MIMA – International Marketing
Master Thesis (EFO705)

“The role of green marketing in development of consumer behavior towards green energy”

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Abstract

Purpose:

The purpose of this thesis is to study the factors affecting consumers while taking decision towards electricity providing company.

Theoretical Frame work

This academic work starts by presenting the background information of energy market, and then presents concept of green marketing, social responsibility, green energy, and consumer behavior in literature review. In conceptual frame work authors adopt consumer decision model, and strategic model which will answer research question and strategic question respectively..

Methodology /Research Limitations

Primary data collected through questionnaire. Quantitative method will be used for analysis of the data. Sample size is limited and research findings are presented in the papers. This study examines few factors influence on consumer in decision making, further researcher needed to study and examine the consumer behavior including more factors.

Findings/ Analysis/Recommendation

Lower Price, Quality of Service and, Green Marketing efforts influence and develop the consumer behavior towards choosing the green energy. Survey result shows that consumers are willing to pay more for sustainability of environment, but they perceive that the price of green energy is high as compared to the conventional energy. For developing awareness in consumers mind companies should use advertisement and positioned themselves as a socially responsible.

Key word: Green Energy, Green Marketing, Green. Consumer Behavior, Consumer Decision. Social Responsibility

Paper Types: Master These Academic work
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I dedicate this work to my respected Father Muhammad Siddique, my beautiful Mother, my loving sister Mrs.Khalida Perveen and my life partner Gulnaz Munir.

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I dedicate my work to my lovely Father Muhammad Akram, my beautiful and caring Mother, and especially to my Uncle Muhammad Aslam, who always support and encourage me to achieve higher education.

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# Table of Contents

1. **INTRODUCTION** ................................................................. 1
   1.1. Introduction to Sweden Energy Market............................... 2
   1.2. The Role of Green Energy in Sweden .................................. 3
   1.3. Aim of the Research.......................................................... 4
   1.4. Strategic Question ............................................................. 5
   1.5. Research Question ............................................................ 5

2. **CONCEPTUAL FRAMEWORK** ............................................. 6
   2.1. Definition of Green Marketing.............................................. 6
   2.2. Green Marketing and Corporate Social Responsibility ........... 7
   2.3. Green Marketing Strategies.................................................. 8
   a. Consumer Value Positioning.................................................. 8
   b. Calibration of Consumer knowledge....................................... 8
   c. Credibility of Product Claim.................................................. 8
   2.4. Ecolabel ........................................................................ 10
   2.5. Marketing Mix.................................................................. 10
   Product .................................................................................. 10
   Price ...................................................................................... 11
   Place ...................................................................................... 11
   Promotion ............................................................................... 11
   2.6. Environmental Strategies .................................................... 12
   2.7. The Perceived Actual Greenness Matrix............................... 13
   2.8. Conceptual Model adopted by Authors for strategic question ...... 13
   2.9. Green Energy .................................................................. 15
   2.10. Power Marketing ............................................................... 15
   2.11. Green Consumer behaviour ................................................ 16
   2.12. Consumer Decision Process ............................................... 17
   Problem Recognition ................................................................ 19
   Information Search ................................................................... 19
   Purchasing Process .................................................................. 19
   Post Purchase Behavior ........................................................... 19
   2.13. CONCEPTUAL MODEL ...................................................... 20

3. **METHODOLOGY** ................................................................. 22
   3.1. PLANNING PROCESS IN SELECTING TOPIC .................... 22
   3.2. Research Process ............................................................... 22
   3.3. Topic Selection ................................................................. 24
   3.4. Research Strategy ............................................................... 24
   3.5. Research Method ............................................................... 25
   3.6. Quantitative Research ........................................................ 26
   3.7. Data Collection ................................................................. 26
Secondary Data ............................................................................................................. 26
Primary Data.................................................................................................................. 27
3.8.  Reliability ............................................................................................................... 27
3.9.  Limitations of Study ............................................................................................. 28

4.  FINDINGS AND ANALYSIS .............................................................................. 29

5.  SUMMARY OF FINDINGS AND ANALYSIS .............................................. 44

6.  CONCLUSIONS AND RECOMMENDATIONS ........................................... 46
   6.1.  Summary ............................................................................................................. 48

7.  FUTURE RESEARCH ......................................................................................... 49

8.  REFERENCES ....................................................................................................... 50

9.  QUESTIONNAIRE ................................................................................................. 75

10. FURTHER STUDIES .............................................................................................. 80
Tables and Graphs

Figure 1 Emissions of CO2 equivalent in the world, tones per capita..........................................................55
Figure 2 Average price of spot traded electricity certificates.................................................................55
Figure 3 Increase in renewable electricity production, 2007–2012,.............................................................70
Figure 4 The table shows number of costumers divided into different kind of agreement..................70
Figure 5 Average electric energy price for household consumers January 2008-December 2009. Cents / kWh (excl taxes)..................................................................................................................71
Figure 6 Consumer Change of Electricity Suppliers ....................................................................................72
Figure 7 Consumer, Change of Electricity Suppliers.................................................................................72
Figure 8 Preliminary population Change in 2010 compared with 2009......................................................73
Figure 9  Source. Karna, J., Hansen. E., & Juslin, H. (2003). .................................................................74
1. Introduction

The world is currently facing the environmental sustainability problems and environmental issues influencing and changing the patterns of human life and activities on this planet. Fossil fuels, the conventional energy sources, are not only running out at a dangerous pace but also give off tons of pollution. In order to meet the growing energy demands and save the planet from being defaced and poisoned, nations all over the worlds are seriously turning towards natural renewable energy systems. Green energy is, thus, considered an extremely important aspect in safeguarding the planet as livable for the future generations. (sciencedaily.com n.d.)

As the energy market is restructured in Sweden, in 1996, since then competition is high among the different energy companies and this competition will create the new opportunities for the companies to introduced environmental based products and introduced new services to attract and keep the customers. Retail competition in energy market will allow the consumer to choose the energy company, some researchers suggest that the consumer will make decision in purchasing the energy, probably depends on environmental products. Wang, Y. (2006)

With the rapid change in the consumer behavior resulting from the green movement towards the sustainability of the environment, the green power products will replace the traditional power products considering the environmental benefits, if this phenomenon continues to rise, and consumers are willing to pay for the green power, then it will create a new market for renewable energy products. Since environmental concern is arising, it may help to emerge green marketing as a successful tool in the energy market. (Wiser, R. H, 1998)

Author of the thesis have developed the research question for exploring how a consumer makes decision for his energy supplier, the research question is “what factors influence on the consumers to choose energy from a green or traditional energy company”. Further, authors will recommend some green marketing strategies for the energy companies whose business process are in actual greenness or low greenness scenario.
The green marketing practices offers opportunity to engage people and promote green life styles. From the other side there is also an opportunity to innovate in providing business solutions and achieve profit targets and at the same time build the customer trust on your company. Further describes the green objectives of the business you can change as your competitors are doing “change the way they see the world”. Grant, J. (2007.p.11)

In Sweden, Volvo heading towards for development a sustainable environment and sourcing energy from renewable energy, presently Volvo replacing natural gas with renewable biogas for heating the factory. Volvo has made agreement with Vattenfall AB (in Sweden) for supplying energy for its operations, switching to green energy is Volvo part of environmental policy. (volvocars.com,n.d)

The term “Green Marketing”, although, is widely popular these days but yet lacks single accepted definition. In general, green marketing is concerned with all the activities of an organization that may have influence on the environment, both in short- and the long-term. Such activities not only include the development of physical characteristics of products that do not harm the natural environment, but also the processes, promotions, and related claims. (Polonsky, 1995, p.181).

1.1. **INTRODUCTION TO SWEDEN ENERGY MARKET**

The Sweden energy market¹ was restructured in 1992, sales and production of electricity were separated. Svenska Kraftnät is acting as transmission system operator in Sweden. Deregulations of electricity act were come into force on January 01, 1996 which made possible to trade and produce electricity competitively. Through this act, government abolished a number of regulatory barriers for energy producers. Since Swedish electricity market has become open for competition, it provides the consumer to choice and contract with any energy company resulting in increased trade of energy (Svenskenergi.se, online, n.d.).

