
Factors Affecting Consumers for Purchasing Electricity in

Sweden

Supervisor

Tobias Eltebrandt

Examiner

Ole Liljefors

Authors

Waqas Anis (841112)

Akmal Mehmood Kalair (850302)

Wednesday, June 02, 2010

School of Sustainable Development of Society and Technology (HST) 2010
The Arabic phrase shown above is pronounced as *Bismillah ir-Rahman ir-Rahim*, and is a beautifully poetic phrase which offers both deep insight and brilliant inspiration. It has often been said that the phrase *Bismillah ir-Rahman ir-Rahim* contains the true essence of the entire Qur’an, as well as the true essence of all religions.

Muslims often say this phrase when embarking on any significant endeavor and the phrase is considered by some to be a major pillar of Islam. This expression is so magnificent and so concise that all but one chapter of the Qur’an begins with the words *Bismillah ir-Rahman ir-Rahim*.

**The common translation**

"*In the name of God, most Gracious, most Compassionate*

(Wahiduddin, 2008)
Acknowledgment

It is not less than an honor to show our deepest gratitude to the Mälardalen University to provide us opportunity to study here and supervisor of our thesis, Mr. Tobias Eltebrandt whose guidance and on time support proves a helping hand to make this piece of paper fruitful. We always found him besides us to give better perspective on the topic, suggested questions and maintaining and organizing meetings and interviews with our selected company (Eskilstuna Energi & Miljö).

We are grateful to the Eskilstuna Energi & Miljö for their continuous support and providing us all sort of information about green energy, their consumers and sharing strategies that they are applying to get the maximum output from that.

We are indebted to my many of our colleagues (Saksakaow, Niramol, Rong, Maite, Linh, Jokling and Jittranuch) to elaborate the mistakes or problems in our writing through critical opposition and provide us chance to always up to the mark for our work and should not deviate from the planned track.

We are feeling proud to say that whatever we are today is due to the prayers, total devotion, love and all kinds of support from our parents without their encouragement and shore up we can’t be able to be at this place and that is the main hub of our inspiration for this work as well.

Last but not least our friends from all around the globe, especially Aamir Raza, Usama Awan, Sweed Ullah, Muhammad Imtiaz, and Maite Menuet helped a lot in collecting the data and suggesting articles and books so that turn this dream into reality and due to that we are able to present in a good manner.

Waqas Anis & Akmal Kalair
Abstract

Title
Factors affecting consumers for purchasing electricity in Sweden.

Purpose
As Sweden is one of the countries who pays a lot of attention towards the sustainability of the society, eco green businesses and also promotes environmental friendly products. So the purpose of this study is to analyze the factors which influence consumers before choosing any electricity supplier, whether it is low price, better services, environmental friendly or availability. And in this way we can check finally that how much people concern about environment and environmental friendly products.

Methodology
We have defined the procedure through which we did this research; mainly focus on the quantitative research which we get from questionnaires from different people belong to different groups to analyze the different factors that influence the consumer’s choice. We also included literature review and conceptual frame work of academic work to provide more depth to the readers about the subject. Besides that the data collection and theory of research is presented in this part.

Finding and Analysis
Finally, we presented analysis through using the adopted model on consumer decision process and green marketing strategies for competitive advantage and the findings that we get through questionnaire.

Conclusion
The factors which affect the consumer choice on choosing electricity supplier in Sweden are majorly influenced by low prices followed by social responsibility, services and environmental friendly.

Key word
- Miljö (environment)
General Information

Group Number 2471
Course Name EFO – 705 Master Thesis
Specialization International Marketing
Internal Supervisor Tobias Eltebrandt
External Supervisor Konstantin Lampou
Submission Date 02nd June, 2010

About Authors

Waqas Anis

Textile engineer by profession and having two years experience in marketing and sales; which made him eager to study international marketing and Mälardalen University turns his dream into reality.

Email: wickyboye@hotmail.com Mobile: +46 700 323 961

Akmal Mahmood Kalair

Textile engineer by profession and having two years experience in garment dyeing at leading factories of Pakistan.

Email: akmalklair@yahoo.com Mobile: +46 760 857 057
Dedication

We believe that it gives immense pleasure and mental satisfaction if we bestow our quality work to someone who is very close to us in our life.

So we want to dedicate this thesis to our families as no one else is as close as they are and it is due to their humble and continuous prayers that we reach up to this level in life.

May Allah Almighty gives them reward for their continuous efforts for the betterment of our career.

Waqas Anis & Akmal Kalair
Table of Contents

1. INTRODUCTION ........................................................................................................... 1
   1.1. About Eskilstuna Energi & Miljö ........................................................................ 2

2. STRATEGIC QUESTION ........................................................................................... 3

3. RESEARCH QUESTION ............................................................................................ 3

4. CHOICE OF TOPIC .................................................................................................... 3

5. METHODOLOGY ......................................................................................................... 5
   5.1. Research Methods ................................................................................................. 5
   5.2. Data Collection Methods .................................................................................... 5
      5.2.1 Primary Data ..................................................................................................... 5
      5.2.2 Secondary Data .................................................................................................. 8
   5.3. Reliability ............................................................................................................. 8
   5.4. Limitation ............................................................................................................. 8
   5.5. Obstacles in Research .......................................................................................... 9

6. LITERATURE REVIEW ............................................................................................ 10
   6.1. Carbon Footprint .................................................................................................. 10

7. CONCEPTUAL FRAMEWORK .................................................................................. 12
   7.1. Consumer Behaviour ......................................................................................... 12
   7.2. Considerable Factors for Consumers .................................................................. 12

8. FINDINGS .................................................................................................................. 15
   8.1. Nationalities ......................................................................................................... 15
   8.2. Gender ................................................................................................................ 16
   8.3. Income ................................................................................................................ 17
   8.4. Occupation .......................................................................................................... 18
   8.5. Location .............................................................................................................. 19
   8.6. Living in ............................................................................................................... 19
   8.7. Reason for choosing current electricity provider ................................................. 20
   8.8. Receive information about green electricity ....................................................... 21
   8.9. Use green electricity ......................................................................................... 22
   8.10. Green electricity price ....................................................................................... 23
   8.11. Why do not use green electricity ....................................................................... 24
   8.12. Considerable factors for switching electricity provider ..................................... 25
8.13. How much extra money you will pay for green electricity

