



# **Explaining adoption and market success of “green products”**

A Conjoint Analysis Experiment  
on German Students' preferences on eco-labels

**Mattia Gesiot**

Dissertation submitted to obtain the Master Degree in

**Industrial Engineering and Management**

**November 2012**

**Extended Abstract**

**Examination Committee**

President: Prof<sup>a</sup> Maria Teresa Romeiras de Lemos

Supervisor: Prof. Manuel Guilherme Caras Altas Duarte Pinheiro

Member: Prof. Carlos Manuel Ferreira Monteiro

# 1. GREEN MARKETING

Concern about the environmental issue is growing among people as the effects of environmental depletion and resource exploitation are dramatically becoming visible and an object of media interest (1). A well-informed public opinion recognizes the priority of the environmental issue and people are domestic with some environmentally friendly behaviors, either because they are forced by authorities, either because they are worried of the environmental situation and they perceive they can do their part.

All companies need to deal with the environmental issue and they undertake different green strategies in order to cope with the consumer awareness (2). In fact, while the first environmentalist movements were strictly against business, there was a change of perspective in contemporary environmentalism: business is seen as part of the solution (3) (**Figure 1** shows how is changing consumers' attitude towards green products)

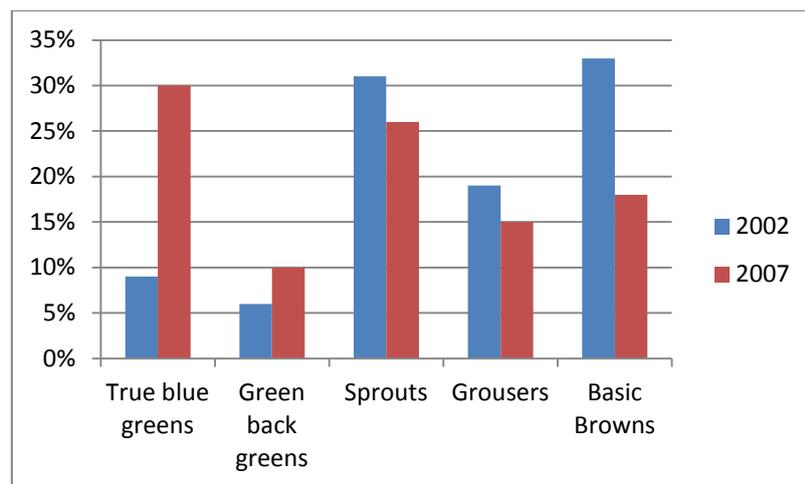


Figure 1 - Changing market segmentation in US

Around 20 years ago companies started offering “green products” to this base of consumers worried about the environment (3). The definition of “green product” is of comparative nature, because a product is “green” in some time and some place (4). Generally in the work “green products” are considered as that products which are environmentally superior to the others. The author knows that this definition is still limited, because the environmental impact of a product consists in several parameters.

Marketing theory suggests that these products traditionally offer an additional benefit to the consumer, called “greenness”, and comport a premium price (5). The nature of this benefit is rather intangible, and is very different from the other traditional benefits a consumer seeks in a product (6). Moreover, the manifestation of the benefit is far from the consumer, both in time and in space. This is one of the

reasons of interest of psychology researchers: the motivation leading to green consumption is a form of “impure altruism”.

Market studies suggest that despite a broad awareness of the environmental problem there is little uniformity towards the attitude of buying green products within the population. Particularly, 20-30 % of the population is very likely to be green consumers and a large part of the remaining population consists of “latent” green consumers (see **Figure 1**) (7) . Therefore while a large part of the population can be appealed to green consumption, the large majority still didn’t pass the threshold between attitude and action. Market shares are not uniform across the industries: in some industries green products got considerably high market shares, in others they substantially are niche products (for example, the automotive industry).

