



Clear

enabling Consumer to Learn about, Engage with, and Adopt Renewables

CLEAR – WP2.2

Consumer survey 2 – Identification of best approach to implement the group offer

Report Portugal



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Co-funded by the Intelligent Energy Europe
Programme of the European Union



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1 Introduction: Objectives & research approach

Within this report the results of the second Consumer Survey undertaken in the CLEAR project as part of Work Package 2 are discussed. The survey focused on identifying the best approach to implement a group offer with regard to Renewable Energy Systems (RES). Specific attention was paid to the information sources that consumers use, their information needs with regards to RES, consideration to participate in a group offer and the importance of different benefits that can be offered within of a group offer. Recommended method of payment and preferences with regards to communication about RES via group offers are also part of this survey.

Because the nature of the results will be highly country specific, the results of the survey are reported per country. The specific reports can be used as guidelines to help define group offers in each country.

1.1 Approach

An online survey with an average duration of 23 minutes per respondent was organized by GfK Belgium in December 2014 – January 2015. Internet penetration has progressed in all EU countries and online surveys are therefore increasingly seen as a robust way to conduct general public surveys.

The Clear Consumer Survey 2 on Renewable Energy Systems was conducted within five EU countries: the Netherlands, Belgium, Italy, Portugal and Spain.

A random sampling approach, with minimum quota on certain subgroups, was applied to collect the data. Aiming at minimum 700 – maximum 1000 respondents per country, a total of 5179 respondents was surveyed. The population in the study was the general public with a minimum age of 18 years.

The quota parameters applied was the consideration rate of Renewable Energy Solutions on respondent level. Priority was given to Intenders. The consideration rate was defined as follows:

| | |
|-----------------|--|
| Adopter | Either a user or an installer of any RES type ¹ defined in the questionnaire. |
| Intender | Has the intention of installing any RES type defined in the questionnaire within the next 2 years (2015-2016). |
| Thinker | Would consider buying any RES type defined in the questionnaire. |
| Rejecter | Would not consider buying any RES type defined in the questionnaire. These were screened out. |

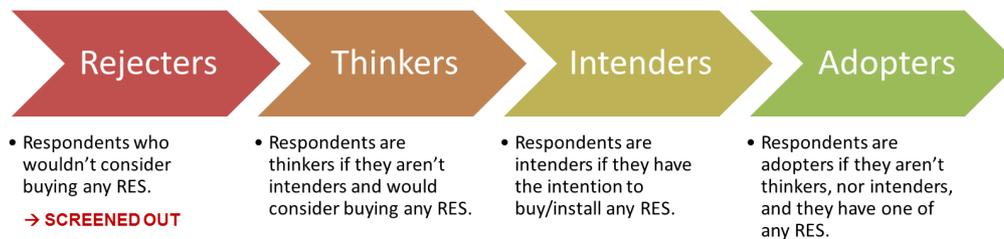
¹ (Photovoltaic) Solar panels, heath-pump for heating as well as cooling, heath-pump only for cooling (airconditioner), heat pump only for heating, heath pump (for domestic/sanitary hot water), solar thermal system (for domestic/sanitary hot water) and pellet stove.



1.2 Sample

At this stage of the work package, the approach of the survey demands a target group with a high concentration of intenders and thinkers and a basic level of adopters. Rejecters for all RES are not included in the survey because there is no added value from this group within this survey.

Because there is more than one Renewable Energy System included in the setup respondents have the potential to belong to each of the target groups, adopters, intenders as well as thinkers, and even rejecters.



Priority was given to the intenders, followed by thinkers and last the adopters. This means that respondents who are already adopters for any type of RES and who are also intenders for another type, are placed in the group of intenders.

Renewable Energy Solutions include in survey 2

Photovoltaic system (Solar panels)

Heat-pump for heating as well as cooling

Heat-pump only for cooling

Heat-pump only for heating

Heat-pump for hot water

Solar thermal system

Pellet stove

Due to the nature of the target setting priorities descriptive results of the target groups can not be compared between the first survey² and this survey³.

