in eco-labelling. Section 3, will deal with the possible regulatory design for eco-labels and the definition of the role of the government. Finally a regulatory strategy for eco-labels will be proposed.

2. Eco-labels and their Law and Economics Rationale

As it can be recalled from Chapter I, in the 1970s governments came together and decided that environmental matters had to be incorporated into everyday life. They drew up several strategies, among which was education and information of consumers. Shortly after, Germany came up with the Blue Angel eco-label. The purpose of the Blue Angel was to inform consumers that the product they were buying had different environmental attributes. These attributes were determined in a set of standards, based on a Life Cycle Analysis (LCA) of the product in question. The standards that were created were complementary to new environmental regulations, hence there was an incentive for firms to join the programme and for consumers to acquire them. After this eco-label came into place many governments followed Germany's model and created their own eco-labels. In conclusion, eco-labels were government tools with the purpose of informing and educating. However, eco-labels have an alternate origin, that is private politics. In the early 1990s environmentalists were disappointed with the fact that governments failed to reach an agreement regarding forestry. Consequently, large NGOs took on the task of creating private certification schemes. These certification schemes, which are also eco-labels, would create standards that the stakeholders (NGOs, farmers, consumers, governments) deemed appropriate. Hence it can be said that eco-labels also cover for government failures. Eco-labels go a step further than the law, as their standards are stricter and broader than the government ones. It could be argued that they also have a broader scope than governments as they can create trans-national standards or standards that influence the processes of private firms (a matter in which governments are not welcome).¹ This brief reminder shows two important matters that eco-labels try to solve: market failures and government failures.

2.1 Eco-labels and Market Failures

If markets were perfect eco-labels would not be necessary. This is because in perfect markets all information is available, there are no information asymmetries. In addition, all products are homogeneous and there are no transaction costs. In a perfect market, prices are set where marginal costs meet marginal revenue; therefore, there are no profits and prices are sufficient to communicate information. Also, all the participants in the markets are *homo economicus*, or rational utility maximisers. Hence, eco-labels (as well as other information tools) and other interventionist measures are useless as the market is capable of

¹ On the other hand, law is mandatory, making it much broader than any voluntary measure.

correcting any fault. However, when the assumptions of perfect markets are not met, the perfect market becomes imperfect. Imperfect markets are characterised by market failures. Tools such as eco-labels are created to aid to mitigate such imperfections. Specifically, eco-labels help to reduce transaction costs, specifically information costs. Additionally, due to their 'environmental' nature they are also expected to internalise their negative environmental externalities; by doing so, they also contribute to the production of a public good.

2.1.1 Information Failures

As seen in Chapter II, products can have a search, experience or credence nature. It was concluded that environmental attributes are considered credence goods, as it is unfeasible for consumers to assess the product's environmental quality either before or after they purchase/consume the good. In addition, it was observed that the only mechanism that is effective for conveying information about credence attributes is certification. Therefore, taking from the analysis in Chapter II it can be deduced that one of the biggest obstacles of eco-labels is the nature of environmental information.

2.1.1.1 Search and Experience environmental attributes.

Not all environmental attributes have a credence nature. For example, a product's packaging or its recyclability, are attributes that can potentially be observed by the consumer either before, during or after consumption. In this sense, some environmental attributes can have search or experience attributes. While it is true that it would be costly to verify if a product is in fact recyclable or compostable, it is not unfeasible for the consumer to find out. Furthermore, many of the environmental attributes (in white-wear, for instance) are designed specifically for the consumption phase (making them experience goods). Therefore, if the appliance is used correctly, the true 'environmental-friendliness' could potentially be observed (reduced electricity bills or less gas). Therefore, advertising and branding can prove to be sufficient to provide this type of information.² Advertising and branding of environmental attributes are considered environmental claims. Environmental claims, as seen in Chapter I, are normally self-declared as they do not use external parties to verify their claims. Then again, due to the nature of the goods (search and experience) there is no

² This matter is discussed in Chapter V Eco-labels and the Law

need for external verification or certification, as consumers can potentially figure out the veracity of the claim by experience.³ Nonetheless, if there is no control over these claims it is possible that producers get away with claims that are exaggerated or untrue. As it was seen in Chapter V, these claims are normally controlled with “guidelines” that work as safe-harbours not as standards.

2.1.1.2 Credence environmental attributes

The majority of environmental claims have a credence nature. Credence attributes normally arise due to the products’ process and production methods (or PPMs). PPMs can be product related or non-product related. When the PPM is product related the product itself can be discriminated due to its physical characteristics, if a tomato is grown using pesticides, the pesticide can be traced; thus this tomato can be differentiated from one grown pesticide-free. Product-related PPMs, will define a product and make it different than other products. A clear example of product-related PPMs are organic products. To a certain degree the nutritional content of a product (calories, fat, sugar, fibre) can also be considered a product-related PPM. Firms can alter the PPM to differentiate it from other products in the same category, making “low-fat” or “sugar-free” varieties. This type of PPMs are not precisely experience attributes but they do not fit clearly in the credence type either. This is because, even though it is difficult for the consumer to verify the attribute it is not physically unfeasible. Thus they can be considered credence goods in a broad sense. On the other hand, non-product related PPMs are those that do not affect the product’s physical or other identifiable characteristics.⁴ These types of unverifiable characteristics are much more complicated to assess because they do not alter or leave traces on the product itself. This could be the case of fair-trade, biodiversity-friendly, cruelty-free or other ‘strictly’ environmental or sustainable labels. The issue is that the end product is no different than a normal product in its performance or appearance. The only thing that makes them different is the eco-label that ‘claims’ they are in fact green and the price differential (if there is one). Therefore, non-product-related PPMs are credence goods in a strict sense.

³ These are the Type II Environmental claims according to the ISO (see Chapter I)

⁴ Environmental Law Institute (ELI), **Harnessing Consumer Power: using Certification systems to Promote Good Governance**, p. 25.

The normal and eco-labelled goods are essentially the same in all their attributes, except for the alleged environmental criteria that they conform to. Consumers cannot verify the claims and they have to trust the information he can extract from the product. The only mechanism that can guarantee that products have the attributes they claim they have is certification. Without certification consumers will not believe any label and simply ignore it. As seen previously, (Chapter II and V) certification is essential for the existence of the credence good market. Without certification, the mark is just a claim. However, environmental claims are not appropriate to communicate credence goods, as the consumer will not be able to verify the claim. Certification provides the proof consumers need about a product's attribute. Moreover, because certification schemes depend on their reputation to be credible, they have high incentives to keep information truthful. Furthermore, as seen in Chapter II, certification has a contractual nature, hence it falls within the private or self-regulatory sphere (as will be seen below).

2.1.2 Externalities and Public Goods

Both externalities and public goods are considered market failures. Eco-labels promote the production of positive environmental externalities⁵ or the reduction of the negative externalities (to be more precise). Environmental externalities, have the characteristics of public goods because they are non-rival and non-excludable. Hence, environmental externalities are also considered public goods. In Chapter II it was discussed that eco-labels have the purpose to increase the provision of public good. They do so by bundling the public good with a private good thereby creating an impure public good or a joint product. The more eco-labelled products are sold, the more public good is produced. When firms decide to voluntarily produce public goods or reduce their negative environmental externalities (or produce positive ones) it is considered pro-environmental behaviour.⁶

2.2. Eco-labels and Government failure

⁵ Externalities are the positive or negative effects of actions experienced by those not involved in the market transaction. They arise when the price of a product does not reflect all the costs that society incurs to make it available to consumers, or when at least some of the benefits associated with the consumption of the good or service "spill over to third parties who pay nothing for it." Externalities mean that the social costs and benefits of a transaction differ from its private costs and benefits. See Paul R. Portney. **Corporate Social Responsibility: An Economic and Public Policy Perspective**, p. 110.

⁶ Pro-environmental behaviour was analysed in Chapter III.

The discussion between private or public ordering has been a popular topic in Law and Economics. Some eco-labels are a vivid example of spontaneous private regulation due to government's failure to regulate. Specifically, the Forest Stewardship Council was created after the failure of the Earth Summit of 1992 held in Rio de Janeiro. It was considered a failure, because in the agenda of such Summit a forestry agreement was to be formalised. At the time, the topic of tropical timber was very heated; governments, industry and NGOs had strong interests on the matter. However, the Summit did not deliver the expected agreement. This led the World Wildlife Foundation (WWF), supported by some governments (such as Austria) and the industry to create a private set of standards to be followed on a voluntary basis. Today the FSC and other eco-labels⁷ create their own standards that the international community (governments) have not managed to reach an agreement on. This example shows that successful interventions have been made by entities other than governments. Ogus points out that "the consequences of government failure may be more severe than market failure."⁸ This is because, it is a failure that no one is addressing and such a lack of attention could lead to terrible consequences.⁹ Therefore it is important to determine carefully what matters can be left to the market alone and which matters might need intervention. In the forestry case, a lack of clear international standards could have set off a race to the bottom. This would have led to the deforestation in parts of the world where the enforcement (or existence) of environmental regulation is too weak (or non-existent).

The environmental goods market, as seen in the previous section, is afflicted by a systematic presence of informational failures (the nature of the information). With the credence nature of environmental information, a market for environmental goods would never arise without an external tool, such as certification. Therefore, an intervention, which in this case takes the form of eco-labels, is justified. Eco-labels, as seen in Chapter V, can be public, private or mixed. In other words, the intervention can come either by private parties, which are part of the market; public parties, which are normally external; or public and private entities can coordinate to create a mixed or hybrid model. Which party is the most efficient regulator can be easily answered within a Law and Economics framework.

⁷ Many eco-labels followed the system of private certification schemes that were created after the international community's failure to regulate matters such as forestry, fisheries, labour and agricultural products (tea, coffee, cacao, cotton and palm oil).

⁸ Anthony Ogus, **Self Regulation**, Encyclopedia of law and Economics, p. 590

⁹ This lesson can be learned from other markets such as the financial market and its crisis in 2008.

The Coase Theorem, basically states that “the ability of consensual bargaining to achieve efficient outcomes is a function of transaction costs.”¹⁰ Therefore it is as simple as determining which party has the lowest transaction costs. The party with the lowest transaction costs is the most likely to reach a consensual and efficient outcome. Specifically, governments’ ability to reach international consensus in the environmental or sustainability arena might too costly ¹¹ to achieve efficient (or any) outcomes. Therefore, it might be worth considering to allow private entities, such as certification entities, who have the bargaining power and the lowest costs¹² to achieve efficient solutions. Therefore, private certification entities, as long as they are less costly, should continue to regulate where governments fail or are unable to do so. Many times governments are unable to tackle certain market failures or their scope of action is limited (jurisdiction, territory, topic). In these cases, private entities can step in to fill-in the gaps created by the government. For example, in the case of international supply chains it is easier for private entities to coordinate and achieve efficient solutions (for example, they can bargain directly with downstream suppliers from different countries and across a variety of sectors) than for governments.¹³

2.3 Eco-labels: an Initial Assessment

At first glance eco-labels are a simple information tool that aim at reducing the information gap between producers and consumers, while simultaneously committing to producing public goods. In this sense, eco-labels reduce transaction costs. Transaction costs, as pointed out by Coase, produce inefficiencies which reduce social welfare. When transaction costs are low, parties are able to achieve efficient outcomes, regardless of the property rights assigned to them. Therefore, any tool that is aiming at reducing transaction costs will lead to a more efficient outcome than without them. However, eco-labels also attempt to lower negative externalities or produce positive externalities, by providing incentives to firms to engage in pro-environmental activities. From this perspective, pro-environmental

¹⁰ Anthony Ogus, *Op. cit.*

¹¹ Transaction costs of achieving international agreements can be very high. For example, the time and resources taken to bring the parties together, finding and funding an adequate forum, but above all, reaching consensus might require a lot of effort because of the different interests the parties might represent.

¹² It is assumed that transaction costs for the private regulators are lower because they have the ability to reach places and stakeholders, both legally and physically, that public regulators cannot. They can have presence in many countries and in several markets, without altering their processes. Furthermore they enjoy more flexibility, as they are not limited by “governmental powers”.

¹³ Fabrizio Cafaggi and Andrea Renda, **Public and Private Regulation: Mapping the Labyrinth**, p. 17.

behaviour is the equivalent of internalising externalities. When the full costs of the transactions (production costs in this case) are considered within the price then the market is expected to be more efficient. In other words, when there are externalities prices are going to be lower because not all costs are included. Hence, it is expected that the goods will be over-supplied, creating an inefficiency (in the environmental case: too much pollution or resource depletion). However, when the costs are internalised, then the price reflects the real costs of the product. It can be assumed that the internalised price is higher than the externalities price scenario, precisely because all the costs are taken into account. Therefore, at least in theory, less product will be supplied. This is more efficient or less wasteful market outcome.

2.3.1 The Price Mechanism

In theory, if pro-environmental behaviour can be compared to internalising environmental costs, it is plausible for the price mechanism to be an efficient tool for communicating such behaviour. In other words, prices alone could be sufficient to reflect the pro-environmental behaviour of the firm. Hence, there would be no need for eco-labels. Eco-labels are a low-cost policy tool because they are driven by consumer interest in reducing environmental impacts. However, the price mechanism has even lower costs than eco-labelling. The price mechanism is a market oriented approach, that can guide consumers to use prices as a reflection of total resource costs in the production of the product.¹⁴ Menell argues that prices are the most reliable market signal there is. Prices are very sensitive to the effects of pollution, as costs such as regulatory compliance are incorporated into them. In this sense, it is more expensive to operate a facility that is in a high pollution control or environmentally aware area (more taxes, fines and costs for waste, water and energy) than one with lax environmental regulations. These costs will be reflected in the price which will tell the consumer the overall environmental value of the good.¹⁵ While prices do not focus exclusively on environmental considerations, they do provide 'reasonable' information on resource costs. For example, it has been claimed that being vegetarian is the most significant behaviour a person can do for the environment (individual pro-environmental behaviour). Considering the resources required for a meat-centred diet, it is expected that

¹⁴ Peter S, Menell, **Educating Consumers about the Environment: Labels vs Prices**, p. 183.

¹⁵ *Idem*, p. 187.

the prices will be higher than a vegetarian one (given that the vegetable is not expensive to produce or is imported from half way across the world). Meat production requires water, food (vegetable protein obtained from grains, which also have to be produced and processed), time and other processing resources. Hence, meat and its derivatives are much more expensive to produce than vegetables and grains. In this case, the price mechanism truly reflects the resources that go into the food and is clear that vegetables are less resource-costly than meat. While the price might reflect the resources-costs, it does not imply it reflects social costs as well. Nonetheless, for this specific case, there is in fact no need for an eco-label to communicate this, as the price is sufficient.¹⁶ However, when it comes to more processed goods the price signal is not so clear. Furthermore, whether the environmental good would be more expensive, because of the compliance costs or cheaper, due to the less resources used in processing, is also not clear. It could even be assumed that the savings in resources and the certification or compliance costs cancel each other leaving the price intact. However, these are mere conjectures that need to be proved.

Supporters of the price-mechanism, such as Menell, did not consider many of the behavioural 'anomalies' that might hinder the price mechanism. For example, it was discussed in Chapter II that even though a product might be cheaper to produce when it is produced in a pro-environmental manner. If it is priced 'truthfully' people will not buy it because lower prices are perceived as lower quality. Hence, many pro-environmental firms, who might have reduced their costs (energy, water and waste savings) might still want to mark-up the prices to signal that the good is of better quality. Furthermore, there is the case of conspicuous conservation (seen in Chapter III) that will push the price of environmental goods up (like a Veblen good), as that would signal status. Notwithstanding the above, it is also pertinent to consider that market prices are not always set at the point where marginal cost meets marginal revenue. The truth of the matter is that market actors (specially firms) do seek profits and rents. Hence, the "market price" from a perfect market, which is the threshold to measure other prices does not really exist. Prices are normally marked up, hence they do not reflect the costs. In addition, contrary to a perfect market, prices are set to differentiate the products, making it difficult for consumers to assess the environmental quality of the product. In other words, high prices can be a reflection of high regulatory

¹⁶ *Idem*, p. 190.

compliance, a fashionable trademark, high transportation costs (if the product is imported), taxes and many other issues that do not necessarily communicate a product's resource use.

On the other hand, prices can magnify the effect of an eco-label (or vice-versa). When eco-labels and prices are strategically placed together, it can lead to increase sales, as both the high price and the eco-label signal that the good has high environmental quality. Hence they reassure the consumer that the environmental attributes are true (at least in the consumers mind). In an experiment, it was shown that sales of eco-labelled goods increased (dramatically) when the prices were significantly different than the normal product.¹⁷ However, eco-labelled or environmentally friendly goods in theory should be cheaper to produce, as they are less resource intensive than normal products. Even with the certification costs (which can be high) the product might still be within the average market price. If this is the case, the price will not really reflect anything and there will be a need of another information tool such as the eco-label.

2.3.2 Eco-labels and the production of public goods.

Evaluations about the environmental (and overall) impact of eco-labels has been limited. Up to date, some efforts have been made to collect empirical evidence regarding eco-labels environmental impacts.¹⁸ These reports have raised many discussions between academics, scientists and NGOs¹⁹, as the overall results of the studies are inconclusive. Measuring the impacts of environmental certification on the environment presents many difficulties. From an empirical perspective, many factors are still unknown and eco-labels vary immensely from one another. These unknown factors are present because eco-labelling is a relatively new phenomenon and has had an exponential increase since the last decade. Furthermore, eco-labels are dynamic and are constantly evolving, hence it is not easy to measure the

¹⁷ This example was discussed in, Chapter II, section 4.4.2.

¹⁸ For a summary on the empirical studies of see Allen Blackman and Jorge Rivera, **The Evidence Base for Environmental and Socioeconomic Impacts of "Sustainable" Certification**, Resources for the Future, Discussion Paper, March 2010

¹⁹ NGOs place in private certification and standard setting is complex. On the one hand there are organizations that are behind the programs, hence they have an interest to "push" the certification trend. On the other hand, they are also the experts on the criteria and they are also the "watchdogs" who oversee the effectiveness of the eco-labels and ensure their accountability. It is shown that, NGOs understand that they have different roles to fulfill in society and some focus on activism, whereas others offer technical support and guidance and others function as watchdogs or even metaregulators such as the ISEAL. NGOs and their roles in eco-labelling is subject of many recent studies, for a nice collection of these see: www.unpop.nl

effects of a single criterion over time.²⁰ On the other hand, the circumstances behind eco-labels vary across products (for example, it is not the same to talk about fish than to talk about diamonds or palm oil) and markets (for example, eco-labels impacts are not the same in the developing world, than in the developed world). From a methodological point of view, studies follow different methodologies and not all of them lead to credible results. Hence, the results of the already available empirical studies are still limited. Blackman and Rivera, find only 37 scientifically relevant studies,²¹ and of those only 14 follow a methodology that is likely to generate credible results. And of those 14, only 6 find that certification has environmental or socio-economic benefits. Furthermore, even with the collection of case studies and comparisons, “the evidence base to judge whether certification systems achieved their claimed social, environmental, and economic benefits at the level where they work (i.e. The farm or enterprise) appears relatively robust, but it is difficult to draw conclusions with confidence given the variability in methodologies.”²² To this conclusion, Blackman and Rivera might add also the need for causal impacts studies (studies that construct a credible counterfactual). Furthermore, they also find that many sectors and eco-labels have been completely ignored in the studies. Of the 14 cases that they deemed relevant for their review, twelve of them focus on bananas, coffee and tourism. Causal impacts studies are missing on fish, timber, cacao, bio-fuels and live-stock.²³ Up-today it is not possible to know whether the standards or criteria set by the eco-labelling organisations actually make a difference in the environment. While this is an important matter to consider for future evaluations of eco-labels, the available information is not of much use from a Law and Economics perspective. Currently, the environmental impacts of eco-labels are better dealt with by other sciences such as engineering or natural and earth sciences. Therefore, this type of analysis, while interesting and potentially useful, is currently out of the scope of this analysis.

2.3.3 Concurrence of eco-labels and claims: too much information

²⁰ Executive Summary, p. 6

²¹ As noted in the Executive Summary, the matter of eco-label performance has been found in a great variety of literature, “including hundreds of case studies and before/after or certified/non certified comparisons of varying quality, dozens of relatively large-sample-size quantitative and qualitative, and a few peer reviewed large-scale outcomes evaluations.” see page 5-6

²² Steering Committee of the State-of-Knowledge Assessment of Standards and Certification. Toward Sustainability: The Roles and Limitations of Certification, **Executive Summary**, p. 6

²³ Allen Blackman and Jorge Rivera, **The Evidence Base for Environmental and Socioeconomic Impacts of “Sustainable” Certification**, p. 24.

Many have argued that a multiplicity or concurrence of eco-labels would be a hindrance for the market. At this point, no clear reason has been set out explaining why there should be a monopoly on eco-labelling or why would competing eco-labels have negative impacts on the market. While it is true that too much information can be damaging (as seen in Chapter IV), having no alternatives or having information about a single attribute is not desirable either. Furthermore, when a policy is based on consumer choice, the proliferation of labels is an inevitable risk.²⁴ This is because consumer preferences are likely to differ from one another. Therefore, there will be a need to address these preferences, hence more than one eco-label is likely to appear. This competition of eco-labels simply indicates market segmentation. In the end each certification has its own advantages, even if consumers do not know each label “the mere existence of the seal on the product conveys useful information, because it indicates that the product has been reviewed.” If a consumer distrusts the judgement of one organisation there would always be an alternative option with a different approach.²⁵

Another argument against multiplicity of eco-labels could be related to their costs. Creating an eco-label (specially a life-cycle eco-label) is not cheap. Therefore, it is understandable why original proponents of eco-labels thought that only governments would have the resources to create and manage an eco-label.²⁶ However, the high operation costs of certification schemes can and have been overcome by private parties. Environmental certification is a labour intensive task and requires know-how. Therefore, it is normal to see only a handful of reliable certifiers in the market as certification is the type of industry that enjoys economies of scale. However, if the certification costs are borne by the certified party and the certifier can enjoy reputational benefits (by being accredited or partnered with an eco-label) it might be a profitable market (industry)²⁷ to enter. Hence, the concurrence of

²⁴ House of Commons. Environmental Audit Committee. Environmental Labelling, Second Report of Session 2008-09. Report together with formal minutes, oral and written evidence. Ordered by the house of Commons to be printed 3 March 2009. P. 7-8

²⁵ John M. Church. **A market solution to Green Marketing: Some Lessons from the Economics of Information**, p. 291

²⁶ The starting costs of eco-labelling can be very expensive, the life-cycle analysis to determine where the production has its highest impact, negotiating with stakeholders (consumers, industry, government agencies) and managing the eco-label are all tasks that have to be undertaken by the certification body. It is unlikely to have high profits, therefore there are not many incentives to pursue this line of activity for a for-profit private entity.

²⁷ Jane Harris and Anne Cole from the Australian government refer to eco-labels as an industry. An industry in its early development stages with private sector activity. See: Jane Harris and Anne Cole. **The Role for Government in Eco-labelling - On the Scenes or Behind the Scenes?** Paper for conference “the Future of Eco-labelling in Australia, 9-10-2003.

eco-labels is not the problem. The problem is the concurrence of eco-labels, environmental claims and environmental advertisement. This great variety of environment-oriented marketing strategies is what causes the confusion. While, the general terms of environmental claims and advertisement do include eco-labels, it also refers to all the other environmental information. Eco-labels convey information about the quality of the information: it is third-party certified. Whereas simple environmental claims have an informational and/or persuasive motive. Claims that have information or persuasion motives are normally considered within the realm of advertisement, which is different from that of eco-labels. However, on the product, at the point of purchase (where it matters) they all look the same in the eyes of the average consumer. This creates the perfect conditions for greenwashing (as seen in Chapter II). The more information is in the market, the easier it will be to get away with greenwashing.

It has also been argued that too much information (environmental or otherwise) creates a cognitive overload on consumers, which hinders their decision making abilities. The cognitive overload regarding eco-labels is due to all the environmental information on the product. On a product's package a consumer can find everything from hazardous material contents, disposal instructions, recyclability, mandatory certification seals, eco-labels and environmental claims and advertisements, which are all environmental in nature. Furthermore, much of the multiplicity is due to overlapping criteria. This arises when a government programme of one country (or state) is not recognised in another, even if the criteria are identical. If a producer wanted to cover several jurisdictions, it would simply obtain the certification and apply to all the programmes that this certification allows it to. This results in a multiplicity of eco-labels that are in essence the same, and do not mean anything to the consumer. This is another scenario in which multiplicity of eco-labels could be a problem, as consumers will either be a) fooled into thinking that the product is VERY eco-friendly, or b) confused to the point of incredibility, where he will ignore the information. As already mentioned in Chapter IV, competing eco-labels should not have the same criteria (even if they cover similar territory), their criteria should be what makes them distinct from each other.

