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Report

Attitudes and perceptions about becoming a prosumer

Results from a survey among Norwegian residential customers - 2016

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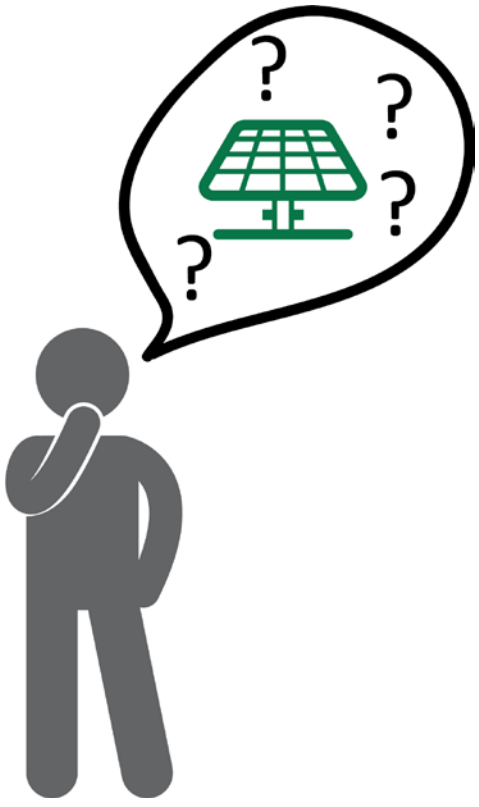

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ABSTRACT
This report presents the results from a survey performed in relation to the research project "Power from the people". The objective of this survey was to investigate the attitudes and perceptions of Norwegian households about becoming/being a prosumer with a PV system. Findings will help understanding motivations, knowledge and barriers for households related to installation of a PV system. The survey was performed between March and May of 2016. The survey was web-based and sent out to a panel operated by TNS Gallup. In total 1102 households answered the survey. Additionally, the survey studied the number of prosumer installations and estimate the households' willingness to pay for a PV system.

The survey generated findings in the following categories: (1) perceptions about household electricity usage and domestic electricity production, (2) related activities and interests about being a prosumer, (3) for those that have not yet considered becoming a prosumer, we elicited responses to investigate people's willingness to pay to become a prosumer and (4) for those that have considered becoming a prosumer, we solicited information about their experience and satisfaction.

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EXECUTIVE SUMMARY

This report presents the results from a survey performed in relation to the research project "Power from the people". The objective of this survey was to investigate the attitudes and perceptions of Norwegian households about becoming/being a prosumer with a PV[1] system (roof-top PV panel). Findings will help understanding motivations, knowledge and barriers for households related to installation of a PV system. Additionally, the survey studied the number of prosumer installations and estimate the households' willingness to pay for a PV system.

TNS Gallup performed the survey on behalf of the research project between March and May of 2016. The survey was web-based and sent out to a panel operated by TNS Gallup. This panel consists of approximately 45.000 persons (15 years and older) recruited in advance to participate in surveys. The households responding to the survey were randomly selected from this group. The survey targeted 1000 completed surveys. To that end, an invitation to participate in the survey was sent via email to 2000 people in the panel with 1128 responding and 1102 completing the survey. The survey closed when it reached 1000 completed responses and therefore precluded slow responders from any opportunity to participate. Table 2.1 reports the summary numbers for the survey sample.

The survey generated findings in the following categories. First, we solicited information on perceptions about household electricity usage and domestic electricity production. Second, we introduced the prosumer concept and technology to respondents, and then asked about their related activities and interests about being a prosumer. Third, for those that had yet considered becoming a prosumer, we elicited responses to investigate people's willingness to pay to become a prosumer. Fourth, for those that have considered becoming a prosumer, we solicited information about their experience and satisfaction.

From the total answers (n = 1102), only 3 respondents were a prosumer and had a PV system already installed and they fed electricity into the grid. 1080 respondents did not have a PV system installed, of which 803 did not consider installing a PV system. 119 respondents were considering a PV system, and 158 respondents are unsecure about this. Based on these answers we get four different groups of different sizes. The different size of the group of respondents interested in a PV system, compared to the size of the group of respondents not interested in a PV system is an indication of PV system as a new technology in Norway.

Perceptions of Electricity

People are concerned about household electricity consumption. When asked about their level of concern regarding electricity consumption at their primary home, about 56.1% of respondents indicated they are quite or very concerned with consumption. Only 13.3% of respondents expressed little concern.

People understand the sources of electricity production. To assess knowledge about electricity production, the survey asked people to share their perceptions of the energy resource mix for electricity production in Norway. Respondents appear informed that hydropower represents most of electricity production in Norway. Two of three (65.2%) respondents indicated that hydropower represented 70-100 percent of electricity production, with one in four (25%) believing that hydropower accounted for 90-100 percent of production.

People have a good understanding of how households use electricity. To assess knowledge about electricity consumption, the survey asked people to indicate their perception of how households use electricity in Norway. Most respondents believe space heating accounts for a large portion of electricity consumption - over 57% of respondents believe space heating represents 50-100 percent of electricity consumption. This

[1] PV = Photovoltaic

corresponds with previous results from REMODECE project (chapter 2.1.3) reporting that space heating is approximately 64% of total yearly electricity consumption for an average household in Norway.

PV system: Background and Interest

There is little baseline interest in PV systems. As expected, nearly all respondents indicated they do not have a PV system (99.8%). Among this group, three in four (74.4%) of respondents indicated they have not considered installing a PV system. Only 11% of respondents indicated that they have considered installing a PV system. From our sample of households, a small number of the respondents have PV systems (1.2%) and even fewer are prosumers (0.3%). This may represent room for growth.

There are many reasons for the lack of interest in PV systems. The three most cited reasons are: installing a PV system is too expensive (34.6%), satisfied with current system (28.5%), and do not know about the possibility of a PV system (25.5%). Other noteworthy issues include uncertainty about the technology (21.3%), not sure about todays regulation and support schemes (20.8%) and whether conditions are suitable (17.2%).

PV system: Willingness to Pay

Following well-established methods, the survey presented a hypothetical scenario that offered respondents the opportunity to indicate a willingness to purchase a PV system at one of three randomly selected costs (20, 40 or 60) [kNOK]. Empirical analyses of the data yield an estimate of an individual's average willingness to pay for a PV system.

The price of a PV system matters. Responses were consistent with the law of demand, with the willingness to install a system being negatively related to the cost (i.e., higher cost leads to less interest). At 20.000 NOK, about 45.7% of respondents indicated a willingness to purchase a PV system. The rate of positive responses declines to 30.5% with a cost of 40.000 NOK and to 25.7% with a cost of 60.000 NOK.

There was some uncertainty in the willingness to pay for a PV system. To assess the validity of the estimates, we asked that people use a ten point scale to indicate the level of certainty that they have in their willingness to pay response (10 very certain; 1 very uncertain). We found that people willing to pay the stated costs have a moderate level of certainty in their positive responses, while those that are not willing to pay the stated costs have a high level of certainty in their negative responses.

The leading reasons that people are willing to pay for a PV system were cost savings and environmental concern. A follow up question asked respondents to indicate one or more reasons for their interest in purchasing a PV system. Among those willing to pay the stated cost, the two most common reasons for their interest include the desire to reduce future electricity cost (68%) and to contribute to a better environment (57.7%). Other reasons that some indicated include an interest in the technology (22.8%), an interest in independence from central providers (22.1%), and a desire to support the market for PV systems (19.1%).

The reasons that people are NOT willing to pay for a PV system focused on uncertainties. The people not willing to pay the stated cost indicated the following reasons for their lack of interest: unsure the house is suitable for a PV system (39.7%), unsure if conditions in Norway are suitable for a PV system (33.2%), unsure if the technology works well (28.8%), and uncertainty about future regulatory framework for prosumers (22%). Reasons were similar for respondents that did not know whether they are willing to pay for a PV system at the stated price.

PV System: Considerations and Experiences

We elicited information from people that have considered installing a PV system and those that have completed an installation of a PV system. Only 11% (n=119) of respondents indicated they are considering installing a PV system. Though limited, the data offers some insights on a few issues.

People seem to learn about PV systems on their own. The survey asked those considering a PV system how they learned about the opportunity. By large margins (65.5%), individual investigation was the most prevailing way people learned about installing PV systems. Only 16.8% of this group (20 of 119) indicated they learned about PV systems from advertisements.

People have multiple reasons for exploring PV systems. The most common reason for interest in a PV system was to save money on future electricity costs, with 85.7% of respondents indicated that it was quite or very important to their interest. Other reasons that were quite or very important to most respondents include: contributing to a better environment (84.0%); contributing to developing the market for PV systems (64.7%); wanting to experience the technology (54.6%); being independent from central power retailers (53.8%); and having an interest in the technology (53.7%).

Insights from people with PV systems is limited. Only 0.3% of respondents (n=3) indicated they have a PV system. Data, though limited, may offer some insights from the perspective of customers with a PV system. The survey asked those with a PV system how they learned about the option (Several answers were possible). The respondents answered that they learned about the PV system from advertisements (2), a call from a vendor (1), individual investigation (1), and 'other' means (1). All respondents with a PV system indicated that contributing to a better environment was the reason behind their purchase of a PV system. Two of the three indicate saving on future electricity costs was a factor. Independence and support PV market were selected by one respondent.

PV System: Knowledge

People know very little about PV systems. Respondents were asked their level of knowledge about issues related to the installation and operation of a PV system. The numbers illustrate a general lack of knowledge with more than half of respondents indicating they have quite poor or very poor knowledge of every listed issue. For each issue, the percentages of responses that indicate a quite poor or very poor knowledge registered: regulatory framework (75%); financial profitability (65%); the time of day of generation (60.7%); the lifetime of the system (70.1%); and the reliability of the system (65.6%). Less than 5% of respondents indicated a quite good or very good knowledge about the regulatory framework. Knowledge also is limited among those considering a PV system.

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Table of contents

1 Survey method and sample

This report presents the results from a survey performed in relation to the research project "Power from the people". The objective of this survey was to investigate the attitudes and perceptions of Norwegian households about becoming/being a prosumer with a PV system. Findings will try to understand motivations, knowledge and barriers for households related to installation of a PV system. Additionally, the findings will study the number of prosumer installations and estimate the households' willingness to pay for a PV system.

The survey was administered to households to assess attitudes, perceptions and activities related to residential electricity. Also, the survey generated data that provides insights on the barriers and opportunities for prosumer development, including information on the willingness of households to pay for a PV system.

TNS Gallup performed the survey on behalf of the research project between March and May of 2016. The survey was web-based and sent out to a panel operated by TNS Gallup. This panel consists of approximately 45.000 persons (15 years and older) recruited in advance to participate in surveys. Respondents to the survey were randomly selected from this group. The survey targeted 1000 completed surveys. To that end, an invitation to participate in the survey was sent via email to 2000 people in the panel with 1128 responding and 1102 completing the survey. The survey closed when it reached 1000 completed responses and therefore precluded slow responders from any opportunity to participate. Table 2.1 reports the summary numbers for the survey sample.

The survey consisted of four sections. The first section solicited information on attitudes and perceptions about household electricity usage and domestic electricity production. The second section introduced the prosumer concept and technology with follow-up questions asking whether the respondents were prosumers, and if not, asking whether they had ever considered being a prosumer. Responses sorted households into one of three categories: (1) not a prosumer and never considered it; (2) not a prosumer but considered it; (3) a prosumer. The subsequent third section of the survey varied for each group. For group (1), the survey investigated the respondent’s willingness to pay to become a prosumer. For groups (2) and (3), the survey solicited information to assess the experience and satisfaction associated with considering and being a prosumer. The fourth and final section collected general information on individuals and households, such as socio-economic, household type/location, etc.

Table 1.1 Number of respondents

	Number of respondents
Contacted	
Dispatched	2.000
No contact achieved	872
Contact achieved	1.128
Withdrawal	
Incomplete	26
Only opened (screening)	0
Technical errors	0
Surveys answered	**1.102**

2 Results

The results from the survey are presented in this chapter. Demographic data are presented in Appendix A, and the questionnaire and the frequency tables related to the responses on each question are presented in Appendix B and C. Cross Tabs related to Willingness to pay are presented in Appendix D.

Based on the different questions the respondents are divided into different groups, as presented in Figure 2.1.

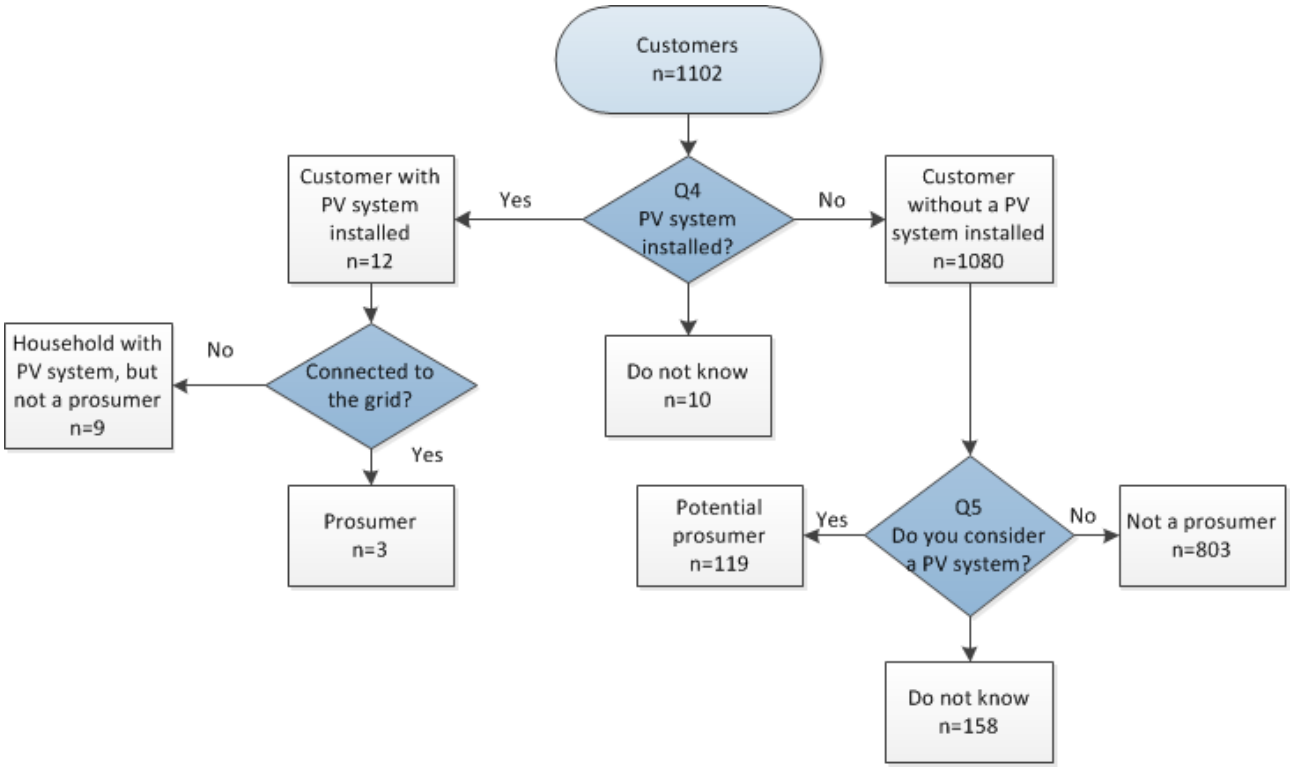

Figure 2.1 Structure of the survey and the number of respondents within each group

The survey had 1102 respondents, and was performed in the first half of 2016. Only 3 out of 1102 respondents were prosumers. The survey was performed at a time when the prosumer market was limited and numbers of prosumers were low. During 2016 it has been a remarkable increase in the number of prosumers witha PV system. In Norway the amount of installed capacity of PV systems at residential customers increased from 825 kWp in 2015 to 7371 kWp in 2016, as illustrated in Figure 2.2.

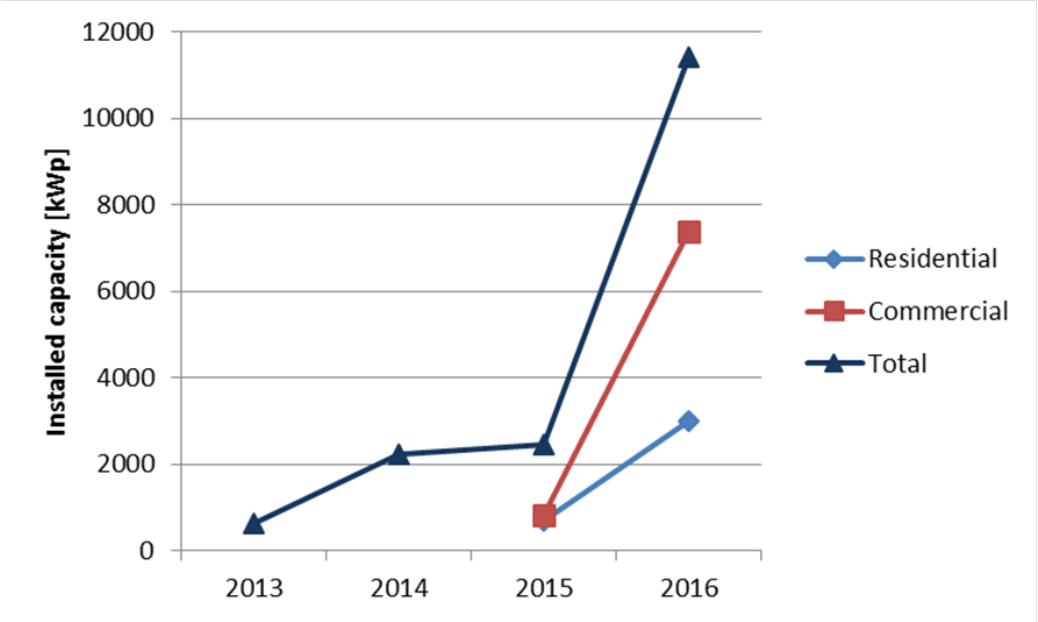

Figure 2.2 Installed capacity [kWp] of PV systems connected to the distribution grid (Norway) [1]

The report first presents findings concerning the respondents without a PV system (n=1080), and though numbers are limited (n=3), responses from respondents with PV systems are presented in chapter 2.5.

2.1 General attitudes and perceptions

2.1.1 Concern about household electricity consumption

The survey started with some questions related to the house (the primary house – not the holiday cottage and such). Figure 2.3 shows that among the total group of respondents about 56.1% of respondents are quite or very concerned with their household's electricity consumption. Only 13.3% of respondents indicate quite or very little concern.

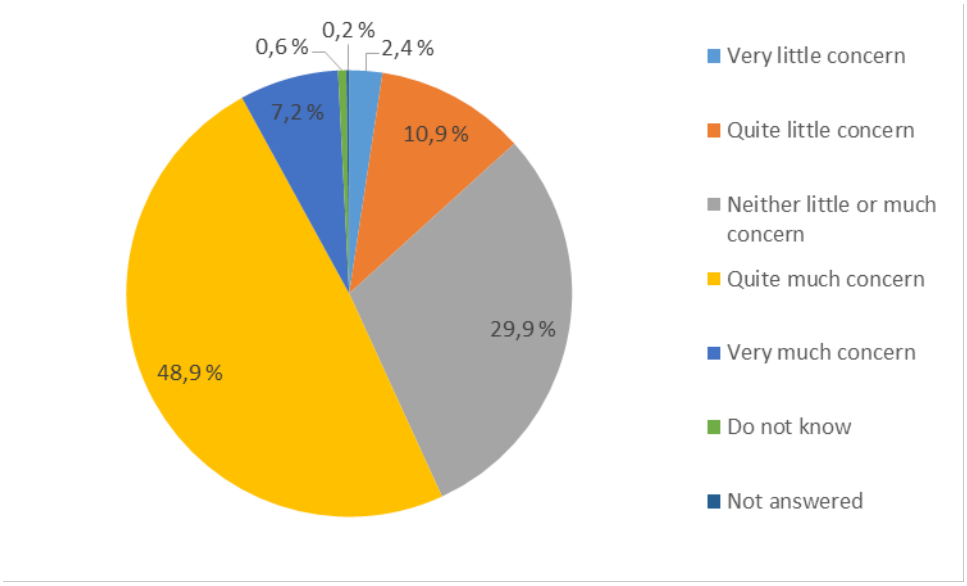

Figure 2.3 How concerned are you related to the electricity consumption of the household? (Q001)

2.1.2 Perceptions about domestic electricity production

To assess knowledge about electricity production, the survey asked people to share their perceptions of the energy resource mix for electricity production in Norway. The respondents appear quite informed that hydropower represents most of the electricity production in Norway. Two of three (65.2%) respondents indicated that hydropower represented 70-100 percent of electricity production, with one in four (25.0%) believing that hydropower accounted for 90-100 percent of production. Respondents stated that some electricity was generated from fossil fuels, with little electricity from nuclear, wind, solar and biofuels.

Based on numbers from Statistical Norway, the total production of electricity in Norway in 2015 was 144 511 GWh [2]. This was split into hydro power (95,8%), thermal/fossil (2,5 %) and wind power (1,7 %). Therefore, respondent perceptions corresponded closely with actual energy mix.

2.1.3 Perceptions about household electricity consumption

To assess knowledge about electricity consumption, the survey asked people to indicate their perception of how households use electricity in Norway. Most respondents believe space heating accounts for a large portion of electricity consumption. Over 57% of respondents indicate space heating represents 50-100 percent of electricity consumption.

44.4% of respondents think that heating tap water represents 10-29% of the electricity consumption. Nearly half (48.8%) of respondents think cooking/white goods represented 10-29% of electricity consumption.

Reviewing reports of actual electricity consumption patterns, respondent perceptions appear to correspond well with actual household use of electricity. REMODECE[2] reports that space heating is approximately 64% of the total electricity consumption of an average household in Norway. Also, REMODECE reports that heating tap water and cooking/cooling/washing represents 15% and 10% of total electricity consumption, respectively.

The split of the yearly electricity consumption for an average household customer in Norway is presented in Figure 2.4.

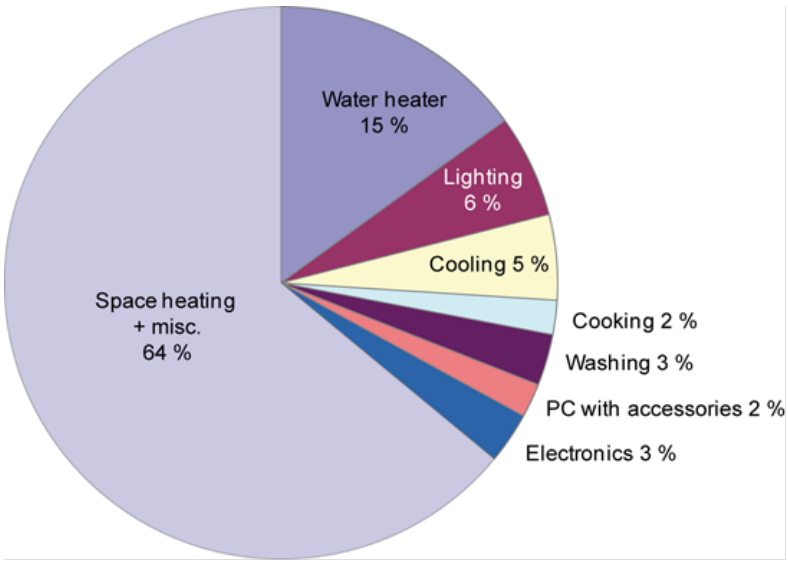

Figure 2.4 Percent Shares of Electrical End-Uses in Norway 2006/2007 [3]

2.2 Prosumer Interest and Experience

After eliciting household perceptions on production and consumption of electricity, the survey identified whether respondents were prosumers with the following question:

Norwegian households can produce their own electricity, by installing a PV system in their house (for example on the roof). The electricity can be used by the customers or feed into the grid. Customers delivering electricity to the grid are often called "prosumers" Do you have a PV system in your house, and feed electricity in to the grid (as a prosumer)?.