9. ANALYSIS

9.1. Analyzing different factors with respect to Occupation

9.2. Analyzing different factors with respect to Income

Electricity consumers with income less than 10,000 SEK per month

9.3. Analyzing different factors with respect to Gender

9.4. Willingness to pay extra, who receive information about renewable energy

9.5. Analyzing the attitude of consumers with and without children

9.6. Various factors with respect to people living in Apartments and houses

10. CONCLUSION

11. RECOMMENDATIONS

12. FUTURE RESEARCH

13. BIBLIOGRAPHY

14. APPENDIX

14.1. Green Energy

14.2. Barriers to Green Energy Penetration

14.3. Some Definitions

14.4. Questionnaire

Swedish Version

English Version
Table of Figures

Figure 1. Percentage share of electricity resources. source: EEM website ............................... 3
Figure 2. Source: Carbon Footprint Website............................................................................ 11
Figure 3. The Consumer Decision Process Model. Source: Fuller 1999 ................................. 13
Figure 4. Source: Adopted model by authors ........................................................................ 14
Figure 5. Nationalities .............................................................................................................. 15
Figure 6. Gender ....................................................................................................................... 16
Figure 7. Income level of respondents ..................................................................................... 17
Figure 8. Occupation ................................................................................................................ 18
Figure 9. Location of respondents ............................................................................................ 19
Figure 10. Living in apartment or home ................................................................................... 19
Figure 11. Reason of choosing current electricity company .................................................... 20
Figure 12. Information about renewable energy ...................................................................... 21
Figure 13. Use green electricity ............................................................................................... 22
Figure 14. Green electricity price ............................................................................................ 23
Figure 15. Why do not use green electricity .......................................................................... 24
Figure 16. Factors for switching electricity provider ............................................................... 25
Figure 17. Extra paying for green energy ............................................................................... 26
Figure 18. Comparison with respect to occupation ................................................................. 28
Figure 19. Comparison between income and factors consideration ....................................... 31
Figure 20. Comparison between gender and factors consideration ....................................... 32
Figure 21. Comparison between receiving information & willingness to pay extra ............... 33
Figure 22. People living with/ without children ....................................................................... 35
Figure 23. People living is apartments & houses ..................................................................... 37
Figure 24. Consumer Decision about electricity supplier, source: authors ................................. 41
1. **INTRODUCTION**

*This chapter begins with the general overview of the research area and it further includes the problem statement, purpose, research question and structure of the thesis.*

Although there are different opinions about the greatest invention but according to a survey conducted by BBC, UK it has been observed that many people are in favor of electricity. (www.bbc.co.uk, n.d) so there is no ambiguity if we say that electricity is the biggest invention on the planet, start looking from the minor things at our home (electric bulb) to the major things (heavy industrial machines and main frame computers) which make our life meaningful and convert our dreams into reality as no one can imagine that without the presence of this useful invention we cannot use all that machines and also all the development was not possible and we might still spending our life like the stone ages.

With the passage of time development in energy and electricity sector increases and reaches to a level from where it started effecting the overall environment and becomes hazardous for the habitants of the society and also a lot of resources have to use to generate electricity. So government agencies and environmental friendly organizations took the bold step to emphasize on the importance of energy saving and environmental friendly electric products and especially developed countries took the initiative to explore certain areas which can sufficiently produce energy without damaging the society and environment.

According to E. Hetesi it has been pointed out after several studies that it is not only good quality and customer satisfaction are the factors which lead electricity market towards the profitability infect there are several other things which have to be considered for it (Hetes, 2009). It has been said in the annual brochure by Fortum\(^1\) that minimum cost, competitive advantage and services are the factors which can take the Nordic electricity market to a better place along with the customer satisfaction and concern for environmental (Lilius, 2007).

\(^1\) One of the leading electricity provider companies in Sweden.
So we decided to work on the concept of green marketing and our chosen industry for that is energy sector in Sweden, which is very attractive now a day and we expanded our area of research by looking at the consumers’ attitude towards deciding about the electricity supplier and which factors they especially focus before choosing it. And the factors on which we will emphasis during the whole research are; price, services, environmental friendly and availability.

1.1. ABOUT ESKILSTUNA ENERGI & MILJÖ

We have collaboration with EEM (Eskilstuna Energi & Miljö) which is owned by Eskilstuna Municipality. And we got some beneficial help from them in understanding the electricity market of Sweden and how electricity companies operate.

It is one the biggest and main service provider of electricity, district heating, water, sanitation and waste water service to the habitants of Eskilstuna, we worked with them to evaluate that how much they work according to the demand of sustainability and what marketing practice they are using currently and how green energy marketing strategies can influence their sales. (EEM Website, 2010)

Right now they are providing three different types of electricity, which includes Bio electricity, Bra miljöval and basic electricity, Bio electricity is the one which is being prepared at EEM and the others they outsource from different companies. But the basic electricity that they provide is also quite suitable for the sustainability of the environment; it includes both water and all the renewable energy sources. Below given image can best explain the percentage share of electricity resources (Lindqvist, 2010)

------------

2 Type of electricity offered by EEM. Exact meaning is, “Good Environmental Choice”
2. **STRATEGIC QUESTION**

A strategic question is not a research question and cannot be answered by doing research; it concerns the future and can only be answered by judgment and act. *Fisher* (2007, P 34-35)

*What are the measures that energy companies should take to market green electricity?*

3. **RESEARCH QUESTION**

*What factors (price, Service, environmental friendly or availability) influence the consumer’s choice for electricity supplier?*

4. **CHOICE OF TOPIC**

We will try to elaborate the importance of green marketing in the energy sector, how it can be useful for the sufficient increase in sales for the energy producing companies in Sweden and how it influences the consumers to think about it before actually finalizing any supplier for their electricity provider.

As Sweden is the country where people can choose about their electricity provider rather than many developing countries where only a single electricity provider is working with the monopoly of government and people do not have any option to think about any other company and they are helpless of choosing any other good supplier in terms of facilities, price and environment friendly. One of the worst example of this is Pakistan now a days where people have to bear load shedding of 10 to 20 hours a day because government are unable to pay money to the current electricity providers and also not taken any step to
introduce other private suppliers and create a competition among the suppliers of energy market, which can results in the better product in cheaper price (Info Pakistan, 2010). Even though we are conducting this research in the Swedish market but it can also be useful for the developing countries as well to think about it in two ways.

- Different supplier of energy or electricity
- Save the Environment

So it can be a good opportunity to do our thesis on this topic where we can analyze some companies that how they present their offerings and what measures/ factors they should adopt to promote green energy marketing, which can has influence over the ratio of their sales as well. On the other hand we are curious to know that what are the important steps/ factors that people consider before actually choosing any company; is it the matter of price, better services or they also think about the environment as well. So these are the reasons which lead us to work on this topic.
5. **Methodology**

This part includes the information about how we conducted the research; firstly we have covered the concept of quantitative research, secondly we have focused on the data collection methods followed by reliability limitations and obstacles during the tenure of research.

5.1. **Research Methods**

According to Colin Fisher, there are two different kinds of research methods; **quantitative** method deals with numbers and uses statistical tools to get the result while **qualitative** research methods emphasis on in depth information to reach the conclusion by focusing on words *(Fisher, P 62, 2007)*

In the above research, ratio is approximately 70 - 30% between quantitative and qualitative research respectively because major portion of our findings are dependent upon questionnaire which we have circulated among different sort of people and besides that we have also focused on the quality as well by getting the chance to work with Eskilstuna Energi & Miljö, who is the major supplier of electricity in Eskilstuna. We had numerous meetings with the representative of development department and got some useful information about electricity market, their way of operations and their strategies regarding environmental friendly products.

5.2. **Data Collection Methods**

Generally there are two types of data collection used for any research; primary and secondary and in this study majorly we focused on primary data to reach to the maximum level of satisfaction.