² cfr. Consumer survey 1. Attitudes, opinion, drivers and barriers and satisfaction with regard to Renewable Energy Systems

³ cfr. Consumer survey 2 – Identification of best approach to implement the group offer



1.3 Quota Portugal

Minimum quotas were set on the three target groups. The tables below present the minimum quota and the achieved sample in Portugal.

| | Minimum target | Achieved quota |
|--------------|----------------|----------------|
| Intenders | 350 | 351 |
| Thinkers | 350 | 506 |
| Adopters | <i>free</i> | 60 |
| Total | 700 | 917 |

Social demographics such as gender, age and educational level are distributed in the sample as follows:

| | Count | Percentage |
|---------------------|-------|------------|
| Male | 504 | 55% |
| Female | 413 | 45% |
| 18-25 year olds | 177 | 19% |
| 26-35 year olds | 241 | 26% |
| 36-45 year olds | 223 | 24% |
| 46-55 year olds | 183 | 20% |
| 55+ year olds | 93 | 10% |
| Primary education | 24 | 3% |
| Secondary education | 458 | 50% |
| Tertiary education | 435 | 47% |

No weighting was applied for analytical purposes because

- The population description of the RES adoption rate is not known
- No total results cross country will be shown as each country has a different composition of the target groups.



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1.4 Sample description Portugal

Within our sample the largest group of adopters can be found for pellet stoves (14%), followed by solar thermal (11%) and solar panels (9%).

Within the heat pump category, adoption is highest for heat pumps for hot water and heat for heating and cooling (both 9%)



Base = All

Intenders are mostly considering installing solar panel and solar thermal. Heat pumps for cooling heating or cooling only have the highest rejection score.





2 Information Process

2.1 Source preference

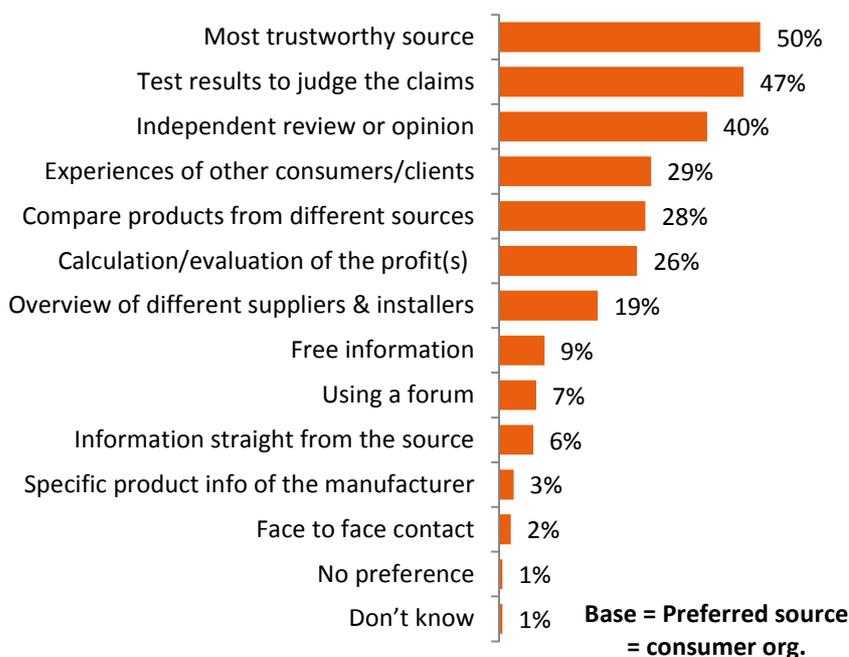
71% of respondents have already done some research about RES. Intenders have done more research (75%) than thinkers.

Respondents who have already done some research prefer information from Manufacturers (24%) and a consumer organization (20%). Friends and acquaintances (10%) completes the top3. When the respondents haven't searched for information yet, the preferred information source is a consumer organization (20%), closely followed by manufacturers (18%) and friends and acquaintances (16%). Respondents who haven't done any research yet also give a slightly higher don't know score.