As expected, Figure 2.5 shows that a small number of respondents have PV systems (2.0%) and even fewer are prosumers (0.3%). Among the customers confirming that they have PV systems there are some that do not feed electricity into the grid. There might be a misunderstanding of this question, because this group

[2] The REMODECE (Residential Monitoring to Decrease Energy Use and Carbon Emissions in Europe) project was supported within the Intelligent Energy for Europe Programme of the European community (contract no. EIE/05/124/S12.419657). The total project period was from January 2006 to September 2008. The overall objective of the REMODECE project was to contribute to an increased understanding of the energy consumption in the EU-27 households for the different types of equipment, including the consumers' behaviour and comfort levels, and identify demand trends.

could be households with PV systems only producing electricity for their own consumption, or that these households have a PV panel on a cottage not connected to the grid.

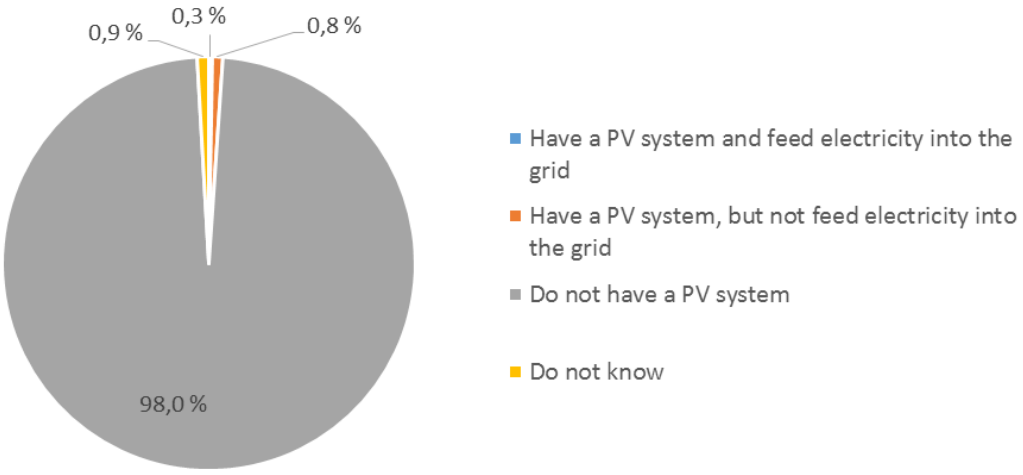

Figure 2.5 Do you have a PV system in your house, and do you feed electricity into the grid? (Q004)

Among those without a PV system, respondents were asked whether they have considered installing a PV system (Figure 2.6). Only 11% of respondents have considered adding a PV system (n=119). Three in four respondents (74.4%) have not considered it (n=803), while 14.6% did not know (n=158).

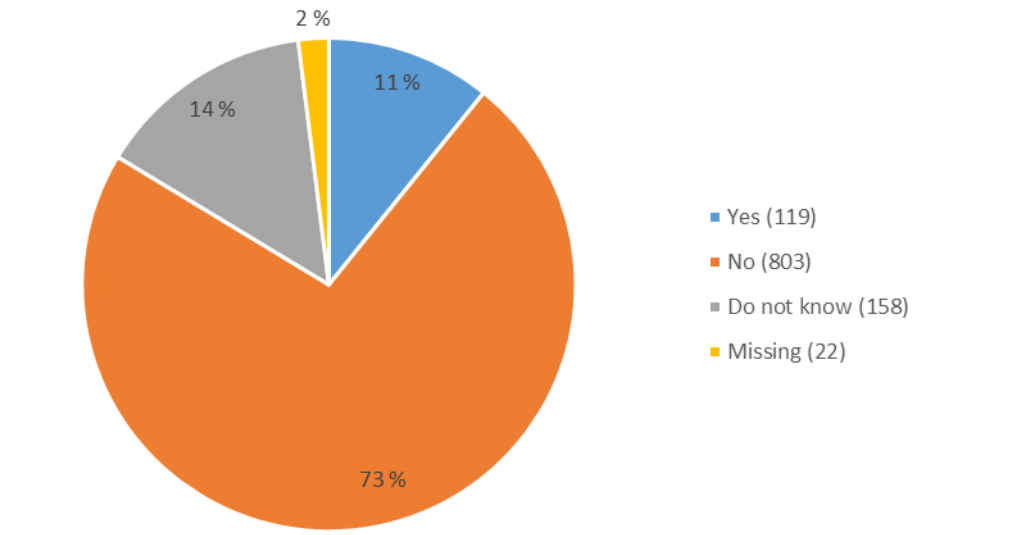

Figure 2.6 Do you consider installing a PV system? (Q005)

2.3 Customers not considering a PV system

2.3.1 Reasons for not considering a PV system (n = 803)

The survey elicited reasons why households have not considered installing a PV system (Figure 2.7). The three most cited reasons are:

- Installing a PV system is too expensive (34.6%),
- Satisfied with current system (28.5%), and
- Do not know about the possibility of a PV system (25.5%).

Other noteworthy issues include Uncertainty about the technology (21.3%) (6_5), Not sure about today's regulation and support schemes (20.8%) (6_4) and Norwegian conditions are unsuitable (17.2%) (6_2).

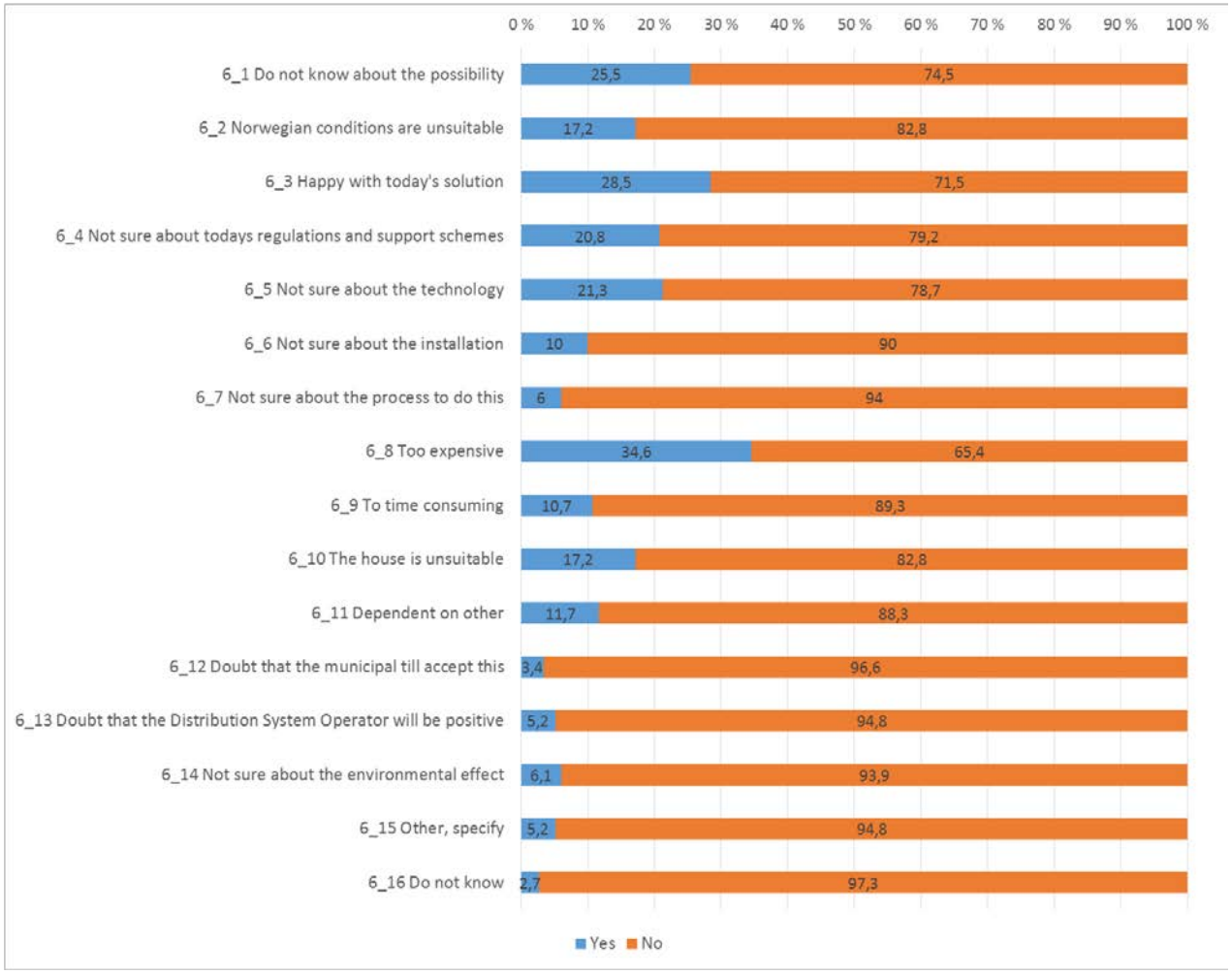

Figure 2.7 What is the main reason(s) that you do not consider to install a PV system? (Q006)

2.3.2 Customer willingness to pay to install a PV system

The next section of the survey focused on eliciting household's willingness to pay for a PV system. This question was asked to all the respondents that had not considered a PV system before they received the survey. Following well-established valuation methods ([3], [4]), the survey presented a scenario of an opportunity to purchase a PV system at one of three randomly selected costs (20, 40 or 60) kNOK. Respondents were asked the following question:

Consider that you get economical grant for investing in a PV system, and the procurement and installation of a PV system would cost you [20, 40 or 60] kNOK. You can use some of the produced electricity yourself, and sell the rest to the grid. Take for granted that this installation is technical possible, would you consider installing in a PV system at this cost?

Responses are consistent with the law of demand, with the willingness to install a system being negatively related to the cost—higher cost leads to less interest. At 20.000 NOK, about 45.7% of respondents indicated a willingness to purchase a PV system. The rate of positive responses declines to 30.5% with a cost of 40.000 NOK and to 25.7% with a cost of 60.000 NOK. An analysis of the data yielded an estimated average willingness to pay of 36.703 NOK.

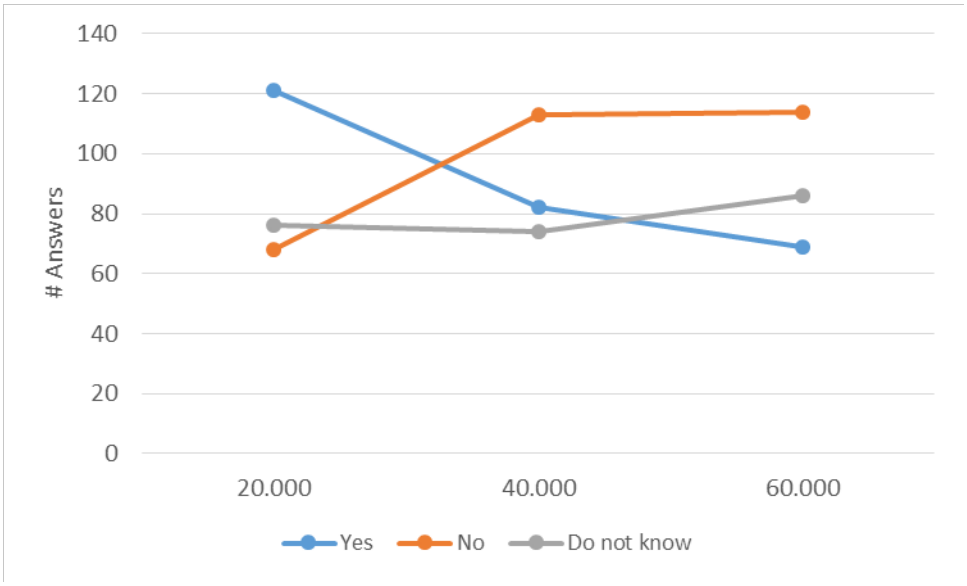

Figure 2.8 Are you willing to invest in a PV system if it would cost you [20, 40 or 60] kNOK? You can use some of the produced electricity yourself, and sell the rest to the grid. (Q007)

To better understand willingness to pay for a PV system, the survey asked respondents to use a ten point scale to indicate the level of certainty that they have in their willingness-to-pay response (10 - very certain; 1 - very uncertain). Survey data show a moderate certainty when the respondents were willing to pay the stated cost, but the data reveal a high level of certainty when respondents were not willing to pay the stated cost.

Willingness to pay for different cost alternatives are presented in Table 2.1. The numbers indicate less certainty in the "yes" responses than the "no" responses.

Table 2.1 "Willingness to pay"-responses for different cost alternatives

Cost alternative [NOK]	Response	Number of responses	[%]	Certainty
20.000	Yes	121	45.7 %	3,9
	No	68	25.7 %	8,3
	Do not know	76	28.7 %	
40.000	Yes	82	30.5 %	4,2
	No	113	42.0 %	8,2
	Do not know	74	27.5 %	
60.000	Yes	69	25.7 %	4,0
	No	114	42.4 %	8,4
	Do not know	86	32.0 %	

2.3.3 Reasons for willingness to pay for a PV system at the specified price

A follow up question asked respondents to indicate one or more reasons for their interest in a PV system. The two most common reasons are the desire to reduce future electricity cost (68%) and to contribute to a better environment (57.7%). Other reasons that some indicated include an interest in the technology (22.8%), an interest in independence from central providers (22.1%), and a desire to support the market for PV systems (19.1%).

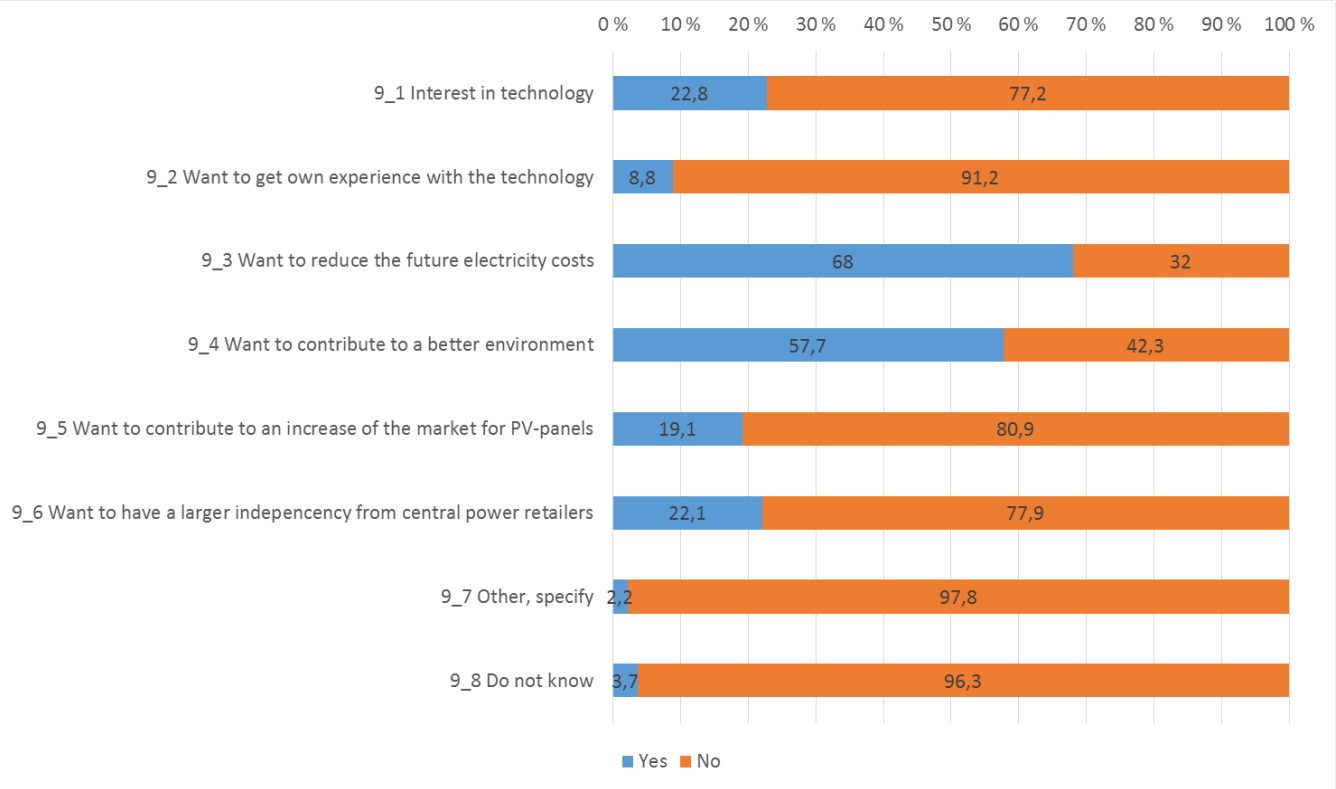

Figure 2.9 What is the most important reason(s) for you to install a PV system? (Q009)

Respondents not willing to pay for PV system at the stated cost indicated the following reasons (Figure 2.10): unsure the house is suitable for a PV system (39.7%), unsure if conditions in Norway are suitable for a PV system (33.2%), unsure if the technology works well (28.8%), and uncertainty about future regulatory framework for prosumers (22%).

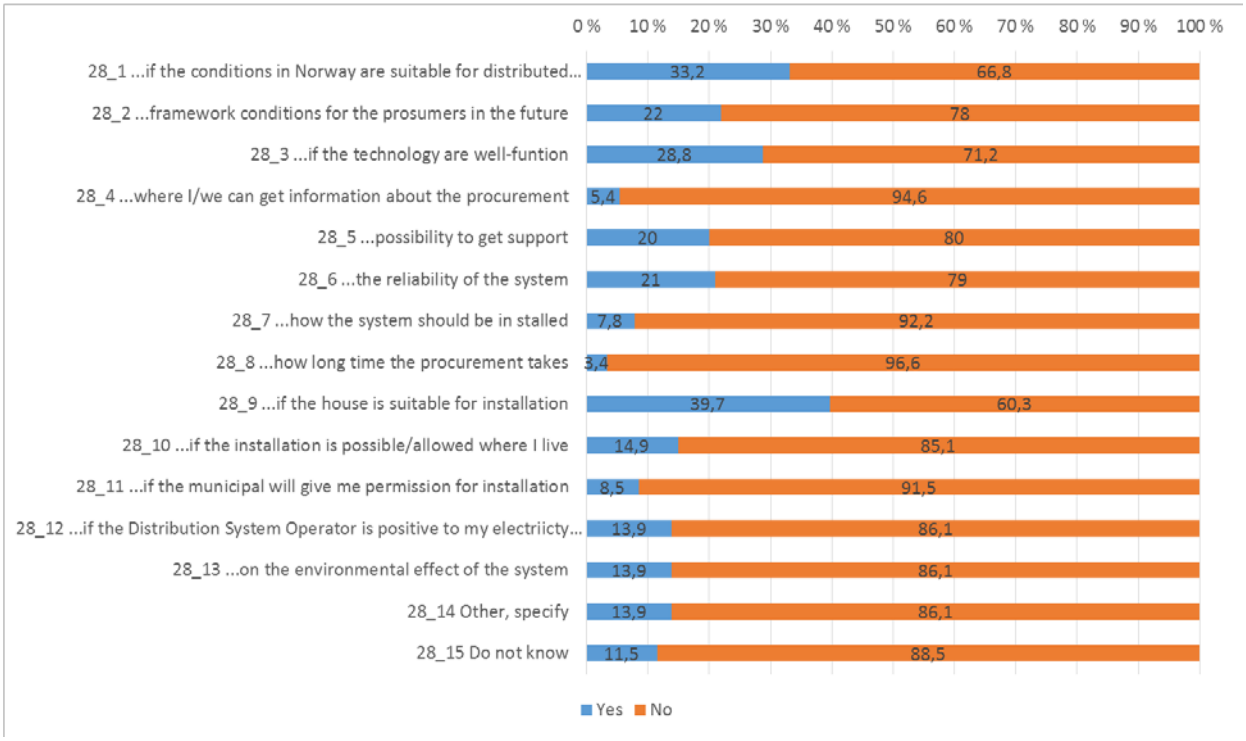

Figure 2.10 What is the importance of the following conditions, related to that you will not install in a PV system at a cost of 20.000 NOK? (Q0028)

Reasons were similar for respondents that did not know whether they are willing to pay for a PV system at the stated price (Figure 2.11).

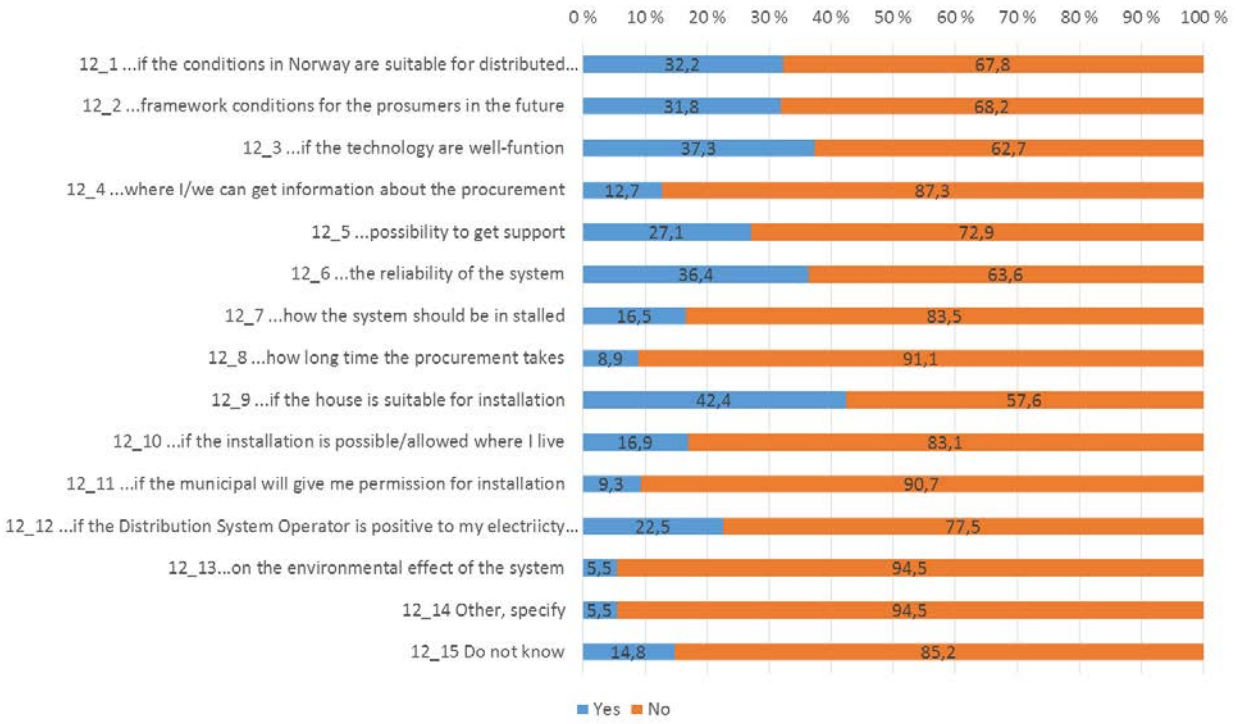

Figure 2.11 How important are the following conditions related to your insecurity for installing a PV system? (Q012)

2.3.4 Knowledge about issues related to installation of PV system

Respondents were asked about their level of knowledge about issues related to the installation and operation of a PV system. The numbers illustrate a general lack of knowledge with more than half of respondents indicating they have quite poor or very poor knowledge of every listed issue. For each issue, the percentages of responses that indicate a quite poor or very poor knowledge were registered: regulatory framework (75%); financial profitability (65%); the time of day of generation (60.7%); the lifetime of the system (70.1%); and the reliability of the system (65.6%). Less than 5% of respondents indicated a quite good or very good knowledge about the regulatory framework.