5.2.1 **Primary Data**

Since the study is mainly composed of quantitative and primary data, which is collected through questionnaire; which was distributed to those people who pays for their bills and we deliberately decided to not to involve those students who lived in student apartment
where they don’t have to pay separate bills for their electricity and we have distribute the questionnaires in Stockholm, Västerås, Eskilstuna and some other areas.

5.2.1.1 Questionnaire

The questionnaire was presented in Swedish only, even though we made it in English but with the help of our supervisor we have translated it to minimize the confusion among different answers for same type of questions and also to provide ease to the habitants of Sweden as we only have to distribute in Sweden.

According to the guidelines in Fisher (2007), regarding the choice of questionnaire format, we include the following Questionnaire formats.

- Dichotomous Questions
- Multiple Choice Question
- Checklists
- Open Questions

5.2.1.2 Questionnaire Design

There are several methods to design the questionnaire but we have structured our questionnaire according to the strategic, research question and framework that we have used to answer these questions.

Questions 1-7 are considered as background questions which were asked to know about the basic things of respondents which can affect on the choice of electricity supplier. (Go to Appendix, Page 58)

Questions 8-15 are emphasis on the current electricity supplier, which is being chosen by the respondents. It gave the idea that why they chosen that specific supplier and which are the factors that they considered while choosing. (Go to Appendix, Page 58-59)
Questions 16-21 consist on the personal factors of the respondents. It helped in understanding that whether respondent is willing to change the supplier or not. (Go to Appendix, Page 59)

Questions 22-28 are totally based on the renewable energy market, which includes the questions about green energy sector and which things are important for respondents and how much extra he/she can spend for green energy promotion and usage. (Go to Appendix, Page 59-60)

5.2.1.3 Distribution of Questionnaire

We had numerous options in mind in the beginning to circulate the questionnaire among different regions and to different class of people but finally we used only two methods to complete this task.

The first option that we used to get the answers from many people at single time is in train, we planned several trips to go to Stockholm, Västerås and Arboga by train and conducted that questionnaire because normally people have some ample time so that proved to be quite feasible because many people work in Stockholm so we got a good idea about the working class of Sweden as well for electricity and energy problems.

Secondly we visited public places like bus and train stations, center of towns and public gardens to get the opinion of people about our academic research.

5.2.1.4 Sample Size

Even though our research is purely based on the conventional sampling but with the understanding of our supervisor, we have decided that our sample size for the questionnaire should be 400. But to fulfill this task we had to ask around 1000 people because neither every person is willing to do nor he/she has the time to solve it.
5.2.1.5 Population

In this research our main population was the habitants of Eskilstuna, Västerås but as we travelled a lot in trains for the fulfillment of questionnaires that’s why we got a chance know about the opinion of many other people who lived in other parts of Sweden like Stockholm, Göteborg, Katrineholm, Strängnäs, Arboga and few other small towns. And we think it was a good sign for the academic work to include so many places for different opinion.

5.2.2 Secondary Data

Secondary data was gathered through related books, previous thesis, articles, journals and websites from internet. But our major sources are; Joseph & Kredler, 2009, Peattie & Crane, 2005 which we have used to compare in our analysis and the book on consumer decision process by Fuller, 1999 through which we have adopted a model and used to find the answers of our research question.

5.3. Reliability

The First hand data collection for the purpose of reliability is highly subject; several checks have been included in the questionnaires to insure the reliability but as it is purely dependent upon the respondent of different backgrounds, time and situation. So one of the major steps that we had taken; is to ensure the presence of any researcher while conducting the questionnaire to give appropriate answers to the queries of some people and to make it interesting for them by telling them a little bit about this work.

5.4. Limitation

Although we have time of around 10 weeks to complete this task but the wideness of the topic and establishing links with the corporate sector time is always being the biggest challenge to meet our requirements and for that we might have to narrow down our theme and have to focus on the major part but as we reached to the decision about our topic earlier and also have sufficient connections with the industry so we tried our level best to cover it in a good sense and produce a result oriented paper within the given span of time. But still to complete the task of questionnaire took more than our expected time, which
resulted in difficulty for completing this task and writing findings and analysis in much less time than expectation that’s why we were hardly able to manage the task in time.

5.5. **Obstacles in Research**

Best things to get most response about questionnaire is trains and busses as people have plenty of time and they can spend few minutes in filling forms but biggest problem that we have faced during questionnaire distribution is when ticket checker in trains stopped us; that we are not allowed to do that without the permission of *SJ Management* which wasted a lot of our time in managing and completing our task of getting 400 response within time.
6. **LITERATURE REVIEW**

In this section we give an overview of the related theories and researches to give an idea about our area of research.

We have used various theories and research papers for our research. We used the work of Phil Shepley \( (\text{Shepley, 2010}) \), L. Bird \( (\text{L. Bird, 2002}) \) and Painuly \( (\text{Painuly, 2000}) \) on green energy. We also used various research articles of Ryan H. Wiser on green energy marketing. These research articles and theories gave us a brief introduction and up to dated knowledge about the green energy marketing. \( (\text{Wiser R., 2000}) \) As we are studying only the Swedish market, there is a very good study about energy usage in Sweden. Schippers has done this research in which he has shown the energy usage trends in the Swedish market. Although the research was done in 1990’s, but it still has the potential to guide us and give us some important information and guideline about the energy usage trends in the Swedish market. \( (\text{L. Schipper, 1993}) \)

Jay Zarnikau has done some very good work on consumer’s attitude about green marketing. We have reviewed his research to understand some important aspects of consumer’s attitude towards green marketing. \( (\text{Zarnikau, 2003}) \)

6.1. **CARBON FOOTPRINT**

“It is a measure of the impact of our activities on the environment and in particular climate change. It relates to the amount of greenhouse gases produced in our day to day lives through burning fossil fuels for electricity, heating and transportation etc”. \( (\text{CarbonFootprint, 2010}) \)

In other words it is a measurement of all greenhouse gases which we individually and on industrial level produce.
Below given pie chart shows the main elements which make the sum of carbon footprint by a normal person in developed world.

![Pie Chart](image)

**FIGURE 2. SOURCE: CARBON FOOTPRINT WEBSITE**

There are two parts which made Carbon footprint, which are as follows.

- Primary Footprint (Green Part)
- Secondary Footprint (Yellow Part)

**Primary Footprint**

All the things on which we have direct control over the emissions of CO\textsubscript{2} are basically considered as primary footprint, e.g. burning of fossil fuels including domestic energy consumption and transportation (car and plane).

**Secondary footprint**

All the products that we indirectly used and caused emissions of CO\textsubscript{2} are associated with secondary footprint - to put it very simply – “the more we buy the more emissions will be caused on our behalf”.

(CarbonFootprint, 2010)
7. **CONCEPTUAL FRAMEWORK**

*This section covers the concepts, understanding and theories which are related to academic work and which we will try to use in different parts of our research.*

7.1. **CONSUMER BEHAVIOUR**

“It is the psychology that how consumer’s think, feel, select and influenced by his or her environment (culture, family, signs and media)”. (Perner, nd)

Some other researches show that there is a direct and positive impact on the green behavior if consumer has more income and education. (Joseph & Kredler, 2009) Anderson & Cunnigham, 1972 cited in Kreidler, N.B and Joseph M.S (2009 P. 232)

According to the surveys reports mostly European consumers are interested in green products and especially electricity and they are willing to pay extra for green products. And it is also observed that 92% of European consumers have adopted environmental sustainability programs (Peattie & Crane, 2005).