This controversy is widely debated within experts of green marketing. In the opinion of some of them, until now Green Marketing failed its expectations: it didn’t dramatically tune the market (as they expected). Instead green products are often still regarded as niche products. Those experts claiming this had big hopes towards Green Products because of their promise to lower our impact on the environment without changing our consumption patterns. In fact, environmentally friendly products seem one of the easiest ways to “do something” for the environmental problem, because they don’t imply change in the consumer’s lifestyle, but imply just a premium price (which is usually affordable).

Nevertheless, the high growth rates which are common to every industry, are encouraging for Green Marketers and reassure also those thinking Green Marketing until now underachieved. Another positive element in this picture is the unexpected attention which is paid in developing countries to green products.

The targeting exigency explains the large body of literature which tries to profile the “green” consumer. Despite this large scientific effort, the results are controversial. Particularly, socio-demographic parameters (which are the most used in market segmentation) revealed to be inefficient in profiling the “green” consumer (8). Just some demographic parameters were traditionally related to a green buying behavior, among them income and education. The non-uniformity of the results can be explained through the variety in time and space within the several experiments conducted (8).

Psychographics seem better predictors of green behavior, but they are more complicated to define and to measure (9). The environmental concern is a concept in among the psychographics and its construct have been widely debated in literature (9).

Two decades of “Green Marketing” offer several example of market successes and failures of green product launches which were studied in order to better understand what consumers want from these products (5). Particularly green marketers suggest that consumers do not consider the “greenness” of a product as a benefit *per se* but rather as a way to enhance other features of the product. Most successful green products presented a different kind of appeal which was combined with the “greenness”: for example they were trendy, convenient or healthier. One of the most relevant examples is the case of CFLs (Compact Fluorescent Light Bulbs): introduced in the market by Philips in a first time, their appeal was just on eco-friendliness and they were a market failure. Re-introduced

a few years later with accent on the exceptional lifetime and the bills savings, they were a market success. This seems to be the key to turn a “green” product in mainstream (4).

But generally the main actors (companies, consumers and governments) are facing some limitations which are intrinsic in the current culture of the society. Particularly the main obstacles come from the fact that in the DSP (Dominant Social Paradigm) the nature is not considered a stakeholder but rather a resource to exploit: firms do not consider the ecological value and brown products are advantaged because their price doesn't include the environmental costs connected to their production. Governments, on their side, are focused on short-term perspectives (while the environmental risk is mostly medium-long term) (10).

Despite the large amount of research on this topic, some aspects are still uncovered: in 2.3 are also presented some aspects, which are missing in research.

This work is focused on students. Main elements of interests in students buying behavior are (11):

- they have purchasing power,
- they have influencing power in their parents' and friends' purchasing decisions,
- they welcome new and innovative ideas,
- their anticipated lifespan is longer

In the green products case they have some specific elements of interest: among them, their relevance as consumers of tomorrow and their high attitude towards the environment. In Green Marketing, they reflect controversial expectations from past research, because they have a lower income than the average and they have an high education, which are opposite predictors (8).

Just a few studies focused on the relation between students and green products. While Hume finds that despite their environmental knowledge they are not willing to undertake any green behavior (12), Gossling found considerable high “Willingness to Pay” for Green electricity. Nevertheless, this study big limitation has the students don't know their consumptions and very often are not responsible for the energy contracts of their houses (13). To overcome limitations of previous studies, the present study deals with something, which is necessarily part of their consumption pattern, food products. The idea behind is that this can disclose insights on the general relation between students and green products.

## 2. ECO LABELS

The attention on Green Products keeps high also on Governments side. They are interested in preserving the environmental wellness for their citizens, and therefore they have all the interest in encouraging these practices of eco-friendly consumptions. Governments mainly act in two directions in order to turn the market more “green”: they establish minimum environmental standards to commercialize a product and they can boost green consumption through eco-labels.

Eco-labels, or environmental labels, are an instrument raised by governments and NGOs to supply to the informational gap existing between consumer and producer (14). In fact, there are some goods

(the so called “credence goods”) for which no distinction is possible to the consumer, who has to trust what the producer declares (15).