The main reasons for source preference are trustworthiness of the source (37%), experiences from other consumers/clients (28%) and test results (26%).

The main reasons why a consumer organization is preferred; trustworthiness of the source (50%), test results (47%) and to get an independent review or opinion (40%). Information of manufacturers is preferred because you get information straight from the source (38%), to get an overview of different suppliers and installers and to get specific product info of the manufacturer (both 37%).

Reasons to prefer consumer organization





2.2 Information needs

2.2.1 Introduction Maxdiff analysis

A first step to guide consumers towards group offers of Renewable Energy Systems is identifying their information needs regarding Renewable Energy Solutions.

In order to determine which information needs are more important than others a Maxdiff questioning and analysis was used. The Maxdiff questioning and analysis, is ideal to define a ranking of information needs of what respondents find to be most important.

MaxDiff is a choice-based modeling technique which provides significantly stronger differentiation than with ratings alone, by making respondents identify their preferences.

Alternatives are presented in small sets (for this study in sets of 4 items) and respondents choose the “most” and “least” important for them among each set. This process is repeated several times with different items being shown. The combinations of items are designed very carefully with the goal that each item is shown an equal number of times and pairs of items are shown an equal number of times. Each statement is evaluated in relation to other statements, resulting in a ranking of all statements.

After the data of the MaxDiff has been processed, all items get a logit utility score. For analysis purposes, these scores are transformed to be all positive values on a ratio scale, where the scores of all items sum to 100. The higher the score, the more important the item is. Because this is a ratio scale, a score of 4 is twice as preferred as a score of 2.

21 different information needs concerning RES were included in the survey. These needs have been grouped into 5 categories or topics:



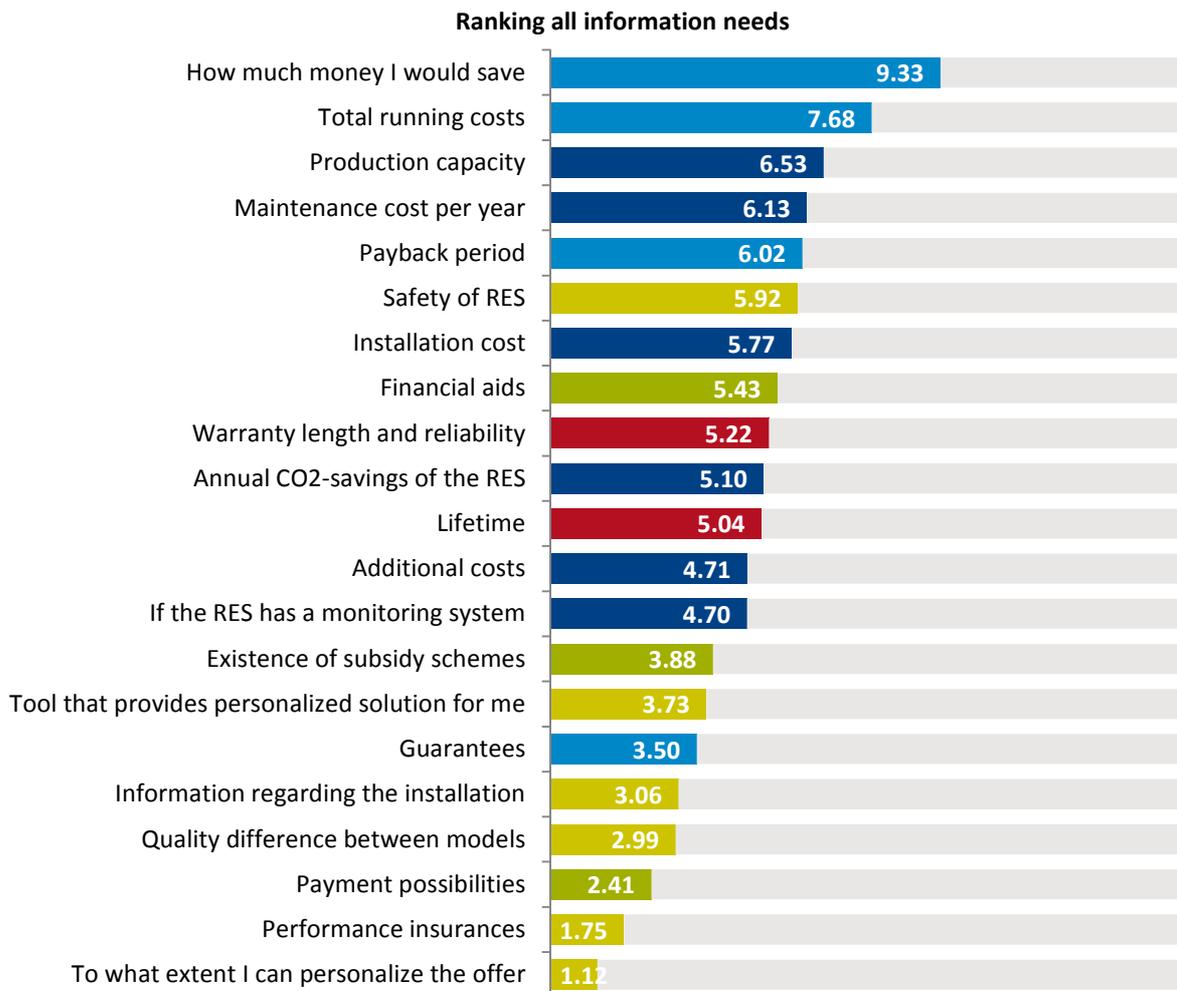


2.2.2 Results Maxdiff information needs

The most important information category is return on investment and cost & performance. Respondents want an estimation of the running costs and the returns, they want confirmation that investing in RES is beneficial.

When looking at information needs concerning RES, the most important information consumers are looking for is how much money they would save if they had a RES compared to a classic energy source (9,33) and information on total running cost (7,68). Info on the production capacity (6,53) is also very important to consumers.

In general the least important information needs are info about the extent to which the offer can be personalized (1,12), which performance insurances they can get (1,75) and info on the payment possibilities (2,41).



Base = All



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Notable is that the highest information needs all revolve around the first step of the purchasing process, confirmation or reassurance that investing in RES is profitable.

However, when consumers are convinced of the value of RES the information needs shift towards more product related information need.

The differences between these types of information seekers can be found within the groups intenders and thinker.

Overall, both intenders and thinkers find it most important to get information about how much the investment in a RES will cost and how much they will get out of it. Both groups generally score high on Return on Investment.

However, thinkers, who are still in the beginning of the decision making process, are primarily looking for information that will help them decide on whether or not to invest in a RES. They generally attach more importance to this financial information (Return on Investment) than intenders.

Intenders, on the other hand, are already convinced that investing in RES is a good choice and now they are trying to decide on which specific RES they will install. At this stage of the decision making process, more concrete information is required. Intenders generally attach more importance to specific product related information than thinkers.





3 Group offer

3.1 Participation group offer

38% would probably/definitely purchase a RES via a group offer organized by a consumer organization, 47% would perhaps participate and 15% would probably/definitely not participate. Intenders are more willing to participate in a group offer organized by a consumer organization (50%) than thinkers (31%) and adopters (25%).

Intenders and thinkers haven't participated in any group offers yet because they are not familiar with the type of offer (31%). they are unaware of any group offers (29%), or there aren't any group offers available in their area (12%).



3.2 Group offer preferences

3.2.1 Introduction Maxdiff analyses

A second step to guide consumers towards group offers of Renewable Energy Solutions is identifying the needs and expectations regarding group offers for Renewable Energy Solutions.

In order to determine which properties of a group offer are more important than others a Maxdiff questioning and analysis was used. This type of analysis is ideal to define a ranking of group offer items of what respondents find most important within a group offer.