¹ Energy Market is to be read as Electricity Market"
1.2. **The Role of Green Energy in Sweden**

Green energy is playing a vital role in development of country economy. Sweden has achieved a low level of carbon dioxide (CO$_2$) emissions and heading towards a low carbon economy in Nordic region (see Figure 1 in appendix). The Swedish government has also started to issue Renewable Electricity Certificate (see Figure 2 in appendix) for encouraging the producers of electricity to produce electricity through renewable energy sources.

The government has set target to achieve 25TWh (terawatt-hours) energy to be produced by the end of year 2020. According to the website, Sweden will produce 51% of electricity through Renewable Energy Sources (RES) by the end of the year 2010 (see Figure 3 in appendix). Swedish Renewable Energy Resource-Electricity (RES-E) policy is comprised on tradable Green Certificate and Environmental premium tariff for wind power. (Sweden.se.gov, online, n.d.).

Sweden.gov.se (online, n.d.) claims that presently, in Sweden, 43 % of the energy comes from renewable energy resources which is the highest among all EU (European Union) countries. The government wants to promote “*efficient and sustainable energy use and a cost-effective energy supply*” that would “*facilitate the transition to an ecologically sustainable society*”. Electricity consumption in Sweden is 17,000 KWh per person per year which makes it the 4$^{th}$ largest country in world with biggest consumption.

A customer can choose a number of different agreements for the supply of electricity from different electricity producer (see Figure 4 in appendix). Customers can also switch from one electric supplier to another supplier. According to Ek and Söderholm (2008) the Swedish households’ behavior regarding changing the electricity supplier has increased during the last few years (see Figure 5 in appendix). Moreover, public administrative bodies and municipalities in Sweden have established contracts to use Eco-label electricity (Kaberger, 2003).
Green Electricity Certificate means that the electricity being provided is produced through wind power, wave power, solar energy, geothermal energy, biomass and small hydroelectric plants, etc. It necessitates that both energy producers and consumers have to buy the certificate. Sweden.se (online, n.d.) reports that among all other green energy sources, wind power is the fastest growing source of electricity production and presently meets the needs of 600,000 households (see Figure 5 in appendix).

### 1.3. **Aim of the Research**

The aim of this research work is to investigate the consumer behavior towards the green energy and see how they take environmental and other factors in consideration when making choices on buying the electricity from the energy companies. For the purpose, authors will put more focus on studying consumer behavior of energy users particularly in Västerås and Eskilstuna, Stockholm and some other cities of Sweden. Further authors will examine which strategies, electricity companies can use in the current as well as in the new market.
1.4. **Strategic Question**

After 1996, when the deregulation of electricity act was promulgated, electricity market in Sweden became open for competition. Increasing environmental concerns in the business world have also led electricity companies to focus on environment related issues and implement new activities that reduce or minimize the impact on environment. Wang, Y. (2006). However, the present energy market is dominated by companies producing electricity from conventional resources. In this scenario, green electricity companies are working hard to compete on equal grounds. Hence, they face the serious question of

“What marketing strategies could be used by the Green Energy Companies to market and to attract consumers towards their services?”

1.5. **Research Question**

We formulate the following research question for our thesis work.

“What are the main factors that influence consumers in their choice of green energy company over the conventional energy”? 
2. CONCEPTUAL FRAMEWORK

2.1. DEFINITION OF GREEN MARKETING

The concept of society and marketing can be traced in the literature of 1970s and 1980s (Peattie, 2005), however, the notion of social marketing was introduced by Kotler and Zaltman in 1971 (Crane & Desmond, 2002). Kotler (2006, p. 6) has defined marketing as “a societal process by which individuals and groups obtain what they need and want through creating, offering, and freely exchanging products and services value with others”. As the concerns enhanced, environment, sustainability, and green marketing became more popular terms.

Grant, J. (2007, p.43) sustainability is internal reforms in the organizations and serves as a “bridge between business and green” and ensuring to make better “life of every one now and for generations to come”. The objective of green marketing is to minimize of environmental harm and as well economics benefits.

Green Marketing is defined by Peattie (1995) as “the holistic management process responsible for identifying, anticipating and satisfying the requirements of customers and society, in a profitable and sustainable way”. According to Ottman (2006) the green marketing satisfies two objectives: improved environmental quality and customer satisfaction. Davis (1993) says that green marketer can develop a communication message which can address the environment problem presenting motivational and relevant attitudes approach in advertising for example communicating that “you are contributing for the improvement of the society as a whole”.

Grant, J. (2007, p.32) has suggested that green marketing objective is to educate and make people willing to go green, because it influences on changing the life style and behavior of the people. There are steady movements in public interest and concern about the environmental issues. "Companies like BASF and DuPont are leading the greening of heavy industry and have had biggest impact on environment".
Simula, Lehtimark, and Salo (2009) stated that the word “Green” is widely used today for new technologies and new products which have more sustainable impact on the environment. “Green”, “Pro-environmental”, “Sustainability”, “Environmentally Friendly” and “Ecology” are the terms commonly used to describes that the firms’ processes and products consume less energy; are recyclable; lessen waste and pollution; and preserve natural resources.

2.2. **GREEN MARKETING AND CORPORATE SOCIAL RESPONSIBILITY**

The European Commission’s (ec.europa.eu, n.d.) defines corporate social responsibility (CSR) as "a concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis." Maignan & Ferrel (2004) define that stakeholders in “organization” include employees, customers, share holders and suppliers; in community includes local residents and special interest groups; in regulatory includes municipality and regularity system; and the media “stakeholders”.

Robins (2008) points out that a company must accept its responsibility for its operations and their impact on society and Natural Environment. Companies should work for betterment of society as a whole and more greening the world. Further Sirsly suggested that Corporate Social Responsibility is not always generating the monetary and economic value for the firms, but it helps to promote firm uniqueness efforts towards society. When a third party endorsed its corporate efforts, the reputation of a firm is reinforced in the “eyes of both market and non market stakeholders”. Sirsly, and Lametrz, (2008).

Karna, Hansen and Juslin (2003) stated that environmental issues were considered solely the responsibility of the government. Proactive marketing strategies and government support can help in building environmental sustainability. If a firm is introducing a highly differentiated product, it is maximizing the stockholders returns and effectively using environmental strategy.
A firm engaged in the cause related marketing because of its long term benefits i.e. Attract and retain consumer for longer period of time. In such type of marketing activity, consumers are emotionally motivate to take part and because they wanted to feel different from other members of society or in their groups. Ottman (1993, p.91).

2.3. **Green Marketing Strategies**

Ottman (2006) further suggests that all marketing activities must convince the consumers through identifying the basic product features. He suggested the following Strategies

a. **Consumer Value Positioning**

   A firm should focus in designing a product, which is differentiated from and performs better than the alternatives.

b. **Calibration of Consumer knowledge**

   In designing marketing communication, a firm should always present product unique features, environmental benefits and solutions that matched with the Customer norms and values.

c. **Credibility of Product Claim**

   A firm should build confidence in the consumers’ minds by presenting or communicate benefits of the product “that are specific and meaningful and qualified for the consumers”.

Davis (1993) explained that consumer wanted to know about the particular and specific information about the product or service which they about to buy are environmentally friendly. Through advertisements on radio, on billboards & in print media, are making aware the consumers about the environmental issues by the green companies along with price that has substantial effect on consumers to choose a new electric supplier (Glaser, 2009). Consumer’s decisions influence by the media, as a stakeholder, the role of media cannot be ignored; it is the only source through which a consumer received much of environmental related information. Ottman (1993, p.91).
Vaccaro (2009) has presented two main strategies for the companies in responding to their external environment as “proactive strategies” (First Mover) and “reactive strategies”. In reactive strategy, organization starts making adjustments in its operations when threats and/or opportunities are seen, whereas in proactive strategy, firm responds to the external environment before changes occurred (see Figure 6 in appendix). The same approach is also presented by McDaniel, W. S., & Rylander, H. D., (1993) a Defensive and Assertive approach.