Proliferation of eco-labels is a real phenomenon. However, even if they are confusing and create cognitive overload, some eco-labels "have become well known by consumers, who are able to differentiate between them in the same way as between the many different

brands and retailers...”²⁸ Therefore, reputational mechanisms have entered into action allowing some eco-labels to be recognised in the market. In addition to being recognised, consumers and competitors might even regard them as “first-rate” schemes. Being a ‘first-rate- scheme is desirable as it implies a positive reputation as well as a strong position in the market. However, to become a first-rate eco-labelling scheme, certain investments in reputation have to be made. As seen in Chapter II, reputation does just not happen automatically, it is a costly strategy that signals the firm’s commitment to certain quality. Therefore, it is no surprise that first-rate eco-labels are those who have sought accreditation before a meta-regulator, such as the ISEAL Organisation. These programmes, to show their commitment have chosen to invest in the compliance of ISEAL’s (or other meta-regulator) criteria which is costly. This will allow the eco-label to enjoy a positive reputation and increased credibility. Hence their signal will be much stronger compared to other eco-labels without such accreditation. This matter as well as the one addressed immediately below show that eco-labels, while solving a first layer of informational matters (the one related with the nature of the environmental attributes of the product), simultaneously create a new layer of information asymmetries.

In conclusion, by increasing the amount of eco-labels, it will be difficult to identify the type of eco-labels as information will be costlier to obtain. There can be good eco-labels (those that are accredited by a meta-regulator), normal eco-labels and bad eco-labels (those that are false). Hence, there are “new” informational asymmetries that are created by the eco-label market. This is accentuated with the amount of eco-labels that are in the market, as it becomes harder to identify the eco-labels’ type.

2.3.4 Eco-labels and greenwashing: the informational conundrum

As it has been stated through-out this work, eco-labelled products can be rewarded with price premiums and/or positive environmental reputation. These rewards are interpreted as profits for the firms that produce such goods. While this incentive is the main driver for pro-environmental firms to join eco-labels it is also the same driver for greenwashing. Greenwashing is the largest undesired outcome of environmental marketing. Eco-labels (certification) are essential “to continuing progress in *greener* products. Ironically, the

²⁸ House of Commons. Environmental Audit Committee. Environmental Labelling, Second Report of Session 2008-09. Report together with formal minutes, oral and written evidence. Ordered by the house of Commons to be printed 3 March 2009. P. 7-8

potential importance of eco-labels has led to a proliferation of them, and to a multitude of types and degrees of meaningfulness and integrity.”²⁹ This means that the mechanism attracts all types of eco-labels not just the “good” ones. In reality, the “good” type of eco-labels are the minority compared to the other types. The conundrum lies in the fact that eco-labels correct an informational failure whilst simultaneously creating a new one. The new informational failure lies in the fact that there are different types of eco-labels. As seen in the previous section, with the increase of environmental claims and labels, the probability of greenwashing also increases.

2.3.4.1 Greenwashing as a long term strategy

Recalling from Chapter II, it has been claimed that greenwashing is not a profitable strategy in the long-run. Over-time consumers are capable of learning true quality of the claims, reputations will develop and the greenwashers will be forced to leave the market. Furthermore, it can be inferred from the TerraChoice survey, that the industry also is able to learn. Such survey shows a tendency of ‘mature’ categories of green products to have much less incidence of greenwashing than ‘newer’ categories. Additionally, these ‘mature’ categories consistently use legitimate eco-labelling schemes to handle their certification. Notwithstanding all these strong arguments, greenwashing still hinders the effect of the eco-labelling mechanism due to its magnitude and the harmful effects on consumer’s trust. Greenwashing outnumbered legitimate claims (roughly) 9 to 1. This evidently makes consumers extremely distrustful about environmental claims. In fact, it is possible that the reasonable strategy for the consumer (under these circumstances) would be to ignore such claims altogether. The problem with this of course is that the eco-labelling mechanism depends on consumers. Without the consumer’s side of the story, there would be no price incentive to commit to pro-environmental behaviour, hence eco-labels would not work.

It is true that, greenwashing is a tempting strategy, as it is very easy and it is practically unpunished. It has to be clear that greenwashing does not mean that the producer pollutes more; it means that it lies, overstates or misrepresents his environmental qualities. In other words, if a product has no environmental claim, regardless of its environmental impact it will not greenwash. Greenwashing is a behaviour regarding environmental information not

²⁹ TerraChoice, **The Sins of Greenwashing: Home and Family Edition. A report on environmental claims in the north american consumer market.**

environmental performance. Hence, proving greenwashing is extremely difficult. However, groups such as TerraChoice perform surveys that can show some light in the reality of the eco-label market. In its 2010 survey, TerraChoice found that out of 5,296 products only 265 were really as green as they claimed this means that 95% of green products are being greenwashed.³⁰ Nonetheless, the same report allows to infer that firms have learned (or will learn) that greenwashing is not a long-term strategy. If the producer has the intention to remain in the market it has to maintain a reputation. Therefore it has to invest in its relationships with its stakeholders. These investments are unlikely to be cheap, if they are meaningful. After a certain point, these investments become valuable and engaging in greenwashing would considerably damage the firm's image. Therefore, reputation is another important mechanism that constrains firms to be truthful. It is true that many firms will still take the opportunity to "cheat the market"; however, they will not survive. As seen in Chapter II, greenwashing is profitable as a "fly-by-night" strategy which is in essence short-term. Therefore, firms that cannot sustain the high costs of the eco-labelled market and will eventually leave it or not enter it in the first place. Following this reasoning, it is understandable why while firms have sought to improve their environmental practices, it is still not wide-spread. Eco-labelling, has still remained a niche precisely because its costs are a significant investment. Therefore, theoretically, only those that are truthful will seek certification. The problem lies in distinguishing truthful eco-labels from greenwash.

2.3.4.2 Eco-labels a potential lemons market?

In economic terms there is an adverse selection problem that can potentially lead to a 'market for lemons'³¹ scenario.³² Akerlof, employed the used car market to exemplify the adverse selection problem created by information asymmetries. In Akerlof's example, just as in eco-labels, the price mechanism is not a reliable signal for quality as all used cars will be

³⁰ TerraChoice makes no distinction between certified and uncertified goods. From the 7 types of greenwashing seen in Chapter II, even certified goods can fall into greenwashing practices. Though it will be of a lesser scale, compared to uncertified claims.

³¹ In the US, bad-quality used cars are known as lemons.

³² Akerlof in 1970, through the used car market or 'lemons market', demonstrated that product quality continuously decreases if quality information is distributed asymmetrically between seller and buyer. Only the seller is exactly informed about the true product attributes. The buyer, having less information supposes an average product quality and is willing to pay only a corresponding market price which covers the costs of a product of average quality. In such situation, sellers of high-quality products will be driven out of the market because their production costs are above average cost level. Since the inferior quality product remains on the market, the supply of quality is selected adversely. See: George Akerlof. **The Market for "Lemons": Quality uncertainty and the market mechanism**, The quarterly Journal of Economics, Vol. 84, No. 3, August 1970, p. 488-500

priced in the same manner. Hence, buyers cannot tell the quality of the car *ex ante*, thus they assume the car is of medium quality (which overvalues the lemon). Consequently, good cars will be undervalued; owners of good cars will prefer not to sell, as they will not receive the true or expected value of their car. This will lead to a scenario in which “*most cars traded will be the ‘lemons’, and good cars may not be traded at all. The ‘bad’ cars tend to drive out the good...*”³³ In other words, the cars will be adversely selected. In this sense the eco-label market can potentially become a lemon’s market. The big difference between lemon’s and greenwashing is that in the first situation the ‘true’ nature of the lemon will eventually surface (through experience) whereas greenwashing can go practically undetected (because of the credence nature of the environmental good). Again, Akerlof points out that the mere “presence of people in the market who are willing to offer inferior goods tends to drive the market out of existence.”³⁴ Following this idea, it is imperative to regulate greenwashing. This is because, it will drive ‘pro-environmental’ firms to invest even more resources in providing a credible claim, which may eventually become to burdensome and will force them to stop. Moreover, it will increase consumers mistrust to a point in which no environmental claim or label will be credible.

2.4 Greenwashing: different problem, different law?

Greenwashing is a different problem from the information failure that eco-labels are meant to address. It is a problem created by the eco-labelling mechanism. In short, eco-labels are the root of greenwashing whilst simultaneously being its solution. This issue arises because firms will take the opportunity to make environmental claims without changing their behaviour. Firms will have no trouble doing this because the probabilities of getting caught are slim. This is because of the credence nature of environmental attributes and the lax or non-existent regulation and monitoring. In 1992 Jamie Grodsky wrote “shortcomings in the current and regulatory system have allowed manufacturers to make misleading and unsubstantiated claims with virtual impunity.”³⁵ Twenty years later, the legal situation has changed very little, but the scenario has only got worse. Recalling some numbers from TerraChoice’s latest report, from the 4744 green products on the market in 2010 only 4.5

³³ George Akerlof. *Op. cit.*, p. 489-490

³⁴ *Idem*, p. 495

³⁵ Jamie A. Grodsky. *Op. cit.*, p. 150

percent of them were true to their claims, the rest (95%) were guilty of greenwashing at some level.³⁶ This means that the current regulatory system (including certification mark protection) has still come short in preventing greenwash.³⁷ Even if firms and markets learn, grow and mature, the problem of greenwashing is that it has not been addressed by any law.³⁸ It is out of the scope of the eco-label's internal regulations and governments have not dealt with it because eco-labels are voluntary. Furthermore, at the time of the creation of all the eco-labels it was not possible to foresee the magnitude of the opportunistic behaviour that the eco-labelling mechanism was going to spur. Controlling greenwash is the only way to ensure that the eco-labelling mechanism runs smoothly.

2.5 Scope for Law in Eco-labelling

When eco-labels first appeared most of the discussions were focused on the need of eco-labels as an instrument to tackle environmental information. Today the rationale for the existence of eco-labels (environmental certification marks) is clear: without certification there can be no market for environmental goods. This is because of the credence nature of environmental goods and attributes creates a market failure. However, the first boom of eco-labels were all government or publicly issued (always voluntary). This meant that those countries that had an 'official' eco-labelling programme were not preoccupied with regulating them, as they were already public. In a way, the eco-label was already the governmental intervention or the solution. When the private eco-labels appeared, they practically remained unregulated because of their voluntary nature. Furthermore, they were run by international organisations and functioned more as roundtables (conferences and workshops) than a regulatory bodies (even though they are). While NGOs are closely monitored by governments (because of the tax breaks and benefits) their programmes themselves are not monitored or regulated. After seeing this angle, it is easy to understand why there is such a legal gap.

Notwithstanding the above, whether eco-labels are good or bad is not relevant anymore (it was 30 years ago). Today, the eco-label market is a different one from that twenty or thirty years ago. Many of the predictions that academics and politicians discussed vehemently

³⁶ <http://sinsofgreenwashing.org/findings/greenwashing-report-2010/>

³⁷ Greenwashing was addressed in depth in Chapter II.

³⁸ From the analysis in Chapter V, it can be deduced that the only tool that exists against greenwashing is the action the owner of a certification mark has against those that are infringing his rights.

have already been proven. Greenwashing for example, was pointed as one of eco-labels' pitfalls by Grodsky in 1992, when it was not a problem (at least not as big as it is today). Greenwashing is a market failure known as adverse selection. As seen in section 2.3.4.2 the adverse selection might lead to a market for lemons scenario in which only 'bad' products will remain on the market as all the 'good' products will be driven out. This is already the case, as 'bad' claims already outnumber the 'truthful' claims roughly 9 to 1. And yet nothing was done about it. Today, the discussion has turned to the effectiveness of eco-labels: do they really have the environmental benefits they claim? As well as whether the information conveyed on the eco-label can be trusted? While this work cannot address the first question, the second one is clearly within its scope. The eco-label market creates greenwash. Greenwash is a market failure that needs to be regulated otherwise the whole eco-labelling mechanism will be completely undermined.

TerraChoice has stated that eco-labelling is both the solution and the cause of greenwashing. Therefore the solution to greenwashing should be in the eco-labelling mechanism. Jeffrey Minneti in his 'rational integrity regulation' theory claims that eco-labels should be "able to nudge consumers toward certified product claims and away from self-declared claims, the self declared claims would eventually leave the market."³⁹ This idea, however, represents Minneti's first best or ideal situation as it is unlikely that self-declared claims leave the market with the simple presence of certification. Furthermore, if the environmental attribute has an experience nature there is nothing wrong with a self-declaration. Minneti, further acknowledges that such solution is not achievable in the short-run; hence he proposes a hybrid scheme for the transition in which there is a "certification process to shape consumer preferences, but it would also provide standards for self-declared claims and a process for removing false claims from the market."⁴⁰ This scheme seems more viable than the previous one. However, Minneti does not provide enough elements to see whether or how this system would work. Neither does he provide elements for achieving these goals. What is true is that certification as it is today is not enough to deter greenwashing. Furthermore, there are countries (such as those with Common-Law traditions, as seen in Chapter V) that do regulate certification marks as well as green claims

³⁹ Jeffrey J. Minneti. **Relational Integrity Regulation: Nudging consumers toward products bearing valid environmental marketing claims**, p. 1344-1345

⁴⁰ *Idem*, p. 1344-1345

(trade or consumer authority), such as Minneti suggests; still, that has not prevented or deterred greenwash. Certification alone, as it is understood today, is not capable of deterring greenwash. Hence, there is a need to improve certification.

3. Possible Regulatory Designs for Eco-labels

Economic rationales and other scientific findings do not always make a clear transition into the laws that are meant to regulate them. This section has the purpose to take the findings from the previous section (and Chapters) and translate them into a sound regulatory strategy. The main objective of this section is to see how the law should be designed to improve the performance of eco-labels as well as deterring greenwash. In order to design a sound regulatory strategy it will be necessary to review different regulatory options that could potentially be used in the strategy. Soundness should be understood in a similar sense as what Gunningham and Grabosky term optimality. An optimal regulation is that which is effective (as it achieves its goals) and efficient (with low cost). In addition, the term regulatory strategy is preferred over 'regulation' alone. This is because regulation is seen as a stand-alone regulatory tool; while regulatory strategy implies that tools can interact with other instruments and actors to potentialise their effects.⁴¹ Hence, creating a regulatory strategy comes down to combining the right instruments and actors to achieve a pre-established set of goals. Designing an optimal regulatory strategy is a process. Hence, this section will break-down this process, providing theoretical grounds for each stage of the process. The different regulatory options will be briefly analysed to justify their part in the regulatory strategy. Finally, the optimal regulatory design will be presented.

3.1 Law, Regulation and Intervention

Before embarking in the regulatory design, the difference between law and regulation has to be pointed out. This is because, the terms, while similar, are not the same. This distinction or relation between law and regulation has been the topic of many debates with no clear solution. Furthermore, both concepts are complex concepts on their own, which tends to take the conversation to a conceptual level. Nonetheless, it is worth attempting to clarify this distinction, precisely because the object of this work is to find a scope for Law in eco-

⁴¹ Of course it expected that the chosen mix complements and enhances the instruments' performance, however it may well be that certain instrument mixes neutralise or even counteract the expected effects, which evidently is undesirable.

labelling. In addition, both concepts are inherently linked to interventions. This is because the purpose of the 'new' law or regulation is to alter a current behaviour or status quo that otherwise will not be achieved. This 'alteration' of the natural course is an intervention.

3.1.1 Defining Regulation

Regulation is a recognisable concept in Law and Economics. However, it is also a concept that many use lightly and can lead to confusion.⁴² For example, some talk about regulation when in reality they mean 'governance', 'control' or a law.⁴³ In simple terms, regulation is "an activity that restricts behaviour and prevents the occurrence of certain undesirable activities (a red light concept) but the influence of regulation may also be enabling or facilitative (green light)."⁴⁴ From this definition it can be deduced that regulation is aimed at changing or controlling the behaviour of some actor.⁴⁵ However, there are other more specific definitions that are more appropriate for this study. For Ogus, regulation is the means by which the state "seeks to encourage or direct behaviour which it is assumed would not occur without such intervention."⁴⁶ Therefore, if a behaviour is unlikely to appear naturally or voluntarily, 'public law' will impose obligations to induce individuals and firms to achieve the desired outcome/behaviour.⁴⁷ This definition is closely related to the understanding that many people have of regulation, which is 'command-and-control' (CAC) regulation.⁴⁸ It is precisely this aspect which leads to the confusion with Law. However, regulation is not always in the hands of governments. In fact there are many actors that act as regulators as they exercise some sort of 'social control'.⁴⁹ Hence, regulation can happen in both public and

⁴² Julia Black points out that outside English-speaking countries there is often no parallel word or even concept. This does not mean they do not regulate, but they use other terms which might be more specific than 'regulation.' Julia Black, **Critical Reflections on Regulation**, p. 2.

⁴³ Julia Black, *Op. cit.*, p. 16.

⁴⁴ Robert Baldwin and Martin Cave, **Understanding regulation: Theory, Strategy and Practice**, p. 2

⁴⁵ Control in this setting is understood as the "ability to keep the state of a system within some preferred subset of all possible states." Julia Black, *Op. cit.*, p. 18.

⁴⁶ Julia Black, *Op. cit.*, p. 10.

⁴⁷ Anthony Ogus, **Regulation Revisited**, p.333.

⁴⁸ Neil Gunningham notes that the term 'command-and-control' refers to the prescriptive nature of the regulation (the command) supported by the imposition of some negative sanction (the control). **Smart Regulation: Designing Environmental Policy**, p. 4 footnote 3.

⁴⁹ Legal pluralists also argue that the Law does not emanate exclusively from the state. While it is true that private parties can enact law by means of contracts or agreements and other legal-acts, these are always 'res-inter-alios acta', meaning they only apply to a specific sphere. Specifically the parties who are subject to those acts. This is not the type of social control this discussion is about.

private spheres. Moreover, these two spheres interact with one another, creating hybrid regulatory forms that are not easily classified. This makes sense, especially if the objective is to find the optimal regulatory strategy: best outcome at the lower cost. This is because, it may be that the party who can achieve a change of behaviour might be someone different than the State. Furthermore, regulatory costs have to be taken into account. When governments regulate many public resources are invested into that regulation. Hence, if there are cheaper alternatives, they should also be considered (as long as they work).

3.1.2 Regulation and Law

The problem for establishing a relationship between these two concepts is that they are both extremely difficult to define. Furthermore, most of the definitions will be rediscussions of each other. For example a simple dictionary definition of Law would state that it is a *system of rules that regulates the actions of a particular group*; making it a circular relationship. Notwithstanding this particular issue, it is possible to separate both concepts. Law is an integrated system which has the function of stabilising and adapting expectations, solving disputes, allocating authority, as well as the assignment and limitation rights (such as property rights).⁵⁰ Hence, the role of law is much broader than that of regulation. Regulation, performs a part of the law's functions related to the influence of behaviour through specific instruments. Still, only public regulation (that enacted by the state) performs this type of function. This is because "law is an obligation backed by state sanction."⁵¹ Therefore law has an 'authority' that regulation (in a broad sense) does not have. Furthermore, law can delegate its authority to other parties allowing them to self-regulate create agreements among each other. Law is what delimits the property rights that will be used in free markets, as it stabilises expectations. Hence the legal system is underlying the whole range of regulatory activities, and without strong legal systems markets might not be able to function correctly. Regulations, on the other hand, are just one of the specific actions/instruments used by Law to influence or change behaviour.

3.1.3 Regulation and Intervention

⁵⁰ Julia Black, **Critical Reflections on regulation**, p. 24

⁵¹ Robert Cooter, **Three Effects of Social Norms on Law: Expression, Deterrence, and Internalization**, p.6

Regulatory activities are interventions. This is because, an intervention is commonly understood as preventing or altering a result or course of events. As it has been stated above, regulations are activities aimed at modifying or controlling certain behaviours. Hence, these regulatory activities are in fact interventions. Nonetheless, conceptually regulation and intervention have different connotations and uses. When talking about intervention, two words immediately come up: prescription and coercion. "Prescription refers to the extent to which external parties determine the level, type and method of environmental improvement. Coercion, on the other hand, refers to the extent to which external parties or instruments place negative pressure on a firm to improve its performance."⁵² It is because of the 'coercion' element that intervention has a negative undertone. However, not all interventions are 'coercive', as its degree may vary from instrument to instrument (the same for prescription). For example, taxes are high on coercion and low on prescription as they allow the subjects the freedom to choose their behaviour (pay high taxes or change their performance). On the other hand, self-regulation is high on prescription but low in coercion. Furthermore, coercion is normally related with the state because of its ability to sanction. However, today states make an attempt to make less coercive instruments, which can be regarded as 'less interventionist'.

While less interventionist measures are always preferred, the premise should always be given that such measures actually work. The issue is that in some cases, "what works" requires a relatively high level of intervention.⁵³ Taking the Tuna-Dolphin case from the Chapter VII, it can be noticed that the Mexican government opted for a direct regulation (command-and-control) to control the amount of dolphin settings, whereas the US chose a voluntary-informational approach. The Mexican government and the tuna fishery invested many resources in avoiding the setting of dolphins and eventually the numbers are close to zero. The US on the other hand, cannot even provide this type of information, as it was left as a voluntary measure (as well as the fact that they started to fish elsewhere). Hence if the objective is to kill less dolphins, then a voluntary instrument might not be appropriate, especially if it goes against the private interests of corporations (profits). It can also be observed, that many times highly coercive interventions might be much more costly than its less coercive counterparts.

⁵² Neil Gunningham and Peter Grabosky. **Smart Regulation: Designing Environmental Policy**, p. 391.

⁵³ Neil Gunningham and Darren Sinclair. **Designing Smart Regulation**, p. 4

3.2 Role of Government

In eco-labelling governments have assumed different roles. In some instances they take a 'hands-on' or active approach by creating eco-labelling programmes of their own. Others, take a behind the scenes approach by recognising property rights or other actionable rights, as well as giving incentives to activate eco-label markets. Others have decided to co-operate with the market by providing resources (human, material or technical) or mandating programmes for others to manage. This shows that governments are versatile and they can adapt to the markets needs. However, this section has a more normative flavour, as it attempts to figure out what such role ought to be. Governments do have a role to play in the market, even when following a free-market system. Hence, what matters is what type of role should the government play. This discussion is intensified in the environmental arena, because even true free-marketeers do not seem to agree on the role of the government. It has been contended that "for government to simply walk away and leave environmental protection to unfettered market forces, as some public choice theorists would advocate, is really no solution at all."⁵⁴ This might be true for cases in which the environmental threat is such that can lead to irreparable or incommensurable damages. For instance, the loss of a species or a nuclear or chemical spill. In these rather extreme cases it is, governmental action is more likely to achieve better results than private actions. This is because governments are likely to have more resources which will allow them to react appropriately. However, when it comes to every-day environmental behaviours the government's place is open to discussion.

3.2.1 Free Market Environmentalism

In free market environmentalism it is expected that markets deliver optimal environmental outcomes. This can be seen as an oxymoron as markets are the source of the same problems it pretends to solve. As it has been pointed out, externalities and public goods are the most common environment-related market failures. Free market environmentalists suggest that these market failures occur because "it is costly to define and enforce rights in both the private and political sectors."⁵⁵ In other words, the political and legal costs of allocating rights are too high, hence rights are not properly defined. Nonetheless, if those

⁵⁴ Neil Gunningham and Darren Sinclair, *Op. cit.*, p. 24.

⁵⁵ Terry L. Anderson and Donald R. Leal, **Free Market Environmentalism**, p. 22.

rights where properly defined the market processes would be able to determine the optimal amounts of resource use. This is given that rights are “well defined, enforced and transferable.”⁵⁶ In other words, law plays a very important role in free markets. When the basis of the market has a solid legal structure it will allow self-interested individuals to consider the complete trade-offs and costs of their actions. “Free market environmentalism entails allocating property rights for natural resources to private interests, or liability rules imposed in respect of harm from pollution, then allowing the market to operate unfettered by government intervention.”⁵⁷ This is simply an interpretation of the Coase theorem. The Coase theorem states that in absence of clearly defined property rights low transaction costs will allow parties to agree on the most efficient solution. Hence, where property rights are properly assigned, markets will tend to gravitate to the most efficient and agreeable outcome.

Free-market environmentalists do not believe that the market is perfect. On the contrary markets will make mistakes, externalities will still be created and there will be a tendency to undersupply public goods. However, in a properly structured market, mistakes such as the creation of externalities represent new profit opportunities. This is because property rights are dynamic. The values of the environmental goods will change and there can be adjustments and reallocation of rights. In other words, ‘property rights will evolve.’ as the perceived costs and benefits of the good change.⁵⁸ Furthermore, property rights should not only be well defined, they should be able to be transferred and defended (if necessary) with ease. This means that un-owned resources, such as externalities can be susceptible to appropriation by creating a value for it. Entrepreneurs can ‘define and enforce property rights to the un-owned resource and charge the free-rider user.’⁵⁹ Thereby creating a market for externalities.