A more detailed description of the Maxdiff analysis can be found in this report;

2.2.1 Introduction Maxdiff analyses Information needs.

18 Different information needs concerning RES were included in the survey. These needs have been grouped into 3 categories or topics:





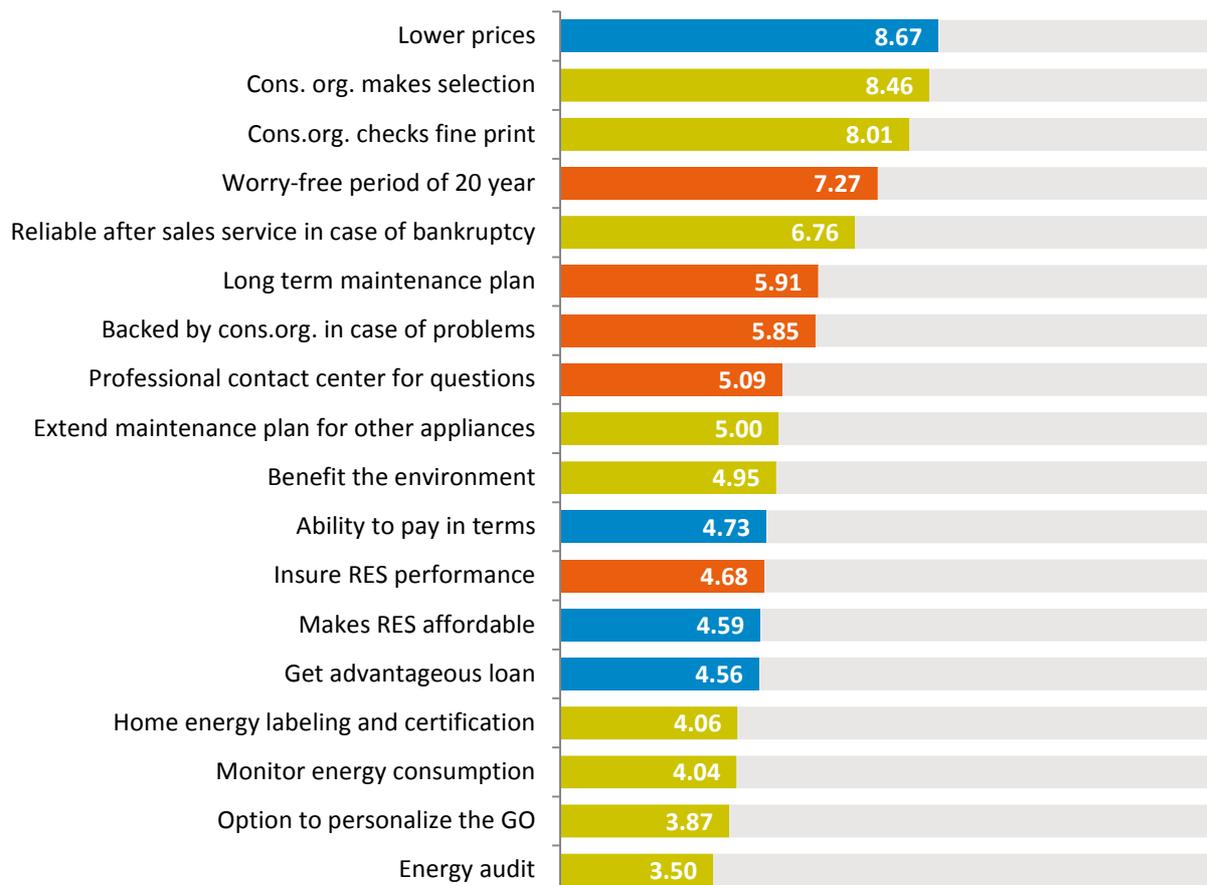
3.2.2 Results Maxdiff group offer preferences

All three topics, convenience/additional services, payment/financial benefits and reassurance are important. Each category has highly important items and less important items.

The most important aspect of a group offer is the lower price you can get (8,67), that the consumer organization does the difficult part of selecting combination of reliable installer, good quality product, customer-friendly after sales support and good guarantee schemes (8,46) and that the consumer organization checks all the fine print (8,01).

Overall, the least important items are all from the convenience/additional services category. Energy audit (3,50) is found least important, followed by the option to personalize the group offer (3,87) and monitoring of energy consumption (4,04).