Eco-labels are promoted by third parts and ensure the consumer that the product complies (or exceeds) with some environmental standards. The promoting institution certifies and monitors the compliance with defined standards; therefore it spends its credibility to ensure to the consumer the eco-friendliness of a product. The eco-label behaves as an “interface” for the consumer. Its credibility therefore is a key element (see Figure 2) (16).

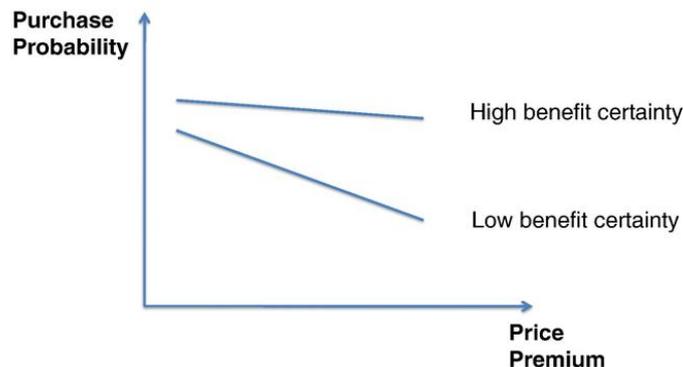


Figure 2 - The eco-label credibility effect (16)

Among all the labels, the most noticeable case is the EU label. Because of the relevance of the promoting institution (EU is responsible for the biggest world' mature market) and because it's part of the “Sustainable Development” framework(17), therefore it comes as complementary to other policies adopted by the EU in order to “green” the market. In chapter 3.1 is presented with its situation across the industries.



Figure 3 - Chosen labels (Bio, Fairtrade, Dolphin Safe and MSC)

Unfortunately for food products the EU label is still not available (even if a feasibility study is being performed). Therefore it was necessary to rely on other existing labels, among them were chosen four labels (two for tuna fish and two for coffee): they are Organic, Fair Trade, MSC and Dolphin Safe (illustrated in **Figure 3**). These labels differ from each other in some aspects, among the issues covered are market share and responsible institutions. Products with these labels are widely available on the shelves of German supermarkets, and retail data places Germany in first place among all European Countries for most of them. Choosing labels among the most diffused at least limits the knowledge-limitation.

Fair trade is more a social label than an ecological label (18), nevertheless it was decided that its inclusion in the experiment would have provide an additional element of interest. It ensure the consumer that a fair wage is paid to third world's coffee producers (19) and is endorsed by the Fair Trade Association.

Organic Label ensures that a food is cultivated without pesticides and fertilizers (20), in other European countries is often rewarded as "Bio" logo. The EU provides a label with a green leaf, which is usually presented beside the traditional national label.

Dolphin Safe Label is endorsed by a third party organization and ensures that no dolphin are caught while catching tuna fish (21). It's one of the first eco-labels, but because it came from producers initiatives authors suggests it's not focus on the environment rather to the industry's profit (22) (23).

MSC (acronym for Marine Stewardship Council) is endorsed by an independent third party. Although it was founded by Unilever and WWF, two years later became independent. It certificates sustainable fisheries (24).

All the chosen labels (except Dolphin Safe, which is older and well established) are growing fast and increasing their market shares continuously.

### 3. METHODOLOGY

The chosen method to investigate consumers' preferences was a conjoint analysis experiment. In the multi-attribute framework a product profile is defined by a combination of the levels of the attributes. Labels have been rewarded as attributes of the product, as well as other characteristics, such as brand or price. Conjoint analysis is a decompositional method, because the utility associated to each attribute is derived from judgments on complete products (25) (26).

The outcome of a Conjoint Experiment is the part-worth utilities, which are measures of consumers' preferences, associated to each attribute level (27). This data has a wide application: allows to compare possible product profiles, to predict market scenarios and measure relative importances of the attributes. The last is the purpose of the current study. Labels' importances are compared with the importances of other attributes.