3.2.2 Role of government in Free-Market-Environmentalism

Free-market environmentalists believe that actors in the market should be allowed to follow the course of action of their choice. In other words, they do not approve of external

⁵⁶ *Ibidem*.

⁵⁷ Neil Gunningham and Darren Sinclair, *Op. cit.* p. 83.

⁵⁸ Terry L. Anderson and Donald R. Leal, *Op. cit.*, p. 22

⁵⁹ *Idem*, p. 23

intervention in the free flow of the market. Once there is intervention, incentives will be distorted and the outcomes will be sub-optimal. Free market environmentalism rejects state intervention. However, for free-markets to work properly they need clear legal rules. Therefore, legal rules are called for even in scenarios where intervention is not. Laws provide the structure for markets to work properly. Hence, the role of governments is to enact the laws that assign and recognise property rights. In this sense it is only the state who will have the authority to create the type of legal rules that will provide the structure of the market. In other words, the role of government in free-market environmentalism is to provide legal rules. However, this type of role does not imply intervention. Once the legal rules are determined the markets are free to follow their natural course. It is due to this function of governments that the difference between law and regulation was discussed previously. This is because regulations, even when they can take formal legal forms, will have the purpose of influencing the behaviour of others. Laws, on the other hand, will have the purpose of altering the market structures, hence the entire market will be altered. The actors in the market are not the subject of the law; it is the market itself.

These arguments make a clear case for free-markets. However, the simple assumption of defined property rights that is necessary for markets to work properly is not always met. This is because there are political and private costs involved in the process of enacting laws. Furthermore, the State is susceptible to be influenced or even captured by interested parties. Hence, the allocation of rights may be flawed from the beginning, which might lead to a bleak market outcome. Moreover, this type of scenario will lead to future interventions which attempt to correct the failures that the lack of proper rights created in the first place. Hence, interventions will be needed from time to time. However, interventions do not need to be 'intrusive'. This means that today it is easier to find regulatory strategies that are not considered intrusive (such as CAC regulations). This is because today governments have learned to harness markets and work with them instead of against them. This has become much common, including in the environmental arena.

3.3 Co-regulation and Smart Regulation

Free market environmentalists raise important points regarding the structure and functioning of markets. While it is true that as long as markets function properly governments should abstain from intervening; it is also true that many times markets do not function as they are

expected. Hence there will be a need to regulate the market to achieve the expected outcomes. Up to this moment, the discussion has focused on state interventions or regulations. Regulation is normally understood as a public matter. However, contrary to conventional wisdom, most regulation is “in the hands not of government officials but of the myriad individuals employed in the private sector and that, often, more can be achieved by harnessing the enlightened self-interest of the private sector than through command and control regulation.”⁶⁰ Hence public regulation has, in reality, only a small part to play in the regulatory sphere. The State does not have the monopoly on the production of law or regulation. Third-parties are also capable of prescribing behaviour of others. This point of view is normally referred to as legal pluralism. Legal pluralism “suggests the existence of several overlapping normative legal systems [that] exist in tandem with the state legal system.”⁶¹ This means that there is a private normative system that co-exists and interacts with the public system. This makes it very difficult to separate which sphere is public and which is private, as both systems interact in the market and influence its behaviour and eventually its outcome. Furthermore, it is common to see governments co-operating with private parties to create better regulation. Hence the clear distinction between public and private is blurred. However, this might not really matter; what matters is that the overall regulatory strategies are efficient, regardless of their origin.

3.3.1 Co-regulation.

Today it is common to see the government co-operating with industry or other private parties to create regulation. This is termed co-regulation, as private and public parties come together to define regulatory strategies. Co-regulation is the middle ground between public regulation such as CAC and purely private activities such as voluntarism. Governments can be involved in different degrees making some regulations more public with a market orientation (such as economic instruments) or more private with government support (such as eco-labels). Literature normally regards co-regulation as a variant of self-regulation. However, it can be contended that co-regulation is much more wide-spread as new types of ‘negotiated’ regulatory instruments are appearing in the markets.

3.3.1.1 Self-Regulation

⁶⁰ Neil Gunningham and Darren Sinclair, *Op. cit.*, p. 12.

⁶¹ <http://www.legalfrontiers.ca/2010/06/legal-pluralism-a-primer/>

In short self-regulation is “law formulated by private agencies to govern professional and trading activities.”⁶² However, the ‘self’ in self-regulation is not always taken literally. These type of rules normally are enacted by an industrial or professional association with the objective to standardise behaviour among its members. In other words, the industry or private group imposes behaviour restrictions on itself (its members). “In essence, rules are developed, administered and enforced by the people whose behaviour is to be governed, or by their direct representatives.”⁶³ In addition, self regulation can also be applied for internal regulations in large corporate settings. Environmental Management Systems and other forms of CSR can also be deemed as self-regulation, as holdings regulate the behaviour of subsidiaries or partners. Overall, self-regulation is private regulation as it involves parties other than the state regulating its own behaviour.

Pure self-regulation is that which emanates spontaneously from private parties. It involves an “industry or profession establishing codes of practice, enforcement mechanisms, and other mechanisms, for regulating itself, entirely independent of government.”⁶⁴ However, it has been claimed that pure self-regulation is not very common. This is because normally self-regulation is mandated by the State or has some type of State over-sight. Hence there is normally some degree of government involvement, which makes it look like co-regulation. Self-regulation can take several forms such as codes of conduct, customer charters, voluntary agreements (signed between firms to reduce COs emissions or achieve a particular standard) or unilateral codes of conduct (an internal policy of a company such as commitment to only use fair-trade sources).

Private eco-labels are self-regulatory instruments. However, they do have the peculiarity that the eco-labelling body or organisation is not an industry or professional association. In other words, they do not always have the ‘self’ element. This is because, eco-label’s role is precisely to be a third-party. Industry and professional associations are not third-parties they are second-parties. Nonetheless, eco-labels are a type of ‘voluntary’ association in the sense that their members’ common traits are that they comply with the criteria. Hence eco-labels regulate the behaviour of its members, which would otherwise be unrelated.

⁶² Anthony Ogus, **Self-Regulation**, in Encyclopaedia of Law and Economics, p. 587

⁶³ <http://www.bis.gov.uk/policies/bre/alternatives-to-regulation/self-regulation>

⁶⁴ Neil Gunningham and Peter Grabosky, *Op. cit.*, p. 51.

Nonetheless, if self-regulation is taken in a broad sense, as law formulated by private parties, eco-labels as certification schemes fall within this category. As commented earlier in this chapter as well as in Chapter II, certification has a quasi-contractual nature, hence it is a private mechanism. Furthermore, the eco-labels sign contracts with the users of the eco-labels, which will govern their relationship. These relationships will remain almost entirely in the private sphere. However, as it will be seen below, certain types of government intervention might strengthen this private relation.

3.3.1.2 Co-regulation: the traditional view

Co-regulation is normally seen as a variant of self-regulation. It refers to governments and industry working together to develop standards that will govern the behaviour of a particular market. This can be done in different ways, either the government can set objectives and allow for the industry to develop and enforce standards. Alternatively, the government can set the standards in agreement with the industry (or any third party such as consumers or NGOs) and leave the enforcement to them. Finally, governments can take the standards (codes of conduct or guidelines) and back them up with legislation or legal recognition (by providing legal standing such standards can be used as a defence in court).⁶⁵ In the end, this view of co-regulation could be simply named 'enforced self-regulation'.⁶⁶

3.3.1.3 Co-regulation in a broad sense.

Co-regulation goes beyond complementing self-regulatory strategies. Today governments attempt to be more inclusive in their regulatory designs. It can be observed that even in direct forms of 'coercive' regulations governments and private parties co-operate. This allows to take advantage of the different regulatory spheres and instruments to achieve better outcomes. For example, as noted by free-market environmentalists, private actors have better information about the value of environmental goods, whilst governments have better means of enforcement. Furthermore, by co-operating or co-regulating with other parties, regulations will be better accepted and complied with. This is because the behaviour will be negotiated and agreed upon beforehand with the subject of the regulation. This type of regulation is increasing in popularity, as governments have identified that regulations are not necessarily one-size-fits-all. These agreements, are tailored to the industry/firms/

⁶⁵ For more details and examples, see: <http://www.bis.gov.uk/policies/bre/alternatives-to-regulation/co-regulation>

⁶⁶ See Robert Baldwin and Martin Cave. *Op. cit.*, p. 39-41

government needs. Hence they are likely to be more effective, as compliance and enforcement costs can be significantly lowered. Hence, this type of co-regulation is actually the 'smart' way to regulate (cheaper with better results and acceptability). Notwithstanding these arguments, the literature does not consider this co-regulation, even though it is.

An example of this broad co-regulation can be found in the 'new' forms of traditional command-and-control regulations. Traditionally, command and control's standards had a 'one-fits-all' approach. They were minimum quality standards that were applied to a wide range of firms and industries. However, the new implementations are individualised site-specific compliance plans. With this new approach, the government negotiates with the industry specific standards or targets. Another variety, are "accredited licensing" by which governments reward 'good performers' by relieving them of much of the regulatory burden that would normally apply. This 'green track' allows firms to voluntarily opt in to this scheme by committing to certain environmental behaviour while other firms are left to follow the normal regulatory track. In general these changes are a shift to *ex ante* controls rather than *ex post* sanctions (as they were before).⁶⁷

3.3.2 Smart Regulation

Smart regulation has the purpose of producing better regulation. It is different from co-regulation as its purpose is to create optimal regulatory strategies, by mixing actors and instruments. It is not limited to the private-public discussion of co-regulation, it simply assumes it. To achieve better regulation the term regulation is used in its broadest sense. It includes direct regulation such as CAC as well as other forms of social control by different parties such as businesses or third parties. In addition, this type of regulation prefers the use of multiple rather than single policy instruments, and a broader range of actors.⁶⁸ This does not mean that smart regulation simply adds new instruments to what already exists, it means applying the instrument that is most likely to achieve the expected outcome. It also means that the party who is more likely to achieve the expected result should be the one regulating, even if it is not the government. The regulatory strategy is an integrated system, where each instrument and each party have a part to play.

⁶⁷ Neil Gunningham and Peter Grabosky, *Op. cit.*, p. 47-49.

⁶⁸ Neil Gunningham and Darren Sinclair, *Op. cit.*, p. 4

Among the many advantages of smart regulation is that it “will reduce the regulatory burden on ‘government, thus freeing up scarce public resources to be allocated to situations where government intervention or assistance is most required. Potentially second and third parties (business or commercial or non-commercial third parties) can act as surrogate or quasi-regulators, complementing or replacing government regulation in certain circumstances.”⁶⁹ This means that who ever has the lowest regulation costs should be the one regulating. As noted by free-market-environmentalists political and legal costs can sometimes be substantial and this can lead to sub-optimal rules. Furthermore it is possible that other actors have better information or bargaining positions, making them the better regulators. It is not a matter of private or public; it is a matter of which party can do it better. Nonetheless, just like in free-market environmentalism, governments will have an important role in smart regulation. It is up to them to establish regulatory objectives, harness compliance, create regulatory safety nets, or, directly intervening itself (if there is no alternative).⁷⁰

3.4 Types of regulatory instruments

To achieve an optimal mixed policy design it is first necessary to know what regulatory instruments are at hand. All instruments present advantages and disadvantages and are probably not capable of delivering outstanding results on their own. Hence, it is better to see regulation as a system, in which the different instruments interact. This does not mean that more instruments are always better. Simply creating more regulation would lead to *smorgasbordism*,⁷¹ which is a way of describing regulatory overload. More regulation does not mean better regulation. Just like in chemistry mixing two substances can create explosive reactions, but the same substances mixed with others might not have any effect. This is what policy mix should look for, mixes that cause a reaction. Therefore, it is also important to understand how such instruments can be mixed. This is because not all mixes will lead to optimal outcomes. Some instruments work better with others. Furthermore, the instruments do not need to be applied simultaneously. Rather, a tiered or sequential application of instruments will be more likely to be appropriate as different instruments have

⁶⁹ *Idem*, p. 15

⁷⁰ *Ibidem*

⁷¹ Smorgasbord means a wide range of things, a variety. Hence, regulatory smorgasbordism means having a wide variety of instruments, that do not necessarily relate or interact among each other (on purpose).

different scopes. Furthermore by mixing the instruments it is possible to compensate for the weaknesses of stand-alone policies.

3.4.1 Command and Control Regulation

Command-and-control regulation is the 'poster-child' for public regulation, as it is the most known type of regulation. It is regulation by the state through use of legal rules backed by (often criminal) sanctions. It is normally viewed as an 'authoritarian' measure as it uses the force of law (criminal sanctions) to impose certain behaviour. This is the 'control' element of the instrument. In the environmental arena, the most common approach of CAC is by setting standards that set uniform requirements on broad categories of activities to achieve specific goals. This is precisely the 'command' part of the instrument. Additionally, governments frequently use permits and licenses to implement the standards. The biggest advantage of these type of instruments is their dependability.⁷² CAC has been proven successful for certain type of problems such as "curbing aspects of point-source pollution, outlawing extremely hazardous substances and the dumping of toxic wastes, and the protection of endangered species." Moreover, "they send the message that 'polluting' is a 'tolerated' activity and not a right"⁷³ (as other instruments such as information dissemination might do). Nonetheless, as seen in the example of co-regulation in a broad sense, CAC regulations are taking a new more inclusive approach with less 'control'.

3.4.2 Self-regulation

Self-regulation, as seen above, involves a private entity (normally an association) developing rules that it monitors and enforces against it self, its members or, in some cases a larger community. According to critics, self-regulatory standards are usually weak, enforcement is ineffective, and punishment is secret and mild. It lacks the virtues of state regulation such as visibility, credibility, accountability, compulsion, rigour, cost spreading and availability of sanctions. However, under the right circumstances self-regulation works very well. For instance, "self regulation works best where there is a degree of coincidence between the self-interest of the individual company or industry, and the wider public interest."⁷⁴ In this sense, if complying with an industry-set standard is going to bring a reduction in costs or

⁷² Neil Gunningham and Peter Grabosky, *Op. cit.* p. 41

⁷³ *Idem*, p. 42

⁷⁴ *Idem*, p. 53

provide more security (for example if the self-regulation is recognised by courts), complying is the rational approach. When private and public interests meet they can be referred to as win-win scenarios. However, in the environmental arena self-regulation's role is limited. This is because "the greater the nexus between environmental improvement and increased costs, the greater the incentive to renege on self regulatory objectives."⁷⁵ Hence if complying with self-regulatory provisions becomes too expensive participation will be low. Thereby, if the costs of environmental improvement are too large, it might be worth considering an alternative instrument or an economic incentive.

3.4.3 Voluntarism

Voluntarism can be considered as a type of self-regulation. It consists of a firm imposing limitations on behaviour on itself, with out any coercion. "In contrast to self regulation, which entails social control by an industry association, voluntarism is based on the individual firm undertaking to do the right thing unilaterally, without any basis on coercion."⁷⁶ In self-regulation, the association will dictate the behaviour to the firm, hence it is an external influence. In voluntarism, the standards or measures are internal, free from any coercion. Self-regulation may have a reputational effect which motivates firms to comply, but voluntarism does not. Nonetheless, "voluntarism still has an important role, particularly where the threats to the environment require active participation to resolve." Such is the case of corporate environmentalism and eco-labels, where firms will make the necessary changes to become pro-environmental. The trick however is making environmental protection a social norm. In addition, they entail high administrative costs due to negotiation and monitoring. Hence, the importance of eco-labelling bodies. As firms can delegate these functions to the eco-label body while they focus on complying with standards.⁷⁷

3.4.4 Education and information Instruments.

These instruments are broad. As their name indicates their purpose is to improve the capacity of industry and communities by addressing environmental issues. They can consist of either providing environmental information or receiving environmental information (which is the education part) with the objective of influencing behaviour. Product certification is a

⁷⁵ *Idem*, p. 55.

⁷⁶ *Idem*, p. 56.

⁷⁷ *Idem*, p. 59.

clear example of this type of instruments. Informational instruments can only work if the intended audience is reached. Hence, the need for educational instruments to complement them. "There is considerable evidence that educational instruments deliver improved management practices... The critical issue is being able to effectively target and deliver the message to the intended audience."⁷⁸ If the intended audience is not educated enough the information will not be properly delivered, hence the instrument will not be effective. Education for consumers can be either to create social or internal norms. Once consumers internalise environmental matters as norms they will behave in an environmentally appropriate way. However, education can also serve to debias and to provide tools to identify wrongful behaviour. In other words, education can also be useful to give consumers tools to identify and use the environmental tools that they have at hand. If consumers understand what eco-labels mean they might be more keen to use them. For example, it is possible to teach consumers about greenwashing and how to identify and avoid it.

Information instruments also have the benefit of motivating the generation of information that would otherwise remain hidden. For example when a firm decides to join an eco-label it has to do a self-assessment (LCA) to identify where the processes have to be adjusted to meet the criteria. This generates useful information that, while it is not necessarily public, it does have a regulatory function. Record keeping and enumeration have important regulatory roles at several levels (CAC, self-regulation, voluntarism and incentive-based tools all require information). It allows firms to observe their actual performance and that will allow them to act accordingly. The largest problem of informational strategies is finding someone to follow the findings and developments. Generating information with no purpose is too costly. This is because the value of the information depends on another party having an interest in such information (there needs to be a demand for the information). In eco-labels, for example, consumers (or other interest groups) must have an interest in following up and acting on the environmental information. In eco-labels, it is very clear that without consumer interest or willingness to pay for the information about environmental quality (the eco-label) there is no sense in producing it.⁷⁹

3.4.5 Economic Instruments

⁷⁸ *Idem*, p. 61

⁷⁹ *Idem*, p. 69

These type of instruments are normally called incentive- based instruments. They attempt to influence private incentives so that private choices are in line with social objectives. These incentives are meant to influence behaviour,⁸⁰ though it is done in a less coercive manner than CAC. Hence, they are more cost-effective than CAC measures. Incentives lower costs of compliance for individuals, hence it (theoretically) motivates them to take more action. The distinction between incentive-based instruments and free-market environmentalism is that incentives will always have the purpose to affect behaviour. Hence, creating incentive-based instruments still attempts to influence or change the behaviour (it is still intervention). Free marketeers point out that economic instruments are “market-based variants of command-and-control.”⁸¹ In their view, the regulator attempts to control the outcomes by manipulating price signals or property rights. On the other hand, it is argued that economic instruments are less intrusive, hence they incentivise people to seek the most cost-effective solutions.

The downside is that economic instruments are not self-enforcing and may involve considerable administrative costs. In addition, these instruments rely on information, which is normally not complete or symmetric (potential for failure). Moreover, they might not be as effective as their proponents want them to be, thus they may still need to be paired with a CAC-type instrument to function properly. In addition, because incentives are set out in the market, they are subject to interpretation (or misinterpretation); hence, the expected outcome is not always achieved. For example, subsidies might have a ‘lulling’ effect which means that they foster the ‘status quo’ rather than a change of behaviour. In eco-labels, for example, governments have to be careful not to crowd-out firms’ intrinsic motivations. External incentives to promote eco-labels might lead to less eco-labels rather than more. This is because incentives are normally tailored to ‘rational’ individuals. However, as seen in Chapter III and IV market actors are not always ‘rational’. This leaves a large scope for future research in behavioural sciences. In the meantime, governments have to be careful on how they attempt to modify behaviour, even if it is just by nudging or giving incentives. Nonetheless, economists will always prefer an economic-instrument over a CAC approach to solve any given problem. There are a wide variety of incentive-based instruments, the most common are:

⁸⁰ Terry L. Anderson and Donald R. Leal, *Op. cit.*, p. 10.

⁸¹ Neil Gunningham and Peter Grabosky, *Op. cit.* p. 83.

- *Property rights*. These are meant to incentivise owners to maintain a high value of their property so if they were to sell they can maximise profits. Hence there will be an incentive to conserve and protect the property, so it does not lose value. “Property right mechanisms offer a powerful means to encourage people to conserve environmental resources and limit their use to that which is sustainable.”⁸²
- *Market creation*. Government creates a market where none existed before, such is the case as tradeable pollution or resource rights. Market creation can be envisaged as a hybrid between free market environmentalism and direct regulation.
- *Fiscal instruments*. These instruments alter the price of the goods as a way to internalise externalities.
- *Financial Instruments*. Their purpose is to mobilise additional financial resources for conservation and environmental protection. These instruments may be effective to finance a variety of environmental activities (sewage treatment, water recycling, reforestation). However, they may be abused (funds used for other purposes), which might increase the monitoring costs substantially.
- *Liability Instruments*. Imposing civil liability on those who devastate the environment can provide an economic incentive for the management and control of risk, pollution and waste. Firms are incentivised to internalise externalities by the threat of legal action

This list of instruments is not exhaustive. However it aids to see what type of tools are preferred by governments. The difference between these measures and market harnessing measures (preferred by free-marketeters) is very dim. For example, liability schemes and property rights can be considered as free-market tools for channelling market forces to some specific direction (as opposed to a specific outcome). Nonetheless, this discussion can be left for the theory. Now that the most common instruments have been reviewed, what matters is how can they be mixed to enhance eco-labels and deter greenwashing.

4. A Smart Regulation for Eco-labels

Eco-labels as certification schemes, have normally been considered as a stand-alone instrument, instead of part of a strategy. However, by using Ayres and Braithwaite’s pyramid

⁸² *Idem*, p. 71.

model, as well as Gunningham and Grabosky's extended version of such pyramid, it can be shown that eco-labels are part of a complex regulatory scheme. The first part of this section is focused on presenting eco-labels under this 'smart regulation' light. Moreover, this model will shed light on how the eco-labelling regulatory strategy can be improved to deter greenwashing. Smart regulatory strategies follow a simple set of principles that have already been addressed throughout this section. According to Gunningham and Grabosky these principles are the heart of well functioning regulations. The principles of smart regulation are:

- Prefer policy mixes incorporating a broader range of instruments and institutions.
- Prefer less interventionist measures.
- Ascend a dynamic instrument pyramid to the extent necessary to achieve policy goals.
- Empower participants which are in the best position to act as surrogate regulators.
- Maximise opportunities for win win outcomes.

These principles, paired up with proper planning and objective definition are likely to produce optimal regulatory strategies. The hard part of planning regulatory strategies is foreseeing which instruments actually work. As seen briefly with economic instruments, many times incentives can back-fire when internal motivations or other behavioural factors are not considered. The instrument might only influence the behaviour of some, but not others. Alternatively, it could be that the instrument that seemed viable *ex ante*, may, in light of experience, prove not to be so.⁸³ These outcomes suggest some sort of failure of the regulatory instrument, it might not be responsive enough or it might need sequencing to increase dependability or it might be hindered by another instrument.

4.1 The Basic Regulatory Pyramid Strategy

Ayres and Brathwaite, created a model for responsive regulation⁸⁴ in which "regulators signal to industry their commitment to escalate their enforcement response whenever lower levels of intervention fail." This can be seen as a 'tit-for-tat' game, in which regulators will initially assume that the industry will be 'virtuous' (co-operative and compliant). This will lead government to adopt a co-operating behaviour. Regulators will continue to cooperate as long

⁸³ Neil Gunningham and Darrel Sinclair, *Op. cit.*, p. 5.

⁸⁴ Responsive regulation, is regulation which responds to the particular circumstances of the industry in question, including how effective an industry has been in the past in making private regulation work."

as the industry remains virtuous. However, when the regulator's "expectations are disappointed, they will respond with 'progressively' punitive and deterrent oriented strategies until the regulatee conforms."⁸⁵ In other words when industry defects from the co-operative behaviour the regulator will respond with punishment, until the industry returns to the original co-operative behaviour: tit-for-tat. This model is known as an enforcement pyramid (Figure A). This pyramid needs two elements: gradual escalation and the existence of a credible peak or tip which if activated, will be sufficiently powerful to deter even the most egregious offender. Applied to eco-labelling the enforcement pyramid would look as follows:

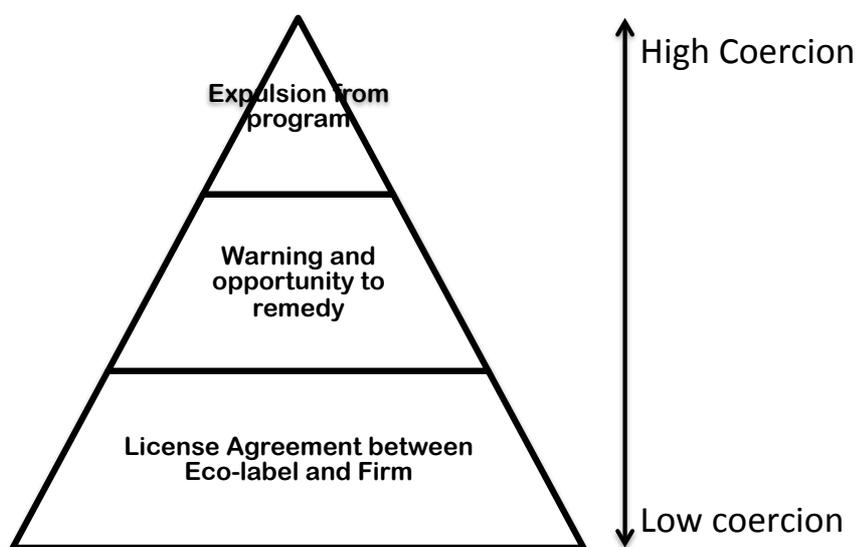


Figure 1. Enforcement Pyramid of an Eco-labelling Body.