7.2. **CONSIDERABLE FACTORS FOR CONSUMERS**

Although in our research we focused on primary data and analyzed that data to get the answer of our strategic and research questions, but we also observed couple of models to guide us throughout the completion of our research. We used Fuller’s “*The Consumer’s Decision Process Model*” but we modified that model according to our research. We added the factors that we want to study in our research, so that we can see their affect on the consumer’s decision making. (Fuller, 1999)

There are numerous factors which consumer considers before choosing electricity and besides that it is not only in electricity sector infect it is our normal habit to think before actually buying or adopting anything and in the electricity this thing becomes more important because we can’t see the product which we are about to buy other than the glowing of tube light or using any machinery.
In the late 90s, many European countries changed the way of supplying electricity and allowed households to choose the supplier of electricity by their own, even though Sweden has introduced the green energy concept in 1996 but this behavioral change of changing electricity supplier has been increased during the last two years. *(Söderholm, 2008)*

Fuller (1999) has suggested that purchase decision of consumer help the marketers to propose the marketing mix for the achievement of sustainability targets 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”.

So we have decided to take the help from the model suggested by Fuller (1999) about the purchase decision that what are the steps involved which actually consumers think before deciding anything.

But as we have some specific factors on which we want to emphasis so we want to change the model a little bit according to our requirement and need.

We have added few things at the stage of information search or during the information search and then final purchase process or the final decision has been made and we have neglected the post purchase behavior as well because our research includes the factors which influence consumers not what is good or effective in longer run as well. So our final model is look like;
So if we try to elaborate the model that we have made, the first thing that is in the mind of consumer is the choosing of electricity supplier which we named as ‘Problem Recognition’ according to Fuller 1999 and when any consumer feel him/ herself in that situation the next step that he/ she is looking for is information regarding possible and available companies and as far consumer starts searching there are several things that can prompt in the mind of consumer and that are those factors which we have mentioned in next step, on which basically our whole academic work is dependent.

So our emphasis on the below given findings is on those factors whose answer we got through questionnaires.
8. FINDINGS

Our sample group for the thesis was the people living in Sweden and paying for their electricity. We asked about more than 1000 people to complete the figure of 400 questioners. And we did this in houses, apartments and public places in Västerås, Eskilstuna and Stockholm. We also circulated it in trains and busses between Eskilstuna, Västerås and Stockholm. So our findings of the data are described below:

8.1. NATIONALITIES

Out of 400 respondents, 93, 25% were the Swedish nationals and remaining 6, 75% were people who are currently living in Sweden and paying for their electricity, but don’t have a Swedish nationality.

![FIGURE 5. NATIONALITIES]
8.2. **Gender**

Women form the bigger part of our respondents population. They there were 56, 75% female respondents as compared with 43, 25% male respondents.

![Gender](image.png)

**FIGURE 6. GENDER**
8.3. **Income**

21, 50% of our respondents have an income lower than 10,000 SEK. 18, 75% have income between 10,001 - 20,000 SEK. 15% lie between 20,001 - 30,000 SEK. 13% of the respondents have an income between 30,001 - 40,000 SEK while 13, 50% of the respondents have a monthly income between 40,001 - 60,000 SEK. 5, 75% of the respondents have an income level between 60,001 - 80,000 SEK and 4, 75% of the respondents have income more than 80,000 SEK per month.

![Income Level of Respondants](image_url)

**FIGURE 7. INCOME LEVEL OF RESPONDANTS**
8.4. **OCCUPATION**

Out of 400 respondents, 46% are employed people. On the second place are the students who are 39% of the total population. There were 5, 50% retired people in the respondents. Self employed and pensioners constitute to the total population of the respondents by 5% and 4, 50%, respectively. So we can see that employed people and students form the biggest part of our respondents’ population that is almost 85%.

![Occupation Diagram](image-url)

**FIGURE 8. OCCUPATION**
8.5. Location

27, 25% of the respondents belong to Västerås. There are 26, 75% respondents from Eskilstuna and 8, 75% are from Stockholm. 36, 50% of the respondents are from the areas of Sweden other than these cities. There were 0, 75% of the respondents who did not mention their location on the questionnaire.

![Location Pie Chart](image)

**FIGURE 9. LOCATION OF RESPONDANTS**

8.6. Living In

60, 75% of our respondents are living in apartments while remaining 39, 25% of the respondents are living in their homes.

![Living in Pie Chart](image)

**FIGURE 10. LIVING IN APARTMENT OR HOME**
8.7. REASON FOR CHOOSING CURRENT ELECTRICITY PROVIDER

The biggest number of respondents, that is 24, 50%, said that they chose the current electricity supplier because it provides electricity at lower price than the competitors. 10, 25% of the respondents considered good service as the main factor while selecting the electricity supplier. 9, 25% of the respondents said that they had no other option available. 5, 50% of the respondents selected their electricity supplier because many other people in their social circle were using the same supplier. Only 5% of the respondents considered environment friendly electricity while choosing their electricity supplier. 28% of the respondents did not know about their electricity supplier’s name or they were unable to remember the name while filling in the questionnaire. 15, 25% of the respondents had some other reasons for choosing their electricity supplier. 2% of the respondents did not answer the question.

![Reason of Choosing Current Company](image)

**FIGURE 11. REASON OF CHOOSING CURRENT ELECTRICITY COMPANY**
8.8. RECEIVE INFORMATION ABOUT GREEN ELECTRICITY

Only 25% of the respondents receive information about green electricity. 25.5% of the respondents were not certain about it. The biggest subgroup of the respondents, that is 48% of the respondents, said that they do not receive any information about green electricity. Only 1.5% of the respondents did not answer this question.

FIGURE 12. INFORMATION ABOUT RENEWABLE ENERGY
8.9. **USE GREEN ELECTRICITY**

Majority of the respondents’ do not use green electricity. 62% of the respondents are not using green electricity. 26% of the respondents said that they use green electricity, while 14% of the respondents did not answer this question.

![Use Green Electricity](image)

**FIGURE 13. USE GREEN ELECTRICITY**
8.10. **GREEN ELECTRICITY PRICE**

47% of the respondents said that they do not know about the green electricity prices. 30% of the respondents think that price for green electricity is higher. 18% think that the price is average while only 4% think that the prices are lower. 2% of the respondents did not answer this question.

![Green Electricity Price Chart]

**FIGURE 14. GREEN ELECTRICITY PRICE**
8.11. **Why do not use green electricity**

Most of the respondents, that are 43%, do not use green electricity because it is expensive. 28% of the respondents said that they have lack of information about green electricity. 16% of the respondents were satisfied with their current suppliers and did not want to change. 4% think that it takes time while 6% said they have some other reasons for not using green electricity. 3% of the respondents did not answer this question.