Conjoint Analysis groups several techniques. The chosen one to investigate consumer's preferences has been Choice based Conjoint Analysis: it is widely recommended for these kinds of problems (28) (29). In addition, provides the consumer a situation which is very similar to the real marketplace one (30). CBC differs from traditional conjoint because the respondents have to choose a product among a small set of possible alternatives. The main disadvantage of this method is that gets a "poor" information amount from each respondent, because it's not expressed the strength of the preference nor the second choice (28).

The theory behind Choice Based Conjoint Analysis is called Random Utility Theory (30).

The design of a Conjoint Experiment deals with several trade-offs (28), which are widely discussed in Chapter 4. It was decided not to use "prohibitions" and to target a minimum of 150 respondents, providing a sufficient accuracy in the results. Each conjoint experiment was decided to be 8 questions

long. In this work an exhaustive overview on Conjoint Analysis is provided and a detailed explications of which were the reasons leading to some choices instead of others in the design of the experiment. The structure of the experiment is shown in Table 1, Table 2 and Table 3. The survey was web-based: this allowed to reach a considerable number of respondents (213) and avoided some bias in the answers due to the presence of the interviewer (31).

**Table 1 - Attributes and levels of the first CBC experiment**

Product : <b>Coffee</b> (Roasted, 500g)	
Attribute	Levels
Price	3,79   4,69   5,59   6,49
Fair Trade Label	Yes   No
Organic Label	Yes   No
Brand	Store   Manufacturer
Blend	100% Arabica   Arabica&Robusta
Provenience	South America   Africa   non specified

**Table 2 - Attributes and levels of the second CBC Experiment**

Product : <b>Tunafish</b> (Canned, 120g)	
Attribute	Levels
Price	0,99   1,29   1,69   1,99
Dolphin Safe Label	Yes   No
MSC Label	Yes   No
Brand	Store   Manufacturer
Conservation	Water and Salt   Sunflower oil   Olive Oil

**Table 3 - Demographic questions**

Question	Possible answers
What is your sex?	Male   Female
What is your age?	-number-
Are you a student?	Yes   No
Do you live with your parents?	Yes   No
How often do you drink coffee specialties a day?	Never   1   2   3   4 or more
How often do you eat tuna in a month?	Never   1   2   3   4 or more

## 4. FINDINGS

The filtered respondent sample is representative (with reserves) of the Hamburg students' population, and is consistent with the nature of the work and its purposes. The author recommends that an improved representativeness can be pursued through the access to university's mailing lists and through the use of ACA, Adaptive Coinjoint Analysis.

There is a light disproportion between female students (60%) and male students (40%). The large majority of respondents live without their parents (86%), but this is consistent with German students' habits.

The age of respondents was on average 23.39, with peaks in 22 and 24.

Majority of respondents drinks coffee (62%) and eats tuna (56%), but it was decided not to restrict the focus of the survey just to those which are habitual consumers, because the labels (except Dolphin Safe) are applied also to other food products.

Students were found to attach much more importance on eco-labels than to some quality-related attributes, confirming their ecological sensibility. Nevertheless price is their main constraint. In tuna experiment a very high attention was paid to the conservation technique of tuna fish.

In coffee experiment the rank of the attributes is:

- Price (41.11)
- Provenience (16.55)
- FT label (15.94)
- Bio label (11.12)
- Brand (8.04)
- Blend (7.24)

In tuna experiment it was:

- Conservation (31.27)
- Price (29.34)
- MSC label (19.10)
- Dolphin Safe label (15.46)
- Brand (4.82)

In Table 4 and Table 5 are presented the main findings of the experiment (the average importances which have been detected).

**Table 4 - Importance of roasted coffee attributes within the defined segments of respondents**

	<b>Price</b>	<b>Brand</b>	<b>Blend</b>	<b>Provenience</b>	<b>FT Label</b>	<b>Bio Label</b>
<b>Student</b>	<b>41.11</b>	<b>8.04</b>	<b>7.24</b>	<b>16.55</b>	<b>15.94</b>	<b>11.12</b>
<i>All Respondents</i>	40.79	8.00	6.93	16.24	16.96	11.08
<i>Students alone</i>	39.59	8.73	7.66	16.08	16.64	11.29
<i>Male</i>	41.67	7.46	9.60	12.98	15.04	13.26
<i>Female</i>	40.07	8.50	6.89	18.71	16.04	9.80
<i>Supermarket</i>	42.61	8.74	7.69	16.46	13.27	11.23