In “Defensive or reactive approach”, a firm meet minimum standards set by the government in order to avoid tax penalties and reacting to competitors and sometimes to avoid boycotts from consumers not to avoiding environmental regulations. Whereas, “Assertive approach”, companies has opportunity for competitive advantage. This approach is also known as “First mover”. It is an image creates strategy for the firms to do more than it is required. McDaniel, W. S., & Rylander, H. D., (1993). Adopting a proactive approach, a firm can find the best available cost effective solutions, and built long term relations with their customers and create a good will image in Public. Ottman (1993 P.60)

Companies make their offerings competitive through price/quality or prestige/image strategies from their competitors but eco friendliness and social responsibility make companies more profitable (Darling et al., 2009). Early mover companies have enhanced their image as environmental friendly. The Municipality owned electricity companies of Stockholm and Goteborg set example as early movers. In 1999 Swedish state-owned railway company SJ bought “Bra Miljöval” labeled electricity (Kaberger, 2003). Other studies by Karna et al. (2003) suggested that companies can create competitive advantage if they use innovations related to environmental sustainability rather than simply comply with the government regulations.
2.4. **Ecolabel**

Ecolabel differentiates the products whether these products are environmentally friendly or not. Since 1991, more than 1000 Eco label license have been awarded till Jan 2010 (ec.europa.eu,online. n.d.).

In 1996, Swedish Society for Nature Conservation (SSNC) introduced ecolabeling on electricity with label “Bra Miljöval”, which is translated in English as “Good Environmental Choice”. In Sweden, ecolabeling was started back in 1988 and presently 12 different products are covered under this scheme (www.naturskyddsforeningen.se, online, n.d.)

2.5. **Marketing Mix**

The first concept of 4Ps (product, price, place and promotion) was presented by Rasmussen, A. later further enhanced by McCarthy, J.E., finalized by Kotler, P. Marketing Mix concept was based on the some defined set of models, after 1960s when new 4Ps concept was introduced; it converted into a research field and established a theoretical ground. (Håkansson, & Waluszewsk, 2005).

Marketing mix is develop for successful marketing penetration of a product to fit according to the customer’s needs and wants and competitiveness position can be achieved through offering a successful component mix. (Darling, Heller, & Tablada, 2009).

Marketers made decision for their offering on the basis of the future developments in the market; a firm has different objective and goals, and develops appropriate strategy for marketing mix over a period of time. (Darling et al 2009)

**Product**

A product must hold distinguished position in buying and selling process. The attributes of a product some time carrying opportunities, restriction and tension, product will always exposed and suggest some benefits for the consumer. (Håkansson et al., 2005).
**Price**

In the marketing mix model, Price is the only element that can create a perfect mix between the revenue and profit, rest other elements create costs. (Håkansson, et al., 2005).

Incentives by the Govt. in renewable energy and cheap prices by the electricity producers create demand for the green power. If electric supplier given value to price, he can capture a large share of green power in residential area. (Glaser, 2009, July 23).

Charter & Polonsky (1999), present a case of Electricity retailer of Massachusetts Electric Company offer a green option program for power consumer by offering three different options Price, Green and other option to donate to charitable.

Charter et al. Further explain that power companies needs to link their marketing strategy in lines to make power consumer aware about the sustainable environment. Power consumers should provide choices in terms of price and renewable energy content, i.e. premium price for electricity that has 75% renewable energy content and pay fewer prices that have 50% to 25% renewable content. (Charter & Polonsky, 1999).

**Place**

Place is not a cost generator factor, it has many features that can create revenue and certain outcome. This element of the marketing mix is dealt “how-to-handle-distance”. (Håkansson, 2005).

**Promotion**

According to (Håkansson et al., 2005) this element of marketing mix creates interaction with the consumers and makes the product position distinguished in the market.
2.6. **Environmental Strategies**

Fuller (1999, p. 105) has presented the strategy matrix of environmentally improved and reinvented products.

<table>
<thead>
<tr>
<th>Column 1</th>
<th>Column 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmentally Improved Products</td>
<td>Environmentally Reinvented Products</td>
</tr>
<tr>
<td>Current Markets</td>
<td></td>
</tr>
<tr>
<td>Market Penetration/Product Improvement Strategy</td>
<td>Product Development Strategy</td>
</tr>
<tr>
<td>New Markets</td>
<td>Diversification Strategy</td>
</tr>
<tr>
<td>Market Development Strategy</td>
<td></td>
</tr>
</tbody>
</table>

Source. Fuller (1999, p.105)

1. The strategies are presented in the column 1, Market Penetration/Product Improvement Strategy and Market development strategy is based on the making some changing in the product attributes and manufacturing process.

2. The Strategy presented in Column 2, Product Development strategy and Diversification strategy High management commitment is required and product is reinvented according to the ecosystems impact. (Fuller, p.105)
2.7. **The Perceived Actual Greenness Matrix**

Simula (2009) proposed that in order to develop the product, companies should understand customer attitudes, norms towards the greenness by using the pre-marketing campaigns.

Simula (2009) presented a quadratic model of actual verses perceived greenness of the product as follows;

![Perceived Actual Greenness Model](image)

(Source: Simula, 2009, p. 340)

Simula’s Actual versus Perceived Greenness Model

2.8. **Conceptual Model adopted by Authors for strategic question**

From the theories discussed in the previous pages, authors have adopted this model to see that what strategies are available for the actual green companies. Authors modified and adopted this model for those companies who see themselves as a least green and those who see themselves as a highest green. This model will help to choose the right strategy for their right segmentation and market. The companies, who are lowest in green but wanted to increase the market share, can follow the following strategies and those companies who are most green in his operation can choose the strategies.
### Strategic Model Adopted By Authors

2.9. **GREEN ENERGY**

The term of green energy is defined by Wenxin (2010) that energy generated from natural and renewable resources such as sunlight, wind, biomass, tides and geothermal heat, is called “renewable energy”. The renewable energy market is still growing and governments are making policies for this sector and companies are putting more efforts to commercialize these resources due to the rapid changing in climate, high oil prices and pollution. (Shi, 2010)

According to Bird et al. (2002) green power products are generally 100% renewable energy offerings and are produced from either a mix of several renewable resources or a single resource such as hydro or wind. Small numbers of these products are selling at the cost of conventional electricity while others have 10-30% premium price than conventional electricity. According to Kreidler & Joseph (2009) green products, those which are totally or partially created from recyclable or renewable materials?

In corporate guide for green power, Hanson, (n.d) further stated that the companies switching from conventional energy to renewable energy is also a part of their corporate social responsibility, through adopting this strategy, companies are communicating corporate values that would help to build feelings of current employees that they are working for green environment and help to attract quality employees in future.

2.10. **POWER MARKETING**

According to (Levitt, 1980 as cited in Wiser, R. H) Energy companies are providing the power as a product to the customers at some accepted cost with showing product or service differentiations against competitors in the market. Wiser, R. H (1998)

After starting the retail competition in the power market, many companies started to target niche market by differentiation products and services. In current competitive market, only those companies will be survived whose product and services are different from other, success of such companies less or more will depend on their customer service based approach. Wiser, R. H (1998).
2.11. **GREEN CONSUMER BEHAVIOUR**

The field of consumer behavior covers a lot of different areas. Antonies & Raaij (1998, p.177) define consumer behavior as “*studies concerning attitudes, intentions and decision processes in order to explain and predict behavior*”. Ottman (1993, p.27) defines green consumer as “Those actively seek and support those products satisfy their needs that are having less impact on environment”

Judy Mey as cited in Ottman (1993, p.8) is in the opinion that “*Habits are decided early in life*” children will make better decision if they start educate at an early age. Consumers become more suspicious towards those firms that stress more environmental theme in their communication. Thus, a firm should design strategy carefully for the long term. (Darling, Heller & Tablada 2009).

Anderson & Cunnigham, 1972 as cited in Kreidler, N. B., & Joseph. M., S. (2009 P. 232) states that research shows that income and education have positive relationship and direct impact on green behavior. Kassaye (2001) pointed out that the existence of environmentally conscious consumers in food products packaged with recycled materials has created a demand in niche markets for green power. A consumer, who is knowledgeable about environment, will tend to make “green purchase” (Peattie, 2001). Surveys showed that the European consumers are interested in green products and willingness to pay for green features. Owing to consumers’ green concerns, 92% of European multinationals has adopted environmental sustainability programs (Peattie & Crane, 2005).

Ottman (1993, P.27) support that a green consumer can be motivated by providing an added benefit in product either a cost effective or a environmentally friendly solution. Peattie (2001) states that consumer behavior can be developed by highlighting the relative advantage of Greener Products as compared with the other products that creates environmental problems.
Mintel, 2006 as cited in Gupta, S. & Ogden, T. D., (2009) study that consumer willingness to pay more for environment friendly products and his concern for pollution and recycling forms his attitude as a “Green buying behavior”. Antonies, G & Raaij, V. F. W. (1998, p.197) defines attitude an individual particular trait who behaves and sees the world according to his own preset favorable or unfavorable manner?