![Why Do not Use Green Electricity](image)

**FIGURE 15. WHY DO NOT USE GREEN ELECTRICITY**
8.12. CONSIDERABLE FACTORS FOR SWITCHING ELECTRICITY PROVIDER

Most of the respondents, 68%, consider price as the most important factor while searching for an electricity provider. 14% of the respondents think the social responsibility as the most important factor. Only 7% of the respondents said that they consider green electricity as the most important factor during their decision making process. 8% of the respondents did not answer this question.

FIGURE 16. FACTORS FOR SWITCHING ELECTRICITY PROVIDER
8.13. **How Much Extra Money You Will Pay for Green Electricity**

Most of the respondents, 36%, said that they will not pay even a single penny extra for green electricity. 17% of the respondents said that they will pay 1 - 50 SEK extra for green electricity. 16% were ready to pay 51-100 SEK extra for green electricity. 10% of the respondents were willing to pay 101-300 SEK extra for green electricity while only 4% were willing to pay more than 300 SEK extra for green electricity. 17% of the respondents did not answer this question.

**FIGURE 17. EXTRA PAYING FOR GREEN ENERGY**
9. **ANALYSIS**

Here we will try to analyze different factors which affect consumers to select electricity supplier which is our major part of thesis and those factors are price, services, environmental friendly or availability.

9.1. **ANALYZING DIFFERENT FACTORS WITH RESPECT TO OCCUPATION**

**Students**

Majority of the students said that low price is the factor that mainly affects their choice for an electricity supplier. There were 20, 51% students who ticked low price as the main factor influencing their decision making process. 10, 25% of the students said that they selected the current supplier because there was no other alternative available for them. On the third place were good services. 8, 97% of the student consumers said that they see services offered the company as the most important factor while making their decision to buy electricity. Only 5, 76% of the student consumers think environment friendly electricity as main factor for selecting an electricity supplier. 14, 10% of the student consumers said that they have some other factors that influence their selection process.

**Employed**

For the employed people, again, low price came out as the most influential factor while selecting electricity supplier. 27, 72% of the employed consumers think price as the main factor during their electricity supplier selection process. On the second place are good services. 11, 96% of the employed people consider services as the main factor while selecting their electricity supplier. Only 4, 89% of the employed consumers said that they consider green electricity as the top priority. 16, 85% of the employed consumers said that they have some factors other than those mentioned in the questionnaire.
35% of the self employed consumers think low price as the most important factor while deciding some electricity supplier. 15% of the self employed consumers selected the electricity supplier because there was no other option available for them. 10% people selected their supplier because of good services. 10% people said that they had some other reasons for selecting their electricity supplier.
**Pensioner**

38% of the pensioner consumers consider price as the most important factor for selecting electricity supplier. 16% of these consumers’ had no other option available. 11% of the pensioner consumers think good services as the most important factor. Only 5% of the pensioner consumers chose their electricity supplier because of environmental reason. 11% of them said that they had some other reasons for selecting their electricity provider.

**Others**

14% of the other people had no other option available for them. 9% think price as the most important factor for them to choose some certain electricity provider. No one in the retired consumers’ think environmental friendliness as the main factor during their decision making process. 18% of the retired consumers’ said that they had some other reasons for choosing some certain electricity supplier.

So from the figure 18; we can see that pensioner consumers are more conscious about low price, while students are slightly more caring about the environment and green electricity comparing to other occupations. Besides that all other factors are almost similar for all consumers with respect to different occupations.
9.2. **ANALYZING DIFFERENT FACTORS WITH RESPECT TO INCOME**

*Electricity consumers with income less than 10,000 SEK per month*

63, 97% of these consumers said that they think low price as the most important factor for choosing an electricity supplier. 16, 27% of this group of consumers consider social responsibility of the supplier as the most important factor. Only 9, 3% of these consumers think about green electricity while choosing their electricity supplier.

*Consumers with income between 10,001 - 20,000 SEK per month*

69, 33% of these consumers think low price as the most important factor for them while choosing an electricity supplier. 13% voted for social responsibility while only 6, 67% consider green electricity as the most dominant factor for them while choosing an electricity supplier.

*Consumers with income between 20,001 - 30,000 SEK per month*

66, 67% of these consumers think about price when choosing an electricity supplier for them. 13, 34% consider social responsibility as the most important factor while only 11, 67% of these consumers think for green electricity when choosing an electricity supplier.

*Consumers with income between 30,001 - 40,000 SEK per month*

75% of these consumers think as price the most important factor while choosing an electricity supplier. 19, 23% voted for social responsibility while only 2% of these consumers think about green electricity.

*Consumers with income between 40,001 - 60,000 SEK per month*

70% of these consumers think about low price while choosing an electricity supplier. 20% think about how social responsible the electricity supplier is, while only 3, 7% of these consumers voted for green electricity as the most important factor.
Consumers with income between 60,001 - 80,000 SEK per month

82, 6% of these consumers think that price matters the most for them. 4, 34% of these consumers voted for each of the social responsibility and green electricity.

Consumers with income more than 80,001 SEK per month

78, 94% of these consumers consider low price as the most important factor for them while choosing an electricity supplier for them. 15, 78% of these consumers think social responsibility of the supplier as the most important factor. No one in this group of consumers think about green electricity as the most important factor.

![Comparison between Income & Factor Consideration](image)

**FIGURE 19. COMPARISON BETWEEN INCOME AND FACTOR CONSIDERATION**

From this graph (figure 19); we can conclude that consumers having higher income are more sensitive about the price of the electricity that they are using rather than the consumers having lower income. Similarly consumers with lower income are more consideration for green product than the consumers having higher income.
9.3. **ANALYZING DIFFERENT FACTORS WITH RESPECT TO GENDER**

We also tried to analyze the effect of gender on factor consideration. We wanted to see if gender has any effect on consumer’s behavior towards these factors.

**Male consumers**

Most of the male consumers, that is 68.20%, think low price as the most important factor while choosing electricity supplier. 10.98% consider social responsible as the most important factor for them while 9.24% of male consumers consider green electricity as the most important factor.

**Female consumers**

The female attitude towards these factors is similar to the male attitude. Majority of the female consumers think low price as the most important factor. 16.74% of these consumers...
consider social responsible as the most important factor for them. Only 5, 72% of the female consumers said that they consider green product as the most important factor while selecting electricity supplier for them.

From the figure 20; we can see that male consumers are more conscious about green product than female consumers, while female consumers give more value to social responsibility than male consumers. Both are almost equally sensitive about low price.

9.4. WILLINGNESS TO PAY EXTRA, WHO RECEIVE INFORMATION ABOUT RENEWABLE ENERGY

![Comparison Between Receiving Information & Willingness to Pay Extra](image)

**FIGURE 21. COMPARISON BETWEEN RECEIVING INFORMATION & WILLINGNESS TO PAY EXTRA**

*Consumers Who Receive Information Regularly*

The majority of these consumers, that is 39%, said that they will not spend even a single penny extra for green electricity. 20% of consumers belonging to this group are willing to pay an amount up to 50 SEK per month on green electricity. 15% say that they can spend 51-100
SEK per month extra for green electricity. Only 4% were willing to pay an amount more than 300 SEK extra per month for green electricity.