<i>Occasional</i>						
<i>Supermarket Often</i>	38.28	7.93	7.39	17.43	17.50	11.47
<i>Never Coffee</i>	38.94	7.31	7.14	20.79	14.12	11.71
<i>Coffee Drinkers</i>	41.08	8.22	8.18	14.25	17.30	10.96

**Table 5 - Average importance of canned tuna attributes within the defined segments of respondents (percentages)**

	Price	Conservation	Brand	Dolphin Safe Label	MSC Label
<b>Student</b>	<b>29.34</b>	<b>31.27</b>	<b>4.82</b>	<b>15.46</b>	<b>19.10</b>
<i>All Respondents</i>	27.30	32.37	4.36	16.82	19.15
<i>Students alone</i>	28.94	31.02	4.94	15.80	19.30
<i>Male</i>	34.50	30.75	4.93	11.57	18.26
<i>Female</i>	26.28	30.72	5.36	18.48	19.16
<i>Supermarket Occasional</i>	24.46	35.16	8.71	13.72	17.96
<i>Supermarket Often</i>	32.74	27.63	5.00	16.82	17.81
<i>Never Tuna</i>	27.85	27.13	6.64	22.30	16.09
<i>Tuna Eater</i>	29.66	31.93	5.05	14.34	19.02

Generally, the answer to the main research question is *yes, students consider eco-labels when buying something, and prefer to trade off on other quality attributes than on the ecological aspect.*

Fair Trade label is evaluated more than Bio label, and MSC label more than Dolphin Safe. These preferences can be explained in several ways, among them, the trust in certifying institutions or the attention paid to the issues they cover (these labels target a specific environmental problem).

About organic label, it's important to underline that when attached on coffee has less appeal than in other food products, because the healthy benefit is less when compared to other products. MSC label is doubtless more complete than Dolphin Safe one: Dolphin Safe label was also suspected to be a case of "green-washing".

But is the demographic segmentation of the respondents that offers most surprising insights. Particularly emerged a considerable difference between males respondents and females respondents. Consistent with previous findings, males are less available to trade off on price. But they seem to express a different environmental concern than females: they rate much less the Dolphin Safe label than females do, and they prefer Bio label to Fair Trade one. Is this expression of a different sensibility to the issues behind this labels?

Another segmentation which reserved surprises was the consumer/non consumer one. It's noticeable that non consumers evaluate much more some attributes, such as provenience in coffee.

About eco-labels, non consumers privilege Dolphin Safe on MSC label (22.30 vs 16.09), the opposite of what the usual consumers do. While the different attention paid to quality attributes it's understandable, this can be a direction for some further research.

It's also noticeable that usual coffee drinkers evaluate more the fair trade label than the non coffee drinkers do, and the opposite happens with Bio label.

## 5. CONCLUSIONS

The answer provided by the work to the question whether students consider eco-labels in the purchasing decision is yes; students really evaluate eco-labels when buying a product. Their main constraint is the price, but there is evidence that they pay more attention to the presence of the chosen labels than to other product characteristics. The importance allocated to labels in certain cases exceeds the expectations of the author.

University students, because of high education, belong to those segments of the population who are more likely to be "green consumers"; therefore this finding is consistent with previous literature.

This finding, combined with an enhanced green consumption when students get higher paying jobs (because of a bigger income), is a reassuring signal for green marketers.

In the tuna experiment, the MSC label was found to be more important, in respondents' eyes, than the label by Dolphin Safe. And this is good news, because it's a more complete label that supports the effort of making world fisheries sustainable, as they are largely overexploited (32). On the contrary, the Dolphin-Safe label addresses a particular issue and was promoted by the industries to face a fall in sales: it was questioned whether its main purpose was to protect the environment or to protect the industry of canned tuna (23).