Kardash’s 1976, P.159 as cited in Macdonald, S & Oates C. J., (2006), “all consumers are potentially green consumers”. When a consumer has choice to buy from two identical products, the consumer will prefer to buy environmentally friendly product. Arbuthnot 1977. Brooker, 1976 as cited in Kreidler, N. B., & Joseph. M., S. (2009, P 232) suggest that in consumer behavior there is no “significant relation between gender and green behavior Antonies et al (1998,p.205) further states that behavior of the consumer can be changed and modified if company speaks desirable benefits or features of product or services that matched with the consumer belief in his advertising or other communication. Peattie is in the view that the companies should put more focus on rewarding schemes in early stages of “habit formation” of consumer (Peattie, 2001).”

Gupta et al, 2009 defines reference group as “A reference group is a person or a group that influences another person’s decision“. Reference groups have important role in spreading of information about the product and have influence on behavior. People in groups make decision collectively rather than individually. Kramer and Goldman, 1995 as cited in Gupta, S. & Ogden, T. D., (2009).Consumer in a group likes to inform others about the positive and negative features of the new product. Antonies at el, (1998,p 270).

2.12. **Consumer Decision Process**

According to Kristina and Söderholm, (2008), changing the electricity supplier behavior in Swedish household has increased during the last years. Sweden Government deregulated electricity market in 1996. Large numbers of countries have deregulated their electricity market allowing household customers freedom to choose any electricity supplier that are connected to
the grid. So product differentiation became a potentially important strategy to attract consumers.

Fuller (1999) has suggested that consumer purchase decision help the marketers to design the marketing mix to achieve the target of sustainability and provide the criteria that the product system must be “compatible with ecosystems”. Fuller (1999) further stated that “Customers must learn to base their purchase decision not only on how well products satisfy individual needs but also on how these products affect the natural environment”.

Wood, & Neal (2009) suggested that consumer will repeat purchase if the outcome of purchase and consumption would be rewarding. On the other side Ottman, (1993 P.8) emphasized, when consumers make decision to buy the product/service, evaluate products not only on “performance and price”, but also on the “social responsibility of manufacturers”.

Information and knowledge consumer received from environment, affect in their decision making process. Society (As reference group) and communication (usually received from media) are formed their attitude towards the product or service. Macdonald and Oates (2006).

In medium degree of innovation, however, exiting product is required to be introduced in new format. The main motive is to change the customer behavior and it takes time to diffuse in the marketing. For this type of degree on innovation, firms usually introduce a different manufacturing process, product or service that attains environmental sustainability (Vaccaro, 2009).


**Stages of the Decision Process**

**Problem Recognition**

The consumer decision process model starts with the problem recognition what are the needs and satisfaction process. Consumer is not always attached with the ecological needs it is hardly express and not recognized by the consumer at all. (Fuller 1999, p.322)

**Information Search**

The ecological attributes of a product plays important role in choosing the product. The consumer here will pass from the two situation “Firstly Sustainability Needs” it’s required by a consumer likes or not and secondly “the environment” lower in importance but influence on the consumer. (Fuller 1999, p.322)

**Purchasing Process**

This phase focuses on the two aspects (i).purchase patterns, it include where to buy(Location),quantity to buy, and when to buy(timing )and (ii).Purchasing outcome, the final outcome of the action. (Fuller 1999, p.322).

**Post Purchase Behavior**

The consumer post purchase behavior is particular imported in sustainable market as follow:

**Avoiding Dissonance**

Fuller (1999, p.233) describes when the purchase is less than satisfactory for whatever reasons, it creates a state of tension called post purchase dissonance. Post purchase dissonance is basically an after purchase cognitive behavior. Kreidler, & Joseph, (2009) explained that people react in two different ways toward environment, “Approach and Avoidance behavior”. In approach behavior people shows positive behaviors to stay, keep searching for the product, power to spend money and look into particular environment. On the other side Avoidance includes negative behavior is attached, exhibiting to leave from a particular situation.
2.13. CONCEPTUAL MODEL

Authors have developed the following conceptual model based on the frame of reference discussed in literature.

Fisher et al (2007, p.5) mentioned that developing a conceptual frame, is normally “modification and developments of theories” written in literature. This conceptual model serves to guide how researcher can further move and how this is related.

Authors of this model will describe what factors are influences on consumer in his decision making behavior towards the green energy. These factors are influence on consumer which lead his behavior towards action, which in turn, consumer decide to buy the green energy and finally outcome is acceptance or rejection of his decision.

In the evaluation stage consumer will match the attributes of the products with his, beliefs, needs and will try to satisfy himself by trusting the sources of information. Our further research on consumers (survey questionnaire method) will clarify his final decision, either consumers accept or reject choosing the green energy. What factors have more influence on his decision in order to arrive at a final decision?

Fisher et al (2007, p. 7) have suggested that student should develop or modify the theories arising from writing the literature review.

The questionnaires include in our survey will be include some background information like, Nationality, Gender, Profession, year of Birth, Place of living, Live in House or Apartment, and which electricity company peoples are using. Further we will include some question to know about the actual electricity supplier, to know that whether they are satisfied with their current supplier and their energy companies are providing the quality or not. Overall the question would be included, trust, commitment, price perception, subject norms, past behavior, questionnaires regarding from the new energy market and alternative attractiveness.
Conceptual model of Decision Process Adopted by authors
3. METHODOLOGY

3.1. PLANNING PROCESS IN SELECTING TOPIC

When we planned to start writing the Master thesis, we chose our topic on Brand Positioning of a company, but after studying different articles it was revealed to us that today every company is turning its efforts towards the ecological marketing. Then we started studying articles related to the Green Marketing and we develop interest to take this topic for our master thesis.

As we headed forward, we were stuck with the choice of industry but after considering different industries, we finally decided to choose Electricity Market. As we studied different articles, we learned that in some countries, particularly in Asia, Electricity Market is fully controlled by the government, however, in Europe and USA, this market is open for competition.

3.2. RESEARCH PROCESS

Fisher, Buglear, Lowry, Mutch, & Tansley (2007, p. 7) have suggested that student should develop or modify the theories arising from writing the literature review.

However, authors of this thesis the guidelines provided by the Fisher et al (2007 p.317) under the heading of “Structuring your dissertation”.
Planning for Selecting the Topic

Select the topic

Formulating the research Question

Theoretical Framework

Conceptual Framework

Data Collection

Selection of appropriate survey

Analyses the data and interpretations

Conclusions and Findings

Primary Data Collection

Literature Search through MDH Library Databases and Books

Secondary Data Collection

Layout of Research Process

*Adopted by the Authors*
3.3. **Topic Selection**

In choosing the topic, we first studied the “Criteria for choosing a topic” by Colin Fisher in his Book “Researching and Writing a Dissertation: A Guiding Book for Business students” (p. 31).

We choose this topic because it can provide a better opportunity to learn how environmental issues are important in consumer decision making process. Today, media is playing an important role in creating the awareness about the effects of ecological related problems on daily human life. Every human being lives on this planet wants to live healthy life and adopt different kinds of activities in life. Companies in turn identify the behavior and start target products manufactured according to the consumer behavior.

3.4. **Research Strategy**

Our main purpose is to find out those ways and factors that can influence customer in their decision to buy green energy. We want to get insight into how electricity companies can develop green marketing strategies in order to stay competitive in the market. Authors of this research report conducted a survey to gain understanding on what are the consumers’ preferences and what factors influence consumers to buy the electricity.

The literature theories used in this research were accessed online from Malardalen University Library Data bases. We accessed the following databases like Emerald, Google Scholar, ABI/ProQuest, and ScienceDirect. Fisher et al., (2007, p. 81) states the importance of journals in writing the research dissertation because these sources are most up to date.

Some books were not available in the Library so we accessed these books online through Google books and using ebray library account. We also ordered books through interlibrary loan in order to write more on our research question.
3.5. **Research Method**

The proposed study will probe the consumers’ eco-attitude and behavior towards Green Energy and environmental issues. Our research problem is more likely to be answered through quantitative methods. However, this research will help to analyze the consumer decision behavior towards the buy and offering of service of Energy Company. We printed 430 questionnaires forms and we scheduled the specific time usually to fill the questionnaire from respondents and every 3rd person was agreed to fill out the survey form. The response rate to fill the questionnaire was high in the Train Station as compared to the other places. Persons who returned the survey form had some specific reason, total 430 survey form were filled from whom we found some uncompleted, so finally we selected 400 questionnaire for analysis of the data.