It can be observed that coercion will increase with escalation. Furthermore, along with coercion, the costs of non-compliance will be higher towards the tip of the pyramid. Hence, at some point it becomes too costly for the regulatee to not comply. In addition, the credibility of the peak will depend on the regulator's effective punishment capacity. Gunningham and Grabosky recall that in Australia, it was only after an environmental offender was imprisoned that industry started to develop audit and other due diligence defences.⁸⁶ The mere existence of the regulation is not deterrent enough; the capacity of the authority to enforce such measure needs to be credible. Figure 1, shows a very simple example of what the eco-labelling organisation's pyramid will look like. At the bottom, is the license agreement. In

⁸⁵ Neil Gunningham and Peter Grabosky, *Op. cit.*, p. 396.

⁸⁶ *Ibidem.*

case of breach of contract, it is likely that the eco-labelling organisation will allow the firm to correct or remedy its actions. However, if firms do not take appropriate actions or the wrongful behaviour continues the eco-label is allowed to sanction and ultimately expel the firm from the programme, not allowing it to use the eco-label anymore. If a product or firm loses the right to use an eco-label, its reputation can be severely damaged. But the eco-labelling regulatory strategy goes beyond this enforcement pyramid. This is because, there are more actors, and each actor has its own pyramid. Hence, the regulatory strategy is kin to Gunningham and Grabosky's dynamic instrument pyramid.

4.2 The Eco-label's dynamic instrument pyramid

Gunningham and Grabosky extend Ayres and Braithwaite's pyramid, by increasing the number of faces of the pyramid. This means that coercion levels can increase not only with one single instrument, but also across several instruments. This is because of the interaction of the different parties and instruments. Just as the original enforcement pyramid escalation will only occur when the less coercive measures have failed. The difference is that escalation can be done through different facets of the pyramid; it is not strictly vertical.

Not all regulatory strategies can be represented by a pyramid, but eco-labels can. This is basically because in the case of eco-labels, there are four parties: consumers, businesses, eco-labels (the eco-label organisation or third party certification schemes) and the government, as it can be seen in Figure 2. Each party has its own enforcement pyramid, like the one shown in Figure 1. However, when placed together they interact, and arguably perform better than if they are considered separately.

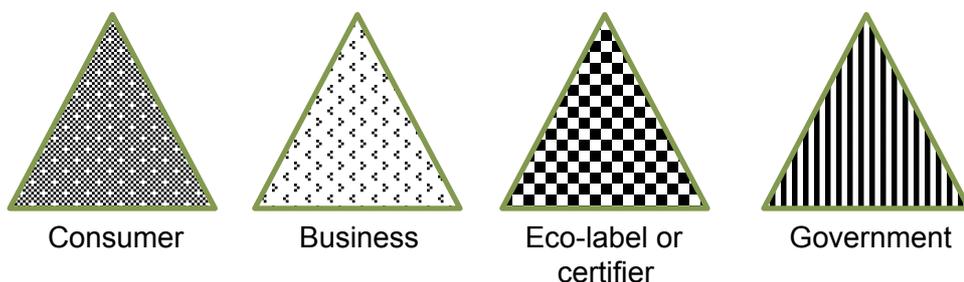


Figure 2. Different parties of the Eco-label regulatory strategy

A) Consumers' role in the eco-labelling regulatory strategy, is being the base of the pyramid. Their regulatory role is being the subject of education and information strategies.

Information is the underlying goal of eco-labels. As it has been discussed throughout this work, eco-labels main purpose is to inform the market (consumers specifically) about the environmental qualities of a product. Hence, it is only logical that informational strategies, directed at the consumers are the base of the whole strategy. In addition, informed consumers are the ones that will trigger the eco-labelling mechanism. However, from all the actors in the eco-label regulatory strategy consumers might have the weakest regulatory role. This is because if they were to change the regulatory strategy they would need to organise in large numbers to do so (to increase their regulatory muscle, which is coercion). This is paradoxical, as without them eco-labels would make no sense.

- B) The role of businesses in the eco-label regulatory strategy is limited to voluntarism. It is up to the firms to engage in pro-environmental activities. As it can be recalled from Chapter III, firms have different motivations to engage in pro-environmental activity that goes beyond legal compliance. However, this is always given that such actions are in line with private benefits. This means that if environmental behaviour becomes too costly or is not within the firm's sphere the firm will not engage in such activities. Furthermore, international corporations with complex supply chains, may already have a complex coercion structure, depending if they are vertically integrated or not. In this sense, the pyramid of enforcement will follow the natural hierarchies of the corporation. All environmental management systems, CSR activities, internal codes of conduct, environmental-self declarations and other environmental policies corporations might have, fall within this facet.
- C) The eco-labelling organisation, which can be either the third party certifier or accreditation body (that authorises external independent certifiers) has a more complex role in the system. Within the regulatory system, they are considered private third-party regulators. This is because they are in charge of setting the criteria and signing the contracts with the eco-label users. Hence they can control and regulate the use of the eco-label (mark). Therefore, they are considered regulators because they influence and even control, to some degree, the behaviour of those firms who decide to conform to their criteria. In addition, with complying with the criteria, eco-labels are entitled to monitor the use of the eco-label by the members and sanction those that do not comply with their agreements. The largest punishment is expulsion of the programme (with possible court sanctions depending on the specific contract). This is shown in figure 1.

D) Government is the primary (or original) regulator, and its role in eco-labelling is to empower the whole regulatory strategy. This is because the government has access to more coercive instruments than the other parties. Governments normally set minimum quality environmental standards, they grant licenses and they can punish wrongdoers (even criminally). Notwithstanding the variety of roles governments can adopt, their main role in eco-labelling is to provide regulatory safety nets, for when the private instruments fail, but above all it should use its coercive power to enhance the whole mechanism. In theory, the government facet of the pyramid should have a highly deterrent mechanism on the tip. This measure should be such that it deters all wrongdoing. However, in eco-labelling there is no such measure in place.

Once the actors and the facets are seen independently, it is necessary to put them together so they form the actual pyramid. Figure 3, shows first how the pyramid looks in two-dimensions. The following figures, attempt to show how the pyramid would look in three-dimensions. In this way it can be seen, how each facet has its own escalation. While simultaneously giving the possibility to move from one facet to the other. The tip of the pyramid will always represent the most coercive measures.

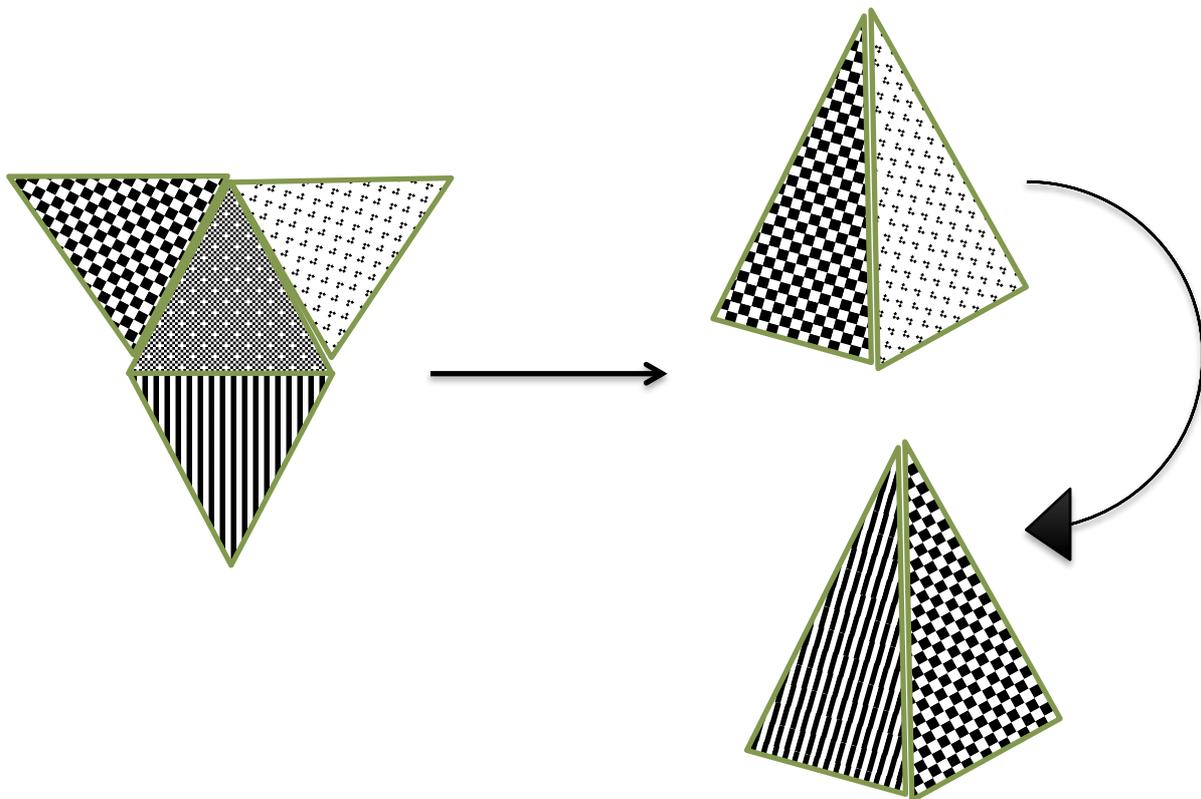


Figure 3. The Eco-label Regulatory Strategy Pyramid.

The dynamics between the facets are as follows: assuming consumers are informed (base of the pyramid), firms will have motives to engage in pro-environmental activities (voluntarism). If the firm so desires it can seek to join an eco-labelling programme (moves into the next facet). Once it is certified and has signed the license agreement the firm has to conform to the regulations of that facet. If the firm fails to comply with its obligations, the eco-label is entitled to sanction the wrongdoer and even expel it from the programme (tip of the pyramid). In some jurisdictions the next facet is already in place, which is the government facet. If the eco-label desires it can register the mark as intellectual property. Once this right is awarded the eco-label is the owner of the right and has the duty to defend it. Hence, the government provides the tools in case of infringement. Nonetheless, while this is how it works (at least in some jurisdictions) today, there is still a missing step, one with higher coercion that is able to deter greenwash.

4.3 Eco-label's tip-less pyramid and the Dual role of Government

Both the enforcement pyramid and the dynamic instrument pyramid are based on the idea that the tip of the pyramid is reserved for the most coercive measure. Such measure should be able to deter wrong-doings as it makes it very costly for market actors to deviate from compliance. All facets of the dynamic pyramid have their 'very coercive' measure or instrument. Except for the government facet. Hence the eco-labelling regulatory pyramid is missing the tip. The tip should represent the most coercive measure capable of deterring unwanted behaviour such as greenwashing. Coincidentally (or not), not one government sanctions greenwashing. Some jurisdictions contemplate green claims guide-lines or some sort of deceptive advertising rules. However, these are not credible enough and they are meant to address environmental claims not certification. In addition, these rules are very difficult to enforce. Furthermore, there are no clear legal actions against these environmental claims, whether they are public or private actions remains unclear. Hence, without clarity and defined roles they do not work as regulatory threat. In short, it is possible to claim that the missing tip of the pyramid should be focused at deterring and sanctioning greenwashing and greenwashers.

In the market for environmental goods, eco-labels are not the only informational tool in play. It cannot be forgotten that there are also environmental claims and other environmental marketing tools that compete in the same market. Eco-labels are but one of those tools, and

while it can be argued that they are one of the best ways to convey truthful environmental information to consumers, they are the minority. The majority of claims in the market are self-declarations. This means there are two intertwined spheres: certification and claims. Certification is a self-regulatory mechanism, which can follow the regulatory model proposed in the previous section. Whereas environmental claims, are governed by public laws or co-regulation models. Specifically, they are normally regulated with guidelines which provide some sort of safe-harbour for marketeers. However, how claims perform in the market and how much greenwashing they allow, will directly affect the performance of eco-labels.

4.3.1 The Role of government in certification

The role of government is critical to eco-labels. measures fail. This is because it is the only facet within the regulatory strategy that provides some sort of coercion. Only when governments recognise property rights or liability rules, can eco-labels have access to the government facet. Otherwise, eco-labels remain in the private sphere with no means to enforce. The type of coercion governments provide, cannot be found in the private face of the pyramid. However, as it has been pointed out, in reality the role of government is far from clear. It can be observed that some governments have opted for creating their own eco-labelling schemes. In this case the government facet in reality covers the function of the third party regulator or the eco-label. Hence it duplicates a function that of another actor or it replaces it, leaving the structure without a legal support. Only when governments provide a clear legal structure, such as recognising property rights or liability rules will the regulatory structure resemble the regulatory model described above. In all other cases, governments are not taking advantage of their main characteristic: public enforcement. Hence, their individual enforcement pyramid is weak or it simply does not exist, making the eco-labelling strategy incomplete. Which may lead to failures such as greenwashing.

Specifically, eco-labels or certification call for governments to underpin the system with some simple interventions. First, as seen in Chapter V some countries regulate certification marks by allowing them to register in a similar manner to trademarks or geographical indications. This simple intervention has several benefits. First, once the certification mark is registered it will entitle the owner to defend the use of its mark in the market. Hence, if there is a greenwasher that attempts to imitate the mark or use it without permission, the owner is entitled to pursue legal action. This allows for peer monitoring, which is likely to lessen greenwashing. Furthermore, if for the registration it is necessary to review the eco-label's criteria and/or regulations (such as the case of Australia reviewed in Chapter V), there is an additional barrier for greenwashing. If the eco-label were proven misleading or exaggerated

the registrar or reviewing authority will be able to correct it before it goes into the market. In addition, it has been pointed out that certification itself is not without its problems. Specifically, third party certification has an inherent conflict of interest problem. The firm that wants to be certified has to pay the certifier, which creates a strange situation for the certifier as it will have a pressure to certify otherwise it will lose business. In this case, government can intervene with a fourth party certification scheme. In theory, governments are independent from the private interests of the certifiers. Hence, it can create a pool or fund, in which the firms that want to be certified (the clients) pay into this fund and the certifier will be randomly assigned. And the government pays the certifiers directly, not the clients. In this way there will be less conflict of interest. However, this structure would have to be reviewed in depth, which will have to be left for further research.

4.3.2 The Role of government in environmental claims

The laws and regulatory models that apply to certification cannot be applied to simple environmental claims. As it was noted before, environmental claims fall within the wide scope of advertising. Hence, the laws governing deceptive advertising will be applied. In addition, some jurisdictions have specific regulations for environmental claims. These normally come in a form of guidelines for marketers or producers (depending on the entity that enacts them). These guidelines are normally enacted by industry associations and then they are approved by the relevant government agency (co-regulation scheme). Following these guidelines would be useful for the firm that is accused of greenwashing as a defence. In other words they are safe-harbours. However, this system has a problem with enforcement. On the one hand private enforcement is unlikely, as one individual is not going to bear the costs of going to court over a misleading environmental claim or any type of greenwashing for that matter. As discussed in Chapter V, for an individual (or even a group) to go to court it is necessary to prove 'harm'. Environmental attributes are unlikely to produce a 'harm' that would give rise to a legal action. On the other hand, public enforcement would imply very high monitoring costs. The enforcement of environmental claims is out of the scope of this work, and would call for further research. The only thing that can be easily observed is that the current system does not address the greenwashing problem. Greenwashing is a market failure that needs to be addressed otherwise both environmental claims and eco-labels will be undermined.

4.4 Trade or environment: government dilemma

As mentioned previously, legal pluralism suggests that two or more legal systems can coexist and co-regulate over one specific sphere. In previous sections the interactions

among the private and public spheres have been analysed. However, in eco-labels two 'public' systems potentially overlap, creating some problems. These two systems are environmental and trade law. This overlapping arises due to eco-labels' dual nature: they are both trade and environmental tools. This problem is not unique to eco-labels, it applies to many sustainable policies. This is because trade tools are normally regulated within the private sphere, with little to no government intervention. Whereas environmental tools normally have a public nature. The problem in the regulatory pyramid becomes a practical matter. Which authority and under which rules should the government facet of eco-labelling be entrusted to? It could be assigned either to the trade or to environmental authority or maybe to both. There is an overlapping of commercial and environmental interests and coexistence can only work if such interests are balanced. The problem lies in the fact that trade and environmental interests compete with each other and are not always aligned. If trade were to dominate the regulatory scenario it is likely that the environment would take a secondary role (which it is already prone to have). On the other hand, if the opposite were true, trade would be constrained and limited because of its environmental effects. The problem is intensified because the effects are not comparable. At some point trade and environmental policy communities (authorities and other stakeholders) will have to come together and decide which are the *circumstances* in which trade will take precedence over the environment and vice-versa. However, as long as it is only the trade or consumer protection authority taking action on eco-labels, their perspective will bias the interventions.⁸⁷

Next Chapter will address the Tuna-Dolphin conflict between Mexico and the US. This case is a clear example of this environment-trade dilemma. In short, when Mexico decided to go before the WTO the US immediately opposed this action because the US and Mexico have a bilateral environmental treaty. Therefore, because the US considers this case an environmental matter (because of the dolphins) it argued that Mexico had no right to go before the WTO. Mexico on the other hand, argued that because the dolphins were already safeguarded, the contended measures were commercial. As it can be seen the line is not clear. Furthermore, bodies such as the WTO cannot solve the environmental problems that arise within their commercial sphere. In the same case, both the Panel and the Appellate Body noted that dolphins outside the Eastern Tropical Pacific Ocean are not really protected

⁸⁷ Tom Rotherham. UNEP. **The Trade and Environmental Effects of Ecolabels: Assessment and Response.** p. 41.

by any law. And while it is evident, and even frustrating, there is not much a trade authority can do on the matter as it is out of its jurisdiction.

5. Conclusions

This chapter attempted to answer two main questions: is there a scope for law in eco-labelling and if so how should it look like. The answer to the first question is quite simple: yes, there is a scope for law in eco-labelling. In fact, given the current scenario with the amount of greenwashing there is not only scope for law there is a need for law. Not only because of the quantity of greenwash, but also because greenwashing is a market failure. Specifically, greenwashing is opportunistic behaviour that leads to an adverse selection problem. Hence, if it is left unattended the market will not function, just like Akerlof's market for lemons. The second question, is slightly more complicated to answer. In theory the law should be such that it underpins the whole third-party (eco-labels) and voluntary systems that are in place. This means that there should be a statute, that provides safeguards or safety nets with the purpose of supporting or empowering (by giving more structure, clear and delimited rights) the eco-labelling system or mechanism. Moreover, it can be deduced from the eco-label's enforcement pyramid and its dynamic variant, that eco-labels are missing a governmental enforcement mechanism. This means that while statutory underpinning is crucial it is not enough, there needs to be a highly coercive tip for the pyramid to work properly. Its purpose is to serve as a threat a deterrence instrument, that increases the cost of non-compliance.

The countries that regulate certification marks have a regulatory structure that resembles the one proposed herein. The ones that do not are incomplete and leave an opening for failure. In a complete pyramid each party is taking the role they should be taking and the dynamics work well. Hence, firms will be focused on their pro-environmental activities, eco-labels will be focused on certifying and the law will support the system and provide actions for when the system fails. If any party is not doing their part, the system is unlikely to work properly. Nonetheless, it was also pointed out that even in the case where certification marks are regulated, there is still scope for public enforcement. This is because the certification scheme does not tackle greenwash either. It might lessen it, but it does not deter it. However, that can be left as a topic for further research.

To close this work, a case study will be presented. This case study, illustrates what is considered a successful eco-labelling policy. In addition it provides a thorough example of the tension between trade and environment laws. It points out the type of problems that arise when trade authorities intervene with environmental matters. Also, it shows the power of corporate environmentalism, as the dolphin-safe policy in the US was initiated by the dominant firms in the tuna industry. It is a complex case, as it has many stages, thus it provides useful examples for many other matters discussed throughout this work. Furthermore, the case has recently been reviewed in the WTO. Hence, it will aid to determine whether there is in fact a risk for public eco-labels to be considered a protectionist measure. The WTO opinion might hold useful insights, as well as an official standing that might influence the findings of this research.

CHAPTER VII

The Mexico-US Tuna Conflict and the Role of the 'Dolphin-Safe' Eco-label

1. Introduction

This chapter's main purpose is to provide an example of the importance of the trade related aspects of eco-labels. The 'dolphin-safe' eco-label¹ (and its variants) clearly illustrates the impacts of eco-labels on trade, policy and the environment. Furthermore, this label has been recently reviewed in the World Trade Organisation (WTO) making it, a very relevant case on an international arena. In addition to understanding the background and the proceedings that took place before the WTO; the 'dolphin-safe' eco-label will be analysed using the findings of other chapters, specifically Chapter I and V.

The tuna dolphin case is a very old case, it dates back to the 1980s. There have been many stages, including more than one attempts to solve it at an international level. In addition, it has a public sphere as well as a private one. On the one hand governments were dealing with the public 'dolphin-safe' policies and on the other, private corporations were launching their 'dolphin-safe' labels. This makes the case somewhat complicated to follow. Therefore, the review will be done in a chronological manner, as it is the most simple way to address it. As mentioned above the WTO case will be duly reviewed. The results of the case may still be argued; however, when applying the findings of other chapters, it will be observed that the findings are not really surprising. The analysis will show that the case is relevant as it will allow the comparison between the different regulatory options. This is because one of the parties of the case opted for a mandatory measure, whereas the other opted for a voluntary measure. Hence this case raises important questions in the desirability of eco-labels to address complex environmental problems. However, this chapter does not attempt to analyse the WTO or international trade matters, as that is out of the scope of this research. It simply addresses a relevant case in the eco-labelling arena.

2. The Core of the Conflict

The trade of tinned tuna has an annual global value of \$2.7 Billion dollars. The US is the number one consumer of canned tuna, where the consumption per capita is of 1.5 kilos a

¹ There have been more than one Dolphin-friendliness related eco-labels, however 'dolphin-safe' will encompass them as a group, as it really does not make a difference for the analysis. Where a distinction is necessary it will be pointed out.

year, which equals 7 cans. Japan is a close second, though canned tuna is not their first option. These 2 countries account for approximately 60% of the world consumption. Finally, in Europe the United Kingdom is the largest canned tuna consumer; in 2008 alone it consumed 778,000,000 tins.

Everywhere from the luxury sashimi markets to the low-cost canned variety, tuna is a key element for the diet of millions of people around the world. There are many species of tuna, however the most relevant ones in world trade are skipjack (or skipper jack), yellow-fin and blue-fin tunas. The largest tuna fishery in terms of volume is skipjack. Yellow-fin, is a much more commercially valuable species and it makes up 35 percent of the world's catch. It is of far better quality than the common skipjack, it is bigger, has softer odour and the meat is firm, making it easy to process. The majestic blue-fin, used for the luxury sashimi markets, only represents 1.5 percent of the volume of tuna, but its dollar value is astronomical. In 2001, a single blue-fin tuna set an all time record when it sold for US\$173,600 in Japan.² Overall, tuna is one of the world's favourite fish and is a significant industry for many countries.

Tuna fisheries face several dilemmas. The most notorious is the fact that several species are in the brink of extinction, such as the iconic blue-fin. The second problem is that all tuna face overfishing. There are not enough fish to sustain the global demand. Additionally, technology now allows big ships (floating factories) to fish and process in two days the amount of tuna that full countries can take in a year. Moreover, fishing has always faced the problem of accidental by-catch of other marine species such as sharks, turtles, dolphins and other marine mammals.

The tuna-dolphin case between Mexico and the United States is one of a kind. The tuna, specifically yellowfin, leaves Alaska and resurfaces in the Eastern Tropical Pacific Ocean (ETP)³ near Mexico, this is shown in the map below (figure A). This means that the US maritime area does not have this type of tuna. Another peculiar aspect of this case is that for some reason, only in the ETP tuna tends to congregate beneath pods of dolphins. This tuna-dolphin association is not observed in any other ocean in the world.

² Source: <<http://www.greenpeace.org/international/en/campaigns/oceans/tuna/?tab=0>>

³ The ETP lies off the coast of California, Mexico, Central America and South America all the way to the coasts of Chile. Only 15% of the tuna comes from the ETP.