In the coffee experiment it was found that consumers attach more importance to the Fair Trade label than the Organic label. Some possible explanations for this:

- Students consider the social problem to be more prominent than the environmental one
- Students trust a more well known NGO (the Fair Trade foundation) more than local governments
- Students discount the environmental risk less because it is far from them (coffee is cultivated in tropical areas)

Regardless, it's important to note that the Organic label in coffee has a weaker appeal than in other typical Organic labeled goods (such as fresh fruit), because of the nature itself of the product (it is not consumed fresh).

A particular element of interest in the study is that while in the real marketplace Organic and Fair trade labels are very often presented together, here their effects are calculated separately.

Although students are a convenient sample and the findings cannot be easily generalized, there are several elements of interest in their relation to green products, among them, their future relevance as consumers. It's reasonable to expect that their detected green purchasing behavior will be transversal and generalized to other products as well, when they will be able to afford premium prices.

In all of the surveys, sample representativeness is always of concern to the researcher. This sample does not claim to be representative of the entire German student population, and therefore accepts the limitations regarding the extent to which our findings can be generalized to broader populations.

Nevertheless, as the main aim of the study was to investigate the relative effect of labels on students' preferences, the sample representativeness is not as important as it could be in a study that aims to investigate market share.

To overcome these limitations, future research may find it useful to reproduce this study with a sample representative of the entire German student population.

An interesting finding is that there were some peculiarities, which emerged from the segmentation. A particular, strong difference emerged between males and females. It was known that males and females had a different approach to environmental-related issues (33) but it was not obvious that this was translated so strongly into labels preferences. While researchers still question whether socio-demographics are relevant in explaining and describing environmental consumption behavior, the evidence from this study is that there is a gender-based difference on label preferences.

The most noticeable differences were observed in Bio-labels (much more important for males) and in Dolphin-Safe labels (much more important for females). A possible explanation for the major importance attached by females to Dolphin-Safe labels is the emotional value this label carries, which seems to appeal more to this segment. In fact, despite this it is often omitted in green buying behavior studies, the choice of buying a green product is both rational and emotional (34).

The previous finding that males are likely to undertake altruistic behaviors when the cost of giving is low (35) fits with the results of this work: they are more price sensitive but they also attach a considerable importance to eco-labels. The finding is relevant also because these two categories do not contribute in the same way to the purchasing, particularly women are main responsible for household consumption (1).

Something that has been highlighted even more in this work is the role which experience plays in consumption: those who are regular consumers have different priorities from those who are occasional consumers, and the same happens with labels.

While conjoint analysis is often used to represent hypothetical products, this survey wanted to be as closer as possible to the marketplace situation in order to appear more realistic to respondents, forcing them to make effective trade-offs among the attributes. The multi-attribute approach is fully compatible with the problem, and Conjoint Analysis is a powerful technique to investigate consumer preferences. Our study focuses on the main effects of estimation. Therefore interactions between attributes haven't been detected, also because accurate results imply a high number of respondents. But we suspect that they are relevant, particularly since the presence of two eco-labels is more valuable than the sum of the two (36). Further research can explore whether the combination of two labels is more valuable than the two separately. It would also be interesting to measure the effective "Willingness to Pay" for eco-labels, but in order to do this would be preferable in an economic experiment.

Eco-labels are a vast topic that embraces several disciplines: every time a research deals with them it is constrained in a certain area of scientific knowledge. Due to this limitation, intrinsic in the nature of the objective of the research, and some technical limitations, the findings of this work open some questions.

The contribution of this study is twofold. Its comparative approach, involving two experiments (on two different products) for a total of four labels, it's innovative and allows observing how the same

respondents react to different label-stimuli. In fact, most of the previous studies focus just on one particular product. On the other hand, it unveils some peculiarities in how students relate to eco-labels. Although students are not typical consumers (37) and the results can't be immediately generalized, students (and young people in general) are objects of a particular interest when related to environmental behaviors, and there is limited research on them.