In designing the questionnaire, we followed the guide lines provided in Colin Fisher on p.192 “Designing the questionnaire” we included the following questionnaire format, Dichotomous questions, Multiple choice question, Checklists, Pre-coded, Open and Closed questions. In the Questionnaires methodology, the design of questions will include some back ground information like, (Nationality, Gender, Place of living, Age, Income).

Due to the accessibility of the respondents, we will used “Convenience Sampling” it is a non-probability sampling method, Hair et al (2002, p.359) define as “in this method participants are selected according to the convenience of the researcher that meets requirements of the study”

For this research the data were gathered through Questionnaire is to measure the respondent behavior, their knowledge on sustainability on environment and how they see the role of energy companies in promoting the renewable energy. In our research we are not examining the purchasing behavior of the individual, despite that studying the consumer decision behavior what factors influence or effect on behavior of consumer concerned renewable energy choices.
3.6. Quantitative Research

After writing the literature review, and developing own conceptual framework, the painstaking and fatiguing task was to select appropriate research method through which we can answer our research question which was based on describing the decision process of consumer. Different research methodologies designed are available like, Exploratory Research Designs, Descriptive Research Design and Causal Research Design.

Hair, J., F. Bush, F., P. & Ortinau, D., J. (2002, p.41) define descriptive research as methods and strategy to compile and consolidate data in structured form that show the existing characteristics i.e. “attitude, intentions, preferences, purchase behaviors, evaluation of current marketing strategies” of a target population.

According to Hair et al (2002, p.41), the descriptive research is applicable when a researcher look to answers to the how, what, who, when and where. These questions are interconnected with marketing and decision variables in a uniqueness market structure.

There are different methods are used to analysis the data, however Colin et al has presented two main research methods Quantitative and Qualitative, where the Quantitative methods particular “deals with the numbers and uses of statistical tools to get the required results” (Fisher, P.62, 2007). we will use quantitative methods for analysis of the data.

3.7. Data Collection

The Population would be selected for questionnaires in particular from Vasteras, Eskilstuna, Stockholm and some other cities of the Sweden. The questionnaires will be filled on the spot from those people who are using and paying for the energy.

The data will be gathered through primary and secondary sources in order to answer the research question. The primary data will be collected through the survey questionnaires.

Secondary Data

Secondary data would be collected through different sources, studying the previous research on our research topic. We will study the International
journals that are available online at Malardalen University Database like, European Journal of Marketing, Journal of Energy Policy, Journal of Consumer Behavior and Books available in the library on our research subject area.

**Primary Data**

Fisher (2007, p. 162) states that in designing the questionnaires, different formats are available like multiple choice question, dichotomous questions rating scales, checklist, Likert scales, open end & closed questions.

The questionnaire will be consisting on closed and open end questions. According to Fisher et al. (2007), the purpose of open end question is to allow the respondents to give their own opinion. On the other side the closed end question allows the respondents to answer the question in easiest and fastest way.

3.8. **Reliability**

Reliability of the primary data is very important because we mainly depend upon the respondent’s opinion. When we have completed all the Questionnaires filled from the respondents, the big task was to enter the data into excel sheet for analysis. We decided to enter data into excel sheet independently by each author to check the validity of the data and minimize the error of duplication in the data. Then authors compared the both excel sheet to check the accuracy of the data, we find some data mistakes in the excel sheet, then we checked with the questionnaire filled form and removed those errors. Questionnaire was filled and collected from the respondent on the spot, because we want to make sure that the survey form is filled by the person himself. If we hand over the survey form to the respondent and collect it later, there might some chances that they get filled form with the help of other person and credibility of the data could not be established. We had put more focus in obtaining the personal opinion of the respondents.
3.9. Limitations of Study

The sample in the study is limited to Vasteras and Eskilstuna and Stockholm only due to the limited time and nature of project, the findings will be drawn from the analysis of this thesis work would be considered as generalized for the whole population.

The one major limitation is that we cannot hire the staff from the different cities of Sweden for this research because in our questionnaire some terms are required to elaborate to the respondent, this could bring problems in our data analysis if they missed the specific question in the questionnaire.

The time given to complete the research is very limited, if we given a flexible time, then we could select appropriate sample size from different cities of the Sweden. The other main hindrance is that budget. Due to financial resources the population from different cities could not sampled, because we have to travel different cities for conducting the survey and data compilation and coding would also be a major hindrance.
Our survey is limited to only few cities; as we have mentioned above due to time and financial resource.
4. **Findings and Analysis**

This survey is conducted from those people who are living in Sweden, using the electricity and paying the electricity bills. The survey purpose is to find out the main factors influencing on the Sweden people in their decision making, while choosing the electricity company.

Survey is conducted in different cities of Sweden Vasteras, Eskilstuna, and Stockholm. Following is the finding of that survey conducted by authors of this report. Sample size of this survey was 400 inhabitants in Sweden and was randomly selected. In our survey method respondents were given a questionnaire to fill, questionnaire contain, 29 questions which consists of Demographic information, level of information about the electricity market, why they choose the certain electricity supplier and some questions were related to the green electricity.

Authors of this survey select some important questions from this questionnaire that was more closely related with our research questions and problem statement. Due to time and resource limitations the research could not analyze all the questions from the different prospects. However, authors of this survey believe that the results of this questionnaires analysis would serve a good resource for further research in the area of green energy market. English and Swedish version of survey questionnaires is available in appendix.

For the reader convenience, here authors will use the same question number during analyzing, as presented the questionnaires in appendix.

**Background Information**

Before we start the analysis of the data some background information’s i.e. Demographic Data, is useful in order to make the analysis more meaning full for the readers.
**Question 1. What is your Nationality?**

The reason to include this question is to determine the reliability of the data, that our sample size included only the Swedish citizens. The survey result shows that 97% of the data collected from the Sweden citizens and rest 3% of the peoples are staying in Sweden for different purposes.

![Pie chart showing nationalities](chart1)

**Question 2. Gender**

Authors include this question because Gender Equality is important in the survey to determine the ratio of men and women. This question tells the researcher how many respondents were males and females. According to result presented in the Graph below, 46% respondents were males and 54% were females. Here authors are using percentage method for analysis of the data. Authors will relate this question with other questions to make analysis from different perspectives.

![Pie chart showing gender distribution](chart2)
Question 3. Occupation

Sample size of this survey was 400, and those respondents selected randomly. Following graph shows number of respondents according to gender and occupation. Mostly respondent of this survey were employed people, among those employees 112 were male and 114 were females.

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student</td>
<td>19</td>
<td>63</td>
</tr>
<tr>
<td>Employed</td>
<td>112</td>
<td>114</td>
</tr>
<tr>
<td>Self Employed</td>
<td>20</td>
<td>12</td>
</tr>
<tr>
<td>Retired</td>
<td>11</td>
<td>4</td>
</tr>
<tr>
<td>Others</td>
<td>17</td>
<td>24</td>
</tr>
</tbody>
</table>

Question 5. Where do you Live

Survey result shows, that the most respondent belongs to different cities of Sweden, which were 37.25 %. Rest of respondents 28.75%, 18%, and 16% belongs to Vasteras, Eskilstuna and Stockholm respectively. Most of the forms filed in trains so that’s the reason most of respondent belongs to other cities of Sweden.
**Question 6. You are living in?**

Fallowing graph shows how many males and females are living in houses and apartments in term of numbers.

![Number of Males and Females live in Houses and Apartments](chart.png)

**Question 8. Which electricity company you are using**

Respondents were asked about which electricity company services they are using presently. Results shows that 80 respondents who are living in Vasteras are using Malarenegi, 34 respondents from Eskilstuna said that they are using Eskilstuna Energy Miljo company services, about 70 respondents are using vatenfall company. Godel which is investing money in social cause 34 respondents are using its electricity.

![No of Peoples Use Energy Company](chart2.png)
Question 9. What was the main reason for choosing your current supplier?

Now, authors analysis why consumers choose the current supplier as per survey the results are more significant here and shows that the people are more likely to choose the electric supplier who offers lower price and good services. Here there is another factor which is very important in consumer decision making is reference group “others people used”. Social Influence is also having some impact on consumer decision making process when choosing the supplier.