Figure 1. Eastern Tropical Pacific

Dolphins swim in the surface above the schools of tuna, making it easy for fishermen to find the deep sea tuna schools. For several decades fishermen maximised their fishing by using the 'setting on dolphins' fishing technique. This technique consists of intentionally encircling the dolphins with boats and other less-friendly devices ('seal' bombs) and then letting the nets drop around them. The purse-seine nets close from the bottom (like a purse) and trap all the fish within the nets including the dolphins (see figure 2) Needless to say this method of fishing is responsible for the death of millions of dolphins. This is precisely the root of the tuna-dolphin conflict.

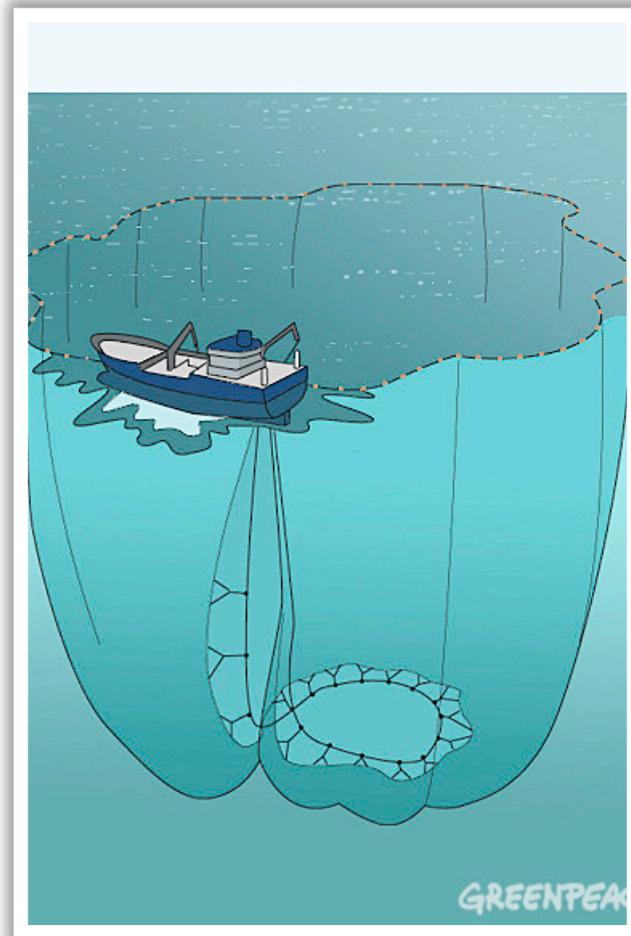


Figure 2. Purse Seine Nets

However, after 1990's the nets have been adapted so the dolphins can escape alive. Other fishing techniques were tested, such as log-setting. This technique did in-fact save dolphins but for every 29 dolphins saved, over 2000 sharks, 38 to 75 swordfish and 5 sea turtles would have had to be killed.⁴ For the specific case of the ETP tuna purse-seine fishing (using nets as those in figure 2) is the least harmful method. It is very specific and has a very low rate of other marine by-catch.⁵ The problem is that despite all these efforts to save the dolphins, it has been contended that these still get psychologically stressed and can get injured during the chases. So even if the fishing process is not lethal to dolphins anymore, the recovery of the ETP dolphin species that were almost depleted⁶ after decades of

⁴ D.D. Murphy, *The Tuna Dolphin Wars*, 40:4 *JWT* (2006), p. 597, at 610

⁵ at <<http://www.greenpeace.org/international/seafood/understanding-the-problem/fisheries-problems-today/purse-seines>>

⁶ A depleted stock is that which level of abundance has diminished over 40% compared to historical levels, with dramatically reduced reproductive capacity. It requires particularly energetic rebuilding strategies and its recovery time will depend on the present condition, the level of protection and the environmental conditions.

unregulated fishing is still very slow. This is the current argument used to foreclose Mexican tuna into the US markets.

3. The Development of the Conflict.

Since the beginning of the 1900s the US fleet was almost the sole producer of tuna in the ETP. During the 1960s American fishermen developed the 'setting on dolphins' technique. However, in the 1970s there were many large environmental movements that pressured governments to enact legislation protecting the environment. Among these laws is The Marine Mammal Protection Act (MMPA) of 1972. The MMPA essentially limited the 'taking' (harassment, hunting, capture, killing or attempt thereof) of marine mammals during any type of commercial fishing activities. The US government took into its hands the protection and conservation of marine mammals such as dolphins, polar bears and whales. At this moment a quota was established for the incidental taking as well as the imports of such animals.

3.1 The 1980s and The First Embargo

As mentioned earlier the US was practically the sole exploiter of the ETP. The Mexican fleet was almost insignificant until 1978 when the Mexican government decided to jump-start the industry. Thanks to this financial aid the Mexican fleet increased from 25 vessels in 1978 to 42 fishing vessels in 1980.⁷

In 1980 Mexico declared its Exclusive Economic Zone (EEZ) of 200 nautical miles from its coast. This was before the signing of the United Nations Convention on the Law of the Sea in December 1982.⁸ The Mexican authorities announced that all foreign vessels interested in fishing in its EEZ would be able to do so by obtaining a licence. Some US vessels ignored this announcement. In July of 1980, the Mexican Navy proceeded to seize six US vessels that were operating without authorisation within Mexican territory.⁹ These upset the US who retaliated by declaring an embargo to Mexican tuna. This measure was grounded on the Magnuson-Stevens Fishery Conservation and Management Act. This Act is the primary Law

⁷ A. Suárez Gutiérrez, Antecedentes Históricos de la Pesquería de Atún en México. 10:24. *El Vigía*, (January-March 2005), 2.

⁸ It is important to make the observation that the US opposed this treaty and did not sign or ratify it.

⁹ E.C. Marin Lopez, Del Proteccionismo Estadounidense a la Política Desleal: El Embargo Atunero. *Problemas del Desarrollo*. 34:134 *Revista Latinoamericana de Economía*. (2003), at 93.

governing marine fisheries and management in the US. It does not recognise other State's sovereignty over highly migratory species (such as tuna). It prescribes that if a vessel is seized by another State as consequence of claim of a jurisdiction not recognised by the US Laws, it will prohibit the imports of fish from such State.

This first embargo wasn't harmful to the Mexican tuna industry. On the contrary, the fishery managed to increase its volume as well as the exports. With the US border closed, Mexico diversified to other markets and strengthened the internal consumption. The fish was offered to canners in Italy, Spain, France, Japan, Costa Rica and Panama. Furthermore, the Mexican fleet found that by reshipping in Puerto Rico they could triangulate and still sell to the US.¹⁰ After six years Reagan's government decided to lift the sanction. This of course came after Mexico's compromise to enter the US market at a slow rate to avoid over-supply. Moreover, this agreement was under the condition that Mexico allowed observers from the Inter-American Tropical Tuna Commission (IATTC) to observe the fishing practices.

3.1.1 US Tuna Market Characteristics up to 1990

Before the embargo the major tuna canners from the US owned the fishing vessels. However in the early 1980s these major US tuna producers sold their vessels. This made it easier to divert their assets to spot markets in other parts of the world. Eventually the US canners dissolved their ties to the tuna fishing fleet altogether. Up to the late 1970s California had been the main processing centre for tuna (due to its proximity to the ETP). But by the early 1980s increased imports had made canning expensive. By the end of the 1989 Puerto Rico and American Samoa, due to their tax benefits, had become the main canneries for US destined tuna.¹¹

The US tuna processing industry was an Oligopoly. Three large companies controlled 71% of the US canned tuna market in 1989. Heinz (Starkist, its representative brand) had 36 percent market share, Van Camp (known for Chicken of the Sea) had 21 percent, and Unicord (brand name Bumble Bee) had 14 percent. Other companies combined had 29% percent, of which 17 were private labels and 6% were Japanese. Up to 1988 the three "big" companies were American-owned. However, by the end of 1988, Chicken of the Sea and

¹⁰ *Ibidem*

¹¹ D.D. Murphy, *Op. cit.*, at 600.

Bumble Bee were sold to Indonesian and Thai interests. Yet, their tuna sales remained mainly in the US.

For the 'big-three' the cost to switching to raw tuna suppliers in the Asian Pacific was small. However, for the smaller US producers these costs were not so small; their assets were ETP specific. These small producers relied on fishers and canneries from the ETP to reduce transport costs (as well as a higher quality fish). In addition, there was an increase in the imports of tuna, which created an over-supply. The price of canned tuna fell from 1987 to 1990 and costs increased for all tuna producers. Overall, 'US tuna processors' net income dropped each year from a high of \$111 billion in 1986 to a net loss of \$49 billion in 1990, the year the embargo was enforced. The income rose in 1991, after the embargo.¹²

3.1.2 The Environmentalists' Background

In 1986, the Earth Island Institute (EII), a California-based non-profit entity, launched its International Marine Mammal Project. Among the first campaigns to protect dolphins was a consumer boycott of tuna in order to pressure the American companies to swop to 'dolphin-safe' practices, to avoid the drowning of dolphins in the tuna-nets. Additionally, in 1988 the biologist Samuel LaBudde, while aboard a Panamanian tuna fishing vessel managed to film how hundreds of dolphins were dying in the fishing nets. These horrifying images circled around the globe and gave a boost to the ongoing tuna boycott.¹³ This video while circulating not necessarily mentioned the fact that the vessel was from Panama, leading to the common misconception that the images were taken in a Mexican vessel.

3.2 The 1990s

By the beginning of 1990 the scenario was building pressure. First, American consumers were very receptive towards the killing of dolphins whilst harvesting tuna. Second, the North-America Free Trade Agreement (NAFTA) was already in negotiations and US tuna producers feared that they would lose market share when their borders opened. Thirdly, there were diplomatic conflicts between the two States regarding Mexico's EEZ. All these events led to an intertwined chain of events, which will be duly analysed.

3.2.1 The Marine Mammal Protection Act

¹² *Idem*, p. 601.

¹³ <<http://www.eurocbc.org/page322.html>>

The upcoming events had a common starting point: the US Marine Mammal Protection Act of 1972. By the 1990s the Act had been reformed several times, and these were the reforms that allowed all the embargoes to take place. As mentioned earlier, the MMPA authorises a limit of incidental taking of mammals by US fisherman, pursuant to a permit and compliance to several regulations. Only one such permit has ever been issued and that is to the American Tuna-boat Association (ATA), this Association covers all US tuna fishing operations in the ETP. Under the permit no more than 20,500 dolphins may be incidentally killed or injured each year by the US fleet.¹⁴ Up to 1988 this was all regulating the internal market. The problem was that the new amendments extended to imported tuna too.

The MMPA states that any fish or products from fish that have been caught with technology that results in incidental death or serious injury of marine mammals would be banned from importation. The prohibition is mandatory. There was an exception: if the imported yellow-fin tuna was harvested with purse-seine nets, which would normally be prohibited, the exporting country could prove that it had a programme regulating the taking of marine mammals comparable to the one in the US. Additionally, it would need to prove that the number of takings is comparable to the average rate of takings in the US. Once the information is complete, the Secretary [of Commerce] must make a positive finding and allow the tuna import.¹⁵

3.2.1.1 The Second Embargo

On August 28, 1990 the US Government imposed an embargo on imports of commercial yellow-fin tuna harvested with purse-seine nets in the ETP.¹⁶ On September 7 the measure was lifted for Mexico, Venezuela and Vanuatu. On October 10, 1990 the US government imposed an embargo on tuna from Mexico until it could prove with documentary evidence that the percentage of Eastern spinner dolphins killed by the Mexican fleet over the course of an entire fishing season did not exceed 15 percent of dolphins killed by the US in that period. February 22nd, 1991 the embargo on imports of tuna from Mexico went into effect. Moreover, on April 3rd, 1991 the US Customs Service issued guidance implementing a further embargo on imports of yellow-fin tuna harvested in the ETP with purse-seine nets by

¹⁴ GATT Report of Panel, 3 September 1991, *United States-Restrictions on Imports of Tuna*, DS21/R-39S/155, at Paragraph 2.4

¹⁵ *Idem*, Paragraph 2.5

¹⁶ This action affected Mexico, Venezuela, Vanuatu, Panama and Ecuador.

vessels of Mexico, Venezuela and Vanuatu. Under this embargo, effective March 26 1991, the importation of yellow-fin tuna was prohibited altogether.

With these new amendments, an importer, in order to be allowed to enter the US would have to prove that no yellow-fin tuna in the shipment was harvested with purse-seines nets in the ETP by vessels from Mexico, Venezuela or Vanuatu. The importer would have to submit a 'Yellow-fin Tuna Certificate of Origin'. The country of origin is deemed the country under whose Laws the harvesting vessel is registered. Furthermore, importers from intermediary countries would also have to provide reasonable proof that it has acted to prohibit the importation of such tuna from any nation from which direct export is banned in the US. On March 24, 1991 the intermediary nations embargo went into effect. The US Customs Service had to obtain from each shipment of yellow-fin tuna from an intermediary country both a Yellow-fin Tuna Certificate of Origin and a declaration from the importer that no yellow-fin tuna in the shipment was harvested with purse-seines nets in the ETP by vessels from Mexico. The identified intermediary countries were Costa Rica, France, Italy, Japan and Panama. Importations from these countries would also be refused unless the declaration was handed in. The effect was that these countries also stopped importing tuna from Mexico.

3.2.1.2 The GATT Processes

Before the creation of the World Trade Organisation (WTO), the General Agreement on Tariffs and Trade (GATT) regulated international trade. Although the GATT was not institutionalised as it is nowadays, its Council was still in charge of solving the commercial disputes between the contracting parties.

Mexico decided to request consultations under the GATT to the US on November 5, 1990. Mexico contended that the prohibition to import yellow-fin tuna from the ETP according to the Marine Mammal Protection Act was contrary to GATT obligations and that the 'dolphin-safe' label was an unnecessary trade barrier.¹⁷ A Panel was established and on August 16th, 1991 it presented its report. The found that the MMPA import ban constituted a quantitative restriction and illegitimately regulated the way tuna was caught. This decision marks the distinction between market access and process regulations. It also makes the distinction between product related or non-product related Production and Process Methods or PPMs.

¹⁷ The 'dolphin-safe' label part will be analyzed below.

The Panel emphasised the fact that the GATT refers to regulations over products not process. The resolution stated that 'regulations governing the taking of dolphins could not possibly affect tuna as a product'.¹⁸ The MMPA was not regulating a product as the US claimed. The MMPA was regulating market access, which is considered protectionist. In conclusion the US embargo on Mexico's Tuna was found to be an:

*...Inappropriate heterogeneous (unilateral) approach to trade and the environment that discriminated against foreign nations, imposed arbitrary, retroactive and unpredictable restrictions on foreign firms and that went beyond the US jurisdiction and violated foreign sovereignty.*¹⁹

In July 1992 the European Union and the Netherlands also challenged the MMPA. Their claim was that the embargoes to the intermediary nations were an unfair trade practice. In February 1993 a Panel confirmed the findings of the previous Panel. However there was an important difference, this decision suggested that the MMPA could stand despite its extraterritorial application if it addressed dolphin conservation more directly than through a secondary embargo.²⁰ The Panel recognised that dolphins were in fact an exhaustible resource, in accordance with the GATT and that the US policy to conserve them fell within the range of policies covered by the GATT exceptions under Article XX(g).²¹ Some claim that the Shrimp-Turtle case, which in essence is very similar to the Tuna-Dolphin case, reverses its decision because it declares the protection of turtles to be legitimate.²² However, sea turtles are an endangered species whereas dolphins (at least the ones involved in the ETP tuna-dolphin case) have never been in danger of extinction.

The decisions of the Panels were never enforced. This is probably because at that time Mexico and the US were about to sign the NAFTA. Hence, Mexico decided it was not a good moment to pressure. Furthermore, due to the negotiating atmosphere between the

¹⁸ GATT Report of Panel 3 September 1991, n. 13 above, at paragraph 5.15.

¹⁹ D.D. Murphy, *Op. cit.*, p. 611.

²⁰ J.E. Salzman, **Free Trade and National Environmental Policy: Lessons from the Tuna/Dolphin Conflict**, p. 199.

²¹ GATT Report of Panel, 16 June 1994, *United States – Restrictions on Imports of tuna*. (DS29/R), Paragraphs 5.13 and 5.20.

²² See Environmental Law Institute, *Op. cit.*, p. 25.

countries, Mexico assumed that it could find a bilateral solution or at least a solution within the NAFTA.

3.2.2 The Inter-American Dolphin Conservation Program

After the primary and secondary embargoes the US participated in the creation of the Inter-American Dolphin Conservation Programme (IADCP), under the vigilance of the IATTC. For this programme two agreements were signed: the Jolla Agreement of 1992 and the Panama Declaration of 1995. La Jolla Agreement is a stringent and voluntary agreement. It calls for the use of fishing methods that avoid killing dolphins and that allow the release of dolphins from purse-seine nets. However, because this agreement is non-binding the ban continued. In October 1995 the Panama Declaration was enacted. This agreement basically makes the La Jolla agreement binding. This programme creates a certification/verification process, which is designed to give consumers complete confidence that tuna from the ETP does not kill dolphins while harvested.



Figure 3. The APCID 'dolphin-safe' logo

3.2.3 The Americanisation of the Problem

Neither the multilateral nor bilateral negotiations (even under the NAFTA) were enough to grant access of Mexican tuna in the US. Mexico continued to satisfy with the strict US requirements in order to clear its tuna. Consequently, Mexico decided to 'Americanise' its strategy. Instead of pursuing more International-Law mechanisms it decided to lobby directly in Washington to promote a reform to the Law itself. After several years and millions of pesos spent in consultancy, legal and lobbying fees, Mexico managed to introduce a project

to lift the embargo. The initiative proposed several modifications to the Laws. The US would be forced to ratify the IADCP, which was incorporated as the International Dolphin Conservation Act by Presidential Decree on August 15, 1997. This Decree was also the base for the lifting of the embargo. The embargo would be lifted from March 1999.²³ Nonetheless, simultaneous to these political/legal issues, the private sphere was also very active. Therefore, there was both a private and a public 'dolphin-safe' policy in the US.

3.3 The private and public 'dolphin-safe' policy in the US

Private parties had a tremendous impact on the 'dolphin-safe' policy. Big corporations, namely Heinz, played a crucial role in the shaping and stimulating the US (both public and private) 'dolphin-safe' policy.²⁴ Non-profit groups had tried for over 18 years to achieve what the private sector managed to do in less than a year.²⁵ Contrarily to what the non-profit groups normally did (attack the regulations), Heinz actively supported the 'dolphin-safe' regulation. Starkist already had the high environmental standards and the legal reinforcement of its 'dolphin-safe' programme would secure its place as market leader.

3.3.1 Starkists' 'dolphin-safe' Programme

For Starkist switching from the ETP to the central or western Pacific was not as cheap as it was for its competitors. This is because, unlike its competitors, Starkist was not bought by Asian interests. Hence the troubles of the opening the border to Mexican tuna (after the first embargo) hit them very bad. 'Ironically, this encouraged Starkist to act first, to avoid being trumped and miss out on the first-mover advantage of increased brand recognition.'²⁶ Hence, Starkist had to find a strategy to secure its position in the market.

Since the 1970s, Starkist had invested in training programmes and research on 'dolphin-safe' fishing techniques. By 1990 more than half of its tuna was already 'dolphin-safe'. But the situation had changed; consumers were aware of the problem and the media was paying a lot of attention to the matter. In an internal memo, J.W. Connolly, president of Heinz USA, allegedly wrote to a top manager that he was interested in 'seizing the environmental high

²³ Statement on Signing the International Dolphin Conservation Program Act, August 15, 1997 at: <<http://www.presidency.ucsb.edu/ws/index.php?pid=54540>>

²⁴ D.D. Murphy, *Op. cit.*, p. 601.

²⁵ *Idem*, p. 603.

²⁶ *Idem*, p. 601.

ground by offering the only tuna guaranteed not caught off dolphins'. Heinz knew this measure would be costly. The average cost of raw tuna for the 'big three' was \$905 per ton in January 1990. Heinz estimated that the 'dolphin-safe' policy would raise its fish costs by 30%, rising the 'big three' average cost to \$1,153 per ton. Nonetheless, market surveys showed optimism for this strategy. They showed that three-fourths of the surveyed consumers said they would switch to a 'dolphin-safe' brand. Eighty-six of those said they would be willing to pay a higher price. If this strategy worked it would be a substantial opportunity for the industry. It was expected that the other major producers would follow suit. However, if Starkist were the first mover, it would secure brand-name recognition as the leading 'green' tuna product.²⁷

On April 12th 1990, Anthony O'Reilly, CEO of H.J. Heinz, launched to the world the 'dolphin-safe' policy. In this announcement he stated Starkists' commitment towards the world and the US society to not purchase, process or retail any tuna that was captured by methods that harm dolphins in anyway. Heinz knew that this announcement had to draw enough attention for it to actually yield an impact on consumers. Heinz Executive Committee approved the project and appropriated \$9.2 million to implement it. The announcement was made during a press conference, in which O'Reilly, representing Heinz was in company of the US Senator John H. Biden and David Phillips, director of the Earth Island Institute. US' ABC News broadcasted clips of the event. The network gave the story 'top billing, as well as a favourable spin'. Furthermore, it is estimated that 80 million people saw the broadcast. This is an advantage that no other label has ever had.

The surprise announcement was also backed-up by contracts on 'dolphin-safe' tuna from the western pacific and a marketing campaign featuring a bottle-nose dolphin. The use of this type of dolphin in the campaigns was not random. In the US there was a television show of a 'friendly' bottle-nose dolphin named 'Flipper', which many Americans remember dearly. The US consumers evidently felt sympathy for this specific type of dolphins, reason why it was the preferred image in the marketing of the 'dolphin-safe policy'. This is relevant because the bottle-nose dolphin is not of the variety threatened by the ETP tuna industry. In the end, even if the policy was environment conscious it was still a strategic business move, with profits as an end.

²⁷ *Idem*, p. 602

After three years Starkists' market share grew from 36 to 42 percent. However, these were not the expected returns. After the policy was disclosed the standards started to be abused and weakened by competitors. Evidently, after Starkists' announcement many (if not all) of its competitors started to place labels (self-declarations) on their products. Hence, consumers were led to mistrust the 'dolphin-safe' labels and marketing claims and stopped consuming tuna altogether. These circumstances created an over-supply of tuna, and the prices started to go down, even the 'dolphin-safe' variety.

3.3.2 The US 'dolphin-safe' Policy

The 'dolphin-safe' eco-label obtained legal recognition on the November 28, 1990 with the enactment of the Dolphin Consumer Information Act (DCIA). This piece of legislation specifies a labelling standard for any tuna product exported from or offered for sale in the US. Under this Law, it is a violation of the Federal Trade Commission Act for any producer, importer, exporter, distributor or seller of such tuna products to include on the label of that product the term 'dolphin-safe' or any other term falsely suggesting its contents were fished in a manner not harmful to dolphins. According to this law tuna-fishing is considered harmful to dolphins if it is harvested in the ETP by a vessel using purse-seine nets or is harvested in high seas by a vessel engaged in drift-net fishing. Even though the misleading use of the label would be sanctioned the label would still remain voluntary. This voluntary nature, gives grounds for American fisherman to fish, without regards of the standards killing as many dolphins as they have to, and just sell without a label or sell in other markets. Furthermore, this only applies to dolphins and tuna, other fisheries such as squid (large in Alaska) that also has a huge dolphin toll, are excluded.

3.3.3 The GATT Procedure and the Dolphin Protection Consumer Information Act

With respect to the DPCIA, in the case taken before the GATT Mexico requested the panel to find whether the Act was inconsistent with GATT obligations, by virtue of the establishment of discriminatory and unfavourable specific conditions for a specific geographical area. The 'Dolphin Safe' label was found to be consistent with the GATT obligations. Within the analysis it was expressed that 'the GATT does not prohibit the right to the exercise of consumer choice'.²⁸ Furthermore it is pointed out that 'the use of the label

²⁸ GATT Panel Report 3 September 1991, n. 13 above, at paragraph 4.6.

“Dolphin Safe” is not a requirement but is voluntary’.²⁹ The Panel noted that the labelling provisions of the DPCIA do not restrict the sale of tuna products, tuna products can be sold freely both with and without the ‘Dolphin Safe’ label. If there is a price differential or any other advantage resulting from the application of the label it is a result of consumer preference. Finally, the labelling regulations governing tuna caught in the ETP applied to all countries whose vessels fished in this geographic area not only to Mexico.³⁰ Therefore it was not discriminatory for Mexico.