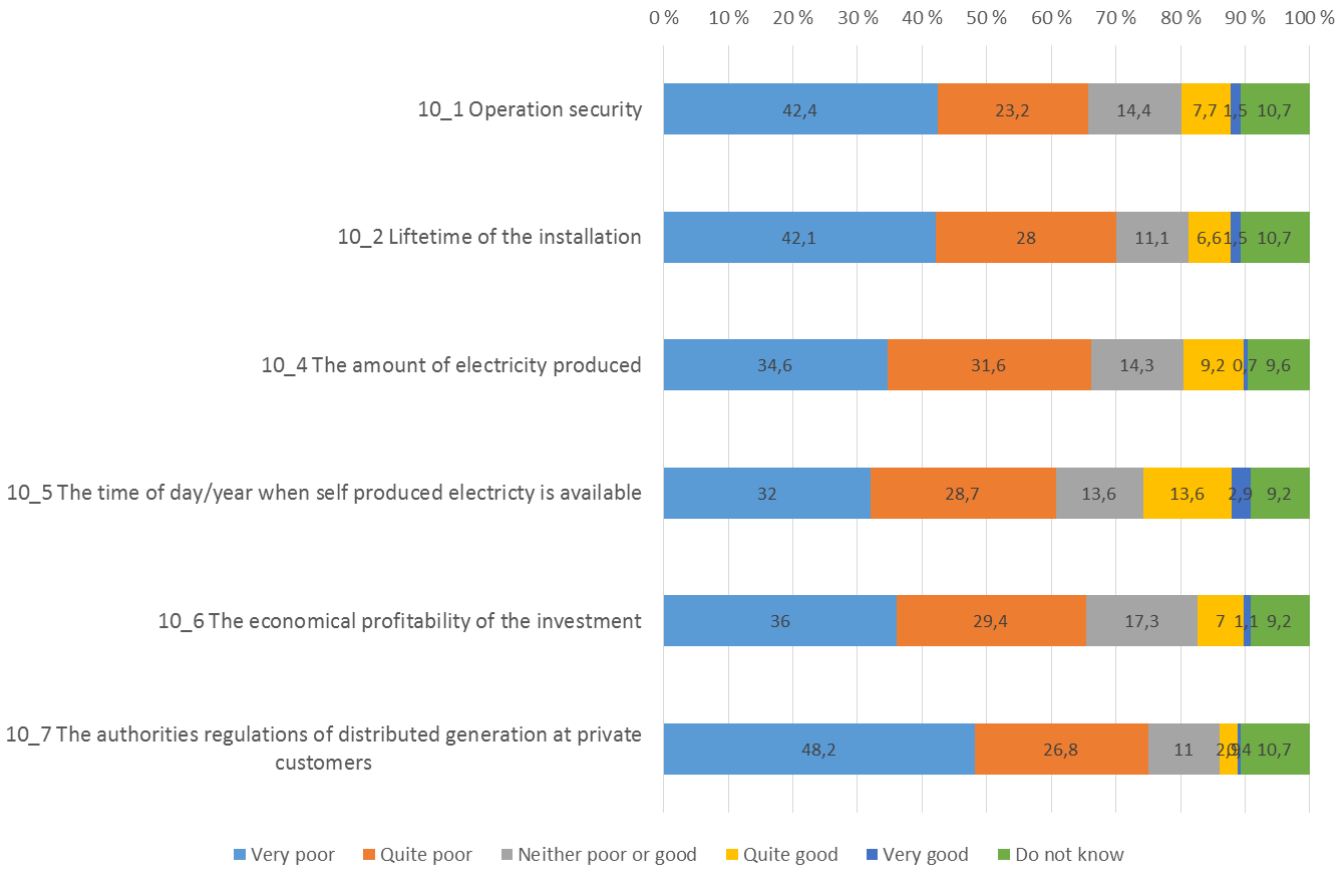

Figure 2.12How little or much do you know about the following conditions related to installation of PV system? (Q010)

2.4 Customers considering a PV system (n = 119)

2.4.1 Sources of awareness

Only 11% (n=119) of respondents indicated they are considering installing a PV system. Though limited, the data offers some insights on related issues. The survey asked those considering a PV system how they learned about the opportunity. By large margins, individual investigation was the most prevailing way people learned about installing PV systems. Only 16.8% of respondents indicated they learned about PV systems from advertisements. Several answers could be given in the questionnaire.

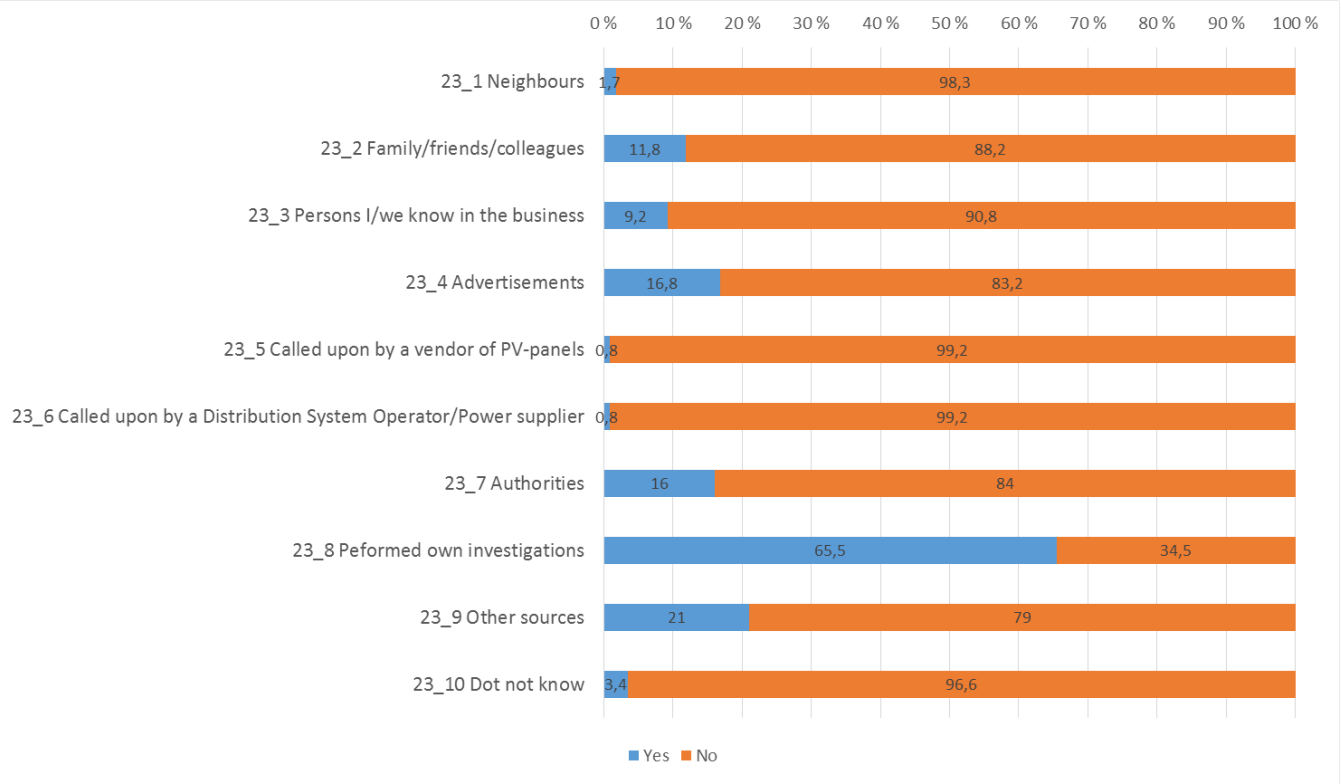

Figure 2.13 Through which channels have you got information about the possibility to install a PV system? (Q023)

2.4.2 Timing of interest

Responses show that interest in PV system is a recent behaviour. Among respondents that have considered a system, approximately two-thirds (68.2%) have looked into within the past two years. Two in five of this group (40.4%) have considered a system within the last year (Figure 2.14).

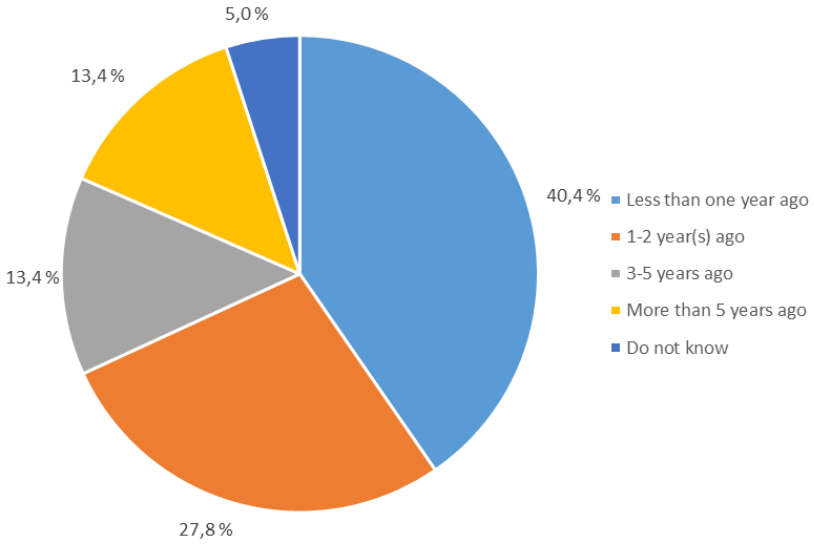

Figure 2.14 When did you start to consider installing a PV system? (Q025)

2.4.3 Reasons for interest

The respondents were asked to share the motives behind their interest in a PV system. The most common reason for interest in a PV system was to contribute to save money on future electricity costs, with 85.7% of respondents indicating it was quite or very important to their interest. Other reasons that were quite or very important to most respondents include: contributing to a better environment (84.0%); contributing to developing the market for PV systems (64.7%); having an interest in the technology (54.6%); being independent from central power retailers (53.8%); and wanting to experience the technology (53.7%).

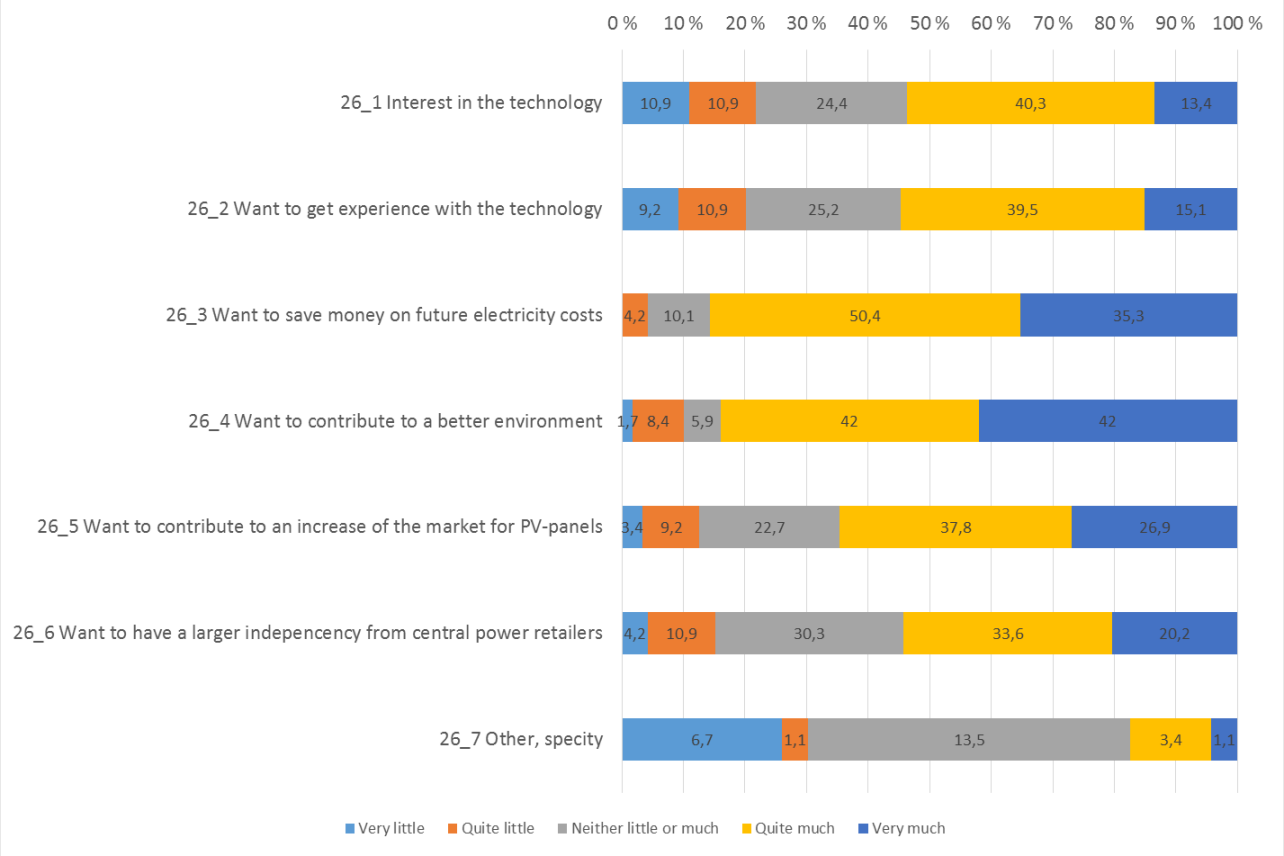

Figure 2.15 – How important are the following conditions related to your interest in installing a PV system? (Q026)

2.4.4 Knowledge about issues related to the installation of a PV system

Respondents were asked about their level of knowledge about issues related to the installation of a PV system. A minority of respondents indicated they were quite or very knowledgeable about any listed issue. Respondents indicated they were least knowledgeable about the regulatory framework (only 13.5% had quite or very good knowledge) and distribution operators (only 14.3% had quite or very good knowledge).

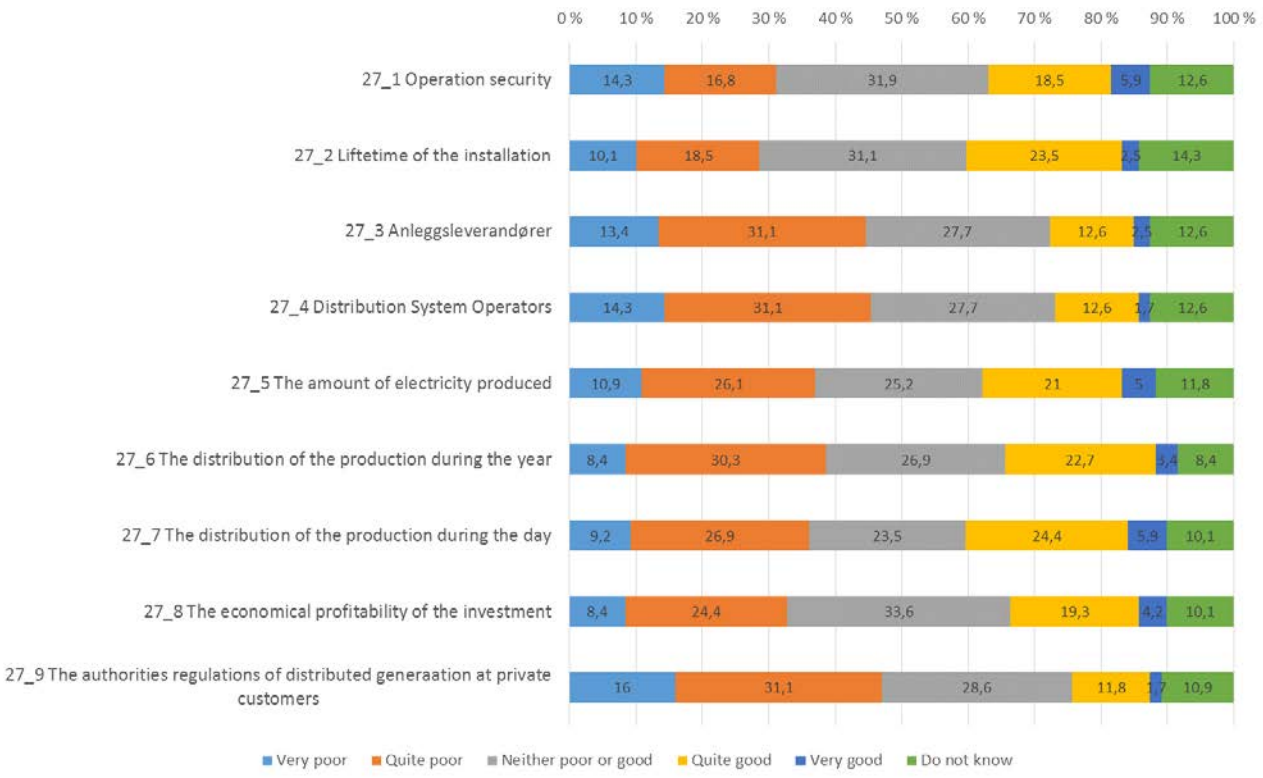

Figure 2.16 What knowledge do you have about the following conditions related to installation of a PV system? (Q027)

2.5 Customers with a PV system (n = 3)

The number of households with a PV system is small in this survey. Only 3 (out of 1102) respondents answered that they had a PV system and feed electricity into the grid. In spite of this low number, the results are included in this report for information purposes. NO conclusions will be given.

2.5.1 Sources of awareness

Only 0.3% of respondents (n=3) indicated they have a PV system. Data, though limited, may offer some insights from the perspective of customers with a PV system. The survey asked those with a PV system how they learned about the option (several answers were possible). The respondents answered that they learned about the PV system from advertisements (2), a call from a vendor (1), individual investigation (1), and 'other' means (1).

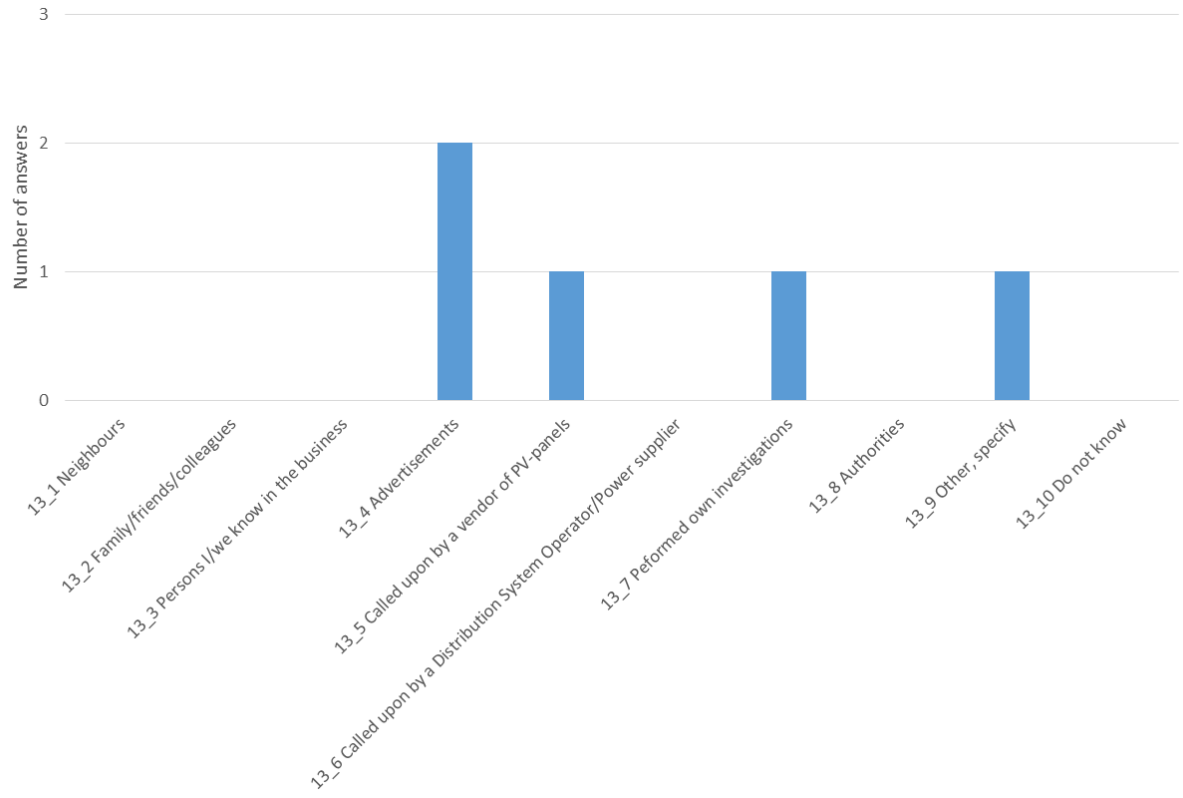

Figure 2.17 Through which channel(s) did you get information about PV systems, when you decided to install such a system? (Q013)

2.5.2 Years with system

The survey asked each owner of a PV system how long they have owned their system. 2 out of 3 respondents indicate they have had their system less than a year (66.7%), and 1 out of 3 have had their system for 3-5 years.

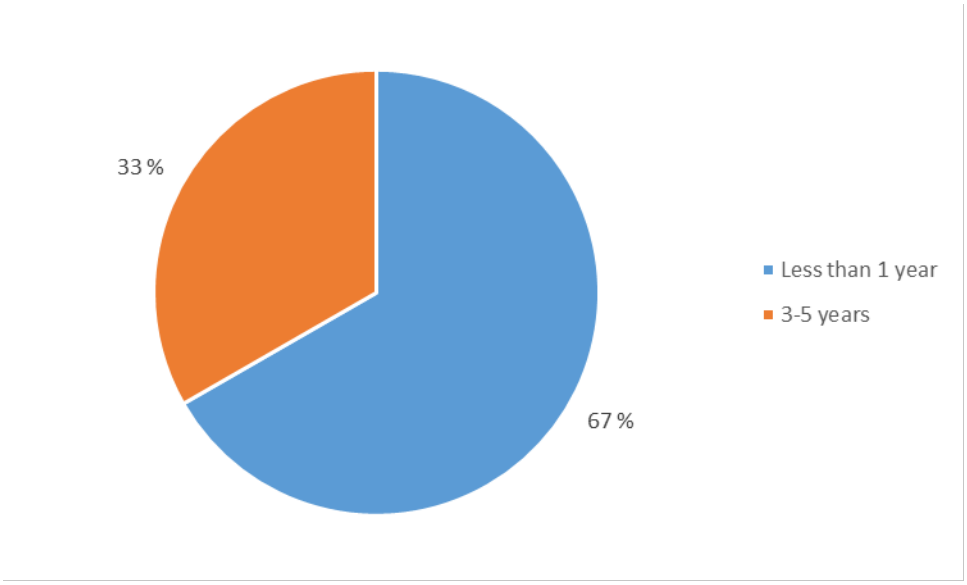

Figure 2.18 For how long have you had a PV system (approx.)? (Q014)

2.5.3 Reasons for purchase

All respondents with a PV system indicated that a desire to contribute to a better environment was one of the reasons behind their purchase of a PV system. Two of the three indicated saving on future electricity costs was a factor. Independence and support PV market were selected by one respondent.