![Main Reason for choosing the current electric supplier according to Male and Female](chart1)

**Question 10. Do you mainly use green energy?**

Fallowing graph shows that 27% of respondents are using green energy while remaining 73% are using brown energy. It means there is much room for green energy growth if they give competitive price and make awareness in people.

![Use Green Energy](chart2)
Question 11. “Overall, I consider my electricity supplier to be good and give good value for the money”?

This question was asked to respondents to see, either they are satisfied from current electricity provider company or not? If a customer does not satisfy from its electricity provider then he or she can consider switching to other company.

This shows this 6% respondent are strongly disagree from the question, 15% are partly disagree, 23% are uncertain about their electric supplier is provided the good services and gives the value of their money, 22.75% are Partly agree, 18.25% are strongly agree, and 15% do not know.

Here we can see that 44% respondent of this survey are those who are strongly disagree, partially disagree and uncertain collectively. It means these consumers may switch their electricity provider. So companies have to do work for availing this opportunity.

Question 13. I usually study my electricity bill carefully.

This question will find out either respondent trust on their current electricity provider company or not. This graph shows that there is opportunity for the companies to come and build their trust through providing good quality
services and engage activities in social cause.

Price perception:

**Question 15. Compare to its competitors, I believe that my electricity supplier’s prices are?**

The purpose of this question is to find out the response of people in order to price perception of their current electricity provider company. According to findings 29.50% of respondent agree on this, that their current electricity provider company charging lower prices than the rest of companies, 46% said that all companies charge equal prices or we can say averagely they charge same prices, 10% said they are charging higher prices while 12.50% don’t know about this.
Question 17. For green electricity the prices are?

Now after looking on current electricity price response, authors will check their response against green electricity. The result shows that most of the respondent doesn’t know about green electricity prices and their percentage among all respondent is 43%, 34% said green electricity prices are higher than conventional electricity providers, 19% said both type of electricity prices are same or averagely same, while 4% said green electricity prices are lower than other companies.

<table>
<thead>
<tr>
<th>Price against Green electricity</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower</td>
<td>4%</td>
</tr>
<tr>
<td>the same / average</td>
<td>19%</td>
</tr>
<tr>
<td>Higher</td>
<td>34%</td>
</tr>
<tr>
<td>Don’t know</td>
<td>43%</td>
</tr>
</tbody>
</table>

Question 18. I believe that many other households in my municipality have changed electricity supplier?

To check the reference group has influenced in choosing of electricity provider researcher put this question in front of respondents to check their response. The result shows that 2.25% strongly disagree with the question, 8.25% partly disagree, 24.25% said they do not have any idea about that, 12.75% are uncertain may be or may not be, 20% are partly agree with the question while mostly respondents which are 32.50% of total feel that many other households in their municipality have changed electricity supplier.

We can conclude that reference group/society has major impact on individual in choosing the energy that other uses. If members of closed group using green energy the individual would also tend to choose the green energy.
Question 20. What is the probability that you would switch from your current electricity supplier to new one?

After getting idea about respondent awareness to electricity companies, price perception and reference group information now researcher will put a direct question to find out their idea about changing electricity supplier. They are willing to or not? The result indicates that 2% are unlikely to switch, 6% said certainly they can switch, 15% each said no chance to switch or probably they can switch, 31% respondents said they are likely to switch and 32% said improbable they can switch their current electricity supplier.
Question 22. I received information concerning renewable energy suppliers?

The analysis of this data indicates that companies are not providing information regarding the renewable energy. As results show that 54% of respondents answered that they are not getting information regarding renewable energy suppliers, 20% said they get information while rests of 26% are uncertain that they get it or not. This is another factor due to which green electricity companies have low market share.

Question 23. My current supplier provides renewable electricity?

After checking awareness now researcher will look at how many percentage of respondents are using renewable electricity provider. Result indicates that 47.75% are using conventional electricity providers 26.50% are using green electricity provider while 25.75% are uncertain about this while their electricity provider is either providing green electricity or not.
Question 24. Why wouldn’t you sign a contract with a supplier providing green energy?

From previous question it’s clear that mostly households are not using green electricity, so now researcher will find out why not what is the reason, buy putting up stated question. 37% respondent said this is due to lack of information they don’t sign contract with green energy Provider Company, 24% said it will take time and prices of green electricity are too high, and 15% that they are satisfied from current electricity Provider Company.

<table>
<thead>
<tr>
<th>Why Not Green Energy</th>
<th>Prices are high</th>
<th>Lack of information</th>
<th>Takes time</th>
<th>Satisfied current supplier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage</td>
<td>37%</td>
<td>24%</td>
<td>24%</td>
<td>15%</td>
</tr>
</tbody>
</table>

Question 25. What makes you want to choose a certain electricity provider?

After finding out reasons of not selecting green electricity provider now author will check what makes respondent to chose their current electricity provider. Results shows that mostly respondents think lower price is the main factor in selecting electricity provider in Sweden 57.75% agree on this. According to 25.25% respondents social responsibility is the main factor, while 6.75% think about innovation and 10.25% prefer that product which is most fit or better for environment. So authors can conclude that social responsibility factor plays significant role after price in choosing electricity provider. But from previous questions it was shown that green electricity companies are doing nothing in building awareness.
After analyzing data as a whole now authors find out that mostly males prefer low price while choosing electricity provider than females. If we see social responsibility factor females prefer it then males. Response regarding innovation does not have significant difference in males and females, more males prefer greenest product than females.
Observing from the graph of comparison between occupation and factors in choice of energy, in each of these factors it is clear that all of the occupations support the lower prices of the energy. Vast majority of the all occupations prefer those energy suppliers who provide the good services. Perhaps from the above data it is clear that the majority of the students and employed person supports the lower prices and quality of the service of Energy Company.

From each of the above factors it is cleared that environmentally friendly and other people used electricity have influenced on the consumers. It is evident from the above graph employed person have positively relationship with the factors influence on the consumers in choosing energy company.
We will analysis of relationship between the occupation and the factors choosing the energy company. More specifically, in occupations particularly students and the employed person have more attitudes towards choosing the energy companies who owned social responsibility, on the other side self employed over all have least interest in the other factors, and this data shows that they have least interest in the lower price and social responsibility of the company. It seems that here opportunity is exit for the green energy companies to turn into the socially responsible; they can take advantage in building good image where they are operating.

**Question 26. How much extra would you be prepared to pay per month to get green energy?**

This graph shows that the Swedish peoples are more environmentally conscious and there interest in paying a more for the green energy and they understand the environment impact of other conventional energy resources. Consumers have more positive trends towards supporting the green environment and they are accepting to pay more for the renewable energy. Accordingly, we can conclude from the above graph there is a relationship between female are willingness to pay more for the green energy.
<table>
<thead>
<tr>
<th>Income Range</th>
<th>% of Male</th>
<th>% of Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-50 kr</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>51-100 kr</td>
<td>11%</td>
<td>11%</td>
</tr>
<tr>
<td>101-200 kr</td>
<td>13%</td>
<td>13%</td>
</tr>
<tr>
<td>201-300 kr</td>
<td>17%</td>
<td>17%</td>
</tr>
<tr>
<td>301 kr+</td>
<td>11%</td>
<td>11%</td>
</tr>
</tbody>
</table>

- **Series3**: Represented by the green bar.
- **Series4**: Represented by the purple bar.
- **% of Male**: Represented by the yellow bar.
- **% of Female**: Represented by the blue bar.
5. SUMMARY OF FINDINGS AND ANALYSIS

By using analysis of questionnaire data, this shows that Quality of the service of a firm and lower price are the main factors which influence on the consumers in making the decision. This analysis also support the notion that the consumers who buy the energy are also convinced form their neighbors and society, all these factors have strong influenced on consumers in building their beliefs and behavior towards choosing the energy.

In the questionnaire, respondent were asked whether in the past they have switched the electricity supplier or not. Majority of the respondents answered that they have switched from their electricity supplier. This shows that in Sweden switching in one electricity supplier to other is common and this is a big opportunity for those companies who are turning or planning turn into green.

On the other side, the questionnaire concerning the knowledge of green energy, this analysis shows that the most of the consumers are not well aware about the green energy; instead they are using the green energy. The energy companies who are turning into the green energy can reap the financial and social benefits in future, because Green marketing has long term impact in consumers in the energy market.