3.3.4 After-math of the ‘dolphin-safe’ Policy

The overall winners in the ‘dolphin-safe’ policy were Starkist and the other big companies. Conversely, smaller private-label canners and independent boat-owners could not absorb the high costs of the new regulations. Eventually they had to leave the market, most of them at a loss. Over two-thirds of the US fleet had left the ETP by 1990. To illustrate, the US tuna industry in 1979 was composed of 98 large US tuna seiners working in the ETP. In 1991 only 4 tuna vessels were regularly fishing in the ETP. And in 2002 only 2 US vessels were registered as active in the ETP.³¹

The ‘dolphin-safe’ policy also had an economic impact in the US. The losses include 12,500 jobs, \$294 million in household income, and \$1.32 billion in US Sales. The federal government lost \$58.8 million in income tax and the state of California lost \$7.37 million in taxes.³² The relatively new Mexican fishing industry was hurt even worse. They not only lost access to the US Market but also to the ‘intermediary’ markets that exported Mexican tuna to the US such as France and Italy. Reports estimated that over 15,000 Mexican fishing-related jobs were threatened and the cost of the policy to Mexico was of over 200 million dollars.

Environmentally, dolphin mortality did go down considerably. The total mortality of dolphins in the ETP has been reduced from about 132,000 in 1986 to less than 1,300 in 2009.³³ However, these types of policies always have a trade-off. ‘Dolphin-safe’ fishing is not necessarily the best environmentally-sound fishing option. As stated before, saving dolphins

²⁹ *Idem*, paragraph 5.6.

³⁰ *Idem*, paragraph 5.43.

³¹ <http://www.iattc.org/VesselRegister/VesselList.aspx?List=AcPS&Lang=ENG#United_States>

³² As quoted in D.D. Murphy, *Op. cit.*, p. 608 footnote 37.

³³ <<http://www.iattc.org/DolphinSafeENG.htm>>

means killing more sharks, juvenile tuna, sea turtles and other marine mammals. Also, even Greenpeace accepted that 'dolphin-safe' eco-labels had negative spill-over effects to other oceans and species other than dolphins.³⁴ Furthermore, Illegal, Unregulated and Unregistered (IUU) fishing is on the rise. In the ETP alone there are up-to 24 active IUU tuna vessels.³⁵ Tuna laundering and pirate fishing are also another cost of stringent policies.

3.4 The Last Decade

At the beginning of the 2000 the US government announced that Mexican tuna would re-enter the US market. Environmental groups energetically opposed this action. There was a proliferation of new 'dolphin-safe' labels and campaigns that created great uncertainty in the market. EII was one of the strongest opponents to the lifting of the ban.

After the Congress's enacted the International Dolphin Conservation Act (IDCA) in 1997, environmental groups led by EII started a chain of suits. The suits had a common objective: to avoid the new 'dolphin-safe' standard. The IDCA, just as the IADCP, would allow the use of the 'dolphin-safe' label to tuna fished with purse-seines as long as they proved that no dolphins were killed or severely injured. However, Congress refused to relax the standards and amended the MMPA. This amendment required the Secretary of Commerce, through the National Oceanic and Atmospheric Administration (NOAA), to conduct several scientific studies in order to determine whether or not the tuna fishery affects the dolphin population. If evidence were found that it did affect the dolphins then Congress would make stronger labelling requirements. Contrarily, if evidence were found that the fishery did not have adverse impacts on the dolphins, it would allow a broader use of 'dolphin-safe' labelling. The NOAA had to present its Initial Findings by March 1999 and its Final Findings by December 2002.

The Initial Finding of such studies sustained that the fishery was not having an adverse impact on the dolphin population, despite inconclusive evidence. This finding was challenged³⁶ because it was considered 'arbitrary and capricious in light of inconclusive evidence'. The appeal court confirmed this finding.

³⁴ D.D. Murphy, *Op. cit.*, p. 610.

³⁵ <<http://www.iattc.org/VesselRegister/IUU.aspx?Lang=es>>

³⁶ *Brower v. Daley*, 93 F. Supp. 2d 1071,1087 (N.D. Cal. 2000) and *Brower v. Evans*, 257 F. 3d 1058,1071 (9th Cir. 2001).

The Final Finding, was published in December 2002. Once again the environmentalists brought suit and courts determined yet again that the studies were not complete and in conformity with Congress' orders. Furthermore, because the studies were inconclusive, the Agency should not have determined that there was no adverse effect, 'any insufficiency of data should be resolved in favour of the species.'³⁷ The District Court that reviewed the case, declared that 'dolphin-safe' labelling should not be used for tuna caught with purse seine nets. Furthermore, it stated that the Agency in charge of the studies was favouring political over scientific matters.

The NOAA based its Final Finding on a scientific report. This report was supposed to complete and update the studies Congress had mandated. The NOAA did look into the indirect and direct causes of dolphin deaths and found that 'the fishery is not directly killing the dolphins... but that the indirect effects of the fishery are inconclusive.' The scientific report outlined several indirect ways the fishery could be causing dolphin deaths: 'dolphin mother-calf separation during the high-speed chase and encirclement; acute cardiac and muscle damage caused by the exertion of avoiding or detangling from the nets; failed or impaired reproduction; compromised immune functions; and unreported mortalities.' However, there was no reliable data on these claims, reason why the NOAA did not consider them 'scientific'. The Courts and environmentalists though, determined it should have considered it as the best available scientific evidence. Once more, the courts found that the studies were incomplete, as an example, one of the studies specifically required the necropsy of 600 dolphins in a year. This study was impossible to complete because there were less than 200 dolphins to perform the necropsy to. Notwithstanding the above, the Final Finding was also vacated.³⁸ The Appeal Court also confirmed this decision.

In conclusion, the 'dolphin-safe' label would continue to mean that the tuna was caught without purse-seine nets and that no dolphins were killed or seriously injured during the harvest.³⁹ Hence the IDCA enacted by Congress in 1997, which would have allowed the re-entrance of the tuna from ETP into the US (by recognising the standards and the label of the

³⁷ *Earth Island Institute v Hogarth*, 494 F.3d 757 (9th Cir. 2007).

³⁸ The Case that challenged the Final Finding was *Earth Island Inst. v. Evans*, No. 03-0007, 2004 WL 1774221, at *30-31 (N.D. Cal. Aug. 9, 2004).

³⁹ *Earth Island Institute v. Hogarth*, 494 F.3d 757 (9th Cir. 2007)

IDCP) market was overturned. This translated into the effective banning of any import of tuna carrying the seal of approval ('dolphin-safe' eco-label) of the IDCP.⁴⁰

4. The Last WTO Dispute

In 2008 Mexican tuna still had practically no access to the US market. In 2009 the US spent \$613 million dollars on tuna imports. In such period, Mexico's exports to the US were of \$7.5 million which is less than 1% of the US total tuna import.⁴¹ In addition, the Mexican tuna industry was severely affected by the US Dolphin-safe policy. Such policy had already cost Mexico one third of its fleet and in 2007 Mexico had to import approximately 25 percent (30 to 40 tons) of tuna to cover its internal demand.⁴² Based on these facts and other arguments, Mexico requested consultations to the US Government under the WTO rules on October 24, 2008. Officially, the consultations were due to measures concerning the importation, marketing and sale of tuna and tuna products, which would later become the name of the case. After the consultations failed, the case was formally brought to the Dispute Settlement Body (DSB). It was only until May 2012 that the Appellate Body delivered its report. The time-line of the case is as follows:

- The consultations took place in December 2008, without positive outcome.
- On March 2009 Mexico proceeded to request to the Dispute Settlement Body (DSB) of the WTO for the establishment of a panel.
- The panel was established on the 20th of April. On December 14, 2009 the Director-General composed the panel.
- On June 15, 2010 the Chairman of the panel informed the DSB that the panel expected to issue the final report to the parties in February 2011.⁴³
- However, due to practical matters such report was only delivered on the 15th of September of 2011.

⁴⁰ <<http://ictsd.org/i/news/biores/43657/>>

⁴¹ Point 7.354 and 7.355 of the Panel Report, p. 231

⁴² Ramon Corral Avila, the head of Mexico's National Aquaculture and Fishing Commission to Notimex, published in *El Financiero* online, March 9, 2010, at: <<http://www.elfinanciero.com.mx/ElFinanciero/Portal/cfpages/contentmgr.cfm?docId=176814&docTipo=1&orderBy=docid&sortBy=ASC>>

⁴³ <http://www.wto.org/english/tratop_e/dispu_e/cases_e/ds381_e.htm>

- United States filed an Appeal to the Final Report of the Panel on the 24th of January 2012 against the main findings of the Panel.
- Mexico also filed an Appeal on the 25th of January 2012, to address the arguments that the Panel had not agreed with.
- The Appellate Body delivered its report on the 16th of May 2012.
- On the 17th of September 2012 the parties communicated to the DSB that they had agreed a 'reasonable' period of time to implement the recommendations and rulings of the DSB. Such period expires on June 2013.

This case marks the first time that a panel examined the WTO compatibility of a label that is entirely voluntary, even if it is granted by a government agency. This case brought attention to many third parties such as: Argentina, Australia, Brazil, Canada, China, Ecuador, the European Communities, Guatemala, Japan, Korea, New Zealand, Chinese Taipei, Thailand, Turkey and Venezuela. Hence there were many expectations set on the result of this case. A considerable difference in this case compared to the previous Tuna-Dolphin cases is that this one is directly challenging the marketing of the eco-label itself as discriminatory, not the standard behind it. The precedent established that the label 'dolphin-safe' did not violate GATT rules. because the measure was designed to prevent deceptive advertising for all tuna products, whether imported or domestically produced. Furthermore, this case challenged the determination of a Court (as part of the whole 'dolphin-safe' policy), which is the responsible for the current ban on the imports of Tuna from Mexico.

4.1 The Core Arguments

In its first submission, Mexico challenged the Dolphin Protection Consumer Information Act; the 'dolphin-safe' labelling standards and the 'dolphin-safe' requirements for tuna harvested in the ETP [Eastern Tropical Pacific Ocean] by large purse seine vessels.⁴⁴ Finally the Mexican government also challenged the ruling in *Earth Island Institute v. Hogarth*, 494 F.3d 757 (9th Cir. 2007). Mexico argued that the application of all these measures '...have the effect of prohibiting the labelling of Mexican tuna and tuna products as "dolphin-safe"...' ⁴⁵ In

⁴⁴ *Code of Federal Regulations*, Title 50, Section 216.91 and Section 216.92

⁴⁵ United States - Measures concerning the importation, marketing and sale of tuna and tuna products, WT/DS381/1; G/L/858; G/TBT/D/32, 28 October 2008, Request for Consultations by Mexico.

general, Mexico claimed that the measures went against the GATT and Technical Barriers to Trade Agreement (TBT). In other words, they claimed that the US 'dolphin-safe' policy discriminated Mexican tuna products. In addition, it argued that the 'dolphin-safe' policy can be considered a technical barrier to trade and that they are more trade-restrictive than necessary to fulfil the policy's legitimate objectives. These objectives are ensuring that consumers are not misled or deceived and contributing to the protection of dolphins.⁴⁶ Furthermore, it argued the US had failed to meet its obligation to use international standards (if available) as the base of their own technical regulations. Specifically, Mexico argued that the AIDCP is such international standard. Hence, dolphin-safety could be perfectly addressed under its standards and verification processes (which is the same measure it lobbied in the US in the late 1990s). In short, according to Mexico the US 'dolphin-safe' labelling policy was not only discriminatory but also unnecessary.

The US counter-argued that the case should be arbitrated under the North American Free Trade Agreement.⁴⁷ According to the US the WTO was not the proper mechanism to solve this 'environmental matter', especially when there is a bilateral treaty that specifies how both countries will deal with environmental disputes. However, Mexico had an almost zero dolphin by-catch, it complied with all the international norms and its technology was up-to-date. Hence, Mexico sustained that the tuna issue 'is more a commercial problem than a biological one. It is a zero-tariff barrier where we have a free trade treaty'.⁴⁸ According to Mexico, there is no reason in maintaining the embargo.⁴⁹ If the dolphin mortality rate is close to zero, there is no further environmental discussion, at least not under a 'dolphin-safety' shield. Furthermore, if the issue were to be resolved within the NAFTA, the solution will remain within the involved countries and would not set the so needed international precedent.

4.2 The Panel's Report

⁴⁶ http://www.wto.org/english/tratop_e/dispu_e/cases_e/ds381_e.htm

⁴⁷ <<http://ictsd.org/i/news/bridges/48580/>>

⁴⁸ Ramon Corral Avila, the head of Mexico's National Aquaculture and Fishing Commission to Notimex, published in *El Financiero* online, March 9, 2010, at: <<http://www.elfinanciero.com.mx/ElFinanciero/Portal/cfpages/contentmgr.cfm?docId=176814&docTipo=1&orderby=docid&sortby=ASC>>

⁴⁹ It is an embargo *de facto*, as the dolphin-safe policy's effect is to effectively close the market to tuna from the ETP.

After some internal complications, the Panel's final report finally came out on September the 15th 2011. One of the main findings is that the 'dolphin-safe' labelling provisions do constitute a Technical Barrier to Trade. The panel arrived to this conclusion after considering whether the labelling provisions were in-fact voluntary. The Panel found that the labelling rules were not voluntary but mandatory. In essence the US policy (all the different statutes, regulations, standards and even the case law) comprises a statutory regulation for the 'official' label. At the same time it gives the provisions for other 'dolphin-safe' labels to comply with. Hence, they do allow for multiplicity of labels, under certain rules. The use of any label that suggests dolphin (or other marine mammals) safety is forbidden unless, they can prove that they do not harm dolphins or other marine mammals. To prove this, other labels have to follow the rules of the Tuna Tracking and Verification Programme, which is determined by the US National Marine Fisheries Service. Hence, other labels have to be aligned with these principles otherwise they are illegal. The fact that other labels have to follow the Tuna Tracking and Verification programme (which are statutory rules) to be able to be marketed is what makes it 'mandatory' and not voluntary.

The second finding, related also to the technical standards, is that the US 'dolphin-safe' measures or policies "are more trade-restrictive than necessary to fulfil their legitimate objectives."⁵⁰ As seen above these objectives are informing consumers and contributing to the protection of dolphins in relation to the impact of drift-net fishing techniques. While these objectives are legitimate (within the scope of the TBT) they are too restrictive.⁵¹ This conclusion was reached after analysing whether an alternative less-restrictive measure would achieve the same results. Specifically, this alternative was the AIDCP regulations, as suggested by Mexico. These regulations, arguably achieve the same results as the US 'dolphin-safe' measures. However, the Panel pointed out that while they are less restrictive, it does not mean they achieve their goals. In its view both the 'dolphin-safe' and the AIDCP provisions "only partly address the adverse effects on dolphins of tuna fishing."⁵² In essence, the objectives are only partially met because the 'dolphin-safe' policy is limited to the ETP and there are no provisions for tuna outside the ETP. This means that if dolphins

⁵⁰ Panel Report, paragraph 7.620, p. 262

⁵¹ "trade restrictive" include those that impose any form of limitation of imports, discriminate against imports or deny competitive opportunities to imports. Paragraph 7.455

⁵² Paragraph 7.544, p. 246

were the pursued environmental goal, as the US claims, the regulations would have to be broader. Regarding the goal of informing consumers, it points out that the dolphin measure is not appropriate either as the labels “do not allow the consumer to accurately distinguish between tuna caught in a manner that adversely affects dolphins and other tuna.”⁵³ Ideally, when consumers buy ‘dolphin-safe’ product in the US, it should be “completely assured that no dolphin was adversely affected during the catching of that tuna in the ETP. However, consumers would not have equal certainty that no dolphin was killed or injured or that dolphins were not otherwise adversely affected in respect of tuna caught outside the ETP.”⁵⁴ Therefore, these provisions only partially address the intended goals. While the observations of the Panel are quite critical to the labelling system itself, in the end it is not their role to evaluate the effectiveness of the tool. However, considering the results and the fact that there are less restrictive available measures, the ‘dolphin-safe’ policies are considered trade-restrictive.

The third finding is that the US ‘dolphin-safe’ policy does not discriminate Mexican tuna on the basis of origin. In the words of the Panel, “any particular adverse impact felt by Mexican tuna products on the US market is, in our view, primarily the result of ‘factors or circumstances unrelated to the foreign origin of the product’, including the choices made by Mexico's own fishing fleet and canners.”⁵⁵ In this sense, the panel does recognize that Mexican tuna does have problems in the US market; however it is not because they are Mexican. If it were the case, then it would be discriminatory, but it is not.

Finally, regarding the argument that the US did not comply with the obligation to use international standards as a basis of internal technical regulations; it was decided that it was not inconsistent. In other words, the US was in-line with such obligation. According to the Panel, the international standard was not appropriate and would not have been effective to achieve the US's policy goals. Hence, such standard is not applicable.

4.3 The appeals

On January 24 and 25 of 2012 the US and Mexico, respectively, presented their appeals before the DSB. It was only until the 16th of May 2012 that the Appellate Body Report was

⁵³ Paragraph 7.542, p. 245

⁵⁴ Paragraph 7.545, p. 246

⁵⁵ Conclusion, paragraph 7.378, p. 206

circulated. In essence, all of the findings from the Panel were appealed from either one of the parties. Hence, the Appellate Body basically had to review all of the Panel's findings.

The Appellate Body confirmed that the 'dolphin-safe' policy is in fact a Technical Regulation. However it reversed the finding that the 'dolphin-safe' policy is not discriminatory against Mexican tuna. In other words, the 'dolphin-safe' labelling policy is discriminatory against Mexican tuna. The Appellate Body reasoned that, "by excluding most Mexican tuna products from access to the 'dolphin-safe' label while granting access to most US tuna products and tuna products from other countries, the measure modifies the conditions of competition in the US market to the detriment of Mexican tuna products."⁵⁶ However, it further considered the fact that the tuna fishing methods (drift-nets as well as other techniques) are very harmful to dolphins. It notes that "the measure at issue is not even-handed in the manner in which it addresses the risks to dolphins arising from different fishing techniques in different areas of the ocean."⁵⁷ Hence, the fact that it only focuses on the tuna from the ETP (or Mexico) does discriminate against these products. The next finding reversed the finding that the 'dolphin-safe' labelling policy is more trade restrictive than necessary. Regarding this point the Appellate Body found that the Panel had made a flawed comparison between the 'dolphin-safe' policy and the AIDCP regulations proposed by Mexico, because they are not alternatives. It added that such measure is not equivalent to the US policy; hence the comparison was incorrect. In essence it argues that the measures are not equivalent because the AIDCP rules would not achieve the US objectives 'to the same extent' as the US policy would (which is fundamental for them to be considered alternatives). Furthermore, both show only partial results, as they both only apply to the ETP. In addition, consumers would be even more misled with the alternative proposed by Mexico. In other words, because the measures are not comparable, the US policy cannot be regarded as more trade restrictive than necessary. Finally, the Appellate Body agreed with the finding that the US did not fail to consider the international standard to set its regulations. However, it did disagree with the intermediate finding that the 'dolphin-safe' definition and certification developed within the AIDCP is a "relevant international standard". This is because such programme is not really considered an international standardising organisation, because participation in such organisation is by invitation only.

⁵⁶ http://www.wto.org/english/tratop_e/dispu_e/cases_e/ds381_e.htm

⁵⁷ http://www.wto.org/english/tratop_e/dispu_e/cases_e/ds381_e.htm

4.4 The conclusion of the Case

The Dispute Settlement Body adopted the Appellate Body and Panel Report. In conclusion, the integrated findings are that the 'dolphin-safe' labelling policy is a technical regulation; hence it goes against the TBT agreement. Second, the measure is not trade-restrictive. It does not discriminate against the Mexican tuna and the US is not at fault with its obligations because it does not observe the regulations of the AIPCD, because this organisation is not an international standardising organisation in the terms of the TBT.

The US has until the 13th of July 2013 to implement the rulings and recommendations of the DSB. However, whether this deadline will be achieved is not certain. In the recent US presidential campaign, Mexico was not mentioned even once. Furthermore, there are many things in the bilateral agenda and whether the US will comply is not certain. This implies that the 'dolphin-safe' policy is not in the US priority list. Furthermore, the US in the past has bluntly disregarded international awards and recommendations, especially when the application of such recommendation is left to a local or judicial authority. In the past, whenever the US gets an international-court ruling overturning a judicial act, it claims that it recognises the award; however its application is entirely on the Court's discretion. The executive power, in-charge of international proceedings, does not have authority over the Judiciary and cannot oblige them to comply with international orders. This is relevant, because the part of the overall policy is the court-originated ban due to the decision of *Earth Island Institute v. Hogarth*. Furthermore, the US might still consider simply acknowledging that the 'dolphin-safe' label is mandatory like the nutritional or organic label, and forget about considering it an 'eco-label' (which would not change the status quo).

4.5 The Impact of the case on eco-labels

It was pointed out in Chapter V that public eco-labels might have to be careful on how they address eco-labels, as there was the risk of being considered a technical regulation under the TBT. The present case shows precisely this point. Because of how the overall 'dolphin-safe' labelling policy is handled in the US it was considered to be mandatory. Hence it cannot be considered a voluntary programme. The US 'dolphin-safe' labelling regulations are more in line with their nutritional and organic labels. These last two labels are labelling laws, they are not eco-labels as understood in this work. The main characteristic that differentiates these labelling laws from voluntary certification schemes, is that the criteria to

obtain the label are set by law or statute. Therefore, even if the label is private by nature, the fact that it has no freedom to select its own criteria, makes it mandatory. Furthermore, the labelling laws regulate the use of the label. Eco-labels as certification schemes regulate the criteria. The use of the eco-label is regulated by a private contract between the licensee and the eco-labelling organization. In short, the US 'dolphin-safe' label is not an eco-label in the definition of eco-label adopted in this work.

Because this case specifically addressed the 'dolphin-safe' labelling policy and it cannot be considered a typical eco-label within the definition selected in Chapter I, hence the WTO rulings do not really apply to other eco-labels. In particular, while the 'dolphin-safe' label is not an eco-label, it is a type of environmental label. A mandatory, single resource, local second-party certified environmental label to be precise. However, it is not a voluntary environmental certification scheme, which is the current vision of eco-labels. Many eco-labels today are the exact opposite of this label. In particular, single-criteria labels are not in use because they could lead to greenwashing. This is because by focusing on only one aspect such as dolphins it distracts from other equally important matters such as overfishing. In other words, they are not indicators of overall 'sustainability'. The 'dolphin-safe' label simply indicates that there are no dolphins killed in the process of fishing the tuna in the ETP. However, it does not say anything about other marine by-catch, overfishing, or even worse: dolphin killings outside the ETP (which is what the Panel and Appellate Body pointed out). Nonetheless, as seen in the following section, still there are many lessons that can be drawn from the 'dolphin-safe' experience and case. For instance, that public eco-labels do have a risk of being considered a technical regulation and go against their WTO obligations.

5. The 'dolphin-safe' labelling policy and eco-labels

The 'dolphin-safe' labelling policy has played an important role in the environmental policy arena, including the eco-labelling arena. Specifically, it can be argued that the 'dolphin-safe' eco-label falls within the 'original' eco-labels (mandatory, single-issue, government) category. One of the most important things that this environmental label shows is that labelling policies can work. This can be asserted because the impacts of this policy have been constantly measured (because of all the suits, cases and lobbying efforts). Furthermore, this label can be taken as a base for other important discussions in the policy, environmental and environmental policy arena, including eco-labels.

5.1 The 'dolphin-safe' labelling policy's effectiveness

Normally it is difficult to assess whether an environmental policy is effective because there is no data on the environmental impact. However in the dolphin-tuna case, there is enough reliable scientific and industry-related information to say that the incidental 'taking' of dolphins is practically insignificant. Furthermore, the rate of adoption and how economically sound the eco-label is in practice is also difficult to determine because producers do not always disclose their financial balances. Nevertheless, it is safe to assume that if the producer keeps using an eco-label (considering it is legitimate) it is because it is profitable. In the tuna case, it was precisely the way the private sector was structured that allowed the 'dolphin-safe' eco-label have the market penetration it had. In the end, eco-labels are commercial tools as much as they are environmental.

Isolating the effects of the eco-label on the environment is almost impossible. Normally, when there is an environmental problem it is attacked by several fronts and isolating the one that solves the problem can be nearly impossible. In the tuna-dolphin case the label was backed-up by specific legal sanction. The private sector gave the resources to start the labelling policy. Also it was the private-sectors resources that drew Congress' attention to the matter and obtained the legal-sanction it required to reinforce it. Non-profits normally do not have the resources to achieve this type of results.

However, as the WTO Panel and Appellate Body point out the 'dolphin-safe' policy is only partially effective. This is because it does not fully protect dolphins or consumers. What Mexico has always argued is that if the US really cared for dolphins it would sanction all fisheries that harm dolphins. Mexico has pointed out that in Alaska (US coast), the squid industry is responsible for the deaths of 15,000 dolphins per year. In this industry dolphins have no regulation to protect them and are not taken into account for the MMPA quota.⁵⁸ In the end it was the tuna industry that used the dolphin shield to protect their industry from foreign competition, not the squid industry. This is because the tuna industry is much larger than the squid industry. Furthermore, if protecting dolphins were the real objective, the scope of the policy should encompass other geographic areas beyond the ETP. Hence, the 'dolphin-safe' labelling policy is only partially effective.