Ranking all group offer components



Base = All



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Just like in the maxdiff regarding information needs, there are significant differences between thinkers and intenders. Again we see that thinkers value general benefits (lower prices, a preselection, checking the fine print) more than intenders. Whereas intenders value product specific or concrete benefits more than thinkers (contact center, extended maintenance plan, monitoring consumption, option to personalize the offer, home energy labeling, energy audit).

Intenders are in a different stage of the purchase journey, where they expect the value of general benefits (most important) but also value the product benefits. Thinkers are still to be persuaded by general information and reassurance.

Consumers find the preselection and security that a group offer provides regarding the purchase journey and after sales service very important. Aside from lower prices, these are the strongest benefits of the group offer. When offering a group offer be sure to focus on;

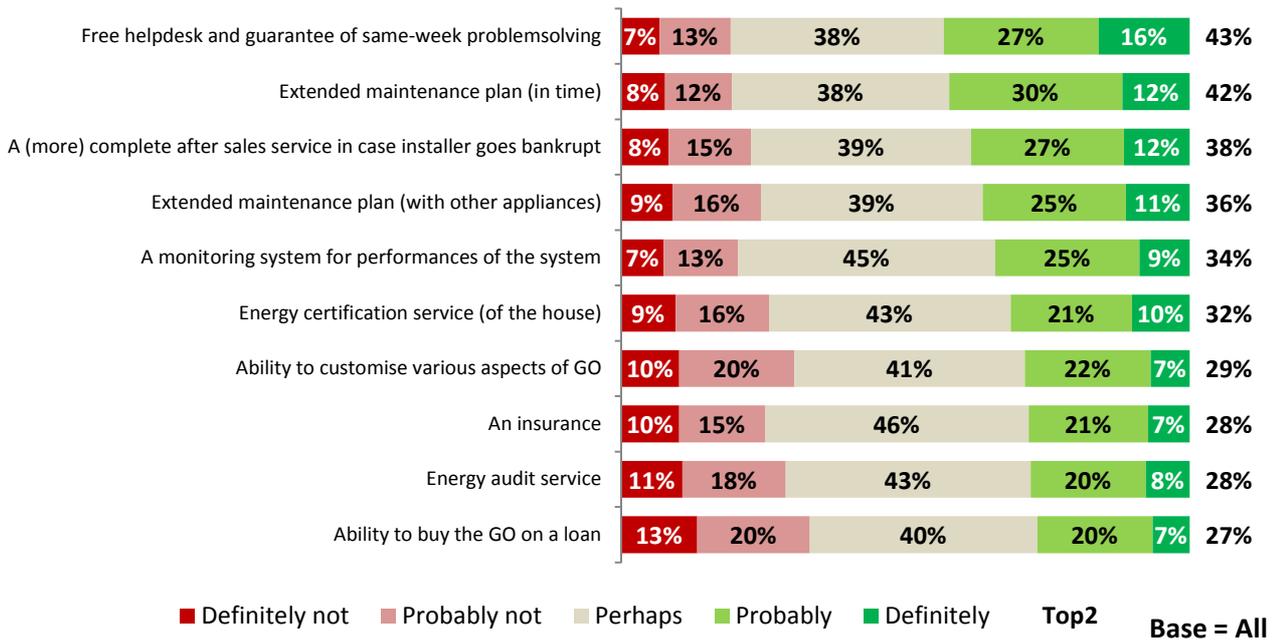
- Pricing
Information regarding pricing is most important for consumers, so highlight these aspects in your communication.
 - Highlight the price advantage in comparison to a purchase without group offer.
- Reassurance
Intenders as well as thinkers are looking for reassurance that RES are wise investments. Make sure to provide several important reassurance aspects in the group offer. An advantage of DECO over other providers of RES is that DECO is a consumer organization, which is also a reassurance and a highly valued info source for the consumers.
 - Highlight the benefits of working together with a consumer organization. Respondents are not alone and can count or fall back on DECO.
 - Important items within the reassurance category are a worry-free period of 20 years and long term maintenance plan.
- Convenience
The main convenience benefit of a group offer organized by DECO is that the hard stuff regarding comparing and selecting suitable RES and providers is already done by DECO.
 - Be sure to communicate the high norm selection process DECO used to compose the group offer.
 - The reliability of DECO in case of emergency is also important. Whenever an installer/producer goes bankrupt, consumers have DECO to fall back on.
 - Again, reassurance is key. Not only has DECO done the difficult part of selecting and assembling the group offer, DECO can also be trusted to check the fine print and approve.