The international relevance of the study is both in the dimension of the underlying environmental problems (which is generally world size) and both in the fact that while Germany is a leader in eco-labels and green products diffusion, the other countries are growing fast, and in some years they will probably have a green market situation similar to the German one.

Some **further research** should explore whether the difference in preferences depends upon the issuer of the label (and so its credibility) or the content of the label itself. It's also not clear the effective knowledge of the labels among the consumers, and while research always focuses on the final effect; it would be interesting to understand how their knowledge affects final purchasing behavior.

Demographic-based preferences are unexplored in eco-labels and should be verified for a broader sample of the population.

As mentioned, intuitively the Organic label has a stronger appeal in fresh consumed products. Nevertheless this is not supported by research and a consumer behavior analysis in this direction would offer insights on the motivations leading consumers to buy organic food.

While the results offered by this work cannot be immediately generalized to other European countries, some insights are useful and are likely to be reflected in other situations. The fact that green food has high market shares in Germany increases the interest of the study, because the other developed countries, according to actual growth rates, will be in the same situation within some years.

As a general recommendation will be useful that industrial engineers and management of the products taken in consideration more active of environmental performance of the products (to students) with a good price balance.

## REFERENCES

1. **Tanner, Carmen and Wolfig Kast, Sybille.** Promoting Sustainable Consumption: Determinants of Green Purchases by Swiss Consumers. *Psychology & Marketing*. 2003 йил, Vol. 20, 10.
2. **Ginsberg, Jill Meredith and Bloom, Paul N.** Choosing the Right Green Marketing Strategy. *MIT Sloan Management Review*. 2004 йил, Vol. 46, 1, pp. 79-84.
3. **Peattie, Ken and Charter, Martin.** Green Marketing. [book auth.] Michael J. Baker. *The Marketing Book*. s.l. : Butterworth Heineman, 1992.
4. **Ottman, Jacquelyn A., Stafford, Edwin R. and Hartman, Cathy L.** Avoiding Green Marketing Myopia. *Environment*. 2006 йил, Vol. 48, 6.
5. **Ottman, Jacquelyn A.** *The New Rules of Green Marketing*. s.l. : Berrett-Koehler Publishers, 2011.
6. **Dibb, Sally, et al.** *Marketing concepts and strategies*. s.l. : Houghton Mifflin, 2005.
7. **Social, TNS Opinion &.** *Special Eurobarometer - Attitudes of the European Citizens towards the Environment*. 2011.
8. **Diamantopoulos, Adamantios, et al.** Can socio-demographics still play a role in profiling green consumers? A review of the evidence and an empirical investigation. *Journal of Business Research*. 2003 йил, 56.
9. **Straughan, Robert D. and Roberts, James A.** Environmental segmentation alternatives: a look at green consumer behavior in the new millennium. *Journal of economic marketing*. 1999 йил, Vol. 16, 6.
10. **Polonsky, Michael Jay.** Transformative green marketing: Impedments and Opportunities. *Journal of Business Research*. 2011 йил, 64.
11. **Lee, Kaman.** Opportunities for green marketing: young consumers. *Marketing Intelligence & Planning*. 2008 йил, Vol. 26, 6.
12. **Hume, Margee.** Compassion without action: Examining the young consumers consumption and attitude to sustainable consumption. *Journal of World Business*. 2010 йил, 45.
13. **Gossling, Stefan, et al.** A target group-specific approach to "green" power retailing: students as consumers of renewable energy. *Renewable and Sustainable Energy Reviews*. 2005 йил, 9.
14. **Teisl, Mario F. and Roe, Brian.** The Economics of Labeling: An overview of Issues for Health and Environmental Disclosure. *Agricultural and Resource Economics Review*. 1998 йил.
15. **Van Amstel, Mariette, Driessen, Peter and Glasbergen, Pieter.** Eco-labelling and information asymmetry: a comparison of five eco-labels in the Netherlands. *Journal of Cleaner Production*. 2008 йил, 16.
16. **Litvine, Dorian and Wustenhagen, Rolf.** Helping "light green" consumers walk the talk: Results of a behavioral intervention survey in the swiss electricity market. *Ecological Economics*. 2011 йил, 70.
17. European Commission Website. [Online] [Cited: 2012 йил 02-05.] [http://ec.europa.eu/environment/eussd/escp\\_en.htm](http://ec.europa.eu/environment/eussd/escp_en.htm).
18. *The Fair Trade Foundation*. [Online] [Cited: 2012 йил 07-05.] <http://www.fairtrade.org.uk/>.
19. **Merskin, Debra.** Coffee. *Green Consumerism: an A-to-Z Guide*. s.l. : SAGE publications, inc., 2011.