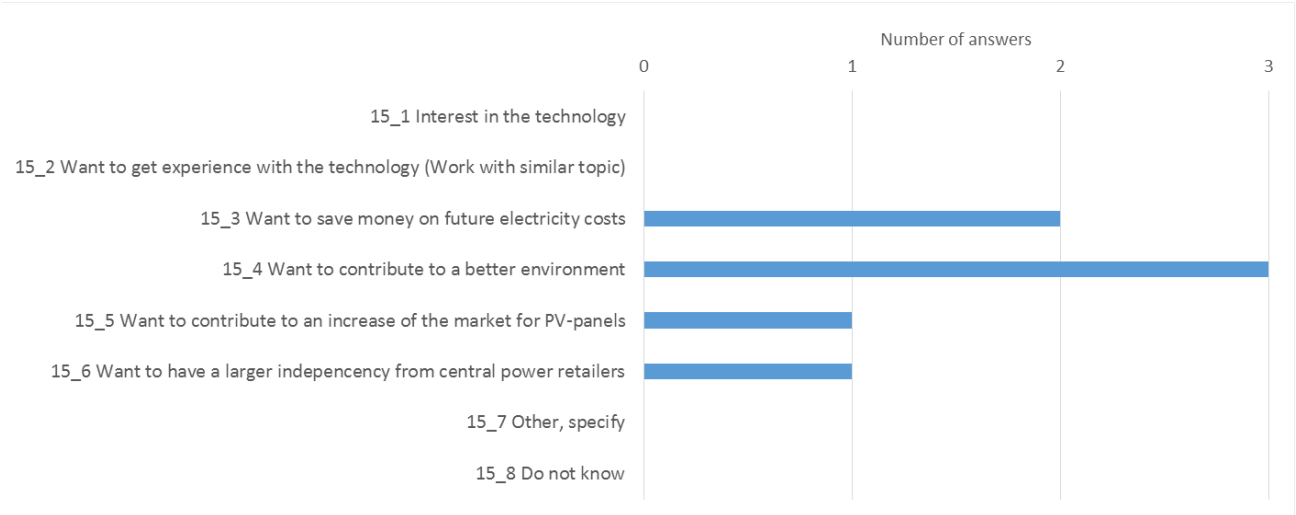

Figure 2.19 What was the most important reason(s) that you installed a PV system? (Q015)

2.5.4 Experience with system

The respondents were asked about how dissatisfied or satisfied they were with the information and follow-up from different stakeholders. The results are presented in Figure 2.20. The numbers in the figure represent the number of answers for each alternative. The result shows that the most positive answers are related to the vendor of the PV system. The most negative answers are related to the Distribution System Operator and power retailer. The responses related to the communication and supporting scheme from the Authorities are carying from "Very displeased" to "Very pleased".

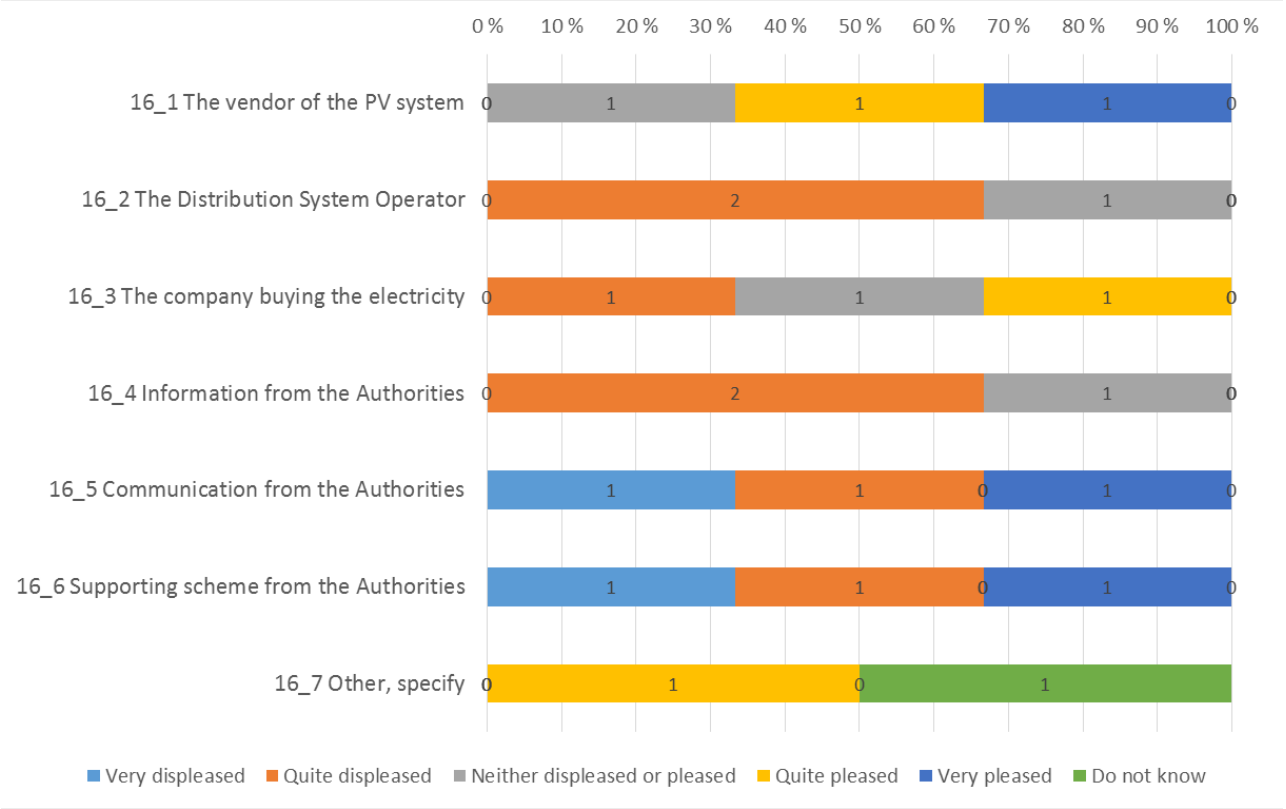

Figure 2.20 How dissatisfied/satisfied were you with the information and follow-up from the following stakeholders, in the process related to procurement and installation of a PV system? (Q016) (Numbers in the figure represent the number of answers for each alternative.)

The respondents were also asked about how dissatisfied or satisfied they were with different topics related to the PV system. The results are presented in Figure 2.21. The results are not clear, and the number of answers are too small to base a conclusion on, but the figure is included to show the total response.

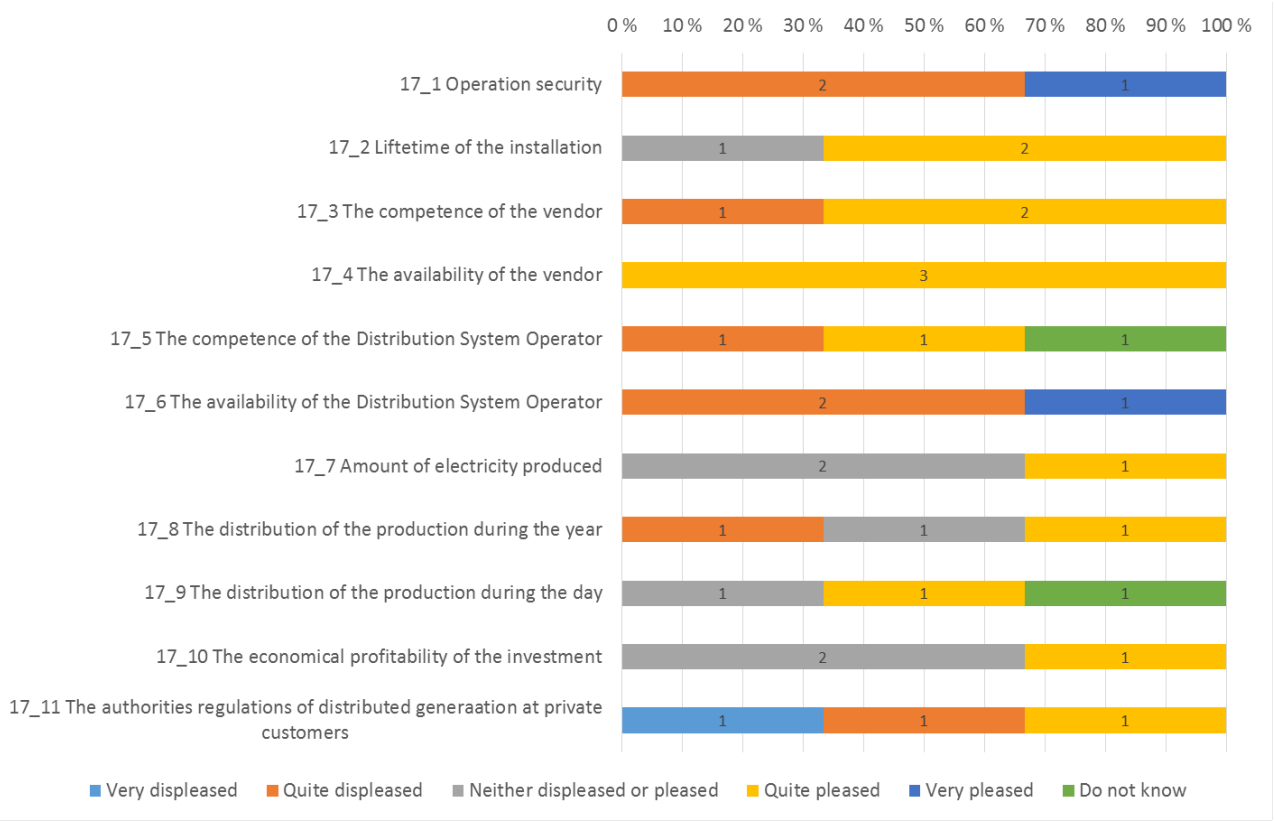

Figure 2.21 How dissatisfied/satisfied are you with the PV system, related to the following topics? (Q017) (Numbers in the figure represent the number of answers for each alternative)

3 Summary

This report presents the results from a survey performed in relation to the research project "Power from the people". The objective of this survey was to investigate the attitudes and perceptions of Norwegian households about becoming/being a prosumer with a PV[3] system (roof top PV panel). Findings will offer information about interests and experiences with prosumer installations and estimates about the required subsidy to encourage households to install systems.

TNS Gallup performed the survey on behalf of the research project between March and May of 2016. The survey was web-based and sent out to a panel operated by TNS Gallup. This panel consists of approximately 45.000 persons (15 years and older) recruited in advance to participate in surveys. Respondents to the survey were randomly selected from this group. In total 1102 respondents completed the survey.

The survey generated findings in the following categories.

1. Information on perceptions about household electricity usage and domestic electricity production.
2. Questions about their related activities and interests about being a prosumer.
3. For those that have yet considered becoming a prosumer, we elicited responses to investigate people's willingness to pay to become a prosumer.
4. For those that have considered becoming a prosumer, we solicited information about their experience and satisfaction.

The report describes the results from each question in the survey. A more detailed analysis combining the answers on the different questions and the demographic information has been performed, but there were no clear results indicating that a specific group was more or less interested in a PV panel than other groups. This work is therefore not further described in this report.

The main highlights from the survey can be summarized as following:

Perceptions of Electricity.

- *People are concerned about household electricity consumption.* About 56.1% of respondents indicated they are quite or very concerned with consumption. Only 13.3% of respondents expressed little concern.
- *People understand the sources of electricity production.* Respondents appear informed that hydropower represents most of electricity production in Norway. Two of three (65.2%) respondents indicated that hydropower represented 70-100 percent of electricity production, with one in four (25%) believing that hydropower accounted for 90-100 percent of production.
- *People have a good understanding of how households use electricity.* Most respondents believe space heating accounts for a large portion of electricity consumption - over 57% of respondents believe space heating represents 50-100 percent of electricity consumption.

PV system: Background and Interest

- *There is little baseline interest in PV systems.* Nearly all respondents indicated they do not have a PV system (99.8%). Among this group, three in four (74.4%) of respondents indicated they have not considered installing a PV system.
- *There are many reasons for the lack of interest in PV systems.* The three most cited reasons are: installing a PV system is too expensive (34.6%), satisfied with current system (28.5%), and do not know about the possibility of a PV system (25.5%).

[3] PV = Photovoltaic

PV system: Willingness to Pay

- *The price of a PV system matters.* At 20.000 NOK, about 45.7% of respondents indicated a willingness to purchase a PV system. The rate of positive responses declines to 30.5% with a cost of 40.000 NOK and to 25.7% with a cost of 60.000 NOK.
- *There was some uncertainty in the willingness to pay for a PV system.* People willing to pay the stated costs have a moderate level of certainty in their positive responses, while those that are not willing to pay the stated costs have a high level of certainty in their negative responses.
- *The leading reasons that people are willing to pay for a PV system were cost savings and environmental concern.* Among those willing to pay the stated cost, the two most common reasons for their interest include the desire to reduce future electricity cost (68%) and to contribute to a better environment (57.7%).
- *The reasons that people are NOT willing to pay for a PV system focused on uncertainties.* The people not willing to pay the stated cost indicated the following reasons for their lack of interest: unsure the house is suitable for a PV system (39.7%), unsure if conditions in Norway are suitable for a PV system (33.2%), unsure if the technology works well (28.8%), and uncertainty about future regulatory framework for prosumers (22%).

PV System: Considerations and Experiences (For those that have considered installing a PV system and those that have completed an installation of a PV system.).

- *People seem to learn about PV systems on their own.* By large margins (65.5%), individual investigation was the most prevailing way people learned about installing PV systems. Only 16.8% of this group (20 of 119) indicated they learned about PV systems from advertisements.
- *People have multiple reasons for exploring PV systems.* The most common reason for interest in a PV system was to save money on future electricity costs, with 85.7% of respondents indicating it was quite or very important to their interest.
- *Insights from people with PV systems is limited.* Only 0.3% of respondents (n=3) indicated they have a PV system. The respondents with PV system installed have learned about the PV system from advertisements (2), a call from a vendor (1), individual investigation (1), and ‘other’ means (1). All respondents with a PV system indicated that contributing to a better environment was the reason behind their purchase of a PV system. Two of the three indicate saving on future electricity costs was a factor. Independence and support PV market were selected by one respondent.

PV System: Knowledge

- *People know very little about PV systems.* The results from the survey illustrate a general lack of knowledge with more than half of respondents indicating they have quite poor or very poor knowledge of every listed issue.

4 References

[1] SSB, [Online]. Available: https://www.ssb.no/energi-og-industri/statistikker/elektrisitet/aar. [Accessed 29 03 2017].

[2] H. Sæle, E. Rosenberg and N. Feilberg, “TR A6999 - State-of-the-art. Projects for estimating the electricity end-use demand,” SINTEF Energi AS, September 2010.

[3] R. Ramsdal, “Det er flere tak å ta av, vi har bare skrapt litt i overflaten (In Norwegian),” www.tu.no, [Online]. Available: https://www.tu.no/artikler/norsk-solkraftutbygging-naer-firedoblet-i-2016-vi-har-savidt-skrapt-i-overflaten/377031. [Accessed 19 05 2017].

[4] W. M. Hanemann, “Valuing the Environment Through Contingent Valuation,” The Journal of Economic Perspectives, 8(4): 19-43, 1994.

[5] S. S. Diamond, “Reference Guide on Survey Research (2nd),” Reference Manual on Scientific Evidence, Federal Judicial Center, 2000.

Appendix A – Demographic data

This appendix gives an overview of the demographic data from the households responding on the survey. This information will be used further in a more detailed analysis of the survey.

How many grownups are at home/home office during daytime?

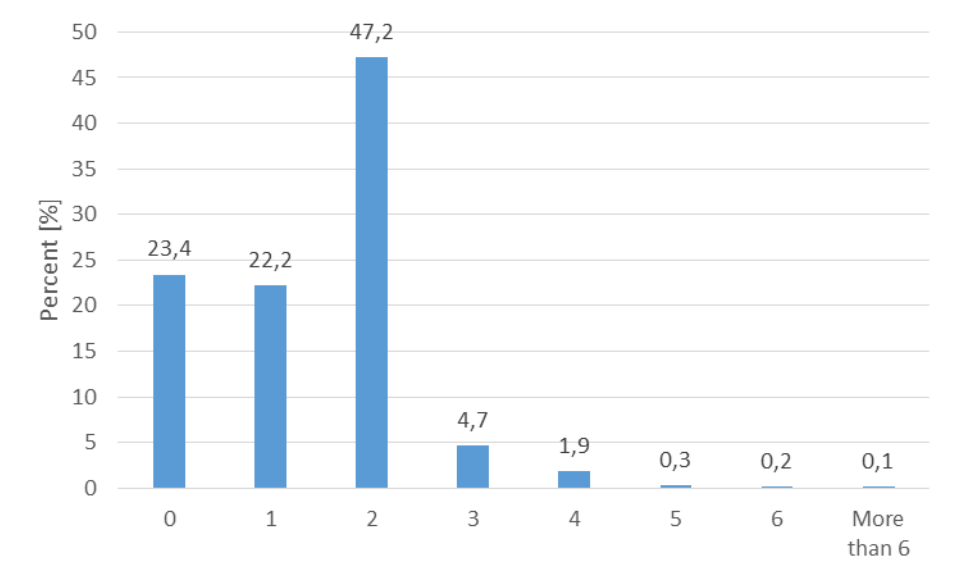

Figure A.0.1 How many grownups are at home/home office during daytime?

What is your age?

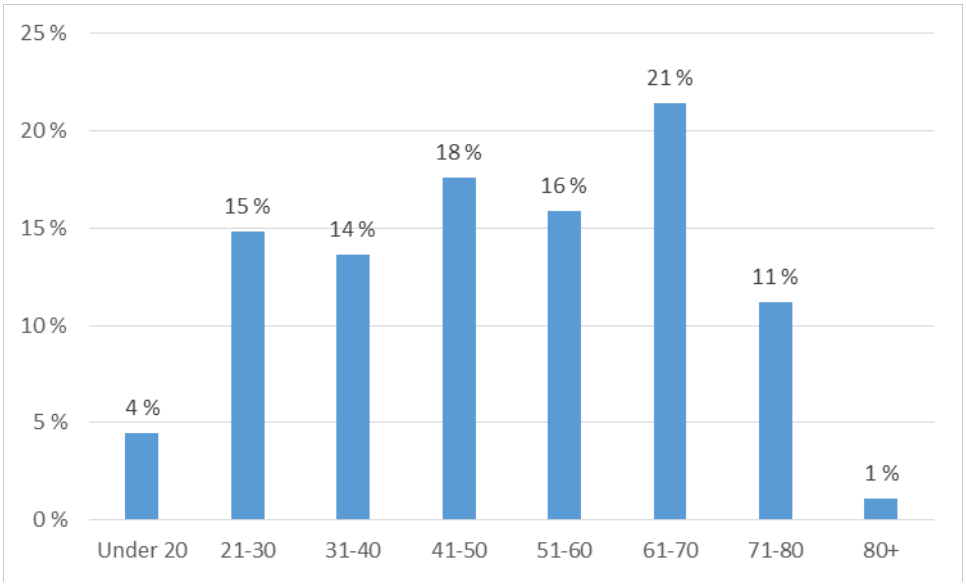

Figure A.0.2 What is your age?

Which county do you live in?

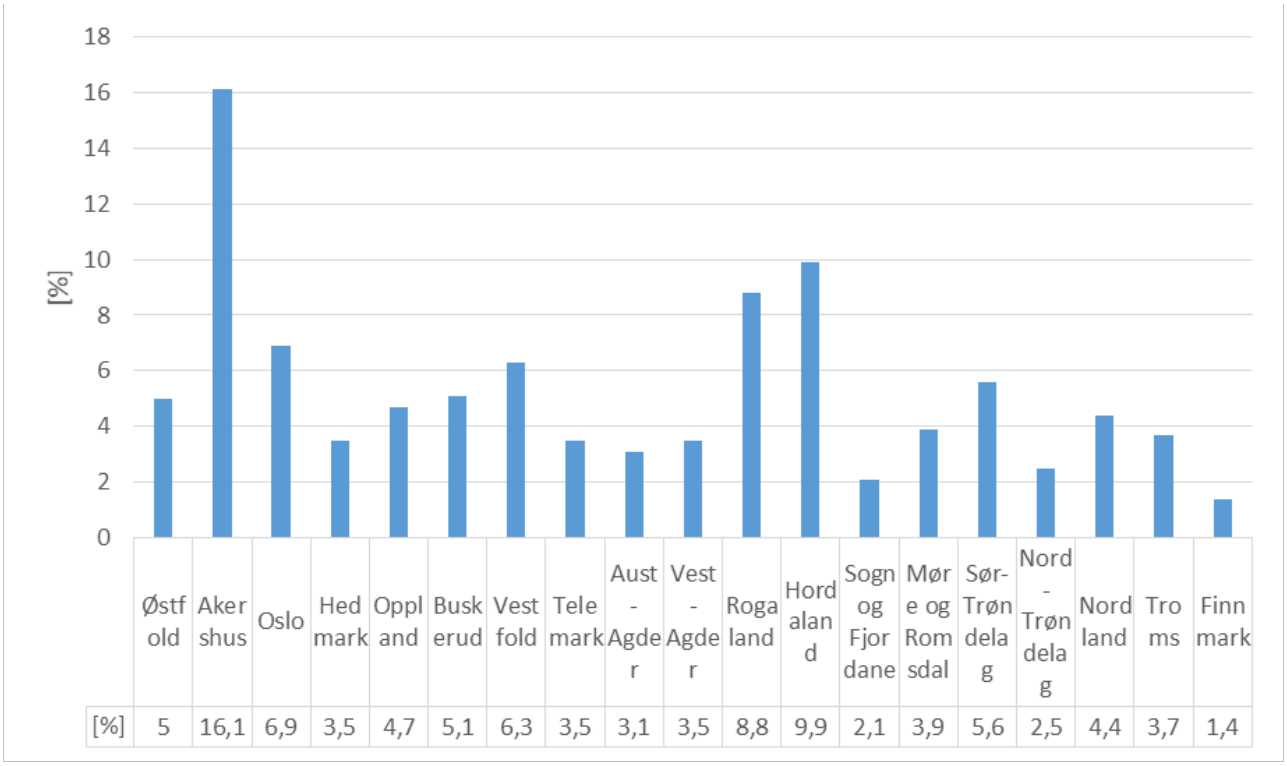

Figure A.0.3 Which county do you live in?