**Consumers Who do not Receive Information**

The consumers who do not receive information about green electricity have almost similar attitude as the consumers receiving information. 35% of these consumers say that they will not pay any amount extra for green electricity. 17% are willing to pay an amount up to 50 SEK per month extra for green electricity. 19% are willing to pay between 51 - 100 SEK per month for green electricity. 10% say that they will pay an amount between 101 - 300 SEK per month extra for green electricity. Only 4 % are willing to pay an amount more than 300 SEK extra per month for green electricity.

From the graph above (figure 21); we can see that there is no much difference in willingness to pay extra for green electricity, between consumers who regularly receive information about green electricity and the consumers who do not receive information regularly.
9.5. **Analyzing the Attitude of Consumers with and Without Children**

**Consumers Having no Child**

69, 91% of the consumers who do not have any child consider low price as the main factor. 13, 27% think social responsibility as the most important factor while 7, 50% think green electricity as the main factor.

**Consumers Having One Child**

66, 10% of the consumers think low price is the main factor for selecting any electricity supplier. 18, 64% consider social responsibility as the most important factor. Only 5% of these consumers think green electricity as the most important factor for them.

**Consumers Having Two Children**

65, 78% of these consumers think low price as the most important factor for them to consider while choosing some electricity supplier. 15, 78% consider social responsibility as the most important factor. 11, 84% of these consumers think green product as the most important factor for them.
Consumers Living with More than Two Children

75% of these consumers think that low price is the main factor for them. 7, 14% consider social responsibility as the most important factor. None of these consumers think green electricity as the most important factor for them.

Even though we have seen a little bit trend in those consumers who are living with two children as the percentage is 11, 84% and they give lower value to social responsibility of the supplier and give no value to greener product. On the other hand all other categories lie within 10%. And only price is the factor which has the major impact over the decision about electricity supplier.
9.6. VARIOUS FACTORS WITH RESPECT TO PEOPLE LIVING IN APARTMENTS AND HOUSES

**Comparison Between People living in Apartments & Houses and Factor Consideration**

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Apartments</th>
<th>Houses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social responsible</td>
<td>12.34%</td>
<td>17.41%</td>
</tr>
<tr>
<td>Low price</td>
<td>70.78%</td>
<td>63.87%</td>
</tr>
<tr>
<td>Innovation</td>
<td>4.93%</td>
<td>2.58%</td>
</tr>
<tr>
<td>Green product</td>
<td>6.99%</td>
<td>7.74%</td>
</tr>
</tbody>
</table>

**FIGURE 23. PEOPLE LIVING IS APARTMENTS & HOUSES**

**Consumers Living in Apartments**

70.78% of the consumers living in apartments consider low price as the most important factor for them while 12.34% think social responsible as the main factor. 6.99% of the consumers living in apartments consider green electricity as the main factor.

**Consumers Living in Their Own Houses**

63.87% of the consumers living in houses said that they think low price as the main factor for them responsible for the selection of a certain electricity supplier. 17.4% of the consumers think social responsibility of the supplier as the main factor. 7.74% of the consumers living in houses consider green electricity as the main factor.
From the graph above (figure 23); we can see that the consumers living in their own houses are less price conscious and give more value to social responsibility and green product than the consumers living in apartments.
10. CONCLUSION

With reference to the topic, strategic and research question of our thesis, we came to an admirable decision about the factors (price, services, environmental friendly or availability) which influence people to purchase electricity in Swedish market.

We have tried to see the data from different angles (occupation, income, information and gender) to check the major share of factor but result is almost same in every context. Even though it was in our mind, as Grazin and Olsen 1991 say, before writing the thesis that environmental friendly will be one of the most concerning factor in Swedish market because whenever we talked to anyone about green energy and sustainability they said that, yes it is very important and we should think about that. But results are totally opposite to that and we do not have any hesitation in saying that Swedish people mostly emphasis on price rather than any other factors.

According to Joseph and Kredler 2009, in the beginning we also had a perception in mind that might be young people or especially students will be more willing to support environmental friendly energy but after gathering the data we saw that we were wrong and same is the result for the income level, does not matter if a person is earning less than 10,000 or more than 80,000 SEK they all focus on price. And the second important factor is the services that companies offer, thirdly is the availability even though it is not a big issue to switch to the services of any other company but still people prefer to stick with that what they have in excess easily and finally at 4th place they consider environmental friendly factor is important.

Another aspect that we used to analyse the data is difference of opinion between male and female but statistics show that price is the important factor, secondly they prefer that companies should be social responsible and thirdly they said that they will go for greener product and more or less same ratio have observed between male and female respondents.

Some people said that lack of information can be one of the reasons that people do not go for environmental friendly products but when we compare the information available with willingness to pay extra for green energy there were no astonishing results and all the three
types of respondents Yes, uncertain and No replied between the range of 15-20% they can spend 1-50 SEK. It means it does not matter if people have information or not they are not willing to spend extra on green energy promotions and products.

As far as effects on consumers’ behavior with respect to living with or without children is also not very promising and the same result of lower price has been revealed from here, even though we have seen a little bit trend in those consumers who are living with their two children are mild towards greener environment as the percentage is 11, 84% otherwise all other categories lie within 10%, which falsified our perspective about green energy that might be people having children concern about the environment as their children are the part of future generation (Figure 22).
So if we try to summarize all the results of our finding and analysis, most demandable answer from customers’ point of view is described below with respect to our adopted model (Figure 4)

FIGURE 24. CONSUMER DECISION ABOUT ELECTRICITY SUPPLIER, SOURCE: AUTHORS
11. RECOMMENDATIONS

On the basis of our finding and analysis here in this chapter we would like to add certain recommendations for the green or intended to be green companies, which can be beneficial for them both in terms of revenue generating and concerning about environment.

The green energy companies should not use advertisement or packages based on occupation. As we can see from Figure 18, that there is no much difference in the factor consideration for consumers belonging to different fields of life.

Green energy companies should also avoid any advertisement or special package which will target consumers belonging to some specific income level. As we can see from figure 19, in analysis, that higher income does not assure consumer’s willingness to pay more for green energy. There is also no useful difference between the factor consideration of consumers belonging to different income levels. Similarly green energy companies should also avoid targeting consumers belonging to some specific gender. As figure 20 shows that there is no much difference in factor consideration in male and female consumers.

As we can see from the Fig.22, that a marketing campaign or special package targeting consumers on the basis of their marital status, or the number of children, will not be much beneficial. The Figure shows that there is no much difference in factor consideration for these consumers. Similarly, figure 23 shows that any marketing campaign targeting consumers living in apartments or living in their own houses will not much difference.

So if we try to answer our strategic question on the basis of our findings we recommend companies who are working on greener product that it does not matter how good your product is and how much it is good for environment, the thing that can influence consumers is price and social responsible (Figure 16).

Even though it is difficult to equalize the price of green electricity with the conventional electricity but we think there are certain marketing techniques that companies can adopt to enhance the share of green electricity. As Granzin and Olsen said in 1991 we also recommend that media promotions should appeal the sense of community. Moreover
Ottman said in 1993 that local subsidiaries can be more successful than multinational power organizations.