⁵⁸ GATT Panel Report 3 September 1991, n. 13 above, at paragraph 3.38.

5.2 Earth Island Institute 'dolphin-safe' and the role of Environmental Activists

The US 'dolphin-safe' labelling scene had two important players, one public and one private. EII is considered the environmental activist of this conflict. In particular EII has played a central role in the development of the conflict. There is no doubt that as a non-profit its objective is to protect the dolphins. The data is clear: dolphin mortality rate in the ETP due to the fishery is almost zero. However, EII's argument has changed. The death of dolphins due to the tuna harvest is no longer the problem. The problem, nowadays, is the fact that the sole presence of the vessels hinders the recovery of the population of dolphins in the ETP. EII has kept-on insisting and pushing the matter to the point that it is the last Court decision, in favour of EII, that has kept the tuna ban active.

It is expected that environmental groups would protest a lowering of an environmental standard. In this case, when the US adopted the AIDCP, the legislation it allowed for the 'dolphin-safe' label to be applied to tuna fished with purse-seines (with the mentioned restrictions). However, EII has insisted that 'dolphin-safe' should only be used on tuna that does not use purse-seines. Nowadays, EII is actively campaigning against the Department of Commerce's and AIDCP 'dolphin-safe' label,⁵⁹ using the slogan *keep the label honest - keep nets off dolphins*.

While the purpose of EII might be honest it is noteworthy that in 1991, EII registered the 'dolphin-safe' logo as a trademark of its property and creation. From 1991 to 1997 EII charged a royalty of 5 cents per box of 48 cans of tuna to those who carried the label. This was a lawful and significant source of income for EII. However in 1997, when the International Dolphin Conservation Program was enacted, Congress also declared the 'dolphin-safe' brand property of the US government. EII lost the exclusivity of the brand and its main source of income.⁶⁰ The subsequent actions of EII do give rise to the suspicion that dolphins are not the only interests it's pursuing. Hence it is possible to imply that EII is trying to preserve its market share by keeping the standard high. What is true is that EII's actions are effectively foreclosing the market to foreign competitors. Instead of fighting its

⁵⁹ This can be clearly seen its website: <<http://www.earthisland.org/dolphinSafeTuna/consumer/USDALabelAlert.html>>

⁶⁰ SEMARNAP, Pesca del Atun y Protección del Delphin, Cuadernos, México 1998, AT 29 and 30.

competition, EII should focus on informing consumers about its label and let the consumers decide by themselves.

5.3 Taking Credit of Mexico's Environmental Improvements

The improvement of the Mexican tuna fleet is a direct consequence of the overall 'dolphin-safe' policy. Mexico's tuna fleet is directly regulated by mandatory governmental standards. Whether Mexico would have adopted the strict regulations it has today without the US bans, is impossible to know. The US has abused the attractive size of its market to pressure small developing economies to improve their standards. A real concern is that for 30 years Mexico has been dealing with the problem posed by the US, it has complied voluntarily to the US' requests with no reward. Mexico and other ETP countries will eventually search for markets that do reward their environmental efforts.

Under normal circumstances, eco-labels would depend on consumer awareness and recognition. Consumers would be allowed to vote with their wallets for the environmental friendly product. However, the US market-access ban on dolphin 'unsafe' tuna from the ETP edited consumer choice. The US consumer will find tuna with and without labels from all over the world, except from the ETP. In Mexico there is no 'dolphin-safe' label. Due to the strict regulations, in Mexico all the tuna is 'dolphin-safe' regardless of consumer awareness. This is a crucial point for Law and Economics, as on one side Mexico regulated the matter with tailor-made command-and-control regulation (this is because the fishing industry and the government agreed on the standards together and the government supported the industry by many means). On the other side, the US applied a less coercive 'voluntary' labelling policy, which would allow the market to decide the fate of the dolphins. In the end, Mexico's tuna fishery has almost zero dolphin by-catch and all the vessels have state-of-the art technology. Whereas the US cannot really make such statement because its programme is 'voluntary' (under quotation marks as it was found by the WTO that it is not the case). Furthermore, the US fishermen do not fish (in theory) in the ETP. Therefore, most of its regulations do not even apply to its own fishermen. The question that necessarily follows is whether bans, embargoes and access-barriers are a better solution than 'less coercive' measures such as market instruments. The 'highly coercive' instruments do address the problem directly, but their costs can be quite high. Not only monetary costs, these measures can be harmful to trade, industry and international relations. Furthermore, strict fishing

standards raise production costs that may lead to many other losses. Strict regulations also push fisheries to forum-shop and what's worse, illegal fishing, which has no respect for Laws, environment or consumers. However, these last issues are out of the scope of this research.

5.4 The limits of the 'dolphin-safe' labelling policy

One of the biggest limits of the 'dolphin-safe' tuna is that it is just that, 'dolphin-safe'. It does not mean that the tuna is turtle, shark or swordfish safe. It neither means that the tuna is sustainable and that its environmental impact is low. A current tuna eco-label would address all by-catch, not only dolphins. The issues keep arising and the environmental challenges are dynamic, hence a 20 year old eco-label does not make sense, especially if it has not evolved. There will always be something to improve. For instance, now it is known that tuna fishing in general is unsustainable, just like many other fisheries. It is not just how the fish are harvested but also how many. There will always be new matters to address. Boycotts and bans on certain types of tuna based on how they are harvested are already in place around the world.⁶¹ The 'dolphin-safe' tuna matter will have to be either solved or left behind to address the current problems that fisheries are facing.

It has been stated several times through out the work that eco-labels have evolved over time. If enough attention is paid to Chapter I, it can be deduced that the 'dolphin-safe' label is one of the 'original' eco-labels. However, after 20 years the market and eco-labels have changed drastically. Today the eco-labels that dominate the market are international multi-criteria sustainable certification schemes. They strive to improve the overall sustainability of products and production. Consumers have also changed over the last years, environmental preferences have been developed and information is more accessible Consumers that buy eco-labelled goods are interested in their overall environmental or sustainable attributes. Nonetheless, the 'dolphin-safe' label did play an important role in the early 1990s and it could even be argued that it served as a stepping stone for future marine eco-labels. Today, eco-labels are normally interpreted as a sign of overall eco-friendliness; hence the fact that the 'dolphin-safe' eco-label only refers to dolphin mortality is deceptive. The following figure shows how marine eco-labels have evolved during the last thirty years. This is a good example of how eco-labels have evolved within one sector. As it can be observed even the

⁶¹ Greenpeace International. **Taking Stock of Tuna. Defending our Oceans**, December 2009.

NOAA has moved on from the 'dolphin-safe' policies and is now focused on programmes that are more comprehensive. It is not to say that the 'dolphin-safe' policies should be completely disregarded, those are still very valuable. However, it is possible that broader eco-labels absorb the 'dolphin-safe' criteria within its own.

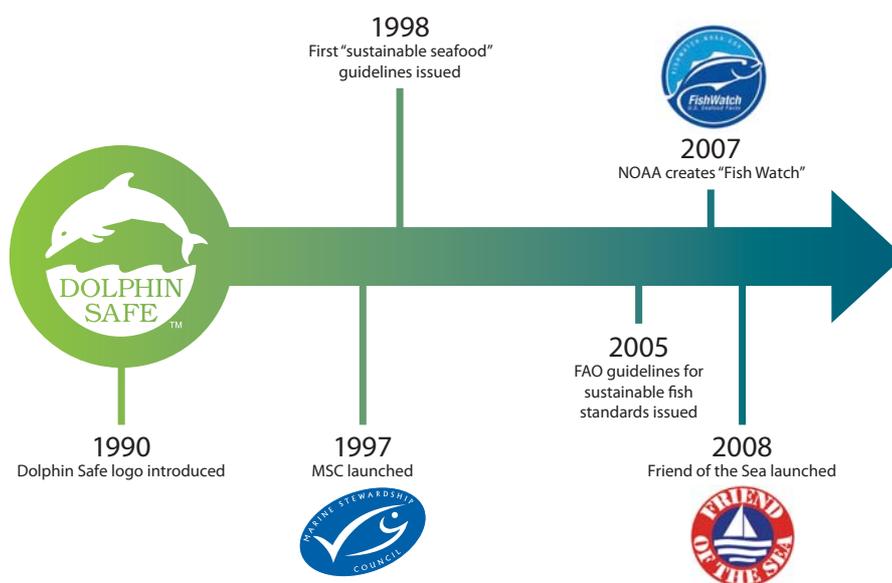


Figure 4. The evolution of marine-related eco-labels.⁶²

6. Conclusions

Thanks to the recent WTO dispute, the tuna-dolphin relation, as well as eco-labelling and labelling policies have received much attention. It is a perfect fit for the rest of this thesis as it is recent, and it is applicable to its central topic. Furthermore, the case hits very close to home, as it involves Mexico. Nonetheless, it became clear throughout the analysis that the 'dolphin-safe' labelling policy is not an eco-label. It is a labelling policy just like the US' nutritional information and organic labels. As seen Chapter V, these are not eco-labels, they are labelling laws that regulate the criteria and the use of the label. They are mandatory, for all those that use the label. Nonetheless, they do share certain similarities with eco-labels, as do nutrition and organic labels. However, when it comes to drawing conclusions from the WTO ruling to other eco-labels, they simply do not apply. This is because eco-labels, as

⁶² Image taken from Toward Sustainability, The roles and limits of certification, executive summary, June 2012 Prepared by the Steering Committee of the State-of-Knowledge Assessment of Standards and Certification, p. 10

international certification schemes, do not share the characteristics that were pointed out by the Panel. They are not mandatory, discriminatory, nor more trade restrictive, but above all, they are not statutory-mandated. In other words they are not public policy and the 'dolphin-safe' label is. Hence, the most relevant lesson drawn from the WTO case, for the purposes of this research, is that public eco-labels have to be very careful in how they address their labelling policies. This is because a public eco-label can be considered a technical regulation, such as the 'dolphin-safe' eco-label. This point was discussed thoroughly in Chapter V and this is the proof.

Another crucial finding of this analysis is the environmental impact of Mexico's command-and-control regulation compared to the US's 'voluntary' approach. In short, the US ban on Mexico tuna pressured Mexico to improve its technology so it stopped killing dolphins. Mexico reacted by enacting stringent technical regulations. Mexico does not need a 'dolphin-safe' eco-label as all the national tuna is 'dolphin-safe'. The US on the other hand cannot account for the dolphins and other marine by-catch. Furthermore, the US was so focused on tuna (due to its scale) that it has never regulated the dolphin by-catch in squid-fishing. Hence, it might be worth considering that voluntary regulation might not yield the best results for this type of environmental problems. In addition, the fate of dolphins and other wild-life is left to the hands (or wallets) of consumers. This might be dangerous, if it is not paired with significant education campaigns, and even with those consumers might not be swayed (as seen in Chapter IV people's natural reaction is not to care about the environment). Hence, it is worth considering that in environmental matters effectiveness should be preferred over efficiency, whenever these are in conflict.

Finally, it would be recommended to both Mexico and the US to move passed this 'dolphin-safe' issue. There are more pressing matters regarding fisheries than saving dolphins. While dolphins are important, maybe countries should focus on other things beyond whether dolphins are traumatised by shipping vessels. Increasing the stock of dolphins in the ETP is important, but the dolphins are not even close to being extinct, hence it is not an urgent matter. What does matter is that there is an increase of illegal fishing, that fisheries are over exploiting the natural resources. The fact that in one trip a single vessel can fish enough for a whole country to consume in one year is quite frightening. If you add these two issues together (illegal fishing and over-fishing) the scenario is even worse. Hence, Mexico and other countries with important fisheries should probably support the creation of criteria and

start developing policies to deter illegal fishing. The 'dolphin-safe' label played an important role, however it has to evolve.

This chapter placed an important building block into this research. On one hand it provides a useful example of an eco-label that has been around for over 30 years and the impact it has had in an industry, the international relations and the environment. On the other hand, it also reviews the latest formal standing regarding eco-labels by an international organisation. The following chapter presents a series of policy recommendations, regarding the regulation of certification marks.

Chapter VIII

Policy Recommendations

1. Introduction

After analysing eco-labels from different perspectives, this chapter is focused on providing specific policy recommendations for improving eco-label's performance. In chapters II through IV eco-labels were analysed from the market and market actors perspective. It was shown that eco-labels have an important role to fulfil in the market as they convey information about environmental attributes of goods in a simple way consumers can easily understand. Hence, eco-labels in addition of lowering information costs, they also lower cognitive costs. On the other hand, firms that opt for certifying their goods, will enjoy the immediate benefits of a pre-established reputation, hence it lowers the investments in reputation that it would otherwise incur on its own. The following chapters focused on how eco-labels are regulated and how they should be regulated. In the end, it can be observed that the model proposed in Chapter IV does not really re-invent the wheel. This is because some countries already follow a similar regulatory model as the one proposed. However, as it was concluded then, there is still room for improvements. These improvements, following the proposed regulatory strategy, lie almost entirely on the legal side. Hence, the objective of this Chapter is to point out what changes or adjustments need to be made in the legal arena to empower eco-labels and allow them to perform optimally.

The recommendations formulated in this Chapter have the goal of strengthening the role of certification of environmental goods. This can be done by increasing eco-labels (and certification in general) credibility. It has been duly noted that the current regulatory system does not handle greenwashing very well or at all. Greenwashing directly affects the eco-label's credibility. Because there is so much greenwashing in the market many consumers simply ignore environmental claims because they do not mean anything to them. If there was less greenwashing, consumers would notice eco-labels and they would be more credible. If eco-labels were more credible it is possible that demand would increase. This last point is relevant due to the fact that the eco-label market has remained a niche market. With a larger demand the market segment for eco-labels would increase. In a large eco-label market more firms would seek certification, hence the market and, above all, the

environment is likely to be improved. However, increasing eco-label's credibility alone will not suffice to deter greenwashing. Jeffrey Minetti, for instance, has argued that by reinforcing certification, greenwash will be deterred and environmental claims will be regulated. However, this vision is not shared, as it was shown that certification and environmental claims are different instruments. It is true that they are interrelated, but their legal nature is completely different. Hence in order to deter greenwash, it is likely that a different approach might need to be taken. However, how to deter greenwash is not scope of this research.

This chapter will briefly address the proposals for regulating environmental claims. Subsequently, the proposals on how to enhance certification marks will be reviewed and explained. Finally, even though it is slightly out of scope, the deterrence of greenwashing will be briefly addressed.

2. Regulating Environmental Claims

When environmental attributes have a search or an experience nature, advertisement suffices to convey the information. Eco-labels in this case would be convenient, though they are not really needed. Consumers can observe and evaluate the claimed environmental attributes of their products first hand. As long as environmental claims are informative (and not persuasive) they are better dealt with by standards than by eco-labels. These informative environmental claims should be addressed by the environmental and/or agricultural (fishing, farming or similar) authorities not by the advertising or consumers authorities alone. The consumer or advertising authority can enact standards when the environmental claims are persuasive in nature, as their purpose is to directly influence consumers purchasing behaviour. In addition, these standards should be mandatory for all of those that use them. In other terms they should not be mere safe harbours. Products or firms using environmental claims that do not follow the standards should be sanctioned. This will make producers think twice before using the claim. This is desirable to reduce greenwashing. As seen in Chapter II, keeping silent about the environmental impacts is not greenwashing, it is only greenwashing when you state false (or incomplete) information. In any case, increasing the sanctions would reduce the amount of frivolous or empty claims. Therefore reducing the amount of environmental information in the market. It is true that enacting this type of standards would imply creating environmental policy. However the market is not able to select the truthful claims and deter the false ones on its own.

In relation to the last point, how these standards should be enforced is out of the scope of this research. Whether private enforcement mechanisms would be an effective means to deter greenwashing or some public enforcement mechanism will do is not clear. As said before, if it were private enforcement, consumers would have to be sufficiently affected by greenwashing to be motivated to pursue legal actions. On the other hand, public enforcement (administrative or criminal procedures) could also work to deter greenwashing but it might be too costly. However, this research will not address these issues, even though they are crucial in reinforcing eco-label's credibility.

3. Enhancing Certification Marks.

Certification marks are protected with property rights, intellectual property rights to be precise. This has many advantages both for the regulator and for the owners of the certification marks. First, owners have the obligation to protect their mark from unauthorised use. Hence, if there is infringement on the certification mark by third parties the owner has a procedure to defend the mark. Furthermore, the owners can create branches or franchises of the certification mark, which allows the mark to expand, thereby gaining more market access. Secondly, the fact that the mark is granted protection by the authority immediately creates a registry of the certification marks that are in the market. This would make it easier to identify false labels that are circulating in the market. Furthermore, if the marks are registered but are not being used, the registration can be lost and someone else is entitled to use the mark (including its criteria). In the States that require review and authorisation of the regulations (and criteria) for their registration also ensure the distinctiveness of each certification mark. Thirdly, registering a certification mark is not cheap or easy, it is an investment. This serves as a guarantee that the eco-labels that seek registration do so because they are committed to pursuing eco-labelling in the longer term (they are unlikely to apply a 'fly-by-night' strategy). However, the system could be perfected so eco-labels (and other sustainability labels) could become more credible by giving even more security to the owners.

3.1 Pre-authorisation of the criteria

It was noted in Chapter V that the Australian system is particular because the Certification Trademarks applications are reviewed by the ACCC. After the Trademark Registrar receives

and analyses the application as if it were a normal trade mark it remits it to the ACCC for its approval. Once the ACCC receives the regulations and criteria it publishes them so that interested parties can make their comments on the criteria and if it considers it necessary it can even call on experts on the subject. Specifically, the fact that the ACCC reviews and approves the criteria and regulations before the trademark is granted is a very good idea. This is because it recognises the particular nature of certification marks in contrast with an ordinary trademark. However, by sending it to the ACCC it can only seek to protect competition and consumer welfare. While this is not an undesirable thing, with eco-labels it is important to seek the view of an environmental authority (call it forestry, farming, agriculture or fisheries) not only the trade side. Therefore for eco-labels and other sustainability labels the trademark authority that receives the application, should send it for pre-approval to the correspondent environmental authority. Additionally it can also be sent to the consumer or competition authority. However, the environmental authority should have a division that evaluates and analyses the eco-label's criteria (as well as keeping record). Furthermore this approval should serve as a guarantee that the standards are in fact designed to provide a true environmental benefit. Alternatively, the authority could request the owner that the criteria and the regulations are pre-approved by the environmental authority before they submit the application. By doing this, the costs would be bared by the owner of the certification mark and only the final version of the criteria would be submitted. However, if it is done like this, the trademark registry would be free to deny the certification mark for lack of distinctiveness or other grounds. What matters is that the environmental authority should keep track and approve the criteria before the certification mark is awarded.

In essence the main difference with Australia's current system, is that the application should be sent to the environmental authority. It is true that there might not be one environmental authority capable of regulating all the environmental aspects of all the products in the market. Therefore, the system has to be flexible enough to channel the application to the competent authority for the specific eco-label at hand. If the eco-label is energy efficient, then the energy authority should review the criteria. Likewise if the eco-label is regarding fair-trade, then even the labour authority could approve the criteria. In this sense, the criteria can be reviewed by the authority that is specialised in the matter of the criteria. This will also allow the criteria to gain a degree of formality as well as inclusiveness, as the authority could ask for meetings and reviews with the owners to discuss the criteria and regulations. This

would enhance eco-labels as an environmental tool. However, the granting of the certification mark in the end is still under the authority of the trademark authority. The trademark authority is in essence the trade authority which is what gives the balance eco-labels need between trade and the environment. By sending the application to another trade-authority such as the ACCC, it would still be biased towards trade.

Finally, with a register of this type, the authority could track overlapping criteria of different eco-labels. If this were to happen the authority could propose a merger or a licensing of the eco-label. If the parties do not want to do so, they will have to prove that their criteria are sufficiently distinct or that the geographical scope does not overlap and is unlikely to cause confusion. Furthermore, potential licensees could have access to the criteria to determine which eco-labels are more convenient for their use. All this in general would make eco-labels more accessible and at the same time they it gives them a certain degree of formality which would allow them to distinguish themselves from regular environmental claims and greenwash.

3.2 The creation of a universal symbol for registered certification marks

In theory eco-labels on their own are sufficient to distinguish themselves from other environmental claims. However, in reality there are many fake labels in the market that imitate eco-labels but are not. Therefore, at least until greenwash is sufficiently deterred, eco-labels and other certification marks should have a symbol that distinguishes them from the others. This proposed system is similar to that used in trademarks such as TM or ®. Specifically it could be a variation of the TM by placing a C in-front: CTM (as in certification trademark) or CM (as in certification mark). This little symbol would be placed next to the eco-label (or any other registered certification mark) to denote registration. This is quite simple but sufficiently significant for distinguishing purposes. Specifically, consumers are already familiar with these symbols and it is easy to teach them what the symbol means. Therefore as long as the eco-label has a CTM or a ® symbol they can be assured that the mark is registered. In addition, if there where a false eco-label using one of these symbols then the trademark authority could pursue it under its laws. All this would serve to reinforce eco-labels and deter greenwash.

3.3 Implementation of this system in other legal systems

While the majority of the countries that have specific certification mark regulations are from the Anglo-American legal traditions, it is not (and should not) be limited to them. Civil-Law systems normally do have regulations for Geographical Indications. It is in these countries, where normally the appellation system is established.¹ Geographical Indications, essentially are a limited scope certification mark. Therefore, countries that have a geographical indication registry could implement a parallel registry for certification marks (environmental and others). As long as the countries have a trademark authority it would be easy for them to create an application for this type of marks. It would be to the discretion of each country to determine whether they will ask for pre-approved criteria or if the authority would remit the application to the competent authority for approval.

In any system, these proposed modifications are quite simple and non-intrusive. Thus, they are also less costly as they are based on a system that already exists. There is no need to create a new law for eco-labelling or even to create a new eco-labelling organism. With the current legal structure of trademarks and geographical indications, eco-labels and other certification marks (sustainable or not) can be perfectly accommodated. In addition, the burden of monitoring infringements will be shared with the owners, which will somehow increase the monitoring in the market, making it less attractive for greenwashers.

As a final note, the environmental authorities need to have a stand in eco-labels and environmental claims. They are the only ones that can provide a balance between trade and environment. While it is true that eco-labels do function without intervention, governments cannot expect great environmental outcomes from a pure market tool. Therefore if eco-labels are to reach their potential environmental authorities will have to get involved and create environmental policy.

3.4 Recognition and homologation of foreign eco-labels

It has been shown that greenwash is partly enabled because of the amount of eco-labels that are in the market. There is a redundancy in eco-labels. This means that there are many eco-labels that are in essence the same. This is exacerbated when the good has presence in different markets which have their own eco-labels. A certified good might comply with the criteria of many eco-labels. Therefore, if the producer has the opportunity, he will obtain as

¹ The appellation system, is the one that requires the conformity to certain quality standards in addition to the geographical requirements.

many eco-labels as it can with its certification. This can lead to multiplicity of eco-labels on the same product. The proposed modifications may aid in this situation as there will be more control on the criteria. If two eco-labels are similar or identical, the opportunity to merge, license or change the criteria could be given to the later eco-labels. The potential redundancy could be caught on time and be avoided. Therefore only relevant eco-labels will be in the market. On an international level this is quite different as there is no international registry, nor is there a need for one. However, recognition agreements could be made among agencies. The purpose of these agreements would be to recognise the validity of the other parties certification and eco-labels, hence there will be no need to duplicate certification or eco-labels. Moreover, this type of recognition can be very important when it comes to enforcing the eco-labelling mechanism. When producing countries are exporting their certified goods to other countries (probably more developed countries) it is important that such certifications are recognised by the importing countries, otherwise their efforts are useless. It is not to say that all certifications have to be recognised, as not all certifications are of the same quality. However, recognising the efforts of other eco-labelling entities gives credibility to the system. But above all, it will aid in the reduction of the amount of redundancy, which damages the credibility of the system.

4. Deterring greenwash

The magnitude and impact of greenwashing on the eco-label market is one of the core findings of this work. It has been pointed out constantly that there is no law that directly attacks greenwashing or greenwashers. It is an activity that today goes practically unpunished. While it is true that there are some reputational mechanisms that can work against it, it is not enough. The first step would be to define the types of greenwashing. This is because the effects of exaggerating the environmental attributes of a product or using vague terms is not the same as using false or imitation labels. The damage of the second type of greenwashing is much worse than the others. Furthermore, when a greenwasher uses this type of tool it can be presumed that it was done intentionally and it knew what it was doing. Hence, from the seven types of greenwashing (hidden trade-off, no proof, vagueness, false labels, irrelevance, lesser of two evils and fibbing)² the most offensive ones should be selected. Those, should be regulated in a way to drive them out of the market.