Gender

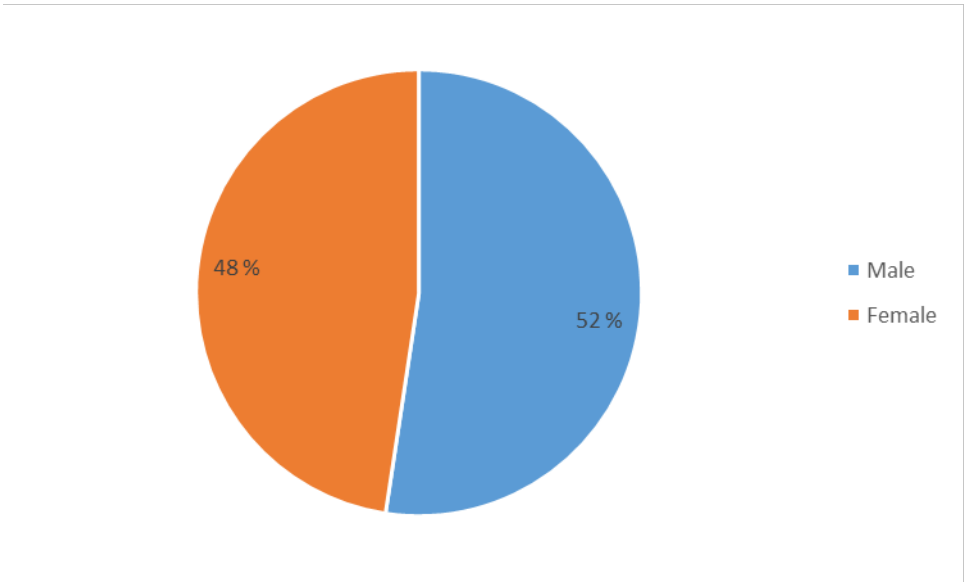

Figure A.0.4 Gender

What is your main source of income?

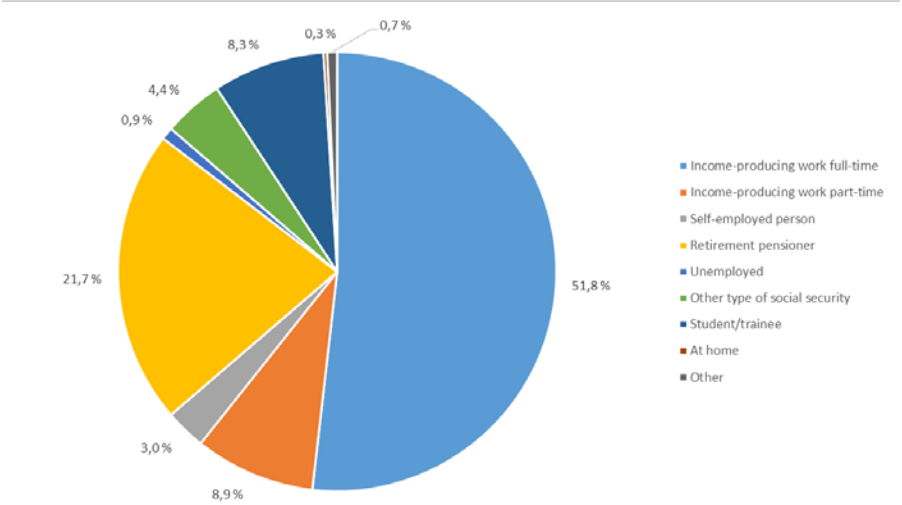

Figure A.0.5 What is your main source of income?

What is (approx.) your personal gross yearly income (before taxes and deductions)?

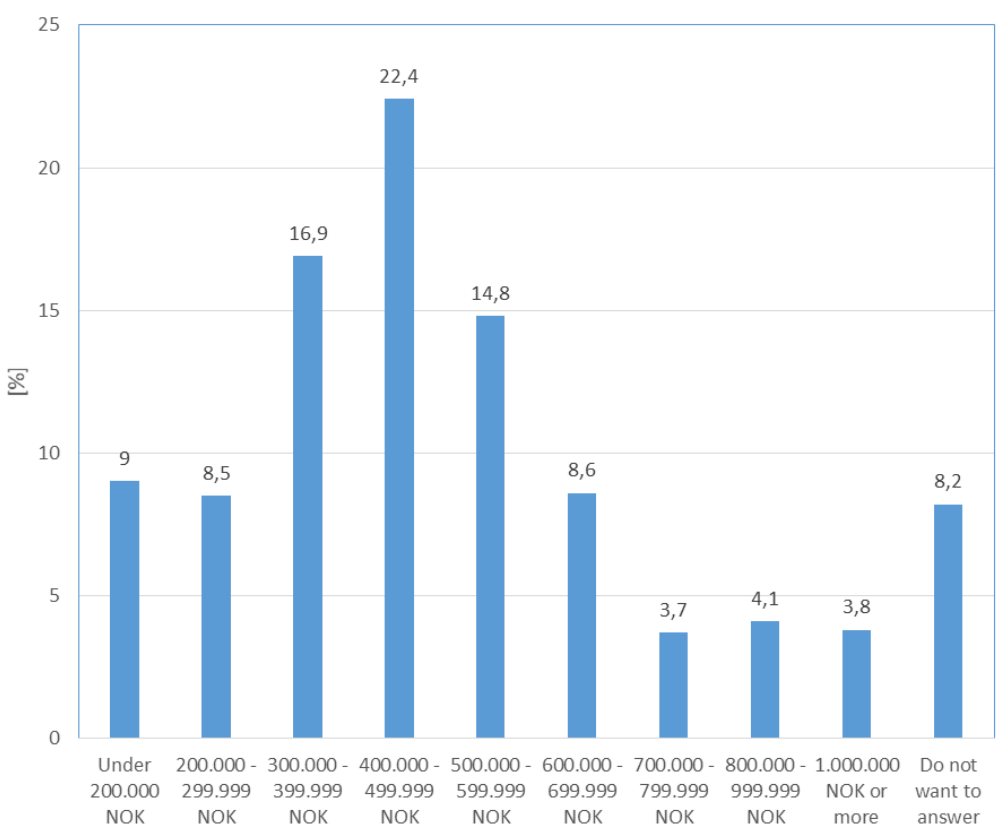

Figure A.0.6 What is (approx.) your personal gross yearly income (before taxes and deductions)?

What is your highest completed education level?

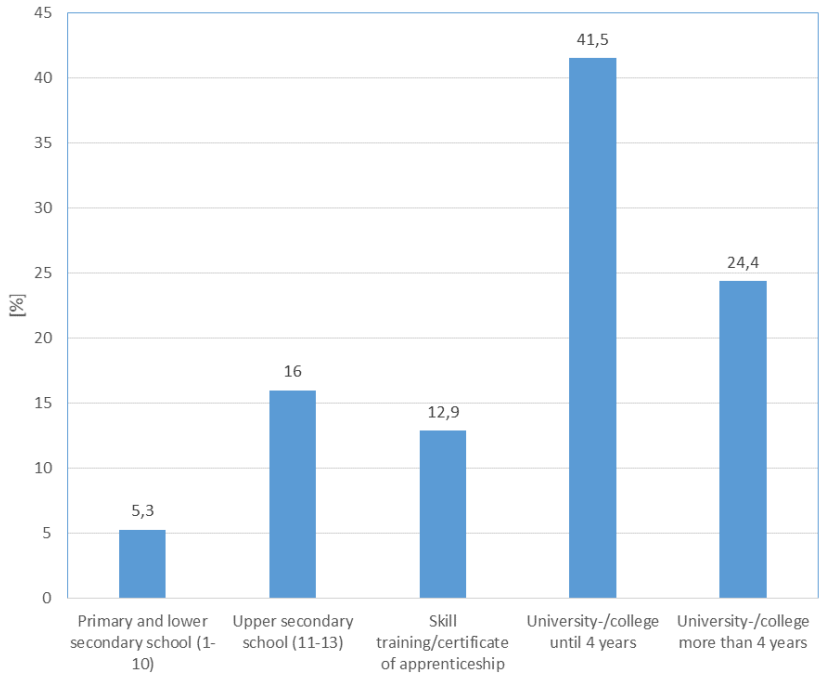

Figure A.0.7 What is your highest completed education level?

How many persons consists the household of?

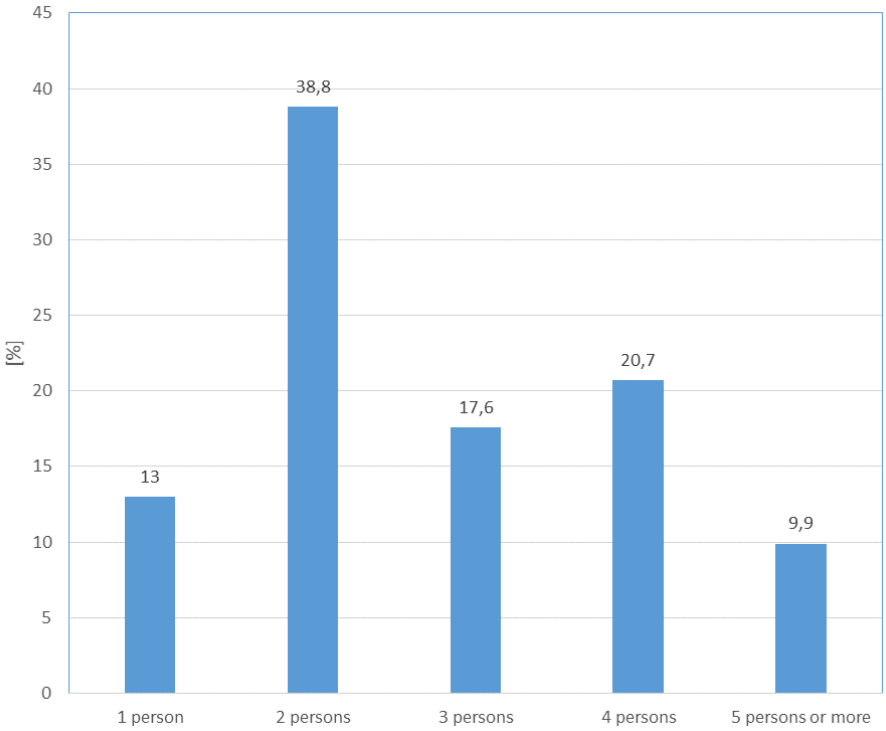

Figure A.0.8 How many persons consists the household of?

What is (approx.) the total gross yearly income (before taxes and deductions) for the household?

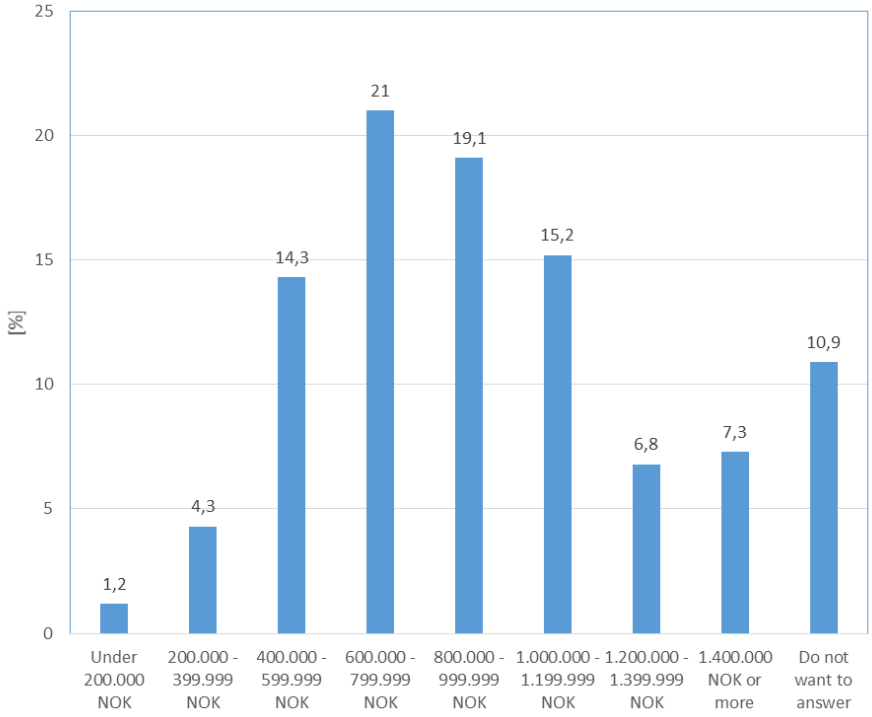

Figure A.0.9 What is (approx.) the total gross yearly income (before taxes and deductions) for the household?

How many persons in the household are younger than 15 years?

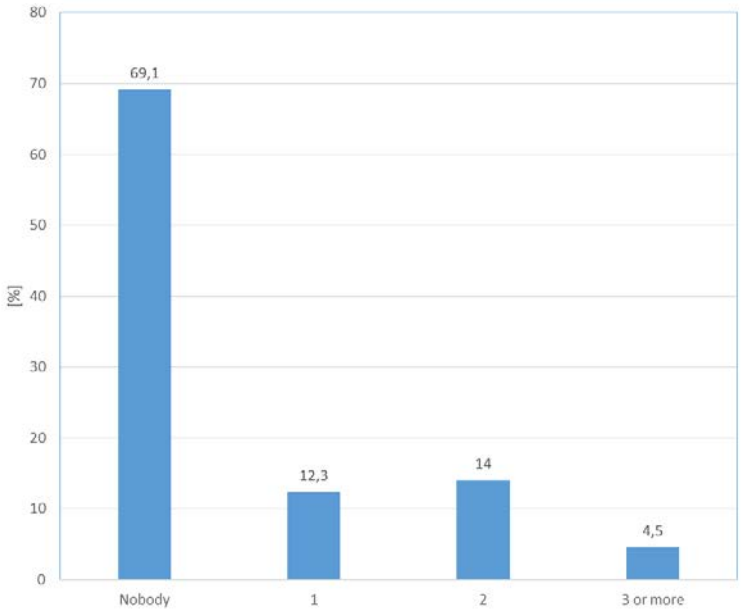

Figure A.0.10 How many persons in the household are younger than 15 years?

Which of the following statements describe your housing situation?

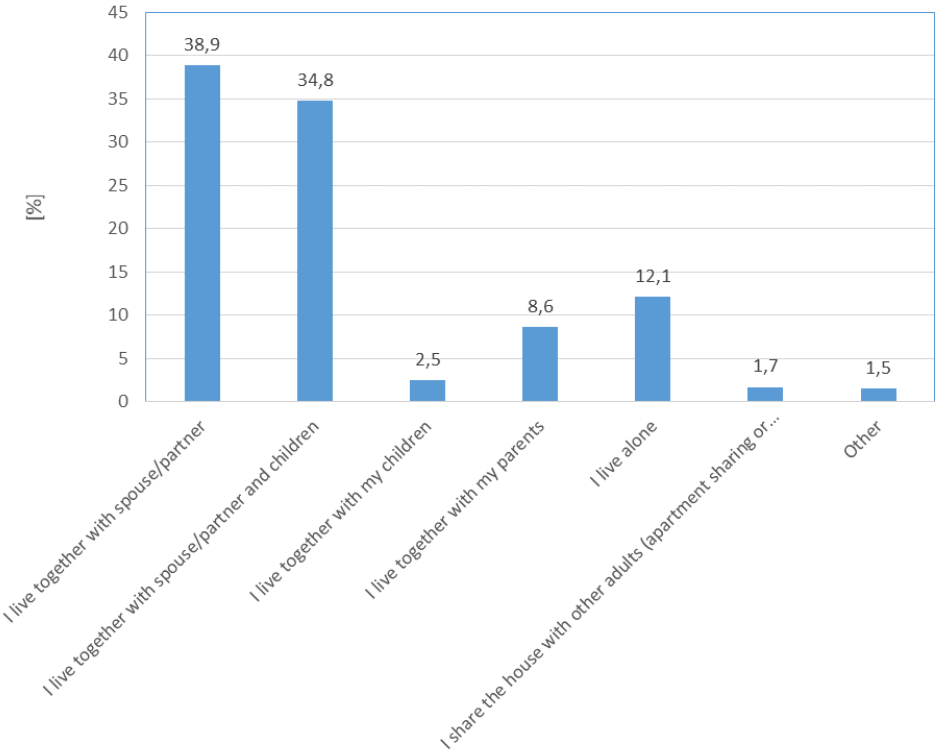

Figure A.0.11 Which of the following statements describe your housing situation?

Region

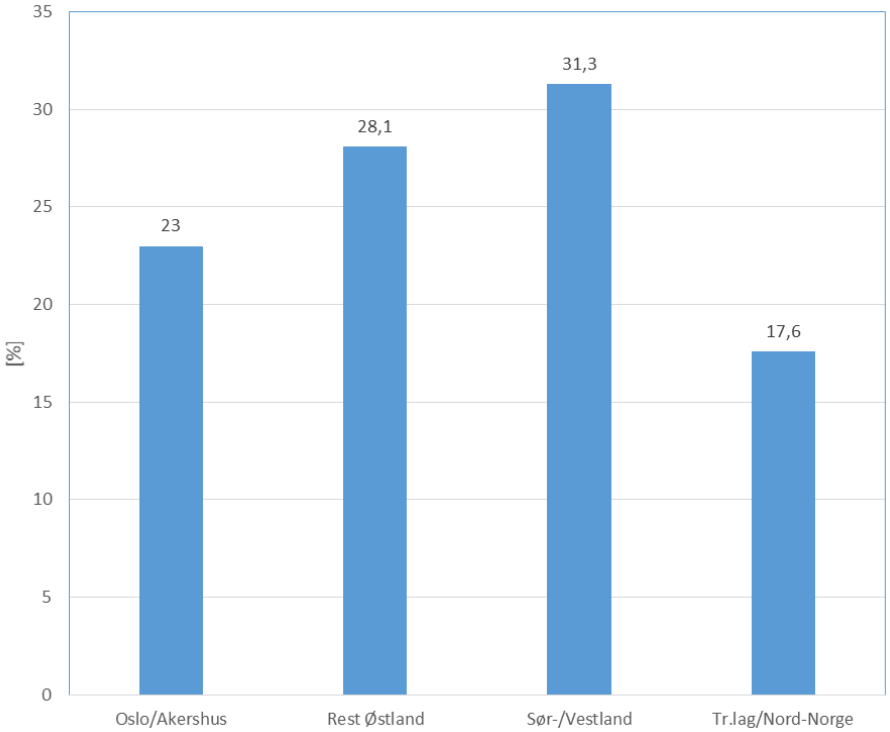

Figure A.0.12 Region

Age - categories

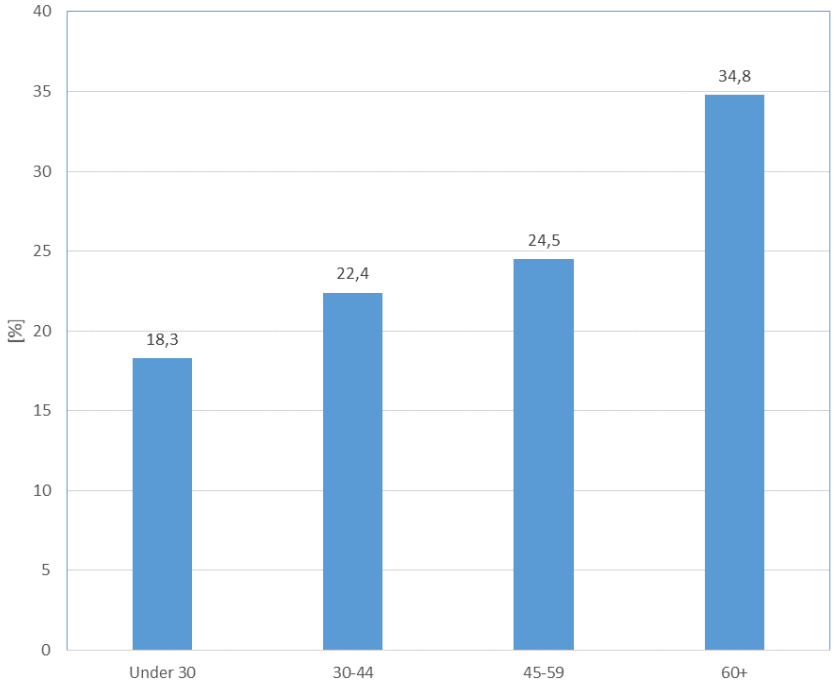

Figure A.0.13 Age – categories

In which business do you work in/is your business in?

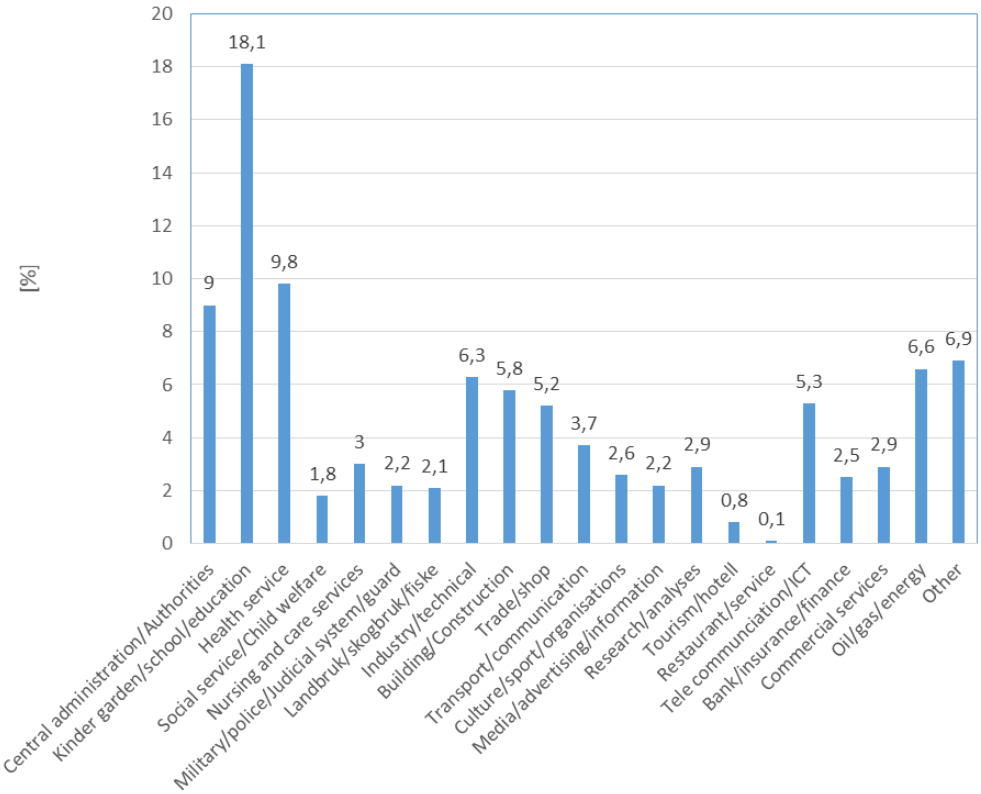

Figure A.0.14 In which business do you work in/is your business in?

Did you vote in the last parliamentary election, and which party did you vote on?