We will also recommend that companies should create awareness about the carbon footprints (Figure 2) that how much we contribute towards maximizing the omission of CO$_2$ in the atmosphere as it is not only a responsibility of government or a single company to save environment. So everyone should contribute towards it and companies should bring some techniques on papers time to time so that best results can be observed.
12. **FUTURE RESEARCH**

Even though our research work concluded in a respectable manner with positive results for the electricity companies in Sweden that which are the things they should focus but there is no limit for betterment and there is always room for more comprehensive and useful research and we think our work will also lead to a new platform for the research in the energy and renewable sector of Sweden.

Each factor that we have chosen in our research can be chosen individually in future to reach up to the deepest level of affects that can generate from it, e.g. if we say that 30% of the population say that good services are important for them to chose the electricity supplier then which services, either it is customer relation services or the quality services or the billing services and it is same with the other factors as well.

We think that sample size and location can be increased to see the more comprehensive results, because we have limitation of time and revenue that’s why we focused on the limited number of respondents and areas.
13. **BIBLIOGRAPHY**

**BBC, UK** [online] Available at:

http://www.bbc.co.uk/radio4/youandyours/technology_launch.shtml

[Accessed April 04, 2010]


**Eskilstuna Energi & Miljö** [online] Available at: http://www.eem.se [Accessed March 28, 2010]


Lindqvist, M. (2010, April 10). Introduction to EEM. (W. &. Akmal, Interviewer)


Wahiduddin, 2008 Retrieved May 27, 2010, from
http://wahiduddin.net/words/bismillah.html


14. APPENDIX

This section includes all the data, which we used and go through during the process of our research and as it consists of many things so we placed it in the last to have appropriate data in the main paper and if anyone want to see more detailed then he/ she can found it here.

14.1. GREEN ENERGY

Green energy is the energy that is produced in such a way that its production has the least negative impact on the environment. The energy sources in use like fossil fuels have very negative effect on the environment. Solar energy, wind energy, hydro energy and geothermal energy are some examples of the green energy. Every method of energy collection creates pollution, but the purpose of the green energy is to create energy with as little pollution as possible. Cleaning up the present fossil fuels so that more clean energy is produced is also one purpose of green energy. (Shepley, 2010) The green energy products are generally 100% renewable energy offerings which are prepared either from many sources, or only one source, like hydro or solar or wind energy. (L. Bird, 2002)

As the public awareness about environmental issues is increasing, the usage of green energy is also increasing. Renewable energy sources provided almost 20 % of total world energy demand in 2000, and will fulfill 90 % of total primary energy demand in 2020. (Painuly, 2000)

Why Green Energy?

According to David P. Chynoweth, John M. Owens and Robert Legrand, the recent emphasize for green or renewable energy is related to global environmental quality. The combustion of fossil fuels releases toxic compounds like oxides of nitrogen and sulfur. These pollutants cause health and environmental problems globally, the most dangerous of which is global warming caused by increasing concentrations of carbon dioxide. For example, the use of renewable biomass as a source of energy is not only greener but also creates closed balanced carbon cycle with respect to atmospheric carbon dioxide. Another concern is the need for treatment and disposal of large quantities of organic wastes. These wastes are not
only environmental threat but are also potential renewable energy resource. (David P. Chynoweth, 2000)

The increasing population of the globe and the limited quantity of fossil fuels also make it necessary for us to move to renewable energy resources as soon as possible. This will help us in sustaining our species on the planet in a way that is compatible for the preservation of the biosphere. (David P. Chynoweth, 2000)

**Green Energy in Sweden**

Green power was started in Sweden in 1996 and today there are more than 50 companies offering green power options to electricity consumers in Sweden. Most of the companies produce their own green power but there are some companies that purchase green power and resell it to their customers. Green power sales increased about 32% in 2000 and contributed to 6% of the total electricity sales in Sweden. The average price premium in 2000 it was almost 1, 4 öre³/ KWH⁴, which was about 8 - 10% premium over the cost of electricity for commercial and industrial users. (L. Bird, 2002)

Green marketing has the advantage of customers’ willingness to purchase and pay many times higher for the product. The product has the benefit that consumers think it good for their environment and health.

The marketers should take care of some very important points while marketing green energy. Green power programs will be more successful when they appeal to the sense of the community. It means that community based marketing techniques should be used. The collective harm messages like everybody should work to protect the environment should be used. (Granzin and Olsen, 1991) This means that local subsidiaries can be more successful than multinational power organizations, for green power. The marketing messages should be targeted to the most suitable social norms. *(Ottman, 1993)*

---

³ 1 Öre = 0, 00127269 US $

⁴ Kilo Watt per Hour
Here is the graphical representation of the data about the Swedish market energy trends and consumption from Schipper’s report:

Energy Use in Sweden
Delivered Energy By End-Use Sector

Primary Energy Input for Electricity Production

(L. Schipper, 1993)
**Consumer’s Attitude towards Green Marketing**

In this article “Consumer demand for ‘green power’ and energy efficiency”, Jay Zarnikauhas provided some very useful facts about the consumer’s attitude towards green energy in USA. During his research he found that consumers have willingness to pay some extra money for green energy. He divided his sample consumers into various categories according demographic factors like gender, age, salary and education. He gathered data twice and in between the educated the consumers about the benefits of green energy on their environment and health. The data gathered before consumer’s awareness of green electricity and its benefits was called pre event survey data and the data gathered after the awareness of consumers was called post event survey data. Here is the graphical representation of the data,

![Graph showing consumer willingness to pay for renewable energy by gender](image-url)
Fig. 3. Willingness to pay for renewable energy by salary.

(Zarnikau, 2003)

Fig. 5. Willingness to pay for renewable energy by education.

(Zarnikau, 2003)
From the information presented above, we can see that educating consumers about the benefits of green electricity can make consumers to pay higher money for green energy. (Zarnikau, 2003)

However the literature on contingency valuation shows that the actual participation of consumers may be lower than suggested by the survey results because while answering a survey question, the consumer may not consider the costs associated with the green electricity, but he will consider those costs in his actual life. (Wiser R. H., Using contingent valuation to explore willingness to pay for renewable energy: A comparison of collective and voluntary payment vehicles, 2006)

14.2. **Barriers to Green Energy Penetration**

In this article “Barriers to renewable energy penetration; a framework for analysis”, J.P. Painuly, says that green energy has the potential to provide clean energy with sustainability to billions of people in developing countries. Although green energy has so much potential but even then it is unable to penetrate in the developing countries. The barriers in the penetration of green energy in the developing countries may be categorized as:

*Market failure/ Imperfection*

These barriers may be due to lack of investments in green energy, lack of information and awareness, restricted access to technology, lack of competition, missing market infrastructure and/or high investment requirements.

*Market distortions*

This barrier category can be defined as Favor (such as subsidies) to conventional energy, taxes on Green or renewable energy and Trade barriers.

*Economic and financial*

These barriers may be because the green energy might be economically not feasible or there might be lack of financial institutions to support green energy.
**Institutional**

These barriers may be due to lack of a legal/regulatory framework to support green or renewable energy, unstable economic environment, lack of involvement of stakeholders in decision making, lack of R&D culture, lack of private sector and lack of professional institutions.