Authors noted that responsibility towards environmental issue is also an important factor in making decision of choosing the electricity supplier. The survey result also shows that the consumers are using the Green Energy, but their level of knowledge on energy is low. However, there are a large number of consumers who are not using the green energy but they show the tendency of using the green energy if they provided with low prices.

Our main focused was on the consumer behavior, this survey analysis shows that consumer behavior is developed in the individuals own opinion and to some extent from the social groups or society. When authors compare the survey results of question concerning choice of Energy Company against low price and social responsibility, however trend shows that Swedish
consumers support the low price company but on the same side a majority of the consumers trend also support the social responsibility.

In this survey, from the question regarding the current electricity supplier and the question regarding your actual electricity supplier provides you the green energy. Consumer’s trends shows that Malarenergi, which is based in Vasteras, is not an actual green company and most of the respondents were not well aware about the company, is actual green or not.

However, we compare data how many users in particularly area uses what company, the results shows that Eskilstuna Energy Milo is a green company and most respondents are well aware about the electricity provided by the company is environmentally friendly. On the other side TelgeEnergi, is only providing the renewable energy and this falls in the actual green company but respondents who used energy from this company, was not aware about they are using green energy.
6. CONCLUSIONS AND RECOMMENDATIONS

After the analysis of the survey result, here we can conclude that the majority of Swedish consumers supported green energy and moreover our survey result shows that consumers are willing to pay extra for the green energy if they see some benefit of their money in terms of good quality, services, taking care of customers and society. Consumers are willing to buy the energy from those companies who are supporting Environment and taking care of poor people and if the company owes a responsibility towards society no matter the company is producing the green energy or from other sources people will do mild towards them.

In our research, we find that many consumers are aware of the environmental issues and they feel their concern about the environment, particularly the young consumers and to participate for sustainability of the environment. According to Pickett B., J (2008) consumer would like to buy those products which are environmentally friendly. Consumers need awareness about the clear benefits of the products. Marketers should be careful while using mode of communication that matched with the beliefs and behavior of the consumers. "Product perception is influenced by situational variables and social reference groups".

Usually people perceive that green energy has higher prices, which is supported by our analysis shows that the price and quality of good service are important factors in the consumer's decision to buy the energy. This study shows that the customers are willing to choose another electric supplier who is offering low price and good services. The present study concludes that low price, Environmental communication, society, and social responsiveness are most important factors in decision making. We conclude after analyzing data that social responsibility and low price plays a vital factor during decision making process of selecting electricity provider. These factors develop the behavior of consumer to buy green energy.

The green marketing efforts can develop the consumer behavior towards using of green energy. As we have discussed in our literature review, that companies can adopt the proactive green marketing strategies while keeping the price low and through providing the quality service. By investing in
social cause companies can build image in the minds of consumer. Overall, our study shows that in Sweden, a potential market opportunity exists for the green energy companies if they market their product by taking proactively approach and introduced different benefits in the product for the consumers.

To answer strategic question, authors have presented the Modified strategic model. The true green companies has opportunity to take advantage by adopting proactive strategies to pursue consumers through educating about the adverse effect that conventional electricity has over environment and promote itself as a socially responsible. Environmental modified Strategic model presents different strategies, which companies can adopt while entering in an existing or in new market. If the company is not actually green, they can see what different strategies are available for them when they want to enter into a new or existing market.

We conclude that companies can use ecolabeling of their product in communication; this will build trust that the product is greener and company could differentiate themselves from other companies in the market. As we have discussed in our literature review, this type of companies can build knowledge in the consumer about the environmental effects. On the basis of survey conducted by authors, choice of consumer decision about Energy Company and strategic question; the trend shows that the companies should put more focus in the development of their marketing mix when companies enter into new or existing market. The price factor is most important in marketing mix however this factor could be changed if companies involves in the Social responsibility
6.1. SUMMARY

In summary authors of this thesis have concluded from findings and analysis that the choice of Energy company, whether it is green or conventional, Price is the most important factor. The results show that consumers are conscious about environment and are willing to pay extra for green energy. On the other side marketing communication, persuade benefits and social responsibility of the company are also important factors in effecting consumer’s choice for some certain electricity supplier.

The green energy companies should educate their consumers about benefits of environment friendly electricity and should introduce innovatively products or services. According to the survey results, we conclude that when consumer makes decision he does not consider only the product. But he also keeps other factors in mind. He takes influence from society and interprets information as he receives from different sources.
7. **Future Research**

This academic paper is preliminary study of some factors that affect consumer’s choice for an electricity supplier. The future researches can continue this study by comparing the effect of demographics on consumer’s choice. This will help electricity companies in preparing marketing strategies for green electricity on demographic basis. With the help of this research energy companies will be able to target and approach their potential consumers more accurately.

Sample size for this research was smaller, in future with bigger sample size and more factors can be added to study the consumer behavior. Moreover, further study can identify the potential green segment for the energy market based on Demographic, Psychographics segmentation. Future research can also be taken to see how consumers make decision with respect to gender, age group, occupation and incomes, so researchers have a broader field to invest and come with fruitful results in future.
8. References


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d=56

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Tables and Figures

FIGURE 1 EMISSIONS OF CO2 EQUIVALENT IN THE WORLD, TONES PER CAPITA


FIGURE 2 AVERAGE PRICE OF SPOT TRADED ELECTRICITY CERTIFICATES.
FIGURE 3  INCREASE IN RENEWABLE ELECTRICITY PRODUCTION, 2007–2012,

Source: Retrieved April 6\textsuperscript{th}, 2010.


FIGURE 4  THE TABLE SHOWS NUMBER OF COSTUMERS DIVIDED INTO DIFFERENT KIND OF AGREEMENT.

Source: Statistics Sweden Retrieved April 6\textsuperscript{th}, 2010 from http://www.scb.se/Pages/TableAndChart__92220.aspx
FIGURE 5 AVERAGE ELECTRIC ENERGY PRICE FOR HOUSEHOLD CONSUMERS JANUARY 2008-DECEMBER 2009. CENTS / KWH (EXCL TAXES)

Source: Statistics Sweden Retrieved April 6th, 2010 from

(Villa utan elvärme Swedish to English....Villa but electric heating
Lägenheter......Apartments Villa med elvärme ........residence with electric heating)
FIGURE 6 CONSUMER CHANGE OF ELECTRICITY SUPPLIERS

Source. Statistics Retrieved From April 5,

http://www.scb.se/Pages/TableAndChart____115300.aspx

<table>
<thead>
<tr>
<th></th>
<th>Jan-09</th>
<th>Jan-10</th>
<th>Change %</th>
<th>Feb-08</th>
<th>Jan-09</th>
<th>Feb-09</th>
<th>Jan-10</th>
<th>Change %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of contracts</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Households</td>
<td>45,717</td>
<td>46,321</td>
<td>-7</td>
<td>405,106</td>
<td>515,060</td>
<td>28</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td>15,469</td>
<td>18,730</td>
<td>21</td>
<td>53,016</td>
<td>77,936</td>
<td>47</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sum</td>
<td>65,186</td>
<td>65,101</td>
<td>0</td>
<td>458,122</td>
<td>594,006</td>
<td>30</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

|                  |        |        |          |        |        |        |        |          |
| Volume, GWh      |        |        |          |        |        |        |        |          |
| Households       | 442    | 484    | 10       | 3,271  | 4,746  | 45     |
| Others           | 2,363  | 3,318  | 40       | 8,387  | 9,419  | 12     |
| Sum              | 2,804  | 3,802  | 36       | 11,657 | 14,165 | 22     |

FIGURE 7 CONSUMER, CHANGE OF ELECTRICITY SUPPLIERS.