20. EU legislation on Organic Farming. [Online] [Cited: 2012 йил 07-07.] [http://ec.europa.eu/agriculture/organic/eu-policy/legislation\\_en](http://ec.europa.eu/agriculture/organic/eu-policy/legislation_en).
21. **Teisl, Mario F., Roe, Brian and Hicks, Robert L.** Can Ecolabels Tune a Market? *Journal of Environmental Economics and Management*. 2002 йил, 43.
22. **Jacquet, Jennifer, Hocevar, John, Lai, Sherman and Majluf, Patricia.** Conserving wild fish in a sea of market-based efforts. *Oryx, The International Journal of Conservation*. 2009 йил.
23. **Brown, James.** An account of the dolphin-safe tuna issue in the UK. *Marine Policy*. 2005 йил, Vol. 29, 1.
24. **Thrane, Mikkel, Ziegler, Friederike and Sonesson, Ulf.** Eco-labelling of wild-caught seafood products. *Journal of Cleaner Production*. 2009 йил, 17.
25. **Green, Paul and Srinivasan, V.** Conjoint Analysis in Consumer Research: Issues and Outlook. *Journal of Consumer Research*. 1978 йил.
26. *SSI Web v7.0 Manual*. Sequim, WA : Sawtooth Software, Inc., 2011.
27. **Bakken, David and Frazier, Curtis L.** Conjoint Analysis: Understanding Consumers Decision Making.
28. **Orme, Bryan K.** *Which Conjoint Method Should I Use?* s.l. : Sawtooth Software Inc., 2009.
29. **Orme, Bryan.** *Special Features of CBC Software for Packaged Goods and Beverage Research*. s.l. : Sawtooth Software, 2003.
30. **Louviere, Jordan J., Flynn, Terry N. and Carson, Richard T.** Discrete Choice Experiments Are Not Conjoint Analysis. *Journal of Choice Modelling*. 2010 йил.
31. **Luchs, Michael G., et al.** The Sustainability Liability: Potential Negative Effects of Ethically on Product Preference. *Journal of Marketing*. 2010 йил, Vol. 74.
32. **Cunningham, William H., Anderson, W. Thomas and Murphy, John H.** Are Students Real People? *The Journal of Business*.
33. Americans Reach Environmental Turning Point. *CSRwire*. [Online] [Cited: 2012 йил 08-05.] [http://www.csrwire.com/press\\_releases/15416-Americans-Reach-Environmental-Turning-Point-Companies-Need-to-Catch-Up-According-to-Gfk-Roper-Green-Gauge-R-Study](http://www.csrwire.com/press_releases/15416-Americans-Reach-Environmental-Turning-Point-Companies-Need-to-Catch-Up-According-to-Gfk-Roper-Green-Gauge-R-Study).
34. **Ramayaha, T., Chow Leea, Jason Wai and Mohamad, Osman.** Green product purchase intention: Some insights from a developing country. *Resources, Conservation and Recycling*. 2010 йил, 54.
35. **Baines, Paul, Fill, Chris and Page, Kelly.** *Marketing*. s.l. : OUP Oxford, 2008. ISBN 978-0199290437.
36. EU Ecolabel for food and feed products - feasibility study. *European Commission Website*. [Online] [Cited: 2012 йил 12-01.] [http://ec.europa.eu/environment/funding/pdf/calls2010/specifications\\_en\\_10025.pdf](http://ec.europa.eu/environment/funding/pdf/calls2010/specifications_en_10025.pdf).