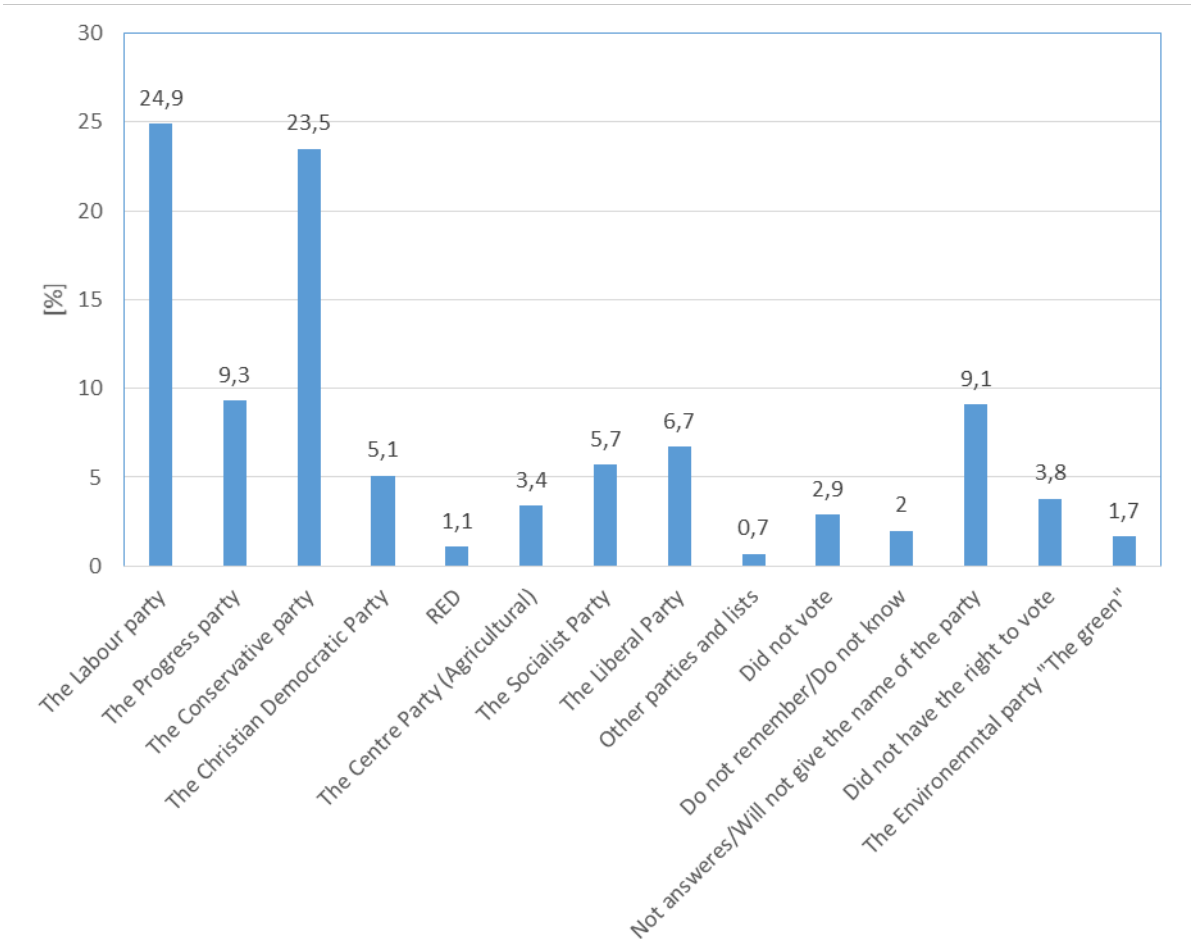

Figure A.0.15 Did you vote in the last parliamentary election, and which party did you vote on?

Appendix B – Questionnaire

Q001 - Q001:

YOUR HOUSE
We will start with some questions related to your house, and is focusing on your main house – and not any holiday cottage or similar.

How concerned are you related to the electricity consumption of the household?

1	❍	Very little concern
2	❍	Quite little concern
3	❍	Neither little or much concern
4	❍	Quite much concern
5	❍	Very much concern
9999	❍	Do not know

Q002 - Q002:

To what degree and at which share of electricity produced in Norway, do you think come from the following sources?

	Under 10%	10-29%	30-49%	50-69%	70-89%	90-100%	Do not know
Hydropower	❍	❍	❍	❍	❍	❍	❍
Fossile (coal, oil, gas)	❍	❍	❍	❍	❍	❍	❍
Nuclear	❍	❍	❍	❍	❍	❍	❍
Wind	❍	❍	❍	❍	❍	❍	❍
Solar	❍	❍	❍	❍	❍	❍	❍
Thermal power from bio fuels	❍	❍	❍	❍	❍	❍	❍

Q003 - Q003:

Which share of electricity used by a normal Norwegian household do you think are used for the following purposes?

	Under 10%	10-29%	30-49%	50-69%	70-89%	90-100%	Do not know
Space heating	❍	❍	❍	❍	❍	❍	❍
Cooking/White goods	❍	❍	❍	❍	❍	❍	❍
Electrical appliances (TV, laptops, ...)	❍	❍	❍	❍	❍	❍	❍
Heating of tap water	❍	❍	❍	❍	❍	❍	❍
Other	❍	❍	❍	❍	❍	❍	❍

Q004 - Q004:

ELECTRICITY PRODUCED WITH PV SYSTEM

Norwegian households can produce their own electricity, by installing in a PV system in their ouse (for example on the roof). The electricity generated can be used by their own, or feed into the grid. Customers feeding electricity to the grid, are often called "prosumers".

Do you have a PV system in your house, and feed electricity into the grid (as a prosumer)?

1 ❍ Have PV system, and feed electricity into the grid

2 ❍ Have PV system, and but do not feed electricity into the grid

3 ❍ Do not have a PV system

9999 ❍ Do not know

Ask only if **Q004 - Q004**,3

B001: Do not have a PV system

Q005 - Q005:

Do you consider installing a PV system?

1 ❍ Yes

2 ❍ No

9999 ❍ Do not know

Ask only if **Q005 - Q005**,2

B002: Do not evaluate installing a PV system **Begin block**

Q006 - Q006:

What is the main reason(s) that you do not consider to install a PV system?

Several answers are possible

1	❑	Do not know about the possibility
2	❑	Norwegian conditions are unsuitable
3	❑	Happy with today's solution
4	❑	Not sure about todays regulations and support schemes
5	❑	Nor sure about the technology
6	❑	Not sure about the installation
7	❑	Not sure about the process to do this
8	❑	Too expensive
9	❑	To time consuming
10	❑	The house is unsuitable
11	❑	Dependent on other
12	❑	Doubt that the municipal will accept this
13	❑	Doubt that the Distribution System Operator will be positive
14	❑	Not sure about the environmental effect
9997	❑	Other, specify... **Open *Position fixed*
9999	❍	Do not know **Position fixed *Exclusive*

Q007 - Q007:

Consider you get economical grant for investing in a PV system. Investing and installation will then cost you kr. 20.000. You can use the electricity yourself, or feed the rest into the grid. Take for granted that the installation is technical possible, would you install a PV panel at this price?

1	❍	Yes
2	❍	No
9999	❍	Do not know

Ask only if **Q007 - Q007**,1

B003: Evaluate yet installation

Q008 - Q008:

How secure or insecure are you that you want to install PV system?

1	❍	1. Very insecure
2	❍	2
3	❍	3
4	❍	4
5	❍	5
6	❍	6
7	❍	7
8	❍	8
9	❍	9
10	❍	10 Very secure

Q009 - Q009:

What is the most important reason(s) for you to install a PV system?

Several answers are possible

1	❑	Interest in technology
2	❑	Want to get own experience with the technology
3	❑	Want to reduce the future electricity costs
4	❑	Want to contribute to a better environment
5	❑	Want to contribute to an increase of the market for PV systems
6	❑	Want to have a larger independency from central power retailers
9997	❑	Other, specify...
9999	❍	Do not know

Q010 - Q010:

How little or much do you know the following conditions related to installation of PV system?

	Very poor	Quite poor	Neither poor or good	Quite good	Very good	Do not know
Operation security	❍	❍	❍	❍	❍	❍
Lifetime of the installation	❍	❍	❍	❍	❍	❍
The amount of electricity produced	❍	❍	❍	❍	❍	❍
The time of day/year when self produced electricity is available	❍	❍	❍	❍	❍	❍
The economical profitability of the investment	❍	❍	❍	❍	❍	❍
The authorities regulations of distributed generation at private customers	❍	❍	❍	❍	❍	❍

B003: Evaluate yet installation

Ask only if **Q007 - Q007**,9999

B005: Still uncertain about the investment

Q012 - Q012:

How important are the following conditions related to your insecurity for installing a PV system?
I am unsure ...

Several answers are possible

1	❑	.. if the conditions in Norway are suitable for distributed...
2	❑	.. framework conditions for the prosumers in the future
3	❑	.. if the technology are well-function
4	❑	.. where I/we can get information about the procurement
5	❑	.. possibility to get support
6	❑	.. the reliability of the system
7	❑	.. how the system should be installed
8	❑	.. how long time the procurement takes
9	❑	.. if the house is suitable for installation
10	❑	.. if the installation is possible/allowed there I live
11	❑	.. if the municipal will give med permission for installation
12	❑	.. if the Distribution System Operator is positive to my electricity
13	❑	.. on the environmental effect of the system
9997	❑	Other, specify...
9999	❍	Do not know

B005: Still uncertain about the investment

Ask only if **Q007 - Q007**,2

B004: Will still not invest

Q011 - Q011:

How secure or insecure are you that you do not want to install PV system?

1	❍	1. Very insecure
2	❍	2
3	❍	3
4	❍	4
5	❍	5
6	❍	6
7	❍	7
8	❍	8
9	❍	9
10	❍	Very secure

Q028 - Q028:

What is the importance of the following conditions, related to that you will not install in a PV system at a cost of 20.000 NOK?
I/we are unsure ...

Several answers are possible

1	❑	.. if the conditions in Norway are suitable for distributed...
2	❑	.. framework conditions for the prosumers in the future
3	❑	.. if the technology are well-function
4	❑	.. where I/we can get information about the procurement
5	❑	.. possibility to get support
6	❑	.. the reliability of the system
7	❑	.. how the system should be installed
8	❑	.. how long time the procurement takes
9	❑	.. if the house is suitable for installation
10	❑	.. if the installation is possible/allowed where I live
11	❑	.. if the municipal will give med permission for installation
12	❑	.. if the Distribution System Operator is positive to my electricity
13	❑	.. on the environment effect of the system
9997	❑	Other, specify...
9999	❍	Do not know

B004: Will still not invest

B002: Will not install a PV system

Ask only if **Q005 - Q005**,1

B007: Potential prosumer

Q023 - Q023:

Through which channels have you got information about the possibility to install a PV system?

Several answers are possible

1	❑	Neighbours
2	❑	Family/friends/colleagues
3	❑	Persons/I/we know in the business
4	❑	Advertisements
5	❑	Called upon by a vendor of PV systems
6	❑	Called upon by e Distribution System Operator/Power supplier
7	❑	Authorities
8	❑	Performed own investigations
9	❑	Other sources
9999	❍	Do not know

Q025 - Q025:

When did you start to consider installation of PV system?

1	❍	Less than a year ago
2	❍	1-2 years ago
3	❍	3-5 years ago
4	❍	More than 5 years ago
9999	❍	Do not know

Q026 - Q026:

How important are the following conditions related to your interest in installing a PV system?

	Very little	Quite little	Neither little or much	Quite much	Very much	Do not know
Interest in the technology	❍	❍	❍	❍	❍	❍
Want to gel experience with the technology	❍	❍	❍	❍	❍	❍
Want to save money on future electricity costs	❍	❍	❍	❍	❍	❍
Want to contribute to a better environment	❍	❍	❍	❍	❍	❍
Want to contribute to an increase of the market for PV systems	❍	❍	❍	❍	❍	❍
Want to have a larger independency from central power retailers	❍	❍	❍	❍	❍	❍
Other, specify	❍	❍	❍	❍	❍	❍

Q027 - Q027:

What knowledge do you have about the following conditions related to installation of a PV system?

	Very poor	Quite poor	Neither poor or good	Quite good	Very good	Do not know
Operation security	❍	❍	❍	❍	❍	❍
Lifetime of the installation	❍	❍	❍	❍	❍	❍
Vendor	❍	❍	❍	❍	❍	❍
Distribution System Operators	❍	❍	❍	❍	❍	❍
The amount of electricity produced	❍	❍	❍	❍	❍	❍
The distribution of the production during the year	❍	❍	❍	❍	❍	❍
The distribution of the production during the day	❍	❍	❍	❍	❍	❍
The economical profitability of the investment	❍	❍	❍	❍	❍	❍
The authorities regulations of distributed generation at private customers	❍	❍	❍	❍	❍	❍

B007: Potential prosumer

B001: Do not have a PV system

Ask only if **Q004 - Q004**,1

B006: Prosumer

Q013 - Q013:

Through which channel(s) did you get information about PV systems, when you decided to install such a system?

Several answers are possible

1	❑	Neighbours
2	❑	Family/friends/colleagues
3	❑	Persons I/we know in the business
4	❑	Advertisements
5	❑	Called upon by a vendor of PV systems
6	❑	Called upon by a Distribution System Operator/Power supplier
7	❑	Performed own investigations
8	❑	Authorities
9997	❑	Other, specify...
9999	❍	Do not know

Q014 - Q014:

For how long have you had a PV system (approx.)?

1	❍	Less than 1 year
2	❍	1-2 years
3	❍	3-5 years
4	❍	More than 5 years
9999	❍	Do not know

Q015 - Q015:

What was the most important reason(s) that you installed a PV system?

Several answers are possible

1 ❑ Interest in the technology
2 ❑ Want to get experience with the technology (Work with similar topic)
3 ❑ Want to save money on future
4 ❑ Want to contribute to a better environment
5 ❑ Want to contribute to an increase of the market for PV systems
6 ❑ Want to have a larger independency from central power retailers
9997 ❑ Other, specify...
9999 ❍ Do not know

Q016 - Q016:

How dissatisfied/satisfied were you with the information and follow-up from the following stakeholders, in the process related to procurement and installation of a PV system?

If you have not been in contact with the stakeholders, please mark "Not relevant"

	Very displeased	Quite displeased	Quite pleased	Very pleased	Do not know	Not relevant
Vendor	❍	❍	❍	❍	❍	❍
DSO	❍	❍	❍	❍	❍	❍
The company buing the electricity (if another than the DSO)	❍	❍	❍	❍	❍	❍
Information from Authorities	❍	❍	❍	❍	❍	❍
Communication from Authorities	❍	❍	❍	❍	❍	❍
Economical support from the Authorities	❍	❍	❍	❍	❍	❍
Other, please specify	❍	❍	❍	❍	❍	❍

Q017 - Q017:

How dissatisfied or satisfied are you with the PV system, related to:

	Very dissatisfied	Quite dissatisfied	Either dissatisfied or satisfied	Quite satisfied	Very satisfied	Do not know
Security of supply	❍	❍	❍	❍	❍	❍
Liftetime of the installation	❍	❍	❍	❍	❍	❍
Competence of the vendor	❍	❍	❍	❍	❍	❍
Availability of the vendor	❍	❍	❍	❍	❍	❍
Competence of the DSO	❍	❍	❍	❍	❍	❍
Availability of the DSO	❍	❍	❍	❍	❍	❍
Amount of electricity produced	❍	❍	❍	❍	❍	❍
How the production of electricity is divided during a year	❍	❍	❍	❍	❍	❍
How the production of electricity is divided during a day	❍	❍	❍	❍	❍	❍
Economical feasibility of the investment	❍	❍	❍	❍	❍	❍
Framework for distributed generation at private households	❍	❍	❍	❍	❍	❍

Q018 - Q018:

Based on your experience now, will you recommend other to install a PV system?

1 ❍ Yes

2 ❍ No

9999 ❍ Do not know

Ask only if **Q024 - Q024**,2,3,4,5

Q019 - Q019:

Who in the household is mainly responsible for the following related to the PV system?

	Myself	Partner	Children	Other	Split between several	Do not know
acquisition of PV system	❍	❍	❍	❍	❍	❍
Installation	❍	❍	❍	❍	❍	❍
Information about generated electricity	❍	❍	❍	❍	❍	❍
Contact with vendor	❍	❍	❍	❍	❍	❍

Q020 - Q020:

Haw you calculated exact on the profitability of the PV system?

1	❍	Yes
2	❍	No
9999	❍	Do not know

Q021 - Q021:

Do you think that the PV system will be paid off during its lifetime?

1	❍	Yes
2	❍	No
9999	❍	Do not know

Ask only if **Q021 - Q021**,1

Q022 - Q022:

How many years is the payment period for the PV system?

Number of years

B006: Prosumer

Appendix C – Frequency Tables

1 Concern about the households electricity consumption

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very little concern	26	2,4	2,4	2,4
	Quite little concern	120	10,9	10,9	13,2
	Neither little or much concern	329	29,9	29,9	43,1
	Quite much concern	539	48,9	48,9	92,0
	Very much concern	79	7,2	7,2	99,2
	Do not know	7	,6	,6	99,8
	7	2	,2	,2	100,0
	Total	1102	100,0	100,0	

2_1 Hydro power

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Under 10%	10	,9	,9	,9
	10-29%	47	4,3	4,3	5,2
	30-49%	94	8,5	8,6	13,7
	50-69%	186	16,9	16,9	30,7
	70-89%	442	40,1	40,2	70,9
	90-100%	275	25,0	25,0	95,9
	Do not know	45	4,1	4,1	100,0
	Total	1099	99,7	100,0	
Missing	System	3	,3		
Total		1102	100,0		

2_2 Fossile (coal, oil, gas)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Under 10%	451	40,9	41,6	41,6
	10-29%	331	30,0	30,5	72,1
	30-49%	146	13,2	13,5	85,5
	50-69%	60	5,4	5,5	91,1
	70-89%	27	2,5	2,5	93,5
	90-100%	3	,3	,3	93,8
	Do not know	67	6,1	6,2	100,0
	Total	1085	98,5	100,0	
Missing	System	17	1,5		
Total		1102	100,0		

2_3 Nuclear

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Under 10%	881	79,9	80,0	80,0
	10-29%	81	7,4	7,4	87,4
	30-49%	27	2,5	2,5	89,8
	50-69%	6	,5	,5	90,4
	70-89%	5	,5	,5	90,8
	Do not know	101	9,2	9,2	100,0
	Total	1101	99,9	100,0	
Missing	System	1	,1		
Total		1102	100,0		

2_4 Wind

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Under 10%	679	61,6	62,1	62,1
	10-29%	254	23,0	23,2	85,3
	30-49%	64	5,8	5,9	91,1
	50-69%	26	2,4	2,4	93,5
	70-89%	6	,5	,5	94,1
	90-100%	5	,5	,5	94,5
	Do not know	60	5,4	5,5	100,0
	Total	1094	99,3	100,0	
Missing	System	8	,7		
Total		1102	100,0		

2_5 Solar

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Under 10%	824	74,8	75,0	75,0
	10-29%	142	12,9	12,9	87,9
	30-49%	37	3,4	3,4	91,3
	50-69%	16	1,5	1,5	92,7
	70-89%	6	,5	,5	93,3
	90-100%	2	,2	,2	93,4
	Do not know	72	6,5	6,6	100,0
	Total	1099	99,7	100,0	
Missing	System	3	,3		
Total		1102	100,0		

2_6 Thermal power from bio fuels

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Under 10%	727	66,0	66,2	66,2
	10-29%	199	18,1	18,1	84,3
	30-49%	33	3,0	3,0	87,3
	50-69%	18	1,6	1,6	89,0
	70-89%	8	,7	,7	89,7
	90-100%	1	,1	,1	89,8
	Do not know	112	10,2	10,2	100,0
	Total	1098	99,6	100,0	
Missing	System	4	,4		
Total		1102	100,0		

3_1 Space heating

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Under 10%	9	,8	,8	,8
	10-29%	133	12,1	12,1	12,9
	30-49%	299	27,1	27,2	40,1
	50-69%	373	33,8	33,9	73,9
	70-89%	240	21,8	21,8	95,7
	90-100%	19	1,7	1,7	97,5
	Do not know	28	2,5	2,5	100,0
	Total	1101	99,9	100,0	
Missing	System	1	,1		
Total		1102	100,0		

3_2 Cooking/White goods

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Under 10%	116	10,5	10,5	10,5
	10-29%	537	48,7	48,8	59,4
	30-49%	273	24,8	24,8	84,2
	50-69%	90	8,2	8,2	92,4
	70-89%	30	2,7	2,7	95,1
	90-100%	29	2,6	2,6	97,7
	Do not know	25	2,3	2,3	100,0
	Total	1100	99,8	100,0	
Missing	System	2	,2		
Total		1102	100,0		

3_3 Electrical appliances (TV, laptops, ...)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Under 10%	523	47,5	47,6	47,6
	10-29%	387	35,1	35,2	82,8
	30-49%	83	7,5	7,6	90,4
	50-69%	33	3,0	3,0	93,4
	70-89%	23	2,1	2,1	95,5
	90-100%	23	2,1	2,1	97,5
	Do not know	27	2,5	2,5	100,0
	Total	1099	99,7	100,0	
Missing	System	3	,3		
Total		1102	100,0		

3_4 Heating of tap water

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Under 10%	140	12,7	12,7	12,7
	10-29%	489	44,4	44,4	57,1
	30-49%	253	23,0	23,0	80,1
	50-69%	116	10,5	10,5	90,6
	70-89%	57	5,2	5,2	95,8
	90-100%	14	1,3	1,3	97,1
	Do not know	32	2,9	2,9	100,0
	Total	1101	99,9	100,0	
Missing	System	1	,1		
Total		1102	100,0		

3_5 Other

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Under 10%	589	53,4	54,0	54,0
	10-29%	204	18,5	18,7	72,8
	30-49%	65	5,9	6,0	78,7
	50-69%	27	2,5	2,5	81,2
	70-89%	14	1,3	1,3	82,5
	90-100%	7	,6	,6	83,1
	Do not know	184	16,7	16,9	100,0
	Total	1090	98,9	100,0	
Missing	System	12	1,1		
Total		1102	100,0		

4 Do you have a PV system?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Have PV systems and feed electricity into the grid	3	,3	,3	,3
	Have PV systems, but not feed electricity into the grid	9	,8	,8	1,1
	Do not have PV systems	1080	98,0	98,0	99,1
	Do not know	10	,9	,9	100,0
	Total	1102	100,0	100,0	

6 Do you consider PV system?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	119	10,8	11,0	11,0
	No	803	72,9	74,4	85,4
	Do not know	158	14,3	14,6	100,0
	Total	1080	98,0	100,0	
Missing	System	22	2,0		
Total		1102	100,0		

6_1 Do not know about the possibility

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	598	54,3	74,5	74,5
	Yes	205	18,6	25,5	100,0
	Total	803	72,9	100,0	
Missing	System	299	27,1		
Total		1102	100,0		

6_2 Norwegian conditions are unsuitable

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	665	60,3	82,8	82,8
	Yes	138	12,5	17,2	100,0
	Total	803	72,9	100,0	
Missing	System	299	27,1		
Total		1102	100,0		

6_3 Happy with today's solution

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	574	52,1	71,5	71,5
	Yes	229	20,8	28,5	100,0
	Total	803	72,9	100,0	
Missing	System	299	27,1		
Total		1102	100,0		