Source: Statistics Sweden Retrieved April 7th, 2010 from

Source: Retrieved April 3th April, 2010
<table>
<thead>
<tr>
<th>Till end of January</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population at the end of the period</td>
<td>9,259,251</td>
<td>9,345,135</td>
</tr>
<tr>
<td>Population Growth</td>
<td>2,904</td>
<td>4,453</td>
</tr>
<tr>
<td>Excess of births over deaths</td>
<td>-585</td>
<td>1,163</td>
</tr>
<tr>
<td>- Live births</td>
<td>8,930</td>
<td>9,591</td>
</tr>
<tr>
<td>- Deaths</td>
<td>9,515</td>
<td>8,528</td>
</tr>
<tr>
<td>Excess of immigrants over emigrants</td>
<td>3,917</td>
<td>3,297</td>
</tr>
<tr>
<td>- Immigrants</td>
<td>7,944</td>
<td>7,781</td>
</tr>
<tr>
<td>- Emigrants</td>
<td>4,027</td>
<td>4,484</td>
</tr>
<tr>
<td>Changes of marital status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Marriages</td>
<td>2,057</td>
<td>1,936</td>
</tr>
<tr>
<td>- Divorces</td>
<td>1,275</td>
<td>1,308</td>
</tr>
</tbody>
</table>

**FIGURE 8 PRELIMINARY POPULATION CHANGE IN 2010 COMPARED WITH 2009**

**Source:** Statistic Swede Retrieved April, 2010

From [http://www.scb.se/Pages/TableAndChart__25891.aspx](http://www.scb.se/Pages/TableAndChart__25891.aspx)
9. QUESTIONNAIRE

What is your ……………………

1. Vilken är din …………………
   
   You are: Male Femal

2. Du är: Man Kvinn
   
   Right now you are mainly:
   Student Employed Self-employed Retired Other

3. Just nu är du i huvudsak:
   Student Anställd Egen företagar Pensionär Annat

   Year of birth: …………………

4. Födelseår: …………………

   What town do you live in? ………...

5. Vilken kommun bor du i? …………………

   You are living in a: House Apartment

6. Du bor i: Hus Lägenhet In your household there is typically:
   Adults _____ Children

7. I ditt hushåll finns det normalt: _____ vuxna
   _____ barn

   Which electricity company are you using? ………………..

8. Vilket elbolag använder du idag? ………………….

Questions regarding your actual electricity supplier:

   What was the main reason for choosing your current supplier?
   Low prices God services Environmentally friendly No other supplier available
   Other people use them Don’t know Other …………………

9. Vilket var det huvudsakliga skälet till att du valde din nuvarande leverantör?
   Låga prisers Bra tjänster Miljövänlig
   Det fanns inga andra alternativ Andra använder dem Vet inte
   Annat …………………

   Do you mainly use “green electricity”? Yes No

10. Använder du i huvudsak “grön el”? Ja Nej
Quality and Satisfaction

“Overall, I consider my electricity supplier to be good and gives good value for the money”
Strongly disagree Partly disagree Do not know
Uncertain Partly agree Strongly agree
11. ”I allmänhet så tycker jag att min elleverantör är bra och ger ett bra värde för pengarna”
Instämmer inte alls Instämmer delvis Osäker
Instämmer delvis Instämmer helt och hället Vet inte

Trust

“I have confidence in my present electricity supplier”
Strongly disagree Partly disagree Do not know Uncertain
Partly agree Strongly agree
12. “Jag har förtroende för min nuvarande elleverantör”.
Instämmer inte alls Instämmer delvis Osäker
Instämmer delvis Instämmer helt och hället Vet inte

I usually study the electricity bill carefully
Strongly disagree Partly disagree Do not know Uncertain
Partly agree Strongly agree
13. “Jag brukar normalt kontrollera min elräkning noga”
Instämmer inte alls Instämmer delvis Osäker
Instämmer delvis Instämmer helt och hället Vet inte

Commitment

If I could I would rather change to another supplier
Strongly disagree Partly disagree Do not know Uncertain
Partly agree Strongly agree
14. “Om jag kunde så skulle jag hellre byta till en annan leverantör”
Instämmer inte alls Instämmer delvis Osäker Instämmer delvis
Instämmer helt och hället Vet inte

Price perception

Compare to its competitors, I believe that my electricity supplier’s prices are: Lower The same / average Higher Don’t know
15. Jämfört med konkurrenterna tror jag att min elleverantörs priser är:
Lägre Samma / Genomsnittliga Högre Vet inte

Attitude toward switching:

For me, switching from my current electricity supplier to a new one is
Strongly disagree  Partly disagree Uncertain  Partly agree  Strongly agree  Do not know

* A good idea
* Wise
* Unpleasant
* Desirable

16. För mig så skulle ett byte från min nuvarande leverantör till en ny vara:

<table>
<thead>
<tr>
<th>Instämmer</th>
<th>Instämmer</th>
<th>Osäker</th>
<th>Instämmer</th>
<th>Instämmer</th>
<th>Vet inte</th>
</tr>
</thead>
<tbody>
<tr>
<td>inte</td>
<td>delvis inte</td>
<td>delvis</td>
<td>helt</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* En bra idé
* Klokt
* Obehagligt
* Önskvärt

For green electricity the prices are:

| Lower     | The same / average | Higher | Don’t know |

17. För grön el så är priserna:

| Lägre     | Samma / genomsnittliga | Högre  | Vet inte |

**Subjective norms:**
I believe that many other households in my municipality have changed electricity supplier

| Strongly disagree | Partly disagree | Do not know | Uncertain |
| Partly agree     | Strongly agree  |             |           |

18. “Jag tror att många hushåll i min kommun har bytt elleverantör”

| Instämmer inte alls | Instämmer delvis | Osäker | Instämmer delvis |
| Instämmer helt och hållet | Vet inte |

**Past behaviour:**
In the past, I switched electricity supplier ... times

Could you specify the reasons why you switched please? ..........................................

...............................................................

19. Jag har bytt elleverantör totalt ... gånger

Kan du berätta varför du bytte leverantör? ..........................................

...............................................................

**Switching intentions:**
What is the probability that you would switch from your current electricity supplier to a new one

<table>
<thead>
<tr>
<th>Unlikely</th>
<th>Likely</th>
<th>Improbable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Probable</td>
<td>No chance</td>
<td>Certain</td>
</tr>
</tbody>
</table>

20. Hur sannolikt är det att du ska byta från din nuvarande elleverantör till en ny
The idea of having to pay two bills – one for the network and one for the electricity – discourages me from finding another supplier.

Questions regarding the new energy market (Alternative attractiveness):

I received information concerning renewable energy suppliers

Yes Uncertain No

My current supplier provides renewable electricity:

Yes Uncertain No

Why wouldn’t you sign a contract with a supplier providing green energy? (select the 2 most relevant reasons)
The price is too high There is a lack of information

How much extra would you be prepared to pay per month to get 100% renewable energy? ………………… kronor / month

What makes you want to chose a certain electricity provider?

Social responsible Low price Innovations Greenest Product

How much extra would you be prepared to pay per month to get 100% renewable energy? ………………… kronor / month

Hur mycket extra skulle du vara beredd att betala – per månad – för att få 100%
förrybar energi? ..................... kronor / månad

If the electricity prices of the companies are same what other factors influence you to switch the company? ..........................................

27. Om två bolag har samma priser, vad skulle då få dig att byta från det ena till det andra? ..............................................

What is the normal household income per month?

Less than 10.000 kr 10.001-20.000 kr 20.001 – 30.000 kr
30.001 – 40.000 kr 40.001 - 60.000 kr 60.001 – 80.000 kr
80.001 – or more

28. Hur höga är hushållets totala inkomster per månad?

Less than 10.000 kr 10.001-20.000 kr 20.001 – 30.000 kr
30.001 – 40.000 kr 40.001 - 60.000 kr 60.001 – 80.000 kr
80.001 – or more
10. **FURTHER STUDIES**

You can find statistical information about the companies involved in the production, distribution and trading of electricity in Sweden

http://www.svenskenergi.se/upload/Statistik/Kraftläget/vrapp.pdf

The Swedish Research Council provides support for research in all scientific fields.
http://www.vr.se

Europe energy portal provides information & statistics about the EU countries energy market.

www.energy.eu

The Swedish Environmental Protection Agency, responsible for Swedish environment policy.

www.naturvardsverket.se

Facts on energy developed by the Swedish Energy Agency.

www.energikunskap.se

The ManagEnergy website provides case studies and good practices as well as a directory of local and regional energy agencies working on energy efficiency and renewable energies.

http://www.managenergy.net/

Environmental leader, news, articles about environment sustainability, energy efficiency.

http://www.environmentalleader.com/

CSR Europe's information, ideas and advice & address CSR challenges.

http://www.csreurope.org/

Social Venture Network (SVN) international network of companies and organizations, that wants to combine business benefits with an increased focus on ethics, sustainability and social responsibility.
http://www.svensweden.se/