² These were reviewed in Chapter II Section 6.1

The others need not be so severe (they were unintentional or do not cause that much harm). While providing eco-labels with legal actions in case of infringement is useful; it is only be triggered if the eco-label is directly affected (imitation or similarity of the label to the point of confusion). Hence, while it could be effective it would still be too small in scale to deter greenwash. Hence, further research should focus on finding a way to deter greenwashing from the market.

5. Conclusions

This brief chapter has the sole purpose to propose small changes to the current law (certification mark laws specifically) that would improve eco-labels. The whole purpose is that eco-labels are properly supported by the law so they can reach their potential as a regulatory tool. The proposed changes pose several benefits on the practical side. First, they do not suggest that an entire new system or regulatory body should be created, it is possible to work with what is already available. Which leads to the second point, the regulatory costs of these changes are not very high. Therefore, these changes would make a significant impact on the performance of eco-labels at a reasonable regulatory cost.

CONCLUSIONS

1. Overview

This book had the purpose of making a classic law and economics analysis about eco-labelling and certification. Eco-labelling and certification are popular topics at the moment, since there is a hype for all things 'sustainable'. Hence, the idea to apply a law and economics approach seemed sensible and original. In the end, it proved to be correct as many insights of the research would not have been attained with any other discipline or approach. Specifically, the research aimed at finding whether there is a scope for law in eco-labelling. While attempting to answer the question it came evident that there is a scope for law in eco-labelling. Hence, the question was adapted into how law and economics could improve the current eco-label market. Therefore, by applying law and economic insights a sound regulatory strategy for eco-labels was proposed.

Through out this work it has been pointed out that eco-labels are not perfect, in fact as market instruments, their equilibrium is extremely delicate. There are too many factors influencing such equilibrium which is likely to make them fail. Nonetheless, in markets for environmental goods, eco-labels and certification are not only desirable they are necessary. This is because eco-labels are marks that prove to the market that the product has the social or environmental attributes it claims it has. Eco-labels become proof of the environmental or social attributes because of certification. This means that a certified product carries different consequences than simple trademarks or advertising claims. Certification implies that the product has been evaluated by a competent entity that can vouch for the existence of the attributes. This allows the market for environmental goods to exist, as the certification tells the market that such goods are there. The work also pointed out that there are certain attitudes from market actors that will allow eco-labels to succeed. Eco-labels have the capacity to capitalise on pro-environmental attitudes and preferences. Consumers and firms have certain behavioural traits that will benefit the eco-labelling mechanism. Hence, it is useful to understand the motivations and preferences so eco-labels can take advantage of them.

In the end this work presents a sound regulatory strategy for eco-labels as well as a detailed proposal for reforms to the current system. It was shown that the optimal regulatory strategy

Conclusions

involves all market actors not just the government. This regulatory strategy is dynamic as it allows for escalation and movement between the different spheres. Precisely due to its dynamism it is crucial for the system to have safety nets to hold the system in case it fails. This safety net is the law. Law has the purpose of enabling the market by providing security to the parties that if something goes wrong the law is there to handle it. Each party has a role to play, therefore if their roles are to be fulfilled they need the certainty of what they are doing will be backed up by the law. This is not a coercive intervention. This is simply giving the eco-label market the underpinning it needs to function properly. It will still not be a perfect market, however if there is a failure it can be corrected. Specifically, the proposed law consists in the recognition of property rights to the owners of eco-labels. In addition to property rights, the law should also have strong liability schemes that allow parties to vindicate their rights in case they are affected. But above all, the law should have a highly coercive measure that is capable of deterring unwanted behaviour in the market. This element is crucial, as it will raise costs of non-compliance for the parties, hence it will motivate people to behave as expected.

2. Main Contributions and Findings

This work has an holistic approach to eco-labels. All the areas that are relevant were dealt with. This was the only way to provide a clear view of the effects and impacts of eco-labels in the market and the market actor's behaviour. Much of the work is based on putting together the relevant information already available to make a complete and thorough assessment. However there are several original contributions derived from this work.

- While analysing the development of eco-labels it was revealed that much of the 'essential' literature of eco-labelling was in fact outdated as it did not fit the reality of either eco-labels or the market. Hence, this proved the need for a new eco-labelling theory. This is specially worrying for all the studies done in other disciplines that use brief definitions from the most salient authors. This is because they create models and experiments based on outdated information, making their assumptions inaccurate. This work took a step forward in actualising the information available, and hopefully contributes to the building of this new theory.

- It was found that eco-labels are necessary for the market of environmental goods. This is because environmental goods are credence goods. A credence good market cannot exist without certification, because there is no other possible way to prove the existence of the attributes or credence goods. Therefore, in the environmental goods markets eco-labels fulfil a key role. On a similar note, it was pointed out that environmental goods in addition to having a credence nature they also have an uncertain nature. Uncertain information has certain characteristics that make the markets based on it very frail. This is basically because uncertain information causes gaps in the information. It was later seen how people have a tendency to fill in these gaps with other information such as previous knowledge or other people's opinions, and with their personal beliefs and preferences. This makes the uncertain information, such as environmental information, subject to interpretation. Hence, eco-labels depend in a grand part on how the public is receiving and interpreting the information it has at hand. The public opinion is a very strong force which can either break the equilibrium of the market or reinforce it.
- From the variety of economic theories used to analyse eco-labels, the competition and intellectual property approach were quite innovative, as it had not been done before. The competition insights however, proved to be limited, as eco-labelling is still not sufficiently widespread as to distort the market in undesired ways. Nonetheless, it was shown that they do have the potential to do so. The Intellectual Property approach was the most surprising of all the findings. Specifically, when eco-labels were defined as environmental certification marks the immediate reaction was to seek for information on that matter, with disappointing results. Hence, this forced the search towards more technical approaches. This new search into trademark handbooks and guidelines proved quite useful. There it was revealed that certification marks are considered a type of collective marks, similar to geographic indications. Moreover, the description of certification marks was a perfect fit for eco-labels. This left no doubt that eco-labels are certification marks. This finding led the subsequent research into the law of certification marks. This legal analysis provided even more insights into the functioning and operation of certification schemes such as eco-labels.
- Greenwashing is not a finding *per se*, as it was not discovered in this work. However, not much formal work had been done on greenwashing. While it is true that there is

much information and surveys done by NGOs and think-tanks, for some reason academics have shown little interest in the matter. The most relevant paper on greenwashing is dated 2011, which for such an important phenomenon is quite recent.¹ However, greenwashing proved to be much more significant than originally expected. Again, it was another game-changer for the remainder of the research. As it proved that there is a huge failure in eco-labelling. This because at a conceptual level eco-labels function properly, but at the implementation level they do not. In other words, it is an *ex post* side effect of eco-labelling. However, it is so widespread that it has the power to undermine the whole system. Hence there is a clear need for a legal intervention. This is because no law directly addresses the greenwashing problem.

- Certification is only as good as the criteria behind it. The criteria or standards behind certification are what makes each eco-label distinct from each other. However, effectiveness of the criteria or standards will be directly influenced by the mandatory or governmental standards that are in place. In jurisdictions where the mandatory legal standard is high certification might not be that relevant as the criteria might be similar to the mandatory standard. Therefore, there is not much to differentiate as all law-abiding firms will be able to obtain certification. However, in jurisdictions with lax mandatory minimum standards or no minimum standards certification becomes much more relevant. This is because it will be able to differentiate certified firms from the mere law-abiding ones. Moreover, in the international arena where each country has its own mandatory minimum standards, certification will be able to level the playing field as its criteria are not subject to one jurisdiction.
- From the analysis of eco-label's enforcement pyramid and its dynamic variant, it was found that eco-labels are missing a governmental enforcement mechanism. As many self-regulatory instruments, eco-labels are incapable of regulating the behaviour of individuals outside its scope. At most, the owner of an eco-label can bring suit to those who infringe its mark. This creates a private enforcement mechanism for the owners of the certification marks. However, this is not enough to deter unwanted behaviour such as greenwashing. This is why there needs to be a higher level of enforcement. While it

¹ This paper is: Thomas P. Lyon and John W. Maxwell. Greenwash: Corporate Environmental Disclosure Under Threat of Audit, *Journal of Economics & Management Strategy*, Volume 20, Number 1, Spring 2011, 3-41.

might need more research, initially it is suggested that it should be a public enforcement mechanism.

3. Further Research

While this research was quite extensive, it does not by any means have the last word on eco-labels or how they should be regulated. As mentioned throughout the work, the evaluation of eco-labels as environmental tools started quite recently. Many eco-labelling entities are not aware of their effects on the environment. This means that at this moment many of the eco-labels are running on the expectation of having a meaningful environmental impact, as it cannot be proven. While it is true that eco-labels have positive effects, these are indirect and influence in other areas such as management and governance. These are not undesirable effects, however it has to be considered that if these are the only proven effects maybe the concept of eco-labels needs to be re-adjusted. Nonetheless, empirical research is in process. This means that in sometime in the near future eco-labels will need to be re-assessed, taking into consideration the data from the ongoing research.

This thesis did not allow for empirical testing of several of the findings. This means that many arguments of this work are mere deductions or intuitions. Though these are theoretically sustained and pose solid arguments, they still lack empirical testing. For example, many arguments from the Eco-labels and Consumers chapter could easily be tested with experiments. On the other hand, the section on prices in Chapter II, still has scope for theoretical testing. This is because most of the studies done on eco-label pricing are empirical. However, there is still a lack of a theoretical background. This work managed to extract some of the insights from the wide variety of empirical studies, and included material from industrial organisation and management. However, a complete and thorough economic study of eco-label pricing is still warranted.

Social and internal norms are very relevant when analysing pro-environmental behaviour. It was seen that in societies or communities where pro-environmental behaviour is already internalised as a norm it is easier for individuals to engage in this behaviour. It has been argued in the work that pro-environmental behaviour is generally motivated by image or social concerns, both in human and non-human entities (such as firms). Furthermore, there are many studies that analyse the role of these social or image motivations in reinforcing

Conclusions

formal laws. Specifically, in criminal law there are many studies that analyse 'stigma' or the negative reputation an individual gains when it deviates from the social norm. However, such studies are missing for the formal analysis of 'status' which is the opposite of 'stigma'. This is the positive reputation effects an individual has for going beyond the norms, but in a positive way. Hence, it could be hypothesized that just like stigma can reinforce a formal norm so can status. However, this topic calls for further research.

Regarding the WTO case analysed in Chapter VII it pointed out a serious issue that has to be addressed eventually: public eco-labels can be considered a protectionist measure. While the case was very particular, the US 'dolphin-safe' policy was found to be a technical regulation, which are not allowed under the TBT. This was determined because while analysing the different instruments that composed the entire regulation a one of the instruments referred to another, which was mandatory. This detail made the whole regulation mandatory and not voluntary as the US claimed it was. Hence, it is very risky for governments to sustain these types of programmes. Nonetheless, this topic is out of the scope of this research, nonetheless it is worth taking note for further discussions.

Finally, there needs to be more research in how to tackle greenwashing. The magnitude of this issue is such that it did not allow to be covered in this work. Eco-labelling is missing an extremely deterrent tool that will drive away or diminish greenwashing to a reasonable amount. Exaggerating environmental claims is one thing but outright lying is completely different. The future research could focus on whether which enforcement mechanism can effectively deter greenwashing. Whether criminalisation of greenwashing is called for; or if simple administrative sanctions would suffice, for example can be topics within such research. The Law and Economics framework has sufficient tools to deal with the matter.

4. Final remarks

The market for eco-labels is not perfect, just like any other. However with a few changes it can be adjusted to function better. While there is still missing information about the environmental benefits of eco-labelling. The information available on the actual benefits of eco-labels, suffices to motivate improvements in the current system. In short, there is no need to reinvent the wheel. The eco-labelling mechanism has proven to work. However there are some adjustments that will enable the mechanism to work better. Some countries

are almost there, as they already have laws for certification marks. In these countries, the adjustments are relatively minor. However in the other countries which do not contemplate any laws for eco-labels, the implementation could be quite easy. Enabling the eco-label market will allow it to perform better, by reaching more consumers and making more information available in the market. Which will always be a benefit.

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SUMMARY

Eco-labels and certification are one of the many environmental policy tools that have been under scrutiny in recent years. This is because the damages of environmental degradation are becoming more apparent over time. Hence there is a pressure to come up with tools that help solve even small parts of the problem. Eco-labels have been around for over 30 years. However the market, the environment and eco-labels have changed drastically during this period. Moreover, in the last 5 years there has been a sudden increase in eco-labels making them more visible in the market and to the average consumer. All this has made evident that little is known about the effectiveness of eco-labels as environmental policy tools. Hence, there is a call to find answers regarding the actual effects of eco-labels on the market and on the environment. While this work cannot address whether eco-labels have an environmental impact it addresses the effects of eco-labels on the markets. Moreover, this work aimed to find the role of law in eco-labelling. In addition, it aims to find a legal solution that would improve the performance of eco-labelling and certification.

Eco-labels are on-pack, independently-verified marks that communicate to the market that a product has certain environmental or social attributes. This simple mark is intended to trigger a mechanism called eco-labelling that will ultimately lead to environmental improvements. It was seen that in the eco-labelling mechanism there are three main actors: consumers, producers and the eco-labelling or accreditation entity. Consumers are the trigger of the eco-labelling mechanism, they are the demand side of the eco-label market. Each time a consumer chooses an eco-labelled good it signals his pro-environmental preferences to the market. Producers will take note of consumer's signals and if it is within its private interests it will adjust his production processes to comply with the eco-label's criteria. Once this is done it seeks certification from an accredited certification body. This accreditation entity or eco-label organization is in charge of setting the criteria, accrediting independent certifiers, and monitoring compliance. The firm and the eco-label will sign a license agreement for a specific time. It is up to the eco-label to keep the credibility and reputation of the eco-label, which is why it is in charge of monitoring and sanctioning the use of the eco-label both by its members and third parties.

As all tools, eco-labels have advantages and disadvantages. Among its advantages, is that is capable of capitalizing on the pro-environmental attitudes of market actors. Additionally,

because they are normally privately run, their reach goes beyond jurisdictions. Thus, for international trade, they might level the playing field by assuring that the quality of the eco-labelled good is constant in the different geographic markets. However, if the eco-label is publicly owned this might become a disadvantage as it can be regarded as a technical regulation, which is considered a protectionist measure. However, the largest disadvantage is that due to the nature of environmental and social attributes it is extremely easy to cheat the market. The market is plagued with opportunistic behaviour. This is because the law is simply too lax or inexistent. Hence there needs to be a law to stop this opportunistic behaviour because it has the capacity to completely discredit eco-labels. Eco-labels and certification depend on their credibility.

This work provides a complete regulatory strategy for eco-labelling. This comprehensive strategy is based on the 'smart regulation' principles. Therefore it takes into consideration the roles of each actor as well as their interactions. Above all it focuses on the role of the government in the optimal eco-labelling regulatory strategy. In this optimal setting, government has a behind-the-scenes role where it provides the system with legal underpinning. This legal underpinning consists of the recognition of eco-labels as intellectual property rights as well as a structured liability system that allows eco-label owners to vindicate their rights when these are affected. In addition, certain specific reforms are proposed to the current systems that are likely to improve the performance of eco-labels.

SUMARIO

Las eco-marcas y la certificación son algunas de las muchas herramientas de política ambiental que han estado bajo estrecha vigilancia en años recientes. Esto se debe a que los daños por degradación ambiental se han hecho más evidentes a través del tiempo. Por consiguiente, existe una presión por desarrollar herramientas que ayuden a resolver incluso partes pequeñas del problema. Las eco-marcas han existido desde hace más de 30 años. Sin embargo, el mercado, el medio ambiente y las eco-marcas han sufrido cambios drásticos durante este período. Además, en los últimos 5 años hubo un repentino incremento en las eco-marcas, haciéndolas más visibles en el mercado y para el consumidor promedio. Todo esto ha hecho evidente lo poco que se conoce acerca de la eficacia de las eco-marcas como herramientas de política ambiental. Además, existe un llamado a encontrar respuestas sobre los efectos reales de las eco-marcas en el mercado y en el medio ambiente. Aunque este trabajo no puede abordar el tema de si las eco-marcas tienen un impacto ambiental, sí aborda los efectos de las eco-marcas en los mercados. Asimismo, este trabajo tiene como objetivo encontrar la función de la ley en el eco-etiquetado. Y también, busca encontrar una solución legal que mejore el rendimiento de las eco-marcas y la certificación.

Las eco-marcas son etiquetas en el empaque, independientemente verificadas, que le comunican al mercado que un producto tiene ciertos atributos ambientales o sociales. Esta simple etiqueta tiene como objetivo detonar un mecanismo llamado eco-etiquetado que en última instancia llevará a mejoras ambientales. En el mecanismo del eco-etiquetado existen tres actores principales: los consumidores, los productores, y la entidad de eco-etiquetado o de acreditación. Los consumidores son el detonante del mecanismo de eco-etiquetado; representan la demanda del mercado de las eco-marcas. Cada vez que un consumidor elige un bien con eco-marca, envía una señal de sus preferencias pro-ambientales al mercado. Los productores tomarán nota de las señales de los consumidores, y si se encuentra dentro de sus intereses particulares; ajustarán sus procesos de producción para cumplir con los criterios de las eco-marcas. Una vez realizado esto, se busca obtener la certificación de una entidad acreditada para certificar. Esta entidad de acreditación u organización de eco-marcas tiene como función establecer los criterios, acreditar a certificadores independientes, y monitorear el cumplimiento. La empresa y la eco-marca firmarán un acuerdo de licencia por un tiempo determinado. Es responsabilidad de la eco-marca mantener la credibilidad y la reputación de la eco-marca, y es por esto que está a cargo de monitorear y sancionar el uso de la eco-marca, tanto por sus miembros como por terceros.

Como todas las herramientas, las eco-marcas tienen ventajas y desventajas. Dentro de sus

ventajas, se encuentra la capacidad de capitalizar sobre las actitudes pro-ambientales de los actores del mercado. También, como usualmente pertenecen al sector privado, su alcance va más allá de la jurisdicción. Así, para el comercio internacional, pueden nivelar el terreno de juego asegurándose que la calidad del bien con eco-marca es constante en los diferentes mercados geográficos. Sin embargo, si la eco-marca es propiedad pública, esto puede convertirse en una desventaja ya que puede ser vista como una norma técnica, que es considerada una medida proteccionista. No obstante, la desventaja más grande es que debido a la naturaleza de los atributos ambientales y sociales, es extremadamente sencillo engañar al mercado. El mercado se encuentra plagado de comportamiento oportunista. Esto porque la ley es simplemente muy tolerante o inexistente. Por lo tanto se necesita que exista normatividad que detenga este comportamiento oportunista, ya que tiene la capacidad de desacreditar por completo las eco-marcas. Las eco-marcas y la certificación dependen de su credibilidad.

Este trabajo provee una estrategia normativa completa para el eco-etiquetado. Esta estrategia exhaustiva está basada en los principios de “normatividad inteligente”. Por lo tanto toma en consideración las funciones de cada actor y sus interacciones. Sobre todo, se enfoca en la función del gobierno en la estrategia óptima de normatividad en el eco-etiquetado. En este escenario óptimo, el gobierno juega un papel en segundo plano donde provee al sistema de un sustento legal. Este sustento legal consiste en reconocer a las eco-marcas como derechos de propiedad intelectual, así como establecer un sistema de régimen de responsabilidad que permita que los propietarios de las eco-marcas defiendan sus derechos cuando éstos sean afectados. Además, se proponen ciertas reformas específicas a los sistemas actuales, las cuales seguramente mejorarán el desempeño de las eco-marcas.

SAMENVATTING

Milieukeurmerken en -certificering zijn een van de vele milieubeleidsmaatregelen waar in de afgelopen jaren veel aandacht aan is besteed. De reden hiervoor is de verslechterende toestand van het milieu en het groeiende besef daarvan. Vandaar dat er een zekere urgentie is om maatregelen te bedenken die het complexe milieuprobleem kunnen helpen oplossen. Ongeveer 30 jaar geleden zijn milieukeurmerken geïntroduceerd. Gedurende deze periode hebben de markt, het milieu en de milieukeurmerken zelf ingrijpende veranderingen ondergaan. De afgelopen vijf jaar was er een sterke toename van milieukeurmerken waardoor ze in de markt beter zichtbaar zijn geworden voor consumenten. Er is echter weinig bekend over de effectiviteit van milieukeurmerken als milieubeleidsmaatregel. Vandaar dat het nuttig is om te onderzoeken wat de daadwerkelijke gevolgen zijn van milieucertificering voor de markt en het milieu. In dit onderzoek kan niet worden onderzocht wat het gevolg is van een milieukeur voor het milieu, maar wel wat de gevolgen van milieukeurmerken zijn voor de markt. Tevens is het doel van deze studie om te onderzoeken of er een rol is weggelegd voor het recht bij de milieukeurmerken en -certificering. Deze studie beoogt daarnaast een bijdrage te leveren aan het verder verbeteren van de werking van milieukeurmerken en –certificering door middel van een juridische oplossing.

Milieukeurmerken staan op verpakkingen in de vorm van een merkteken waarmee wordt aangegeven aan de consument dat het product bepaalde eigenschappen heeft in verband met het milieu of andere maatschappelijke doelstellingen. Deze eenvoudige aanduiding is gericht op een mechanisme dat milieukeurmerken wordt genoemd en dat uiteindelijk zal leiden tot verbetering van het milieu. In het mechanisme van de milieukeurmerken kunnen we drie actoren onderscheiden: consumenten, producenten en de organisatie die de milieukeurmerken of de accreditatie uit geeft. Zonder consumenten zou er geen mechanisme voor milieukeurmerken zijn, zij staan immers aan de vraagkant van de markt. Iedere keer als een consument een product koopt met een milieukeurmerk geeft hij daarmee een signaal af aan de markt dat hij het milieu een warm hart toedraagt. Producenten merken deze signalen op en als dat in hun belang is, zullen zij hun productieproces aanpassen om daarmee te voldoen aan de criteria van het milieukeurmerk. Als dit eenmaal is gebeurd, zal de producent proberen om door de accreditatieorganisatie erkend te worden. Deze accreditatieorganisatie of keurorganisatie bepaalt de criteria, erkent onafhankelijke certificatoren en houdt toezicht op de naleving. Het bedrijf en de keurorganisatie tekenen een

licentieovereenkomst voor bepaalde tijd. De keurorganisatie moet waken over de geloofwaardigheid en reputatie van het milieukeurmerk. Daarom dient toezicht te worden gehouden op het gebruik door zijn leden en derden van het keurmerk, eventueel gevolgd door sancties.

Zoals met alle maatregelen hebben milieukeurmerken zowel voor- als nadelen. Een van de voordelen is dat de pro-milieu houding van de marktactoren te gelde kan worden gemaakt. Bovendien overschrijden ze jurisdicties omdat het particuliere initiatieven zijn. En zo zouden ze gelijke voorwaarden kunnen scheppen in de internationale handel, door ervoor te zorgen dat de kwaliteit van de producten met een milieukeurmerk constant is in verschillende geografische markten. Als het milieukeurmerk echter in handen van een overheid is, kan dit een nadeel zijn omdat het beschouwd kan worden als technische regulering, wat kan worden gezien als een protectionistische maatregel. Het grootste nadeel is echter dat door de aard van de milieueigenschappen en maatschappelijke doelstellingen het zeer gemakkelijk is om de markt te misleiden. De markt wordt geteisterd door opportunistisch gedrag. Dat komt omdat het recht eenvoudigweg òf niet streng genoeg is òf lacunes vertoont. En daarom dienen er wettelijke maatregelen te komen om dit opportunistische gedrag tegen te gaan omdat dit anders ertoe kan leiden dat milieukeurmerken schade oplopen. Milieukeurmerken en -certificering bestaan bij de gratie van hun geloofwaardigheid.

In deze studie is een volledige reguleringsstrategie opgenomen voor milieukeurmerken. Deze alomvattende strategie is gebaseerd op grondslagen van 'slimme regulering'. En dus wordt de rol van iedere actor in overweging genomen evenals hun interacties. Maar bovenal is deze studie gericht op de rol van de overheid voor de optimale strategie wat betreft keurmerkregulering. In deze optimale setting heeft de overheid een rol achter de schermen door te zorgen dat het systeem wordt ingebed in een juridisch kader. Dit kader bestaat uit de erkenning van milieukeurmerken als intellectuele eigendomsrechten evenals een gestructureerd aansprakelijkheidssysteem dat eigenaren van een milieukeurmerk de mogelijkheid biedt om naleving van hun rechten te vorderen als daar inbreuk op wordt gemaakt. Bovendien worden er in deze studie aanbevelingen gedaan voor specifieke hervormingen van het bestaande systeem met als doel de prestaties van de milieukeurmerken verder te verbeteren.