6_4 Not sure about todays regulations and support schemes

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	636	57,7	79,2	79,2
	Yes	167	15,2	20,8	100,0
	Total	803	72,9	100,0	
Missing	System	299	27,1		
Total		1102	100,0		

6_5 Not sure about the technology

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	632	57,4	78,7	78,7
	Yes	171	15,5	21,3	100,0
	Total	803	72,9	100,0	
Missing	System	299	27,1		
Total		1102	100,0		

6_6 Not sure about the installation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	723	65,6	90,0	90,0
	Yes	80	7,3	10,0	100,0
	Total	803	72,9	100,0	
Missing	System	299	27,1		
Total		1102	100,0		

6_7 Not sure about the process to do this

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	755	68,5	94,0	94,0
	Yes	48	4,4	6,0	100,0
	Total	803	72,9	100,0	
Missing	System	299	27,1		
Total		1102	100,0		

6_8 To expensive

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	525	47,6	65,4	65,4
	Yes	278	25,2	34,6	100,0
	Total	803	72,9	100,0	
Missing	System	299	27,1		
Total		1102	100,0		

6_9 To time consuming

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	717	65,1	89,3	89,3
	Yes	86	7,8	10,7	100,0
	Total	803	72,9	100,0	
Missing	System	299	27,1		
Total		1102	100,0		

6_10 The house is unsuitable

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	665	60,3	82,8	82,8
	Yes	138	12,5	17,2	100,0
	Total	803	72,9	100,0	
Missing	System	299	27,1		
Total		1102	100,0		

6_11 Dependent on other

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	709	64,3	88,3	88,3
	Yes	94	8,5	11,7	100,0
	Total	803	72,9	100,0	
Missing	System	299	27,1		
Total		1102	100,0		

6_12 Doubt that the municipal till accept this

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	776	70,4	96,6	96,6
	Yes	27	2,5	3,4	100,0
	Total	803	72,9	100,0	
Missing	System	299	27,1		
Total		1102	100,0		

6_13 Doubt that the Distribution System Operator will be positive

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	761	69,1	94,8	94,8
	Yes	42	3,8	5,2	100,0
	Total	803	72,9	100,0	
Missing	System	299	27,1		
Total		1102	100,0		

6_14 Not sure about the environmental effect

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	754	68,4	93,9	93,9
	Yes	49	4,4	6,1	100,0
	Total	803	72,9	100,0	
Missing	System	299	27,1		
Total		1102	100,0		

6_15 Other, specify

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	761	69,1	94,8	94,8
	Yes	42	3,8	5,2	100,0
	Total	803	72,9	100,0	
Missing	System	299	27,1		
Total		1102	100,0		

6_16 Do not know

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	781	70,9	97,3	97,3
	Yes	22	2,0	2,7	100,0
	Total	803	72,9	100,0	
Missing	System	299	27,1		
Total		1102	100,0		

8 How sure/unsure are you related to installing a PV system?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	49	4,4	18,0	18,0
	2	30	2,7	11,0	29,0
	3	41	3,7	15,1	44,1
	4	28	2,5	10,3	54,4
	5	68	6,2	25,0	79,4
	6	17	1,5	6,3	85,7
	7	23	2,1	8,5	94,1
	8	9	,8	3,3	97,4
	10	7	,6	2,6	100,0
	Total	272	24,7	100,0	
Missing	System	830	75,3		
Total		1102	100,0		

9_1 Interest in technology

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	210	19,1	77,2	77,2
	Yes	62	5,6	22,8	100,0
	Total	272	24,7	100,0	
Missing	System	830	75,3		
Total		1102	100,0		

9_2 Want to get own experience with the technology

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	248	22,5	91,2	91,2
	Yes	24	2,2	8,8	100,0
	Total	272	24,7	100,0	
Missing	System	830	75,3		
Total		1102	100,0		

9_3 Want to reduce the future electricity costs

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	87	7,9	32,0	32,0
	Yes	185	16,8	68,0	100,0
	Total	272	24,7	100,0	
Missing	System	830	75,3		
Total		1102	100,0		

9_4 Want to contribute to a better environment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	115	10,4	42,3	42,3
	Yes	157	14,2	57,7	100,0
	Total	272	24,7	100,0	
Missing	System	830	75,3		
Total		1102	100,0		

9_5 Want to contribute to an increase of the market for PV systems

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	220	20,0	80,9	80,9
	Yes	52	4,7	19,1	100,0
	Total	272	24,7	100,0	
Missing	System	830	75,3		
Total		1102	100,0		

9_6 Want to have a larger indepencency from central power retailers

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	212	19,2	77,9	77,9
	Yes	60	5,4	22,1	100,0
	Total	272	24,7	100,0	
Missing	System	830	75,3		
Total		1102	100,0		

9_7 Other, specify

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	266	24,1	97,8	97,8
	Yes	6	,5	2,2	100,0
	Total	272	24,7	100,0	
Missing	System	830	75,3		
Total		1102	100,0		

9_8 Do not know

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	262	23,8	96,3	96,3
	Yes	10	,9	3,7	100,0
	Total	272	24,7	100,0	
Missing	System	830	75,3		
Total		1102	100,0		

Q009_96

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		1096	99,5	99,5	99,5
	Billigere etter hvert (når man har hatt det noen år blir det nesten gratis)	1	,1	,1	99,5
	Kan ikke installere	1	,1	,1	99,6
	Tjene penger	1	,1	,1	99,7
	Tror det vil fungere bra på hyta	1	,1	,1	99,8
	uaktuelt	1	,1	,1	99,9
	Ønsker ikke å installere solcelleanlegg...	1	,1	,1	100,0
	Total	1102	100,0	100,0	

10_1 Operation security

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very poor	115	10,4	42,4	42,4
	Quite poor	63	5,7	23,2	65,7
	Neither poor or good	39	3,5	14,4	80,1
	Quite good	21	1,9	7,7	87,8
	Very good	4	,4	1,5	89,3
	Do not know	29	2,6	10,7	100,0
	Total	271	24,6	100,0	
Missing	System	831	75,4		
Total		1102	100,0		

10_2 Liftetime of the installation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very poor	114	10,3	42,1	42,1
	Quite poor	76	6,9	28,0	70,1
	Neither poor or good	30	2,7	11,1	81,2
	Quite good	18	1,6	6,6	87,8
	Very good	4	,4	1,5	89,3
	Do not know	29	2,6	10,7	100,0
	Total	271	24,6	100,0	
Missing	System	831	75,4		
Total		1102	100,0		

10_4 The amount of electricity produced

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very poor	94	8,5	34,6	34,6
	Quite poor	86	7,8	31,6	66,2
	Neither poor or good	39	3,5	14,3	80,5
	Quite good	25	2,3	9,2	89,7
	Very good	2	,2	,7	90,4
	Do not know	26	2,4	9,6	100,0
	Total	272	24,7	100,0	
Missing	System	830	75,3		
Total		1102	100,0		

10_5 The time of day/year when self produced electricty is available

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very poor	87	7,9	32,0	32,0
	Quite poor	78	7,1	28,7	60,7
	Neither poor or good	37	3,4	13,6	74,3
	Quite good	37	3,4	13,6	87,9
	Very good	8	,7	2,9	90,8
	Do not know	25	2,3	9,2	100,0
	Total	272	24,7	100,0	
Missing	System	830	75,3		
Total		1102	100,0		

10_6 The economical profitability of the investment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very poor	98	8,9	36,0	36,0
	Quite poor	80	7,3	29,4	65,4
	Neither poor or good	47	4,3	17,3	82,7
	Quite good	19	1,7	7,0	89,7
	Very good	3	,3	1,1	90,8
	Do not know	25	2,3	9,2	100,0
	Total	272	24,7	100,0	
Missing	System	830	75,3		
Total		1102	100,0		

10_7 The authorities regulations of distributed generation at private customers

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very poor	131	11,9	48,2	48,2
	Quite poor	73	6,6	26,8	75,0
	Neither poor or good	30	2,7	11,0	86,0
	Quite good	8	,7	2,9	89,0
	Very good	1	,1	,4	89,3
	Do not know	29	2,6	10,7	100,0
	Total	272	24,7	100,0	
Missing	System	830	75,3		
Total		1102	100,0		

12_1 ...if the conditions in Norway are suitable for distributed generation on the customer level

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	160	14,5	67,8	67,8
	Yes	76	6,9	32,2	100,0
	Total	236	21,4	100,0	
Missing	System	866	78,6		
Total		1102	100,0		

12_2 ...framework conditions for the prosumers in the future

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	161	14,6	68,2	68,2
	Yes	75	6,8	31,8	100,0
	Total	236	21,4	100,0	
Missing	System	866	78,6		
Total		1102	100,0		

12_3 ...if the technology are well-function

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	148	13,4	62,7	62,7
	Yes	88	8,0	37,3	100,0
	Total	236	21,4	100,0	
Missing	System	866	78,6		
Total		1102	100,0		

12_4 ...where I/we can get information about the procurement

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	206	18,7	87,3	87,3
	Yes	30	2,7	12,7	100,0
	Total	236	21,4	100,0	
Missing	System	866	78,6		
Total		1102	100,0		

12_5 ...possibility to get support

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	172	15,6	72,9	72,9
	Yes	64	5,8	27,1	100,0
	Total	236	21,4	100,0	
Missing	System	866	78,6		
Total		1102	100,0		

12_6 ...the reliability of the system

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	150	13,6	63,6	63,6
	Yes	86	7,8	36,4	100,0
	Total	236	21,4	100,0	
Missing	System	866	78,6		
Total		1102	100,0		

12_7 ...how the system should be in stalled

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	197	17,9	83,5	83,5
	Yes	39	3,5	16,5	100,0
	Total	236	21,4	100,0	
Missing	System	866	78,6		
Total		1102	100,0		

12_8 ...how long time the procurement takes

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	215	19,5	91,1	91,1
	Yes	21	1,9	8,9	100,0
	Total	236	21,4	100,0	
Missing	System	866	78,6		
Total		1102	100,0		

12_9 ...if the house is suitable for installation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	136	12,3	57,6	57,6
	Yes	100	9,1	42,4	100,0
	Total	236	21,4	100,0	
Missing	System	866	78,6		
Total		1102	100,0		

12_10 ...if the installation is possible/allowed where I live

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	196	17,8	83,1	83,1
	Yes	40	3,6	16,9	100,0
	Total	236	21,4	100,0	
Missing	System	866	78,6		
Total		1102	100,0		

12_11 ...if the municipal will give me permission for installation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	214	19,4	90,7	90,7
	Yes	22	2,0	9,3	100,0
	Total	236	21,4	100,0	
Missing	System	866	78,6		
Total		1102	100,0		

12_12 ...if the Distribution System Operator is positive to my electriicty fed into the grid

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	183	16,6	77,5	77,5
	Yes	53	4,8	22,5	100,0
	Total	236	21,4	100,0	
Missing	System	866	78,6		
Total		1102	100,0		

12_13...on the environmental effect of the system

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	223	20,2	94,5	94,5
	Yes	13	1,2	5,5	100,0
	Total	236	21,4	100,0	
Missing	System	866	78,6		
Total		1102	100,0		

12_14 Other, specify

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	223	20,2	94,5	94,5
	Yes	13	1,2	5,5	100,0
	Total	236	21,4	100,0	
Missing	System	866	78,6		
Total		1102	100,0		

12_15 Do not know

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	201	18,2	85,2	85,2
	Yes	35	3,2	14,8	100,0
	Total	236	21,4	100,0	
Missing	System	866	78,6		
Total		1102	100,0		

11 How sure/unsure are you that you will not install a PV system?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	7	,6	2,4	2,4
	2	2	,2	,7	3,1
	3	4	,4	1,4	4,4
	4	6	,5	2,0	6,4
	5	15	1,4	5,1	11,5
	6	13	1,2	4,4	15,9
	7	32	2,9	10,8	26,8
	8	51	4,6	17,3	44,1
	9	36	3,3	12,2	56,3
	10	129	11,7	43,7	100,0
	Total	295	26,8	100,0	
Missing	System	807	73,2		
Total		1102	100,0		

28_1 ...if the conditions in Norway are suitable for distributed generation on the customer level

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	197	17,9	66,8	66,8
	Yes	98	8,9	33,2	100,0
	Total	295	26,8	100,0	
Missing	System	807	73,2		
Total		1102	100,0		

28_2 ...framework conditions for the prosumers in the future

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	230	20,9	78,0	78,0
	Yes	65	5,9	22,0	100,0
	Total	295	26,8	100,0	
Missing	System	807	73,2		
Total		1102	100,0		

28_3 ...if the technology are well-funtion

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	210	19,1	71,2	71,2
	Yes	85	7,7	28,8	100,0
	Total	295	26,8	100,0	
Missing	System	807	73,2		
Total		1102	100,0		

28_4 ...where I/we can get information about the procurement

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	279	25,3	94,6	94,6
	Yes	16	1,5	5,4	100,0
	Total	295	26,8	100,0	
Missing	System	807	73,2		
Total		1102	100,0		

28_5 ...possibility to get support

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	236	21,4	80,0	80,0
	Yes	59	5,4	20,0	100,0
	Total	295	26,8	100,0	
Missing	System	807	73,2		
Total		1102	100,0		

28_6 ...the reliability of the system

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	233	21,1	79,0	79,0
	Yes	62	5,6	21,0	100,0
	Total	295	26,8	100,0	
Missing	System	807	73,2		
Total		1102	100,0		

28_7 ...how the system should be in stalled

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	272	24,7	92,2	92,2
	Yes	23	2,1	7,8	100,0
	Total	295	26,8	100,0	
Missing	System	807	73,2		
Total		1102	100,0		

28_8 ...how long time the procurement takes

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	285	25,9	96,6	96,6
	Yes	10	,9	3,4	100,0
	Total	295	26,8	100,0	
Missing	System	807	73,2		
Total		1102	100,0		

28_9 ...if the house is suitable for installation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	178	16,2	60,3	60,3
	Yes	117	10,6	39,7	100,0
	Total	295	26,8	100,0	
Missing	System	807	73,2		
Total		1102	100,0		

28_10 ...if the installation is possible/allowed where I live

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	251	22,8	85,1	85,1
	Yes	44	4,0	14,9	100,0
	Total	295	26,8	100,0	
Missing	System	807	73,2		
Total		1102	100,0		

28_11 ...if the municipal will give me permission for installation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	270	24,5	91,5	91,5
	Yes	25	2,3	8,5	100,0
	Total	295	26,8	100,0	
Missing	System	807	73,2		
Total		1102	100,0		

28_12 ...if the Distribution System Operator is positive to my electriicty fed into the grid

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	254	23,0	86,1	86,1
	Yes	41	3,7	13,9	100,0
	Total	295	26,8	100,0	
Missing	System	807	73,2		
Total		1102	100,0		

28_13 ...on the environmental effect of the system

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	254	23,0	86,1	86,1
	Yes	41	3,7	13,9	100,0
	Total	295	26,8	100,0	
Missing	System	807	73,2		
Total		1102	100,0		

28_14 Other, specify

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	254	23,0	86,1	86,1
	Yes	41	3,7	13,9	100,0
	Total	295	26,8	100,0	
Missing	System	807	73,2		
Total		1102	100,0		

28_15 Do not know

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	261	23,7	88,5	88,5
	Yes	34	3,1	11,5	100,0
	Total	295	26,8	100,0	
Missing	System	807	73,2		
Total		1102	100,0		

23_1 Neighbours

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	117	10,6	98,3	98,3
	Yes	2	,2	1,7	100,0
	Total	119	10,8	100,0	
Missing	System	983	89,2		
Total		1102	100,0		

23_2 Family/friends/colleagues

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	105	9,5	88,2	88,2
	Yes	14	1,3	11,8	100,0
	Total	119	10,8	100,0	
Missing	System	983	89,2		
Total		1102	100,0		

23_3 Persons I/we know in the business

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	108	9,8	90,8	90,8
	Yes	11	1,0	9,2	100,0
	Total	119	10,8	100,0	
Missing	System	983	89,2		
Total		1102	100,0		

23_4 Advertisements

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	99	9,0	83,2	83,2
	Yes	20	1,8	16,8	100,0
	Total	119	10,8	100,0	
Missing	System	983	89,2		
Total		1102	100,0		

23_5 Called upon by a vendor of PV systems

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	118	10,7	99,2	99,2
	Yes	1	,1	,8	100,0
	Total	119	10,8	100,0	
Missing	System	983	89,2		
Total		1102	100,0		

23_6 Called upon by a Distribution System Operator/Power supplier

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	118	10,7	99,2	99,2
	Yes	1	,1	,8	100,0
	Total	119	10,8	100,0	
Missing	System	983	89,2		
Total		1102	100,0		

23_7 Authorities

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	100	9,1	84,0	84,0
	Yes	19	1,7	16,0	100,0
	Total	119	10,8	100,0	
Missing	System	983	89,2		
Total		1102	100,0		

23_8 Peformed own investigations

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	41	3,7	34,5	34,5
	Yes	78	7,1	65,5	100,0
	Total	119	10,8	100,0	
Missing	System	983	89,2		
Total		1102	100,0		

23_9 Other sources

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	94	8,5	79,0	79,0
	Yes	25	2,3	21,0	100,0
	Total	119	10,8	100,0	
Missing	System	983	89,2		
Total		1102	100,0		

23_10 Dot not know

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	115	10,4	96,6	96,6
	Yes	4	,4	3,4	100,0
	Total	119	10,8	100,0	
Missing	System	983	89,2		
Total		1102	100,0		

25 When did you start to evaluate installation of PV systems?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than one year ago	48	4,4	40,3	40,3
	1-2 year(s) ago	33	3,0	27,7	68,1
	3-5 years ago	16	1,5	13,4	81,5
	More than 5 years ago	16	1,5	13,4	95,0
	Do not know	6	,5	5,0	100,0
	Total	119	10,8	100,0	
Missing	System	983	89,2		
Total		1102	100,0		

Q026other

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		1096	99,5	99,5	99,5
	el-bil	1	,1	,1	99,5
	Endringer på bygninger	1	,1	,1	99,6
	import av strøm fra andre land	1	,1	,1	99,7
	som en del av et "SMART"Hus	1	,1	,1	99,8
	Unngå kjernekraft	1	,1	,1	99,9
	økonomi	1	,1	,1	100,0
	Total	1102	100,0	100,0	

26_1 Interest in the technology

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very little	13	1,2	10,9	10,9
	Quite little	13	1,2	10,9	21,8
	Neither little or much	29	2,6	24,4	46,2
	Quite much	48	4,4	40,3	86,6
	Very much	16	1,5	13,4	100,0
	Total	119	10,8	100,0	
Missing	System	983	89,2		
Total		1102	100,0		

26_2 Want to get experience with the technology

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very little	11	1,0	9,2	9,2
	Quite little	13	1,2	10,9	20,2
	Neither little or much	30	2,7	25,2	45,4
	Quite much	47	4,3	39,5	84,9
	Very much	18	1,6	15,1	100,0
	Total	119	10,8	100,0	
Missing	System	983	89,2		
Total		1102	100,0		

26_3 Want to save money on future electricity costs

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Quite little	5	,5	4,2	4,2
	Neither little or much	12	1,1	10,1	14,3
	Quite much	60	5,4	50,4	64,7
	Very much	42	3,8	35,3	100,0
	Total	119	10,8	100,0	
Missing	System	983	89,2		
Total		1102	100,0		

26_4 Want to contribute to a better environment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very little	2	,2	1,7	1,7
	Quite little	10	,9	8,4	10,1
	Neither little or much	7	,6	5,9	16,0
	Quite much	50	4,5	42,0	58,0
	Very much	50	4,5	42,0	100,0
	Total	119	10,8	100,0	
Missing	System	983	89,2		
Total		1102	100,0		

26_5 Want to contribute to an increase of the market for PV systems

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very little	4	,4	3,4	3,4
	Quite little	11	1,0	9,2	12,6
	Neither little or much	27	2,5	22,7	35,3
	Quite much	45	4,1	37,8	73,1
	Very much	32	2,9	26,9	100,0
	Total	119	10,8	100,0	
Missing	System	983	89,2		
Total		1102	100,0		

26_6 Want to have a larger indepencency from central power retailers

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very little	5	,5	4,2	4,2
	Quite little	13	1,2	10,9	15,1
	Neither little or much	36	3,3	30,3	45,4
	Quite much	40	3,6	33,6	79,0
	Very much	24	2,2	20,2	99,2
	Do not know	1	,1	,8	100,0
	Total	119	10,8	100,0	
Missing	System	983	89,2		
Total		1102	100,0		

26_7 Other, specity

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very little	6	,5	6,7	6,7
	Quite little	1	,1	1,1	7,9
	Neither little or much	12	1,1	13,5	21,3
	Quite much	3	,3	3,4	24,7
	Very much	1	,1	1,1	25,8
	Do not know	66	6,0	74,2	100,0
	Total	89	8,1	100,0	
Missing	System	1013	91,9		
Total		1102	100,0		

27_1 Operation security

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very poor	17	1,5	14,3	14,3
	Quite poor	20	1,8	16,8	31,1
	Neither poor or good	38	3,4	31,9	63,0
	Quite good	22	2,0	18,5	81,5
	Very good	7	,6	5,9	87,4
	Do not know	15	1,4	12,6	100,0
	Total	119	10,8	100,0	
Missing	System	983	89,2		
Total		1102	100,0		

27_2 Liftetime of the installation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very poor	12	1,1	10,1	10,1
	Quite poor	22	2,0	18,5	28,6
	Neither poor or good	37	3,4	31,1	59,7
	Quite good	28	2,5	23,5	83,2
	Very good	3	,3	2,5	85,7
	Do not know	17	1,5	14,3	100,0
	Total	119	10,8	100,0	
Missing	System	983	89,2		
Total		1102	100,0		

27_3 Anleggsleverandører

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very poor	16	1,5	13,4	13,4
	Quite poor	37	3,4	31,1	44,5
	Neither poor or good	33	3,0	27,7	72,3
	Quite good	15	1,4	12,6	84,9
	Very good	3	,3	2,5	87,4
	Do not know	15	1,4	12,6	100,0
	Total	119	10,8	100,0	
Missing	System	983	89,2		
Total		1102	100,0		

27_4 Distribution System Operators

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very poor	17	1,5	14,3	14,3
	Quite poor	37	3,4	31,1	45,4
	Neither poor or good	33	3,0	27,7	73,1
	Quite good	15	1,4	12,6	85,7
	Very good	2	,2	1,7	87,4
	Do not know	15	1,4	12,6	100,0
	Total	119	10,8	100,0	
Missing	System	983	89,2		
Total		1102	100,0		

27_5 The amount of electricity produced

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very poor	13	1,2	10,9	10,9
	Quite poor	31	2,8	26,1	37,0
	Neither poor or good	30	2,7	25,2	62,2
	Quite good	25	2,3	21,0	83,2
	Very good	6	,5	5,0	88,2
	Do not know	14	1,3	11,8	100,0
	Total	119	10,8	100,0	
Missing	System	983	89,2		
Total		1102	100,0		

27_6 The distribution of the production during the year

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very poor	10	,9	8,4	8,4
	Quite poor	36	3,3	30,3	38,7
	Neither poor or good	32	2,9	26,9	65,5
	Quite good	27	2,5	22,7	88,2
	Very good	4	,4	3,4	91,6
	Do not know	10	,9	8,4	100,0
	Total	119	10,8	100,0	
Missing	System	983	89,2		
Total		1102	100,0		