**Technical**

These barriers may be due to lack of standard and codes, lack of skilled persons and/or lack of entrepreneurs.

**Social, cultural and behavioral**

These barriers may be due to the lack of acceptance of the green electricity by the society or the consumers.

**Other barriers**

Other barriers may be uncertain policies by the government or lack of infrastructure needed for the production of green electricity. (Painuly, 2000)

14.3. **SOME DEFINITIONS**

**Green Power**

“The green power products are generally 100 % renewable energy offerings supplied from either a mix of several renewable, or a single resource, such as hydro or wind”. (L. Bird, 2002)

**Renewable Energy Sources**

While “Renewable energy sources refer to hydropower, biomass energy, solar energy, wind energy, geothermal energy, and ocean energy. The term ‘new’ renewable suggests a greater focus on modern and sustainable forms of renewable energy, in particular: modern biomass energy, geothermal heat and electricity, small-scale hydropower, low-temperature solar
heat, wind electricity, solar photovoltaic and thermal electricity, and marine energy”.
(Johansson, McCormick, Neij, & Turkenburg, 2004)

14.4. QUESTIONNAIRE

Below is the sample of our questionnaire which we used for our research, even though our questionnaire was in Swedish to give ease to the Swedish people to fill it but we have provided both Swedish and English versions so that non Swedish can also understand that what we have actually asked.

Swedish Version

1. Vilken är din nationalitet? ..............................
2. Du är: □ Man □ Kvinna
3. Just nu är du i huvudsak:
□ Student □ Anställd □ Egen företagare □ Pensionär □ Annat
4. Födelseår: ..............................
5. Vilken kommun bor du i? ..............................
6. Du bor i: □ Hus □ Lägenhet
7. I ditt hushåll finns det normalt: ___ vuxna ___ barn
8. Vilket elbolag använder du idag? ..............................
9. Vilket var det huvudsakliga skälet till att du valde din nuvarande leverantör?
□ Låga priser □ Bra tjänster □ Miljövänliga □ Det fanns inga andra alternativ tillgängliga
□ Andra använder dem □ Vet inte □ Annat ......................................................
10. Använder du i huvudsak “grön el”? □ Ja □ Nej
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 hållet □ Vet inte
12. “Jag har förtroende för min nuvarande elleverantör”
□ Instämmer inte alls □ Instämmer delvis □ Osäker □ Instämmer delvis □ Instämmer helt och hållet □ Vet inte
13. “Jag brukar normalt kontrollera min elräkning noga”
Instämmer inte alls □ Instämmer delvis □ Osäker □ Instämmer delvis □ Instämmer helt och hållet □ Vet inte

14. ”Om jag kunde så skulle jag hellre byta till en annan leverantör”
□ Instämmer inte alls □ Instämmer delvis □ Osäker □ Instämmer delvis □ Instämmer helt och hållet □ Vet inte

15. Jämfört med konkurrenterna tror jag att min elleverantörs priser är:
□ Lägre □ Samma / Genomsnittliga □ Högre □ Vet inte

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

Instämmer Instämmer Osäker Instämmer Vet inte inte alls delvis inte delvis helt _
* En bra idé □ □ □ □ □
* Klokt □ □ □ □ □
* Obehagligt □ □ □ □ □
* Önskvärt □ □ □ □ □

17. För grön el så är priserna: □ Lägre □ Samma / genomsnittliga □ Högre □ Vet inte

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


20. Kan du berätta varför du bytte leverantör? (Om du svarade ”noll” på fråga 19 så kan du hoppa över denna)

21. Vilken sannolikhet är det att du ska byta från din nuvarande elleverantör till en ny
□ Osannolikt □ Sannolikt □ Inte troligt □ Troligt □ Inte en chans □ Säkert

22. ”Tanken på att få två räkningar – en från elleverantören och en annan för nätkostnaden – avskräcker mig från att hitta en annan leverantör.”
□ Instämmer inte alls □ Instämmer delvis □ Osäker □ Instämmer delvis □ Instämmer helt och hållet □ Vet inte

23. Har du fått information angående leverantörer av förnybar energi
24. Min nuvarande leverantör tillhandahåller förnybar energi.

Ja ☐ Osäker ☐ Nej

25. Av vilken anledning skulle du INTE använda en elleverantör som erbjuder grön el?
   (Välj de två alternative som du tycker passar bäst)
   ☐ Priset är för högt ☐ Det saknas information
   ☐ Det tar tid ☐ Jag är nöjd med min nuvarande leverantör ☐ Annat…………………………..

26. Vad får dig att vilja välja en viss elleverantör?
   ☐ De är socialt ansvarstagande ☐ Låga priser ☐ Innovationer ☐ Grönaste produkten

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

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

29. Hur höga är hushållets totala inkomster per månad?
   ☐ Mindre än 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 – eller högre
English Version

1. What is your nationality? ..........................

2. You are: □ Male □ Female

3. Right now you are mainly:
□ Student □ Employed □ Self-employed □ Retired □ Other

4. Year of birth: .........................


6. You are living in a: □ House □ Apartment

7. In your household there is typically: ___ Adults ___ Children

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

9. 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 ..................

10. Do you mainly use “green electricity”? □ Yes □ No

11. “Overall, I consider my electricity supplier to be good and give good value for the money”
□ Strongly disagree □ Partly disagree □ Do not know □ Uncertain □ Partly agree □
Strongly agree

12. “I have confidence in my present electricity supplier”
□ Strongly disagree □ Partly disagree □ Do not know □ Uncertain □ Partly agree □
Strongly agree

13. I usually study the electricity bill carefully
□ Strongly disagree □ Partly disagree □ Do not know □ Uncertain □ Partly agree □
Strongly agree

14. If I could I would rather change to another supplier
15. Compare to its competitors, I believe that my electricity supplier’s prices are:
   - Strongly disagree
   - Partly disagree
   - Do not know
   - Uncertain
   - Partly agree
   - Strongly agree

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

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

   a. A good idea
   b. Wise
   c. Unpleasant
   d. Desirable

17. For green electricity the prices are:
   - Lower
   - The same/ average
   - Higher
   - Don’t know

18. 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

19. In the past, I switched electricity supplier ... times

   Could you specific the reasons why you switched please?
   …………………………………………………

20. What is the probability that you would switch from your current electricity supplier to a new one.

   - Unlikely
   - Likely
   - Improbable
   - Probable
   - No chance
   - Certain

21. The idea of having to pay two bills – one for the network and one for the electricity –

   discourages me from finding another supplier.

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

22. I received information concerning renewable energy suppliers

   - Yes
   - Uncertain
   - No
23. My current supplier provides renewable electricity:
   □ Yes □ Uncertain □ No

24. 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 □ It takes time □ I am satisfied with my actual supplier □ Other

25. What makes you want to choose a certain electricity provider?
   □ Social responsible □ Low price □ Innovations □ Greenest Product

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

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

28. What is the normal household income per month?
   □ Less than 10,000 SEK □ 10,001–20,000 SEK □ 20,001 – 30,000 SEK □ 30,001 – 40,000 SEK □ 40,001 - 60,000 SEK □ 60,001 – 80,000 SEK □ 80,001 – or more