3.2.3 Willingness to pay more for additional services

There is a certain willingness to pay more for additional services that come within the group offer. 16% would definitely be willing to pay more for a free helpdesk and guarantee of same-week problem solving and 12% would definitely pay more for an extended maintenance plan and a more complete after sales service in case the installer goes bankrupt.

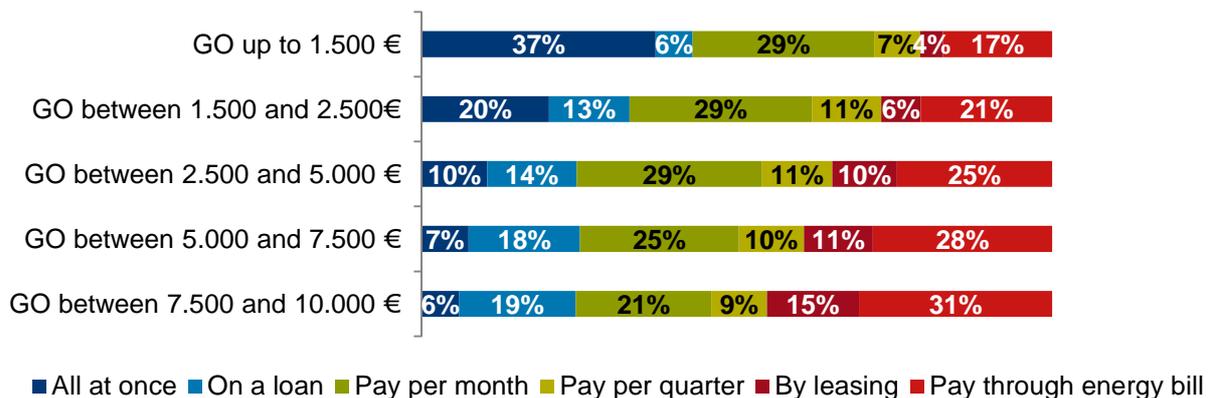




3.2.4 Preferred payment method

When looking at the preferred payment method there seems to be a linear connection between the amount of the group offer and preference to pay everything at once or through the energy bill or by leasing.

The lower the amount, the higher the preference to pay all at once and the higher the amount, the higher the preference to pay through the energy bill. For amounts up to 2.500 EUR paying everything at once or per month are the preferred payment methods. Between 2,5 – 5k payment per month is, but the gap with payment through energy bill is already becoming smaller. For higher amounts (5–10k) payment through energy bill is mostly preferred. As the amount increases, the preference to pay by leasing or on a loan also increases.