27_7 The distribution of the production during the day

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very poor	11	1,0	9,2	9,2
	Quite poor	32	2,9	26,9	36,1
	Neither poor or good	28	2,5	23,5	59,7
	Quite good	29	2,6	24,4	84,0
	Very good	7	,6	5,9	89,9
	Do not know	12	1,1	10,1	100,0
	Total	119	10,8	100,0	
Missing	System	983	89,2		
Total		1102	100,0		

27_8 The economical profitability of the investment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very poor	10	,9	8,4	8,4
	Quite poor	29	2,6	24,4	32,8
	Neither poor or good	40	3,6	33,6	66,4
	Quite good	23	2,1	19,3	85,7
	Very good	5	,5	4,2	89,9
	Do not know	12	1,1	10,1	100,0
	Total	119	10,8	100,0	
Missing	System	983	89,2		
Total		1102	100,0		

27_9 The authorities regulations of distributed generaation at private customers

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very poor	19	1,7	16,0	16,0
	Quite poor	37	3,4	31,1	47,1
	Neither poor or good	34	3,1	28,6	75,6
	Quite good	14	1,3	11,8	87,4
	Very good	2	,2	1,7	89,1
	Do not know	13	1,2	10,9	100,0
	Total	119	10,8	100,0	
Missing	System	983	89,2		
Total		1102	100,0		

13_1 Neighbours

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	3	,3	100,0	100,0
Missing	System	1099	99,7		
Total		1102	100,0		

13_2 Family/friends/colleagues

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	3	,3	100,0	100,0
Missing	System	1099	99,7		
Total		1102	100,0		

13_3 Persons I/we know in the business

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	3	,3	100,0	100,0
Missing	System	1099	99,7		
Total		1102	100,0		

13_4 Advertisements

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	1	,1	33,3	33,3
	Yes	2	,2	66,7	100,0
	Total	3	,3	100,0	
Missing	System	1099	99,7		
Total		1102	100,0		

13_5 Called upon by a vendor of PV systems

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	2	,2	66,7	66,7
	Yes	1	,1	33,3	100,0
	Total	3	,3	100,0	
Missing	System	1099	99,7		
Total		1102	100,0		

13_6 Called upon by a Distribution System Operator/Power supplier

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	3	,3	100,0	100,0
Missing	System	1099	99,7		
Total		1102	100,0		

13_7 Peformed own investigations

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	2	,2	66,7	66,7
	Yes	1	,1	33,3	100,0
	Total	3	,3	100,0	
Missing	System	1099	99,7		
Total		1102	100,0		

13_8 Authorities

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	3	,3	100,0	100,0
Missing	System	1099	99,7		
Total		1102	100,0		

13_9 Other, specify

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	2	,2	66,7	66,7
	Yes	1	,1	33,3	100,0
	Total	3	,3	100,0	
Missing	System	1099	99,7		
Total		1102	100,0		

13_10 Do not know

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	3	,3	100,0	100,0
Missing	System	1099	99,7		
Total		1102	100,0		

Q013_96

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		1101	99,9	99,9	99,9
	Nrk P1	1	,1	,1	100,0
	Total	1102	100,0	100,0	

14 For how long time have you had a PV system? (approx.)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 1 year	2	,2	66,7	66,7
	3-5 years	1	,1	33,3	100,0
	Total	3	,3	100,0	
Missing	System	1099	99,7		
Total		1102	100,0		

15_1 Interest in the technology

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	3	,3	100,0	100,0
Missing	System	1099	99,7		
Total		1102	100,0		

15_2 Want to get experience with the technology (Work with similar topic)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	3	,3	100,0	100,0
Missing	System	1099	99,7		
Total		1102	100,0		

15_3 Want to save money on future electricity costs

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	1	,1	33,3	33,3
	Yes	2	,2	66,7	100,0
	Total	3	,3	100,0	
Missing	System	1099	99,7		
Total		1102	100,0		

15_4 Want to contribute to a better environment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	3	,3	100,0	100,0
Missing	System	1099	99,7		
Total		1102	100,0		

15_5 Want to contribute to an increase of the market for PV systems

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	2	,2	66,7	66,7
	Yes	1	,1	33,3	100,0
	Total	3	,3	100,0	
Missing	System	1099	99,7		
Total		1102	100,0		

15_6 Want to have a larger indepencency from central power retailers

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	2	,2	66,7	66,7
	Yes	1	,1	33,3	100,0
	Total	3	,3	100,0	
Missing	System	1099	99,7		
Total		1102	100,0		

15_7 Other, specify

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	3	,3	100,0	100,0
Missing	System	1099	99,7		
Total		1102	100,0		

15_8 Do not know

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	3	,3	100,0	100,0
Missing	System	1099	99,7		
Total		1102	100,0		

Q015_Other

		Frequency	Percent
Missing	System	1102	100,0

16_1 The vendor of the PV system

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Neither displeased or pleased	1	,1	33,3	33,3
	Quite pleased	1	,1	33,3	66,7
	Very pleased	1	,1	33,3	100,0
	Total	3	,3	100,0	
Missing	System	1099	99,7		
Total		1102	100,0		

16_2 The Distribution System Operator

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Quite displeased	2	,2	66,7	66,7
	Neither displeased or pleased	1	,1	33,3	100,0
	Total	3	,3	100,0	
Missing	System	1099	99,7		
Total		1102	100,0		

16_3 The company buying the electricity

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Quite displeased	1	,1	33,3	33,3
	Neither displeased or pleased	1	,1	33,3	66,7
	Quite pleased	1	,1	33,3	100,0
	Total	3	,3	100,0	
Missing	System	1099	99,7		
Total		1102	100,0		

16_4 Information from the Authorities

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Quite displeased	2	,2	66,7	66,7
	Neither displeased or pleased	1	,1	33,3	100,0
	Total	3	,3	100,0	
Missing	System	1099	99,7		
Total		1102	100,0		

16_5 Communication from the Authorities

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very displeased	1	,1	33,3	33,3
	Quite displeased	1	,1	33,3	66,7
	Very pleased	1	,1	33,3	100,0
	Total	3	,3	100,0	
Missing	System	1099	99,7		
Total		1102	100,0		

16_6 Supporting scheme from the Authorities

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Svært misfornøyd	1	,1	33,3	33,3
	Ganske misfornøyd	1	,1	33,3	66,7
	Ganske fornøyd	1	,1	33,3	100,0
	Total	3	,3	100,0	
Missing	System	1099	99,7		
Total		1102	100,0		

16_7 Other, specify

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Quite pleased	1	,1	50,0	50,0
	Do not know	1	,1	50,0	100,0
	Total	2	,2	100,0	
Missing	System	1100	99,8		
Total		1102	100,0		

17_1 Operation security

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Quite pleased	2	,2	66,7	66,7
	Very pleased	1	,1	33,3	100,0
	Total	3	,3	100,0	
Missing	System	1099	99,7		
Total		1102	100,0		

17_2 Liftetime of the installation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Neither displeased or pleased	1	,1	33,3	33,3
	Quite pleased	2	,2	66,7	100,0
	Total	3	,3	100,0	
Missing	System	1099	99,7		
Total		1102	100,0		

17_3 The competence of the vendor

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Quite displeased	1	,1	33,3	33,3
	Quite pleased	2	,2	66,7	100,0
	Total	3	,3	100,0	
Missing	System	1099	99,7		
Total		1102	100,0		

17_4 The availability of the vendor

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Quite pleased	3	,3	100,0	100,0
Missing	System	1099	99,7		
Total		1102	100,0		

17_5 The competence of the Distribution System Operator

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Quite displeased	1	,1	33,3	33,3
	Quite pleased	1	,1	33,3	66,7
	Do not know	1	,1	33,3	100,0
	Total	3	,3	100,0	
Missing	System	1099	99,7		
Total		1102	100,0		

17_6 The availability of the Distribution System Operator

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Quite displeased	2	,2	66,7	66,7
	Very pleased	1	,1	33,3	100,0
	Total	3	,3	100,0	
Missing	System	1099	99,7		
Total		1102	100,0		

17_7 Amount of electricity produced

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Neither displeased or pleased	2	,2	66,7	66,7
	Quite pleased	1	,1	33,3	100,0
	Total	3	,3	100,0	
Missing	System	1099	99,7		
Total		1102	100,0		

17_8 The distribution of the production during the year

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Quite displeased	1	,1	33,3	33,3
	Neither displeased or pleased	1	,1	33,3	66,7
	Do not know	1	,1	33,3	100,0
	Total	3	,3	100,0	
Missing	System	1099	99,7		
Total		1102	100,0		

17_9 The distribution of the production during the day

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Neither displeased or pleased	1	,1	33,3	33,3
	Quite pleased	1	,1	33,3	66,7
	Do not know	1	,1	33,3	100,0
	Total	3	,3	100,0	
Missing	System	1099	99,7		
Total		1102	100,0		

17_10 The economical profitability of the investment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Neither displeased or pleased	2	,2	66,7	66,7
	Quite pleased	1	,1	33,3	100,0
	Total	3	,3	100,0	
Missing	System	1099	99,7		
Total		1102	100,0		

17_11 The authorities regulations of distributed generaation at private customers

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very displeased	1	,1	33,3	33,3
	Quite displeased	1	,1	33,3	66,7
	Quite pleased	1	,1	33,3	100,0
	Total	3	,3	100,0	
Missing	System	1099	99,7		
Total		1102	100,0		

18 Based on your experience, would you recommend other to install a PV-panek?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	1	,1	33,3	33,3
	No	1	,1	33,3	66,7
	Do not know	1	,1	33,3	100,0
	Total	3	,3	100,0	
Missing	System	1099	99,7		
Total		1102	100,0		

19_1 The procurement of the PV system

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Spouse/partner	1	,1	50,0	50,0
	The responsibility are split between several	1	,1	50,0	100,0
	Total	2	,2	100,0	
Missing	System	1100	99,8		
Total		1102	100,0		

19_2 The practical implementation of the installation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Children	1	,1	50,0	50,0
	The responsibility are split between several	1	,1	50,0	100,0
	Total	2	,2	100,0	
Missing	System	1100	99,8		
Total		1102	100,0		

19_3 Updated information about the electricit production

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	The responsibility are split between several	2	,2	100,0	100,0
Missing	System	1100	99,8		
Total		1102	100,0		

19_4 Contact with the vendor

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Spuse/partner	2	,2	100,0	100,0
Missing	System	1100	99,8		
Total		1102	100,0		

30 To what extent to you keep track on amount of electriicty produced?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Neither litte or large degree	1	,1	33,3	33,3
	To a very large degree	1	,1	33,3	66,7
	Do not know	1	,1	33,3	100,0
	Total	3	,3	100,0	
Missing	System	1099	99,7		
Total		1102	100,0		

20 Have you calculated the economical benefit of the PV system?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	3	,3	100,0	100,0
Missing	System	1099	99,7		
Total		1102	100,0		

21 Do you expect that the PV system will be paid of during the lifetime of the installation?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	1	,1	33,3	33,3
	No	1	,1	33,3	66,7
	Do not know	1	,1	33,3	100,0
	Total	3	,3	100,0	
Missing	System	1099	99,7		
Total		1102	100,0		

22 How many years of payment does the installation have?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	1	,1	100,0	100,0
Missing	System	1101	99,9		
Total		1102	100,0		

Q022_Codes

		Frequency	Percent
Missing	System	1102	100,0

29 How many grownups are at home/home office during daytime?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	253	23,0	23,4	23,4
	1	240	21,8	22,2	45,6
	2	511	46,4	47,2	92,8
	3	51	4,6	4,7	97,5
	4	21	1,9	1,9	99,4
	5	3	,3	,3	99,7
	6	2	,2	,2	99,9
	22	1	,1	,1	100,0
	Total	1082	98,2	100,0	
Missing	System	20	1,8		
Total		1102	100,0		

Q029_Codes

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	20	1,8	100,0	100,0
Missing	System	1082	98,2		
Total		1102	100,0		

Which county do you live in?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Østfold	55	5,0	5,0	5,0
	Akershus	177	16,1	16,1	21,1
	Oslo	76	6,9	6,9	27,9
	Hedmark	39	3,5	3,5	31,5
	Oppland	52	4,7	4,7	36,2
	Buskerud	56	5,1	5,1	41,3
	Vestfold	69	6,3	6,3	47,5
	Telemark	39	3,5	3,5	51,1
	Aust-Agder	34	3,1	3,1	54,2
	Vest-Agder	39	3,5	3,5	57,7
	Rogaland	97	8,8	8,8	66,5
	Hordaland	109	9,9	9,9	76,4
	Sogn og Fjordane	23	2,1	2,1	78,5
	Møre og Romsdal	43	3,9	3,9	82,4
	Sør-Trøndelag	62	5,6	5,6	88,0
	Nord-Trøndelag	27	2,5	2,5	90,5
	Nordland	49	4,4	4,4	94,9
	Troms	41	3,7	3,7	98,6
	Finnmark	15	1,4	1,4	100,0
	Total	1102	100,0	100,0	

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	577	52,4	52,4	52,4
	Female	525	47,6	47,6	100,0
	Total	1102	100,0	100,0	

What is your main source of income?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Income-producing work full-time	571	51,8	51,8	51,8
	Income-producing work part-time	98	8,9	8,9	60,7
	Sself-employed person	33	3,0	3,0	63,7
	Retirement pensioner	239	21,7	21,7	85,4
	Unemployed	10	,9	,9	86,3
	Other type of social security	49	4,4	4,4	90,7
	Student/trainee	91	8,3	8,3	99,0
	At home	3	,3	,3	99,3
	Other	8	,7	,7	100,0
	Total	1102	100,0	100,0	

What is (approx.) your personal gross yearly income (before taxes and deductions)?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Under 200.000 NOK	99	9,0	9,0	9,0
	200.000 - 299.999 NOK	94	8,5	8,5	17,5
	300.000 - 399.999 NOK	186	16,9	16,9	34,4
	400.000 - 499.999 NOK	247	22,4	22,4	56,8
	500.000 - 599.999 NOK	163	14,8	14,8	71,6
	600.000 - 699.999 NOK	95	8,6	8,6	80,2
	700.000 - 799.999 NOK	41	3,7	3,7	83,9
	800.000 - 999.999 NOK	45	4,1	4,1	88,0
	1.000.000 NOK or more	42	3,8	3,8	91,8
	Do not want to answer	90	8,2	8,2	100,0
	Total	1102	100,0	100,0	

What is your highest completed education level?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Primary and lower secondary school (1-10)	58	5,3	5,3	5,3
	Upper secondary school (11-13)	176	16,0	16,0	21,2
	Skill training/certificate of apprenticeship	142	12,9	12,9	34,1
	University-/college until 4 years	457	41,5	41,5	75,6
	University-/college more than 4 years	269	24,4	24,4	100,0
	Total	1102	100,0	100,0	

How many persons consists the household of?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 person	143	13,0	13,0	13,0
	2 persons	428	38,8	38,8	51,8
	3 persons	194	17,6	17,6	69,4
	4 persons	228	20,7	20,7	90,1
	5 persons or more	109	9,9	9,9	100,0
	Total	1102	100,0	100,0	

What is (approx.) the total gross yearly income (before taxes and deductions) for the household?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Under 200.000 NOK	13	1,2	1,2	1,2
	200.000 - 399.999 NOK	47	4,3	4,3	5,4
	400.000 - 599.999 NOK	158	14,3	14,3	19,8
	600.000 - 799.999 NOK	231	21,0	21,0	40,7
	800.000 - 999.999 NOK	211	19,1	19,1	59,9
	1.000.000 - 1.199.999 NOK	167	15,2	15,2	75,0
	1.200.000 - 1.399.999 NOK	75	6,8	6,8	81,9
	1.400.000 NOK or more	80	7,3	7,3	89,1
	Do not want to answer	120	10,9	10,9	100,0
	Total	1102	100,0	100,0	

How manye persons in the household are younger than 15 years?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Nobody	762	69,1	69,1	69,1
	1	136	12,3	12,3	81,5
	2	154	14,0	14,0	95,5
	3 or more	50	4,5	4,5	100,0
	Total	1102	100,0	100,0	

Which of the following statements describe your housing situation?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	I live together with spouse/partner	429	38,9	38,9	38,9
	I live together with spouse/partner and children	383	34,8	34,8	73,7
	I live together with my children	27	2,5	2,5	76,1
	I live together with my parents	95	8,6	8,6	84,8
	I live alone	133	12,1	12,1	96,8
	I share the house with other adults (apartment sharing or equivalent)	19	1,7	1,7	98,5
	Other	16	1,5	1,5	100,0
	Total	1102	100,0	100,0	

Region

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Oslo/Akershus	253	23,0	23,0	23,0
	Rest Østland	310	28,1	28,1	51,1
	Sør-/Vestland	345	31,3	31,3	82,4
	Tr.lag/Nord-Norge	194	17,6	17,6	100,0
	Total	1102	100,0	100,0	

Age - categories

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Under 30	202	18,3	18,3	18,3
	30-44	247	22,4	22,4	40,7
	45-59	270	24,5	24,5	65,2
	60+	383	34,8	34,8	100,0
	Total	1102	100,0	100,0	

Device

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	PC/laptop/netbook	693	62,9	62,9	62,9
	Large tablet	168	15,2	15,2	78,1
	Medium tablet	3	,3	,3	78,4
	Small tablet	91	8,3	8,3	86,7
	Smart phone with touch	141	12,8	12,8	99,5
	Other	6	,5	,5	100,0
	Total	1102	100,0	100,0	

Which of the following statements describe your housing situation?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	I live together with spouse/partner	429	38,9	38,9	38,9
	I live together with spouse/partner and children	383	34,8	34,8	73,7
	I live together with my children	27	2,5	2,5	76,1
	I live together with my parents	95	8,6	8,6	84,8
	I live alone	133	12,1	12,1	96,8
	I share the house with other adults (apartment sharing or equivalent)	19	1,7	1,7	98,5
	Other	16	1,5	1,5	100,0
	Total	1102	100,0	100,0	

Person 1

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Man/boy	521	47,3	53,5	53,5
	Woman/girl	453	41,1	46,5	100,0
	Total	974	88,4	100,0	
Missing	System	128	11,6		
Total		1102	100,0		

Person 2

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Man/boy	263	23,9	46,6	46,6
	Woman/girl	301	27,3	53,4	100,0
	Total	564	51,2	100,0	
Missing	System	538	48,8		
Total		1102	100,0		

Person 3

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Man/boy	178	16,2	46,6	46,6
	Woman/girl	204	18,5	53,4	100,0
	Total	382	34,7	100,0	
Missing	System	720	65,3		
Total		1102	100,0		

Person 4

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Man/boy	50	4,5	39,7	39,7
	Woman/girl	76	6,9	60,3	100,0
	Total	126	11,4	100,0	
Missing	System	976	88,6		
Total		1102	100,0		

Person 5

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Man/boy	34	3,1	56,7	56,7
	Woman/girl	26	2,4	43,3	100,0
	Total	60	5,4	100,0	
Missing	System	1042	94,6		
Total		1102	100,0		

Person 6

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Man/boy	5	,5	33,3	33,3
	Woman/girl	10	,9	66,7	100,0
	Total	15	1,4	100,0	
Missing	System	1087	98,6		
Total		1102	100,0		

Person 7

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Man/boy	3	,3	50,0	50,0
	Woman/girl	3	,3	50,0	100,0
	Total	6	,5	100,0	
Missing	System	1096	99,5		
Total		1102	100,0		

In which business do you work in/is your business in?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Central administration/Authorities	68	6,2	9,0	9,0
	Kinder garden/school/education	137	12,4	18,1	27,1
	Health service	74	6,7	9,8	36,9
	Social service/Child welfare	14	1,3	1,8	38,7
	Nursing and care services	23	2,1	3,0	41,7
	Military/police/Judicial system/guard	17	1,5	2,2	44,0
	Landbruk/skogbruk/fiske	16	1,5	2,1	46,1
	Industry/technical	48	4,4	6,3	52,4
	Building/Construction	44	4,0	5,8	58,3
	Trade/shop	39	3,5	5,2	63,4
	Transport/communication	28	2,5	3,7	67,1
	Culture/sport/organisations	20	1,8	2,6	69,7
	Media/advertising/information	17	1,5	2,2	72,0
	Research/analyses	22	2,0	2,9	74,9
	Tourism/hotell	6	,5	,8	75,7
	Restaurant/service	1	,1	,1	75,8
	Tele communciation/ICT	40	3,6	5,3	81,1
	Bank/insurance/finance	19	1,7	2,5	83,6
	Commercial services	22	2,0	2,9	86,5
	Oil/gas/energy	50	4,5	6,6	93,1
	Other	52	4,7	6,9	100,0
	Total	757	68,7	100,0	
Missing	System	345	31,3		
Total		1102	100,0		

Did you vote in the last parliamentary election, and which party did you vote on?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	The Labour party	271	24,6	24,9	24,9
	The Progress party	101	9,2	9,3	34,2
	The Conservative party	256	23,2	23,5	57,7
	The Christian Democratic Party	56	5,1	5,1	62,8
	RED	12	1,1	1,1	63,9
	The Centre Party (Agricultural)	37	3,4	3,4	67,3
	The Socialist Party	62	5,6	5,7	73,0
	The Liberal Party	73	6,6	6,7	79,7
	Other parties and lists	8	,7	,7	80,4
	Did not vote	32	2,9	2,9	83,4
	Do not remember/Do not know	22	2,0	2,0	85,4
	Not answeres/Will not give the name of the party	99	9,0	9,1	94,5
	Did not have the right to vote	41	3,7	3,8	98,3
	The Environemntal party "The green"	19	1,7	1,7	100,0
	Total	1089	98,8	100,0	
Missing	System	13	1,2		
Total		1102	100,0		

Do you own or rent your current house?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Own	1102	100,0	100,0	100,0

What type of house is your current house?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	878	79,7	79,7	79,7
	3	224	20,3	20,3	100,0
	Total	1102	100,0	100,0	

Appendix D - Cross Tabs "Willingness to Pay"

Amount to be used in Q007 * 7 The cost for investments and installation. Do you consider installing a PV system? Crosstabulation

Count

		7 The cost for investments and installation. Do you consider installing a PV system?			
		Yes	No	Do not know	Total
Amount to be used in Q007	20.000	121	68	76	265
	40.000	82	113	74	269
	60.000	69	114	86	269
Total		272	295	236	803

Amount to be used in Q007 * 8 How sure/unsure are you related to installing a PV system? Crosstabulation

Count

		8 How sure/unsure are you related to installing a PV system?									
		1	2	3	4	5	6	7	8	10	Total
Amount to be used in Q007	20.000	21	12	21	16	34	2	8	3	4	121
	40.000	12	11	12	5	18	12	9	2	1	82
	60.000	16	7	8	7	16	3	6	4	2	69
Total		49	30	41	28	68	17	23	9	7	272

Amount to be used in Q007 * 11 How sure/unsure are you that you will not install a PV system? Crosstabulation

Count

		11 How sure/unsure are you that you will not install a PV system?										Tot
		1	2	3	4	5	6	7	8	9	10	al
Amount to be used in Q007	20.000	3	1	0	0	3	5	6	8	9	33	68
	40.000	3	0	2	3	6	3	12	26	15	43	113
	60.000	1	1	2	3	6	5	14	17	12	53	114
Total		7	2	4	6	15	13	32	51	36	129	295

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