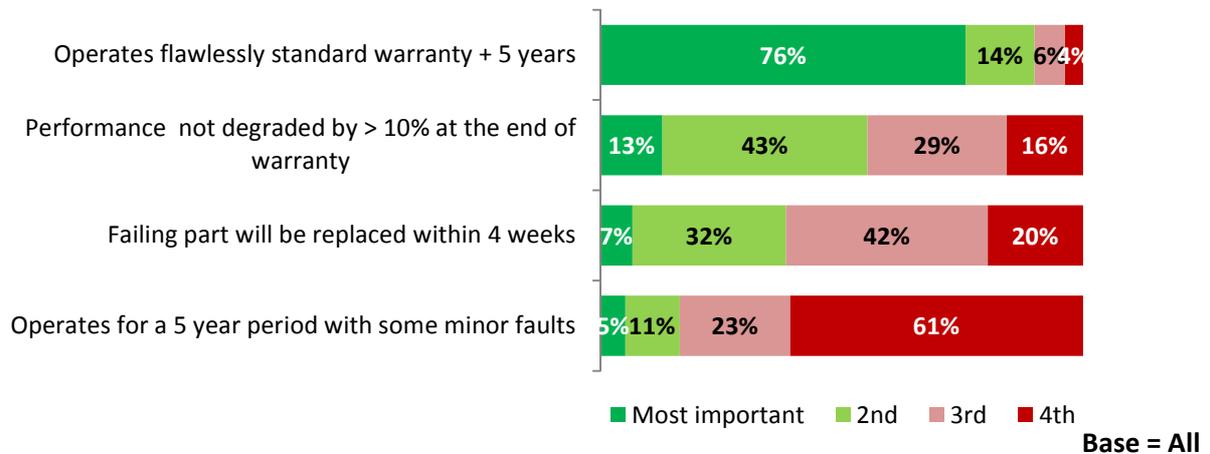


Base = All



3.2.5 Expectations group offer

When looking at the guaranteed performance of a RES bought through a group offer, it is clear that respondents find it most important that it operates flawlessly for 5 years longer than the standard manufacturer’s warranty (76% ranks this at 1st place). “I expect that it operates for a 5 year period with some minor faults” is most often ranked as least important.



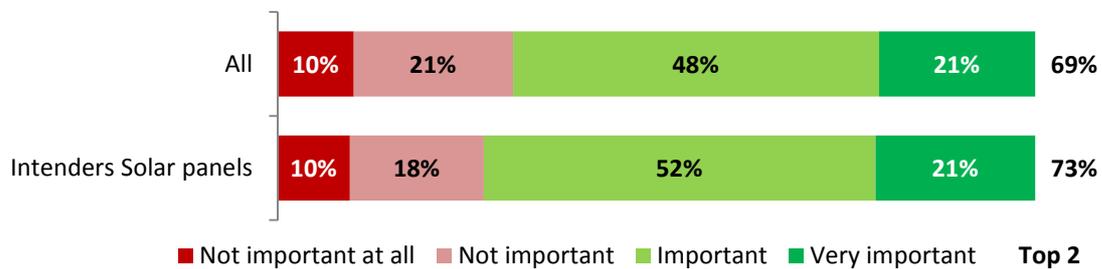


3.2.6 Solar panels

Importance choice of number of panels

More than 2 in 3 respondents (69%) think choosing the exact number of solar panels is important. There are no differences between intenders and the total sample.

When offering solar panels via a group offer it could be advisable to offer a choice of the number of panels, since 69% of respondents indicate this free choice is important to them.



Roof shading

64% has no shading on the roof during a large part of the day, 23% has a partially shaded roof and 13% doesn't know.



4 Communication

Within the communication part several phrases were tested relative to each other. Respondents were asked to indicate their preference.

Savings

Respondents are clearly more susceptible to expression of savings in terms of payback time and energy savings in euros per year. Communication about ROI and an initial discount is clearly less appealing.

Payback time (34% preference)

example; buying a RES will pay itself back within 5 years due to low or non-existing energy bills

Energy savings (34% preference)

Example; using a RES will decrease your energy bill by 4000kWh/years, with is a financial saving of € 800 per year

Return on investment (20% preference)

example; although the initial cost might be high, your energy cost decreases in the following years. Each year you'll save money otherwise spent. (6% on annual bases after a period of 20 years)

Initial discount (12% preference)

example; a discount of 100€ with purchase of a RES of 2.000€

When talking about a discount, it is best to express the discounts in euros rather than in percentages (preferred by 74% of respondents).

Payback period

There is a clear preference about communication about guarantees about the payback time. The phrase 'within a group offer payback time will be 1 year shorter than if you buy the system on your own' is more often preferred than 'a payback time of max. 10 years'.

Performance insurance

There is a clear preference for 'A worry-free period of 20 years in which your system will function without a glitch' over 'a performance insurance that guarantees the performance of your RES will be as expected'.

Environmental impact

As for communicating about the environmental impact, almost 1 in 2 prefers to hear that 'by installing a RES you contribute to a better environment'.

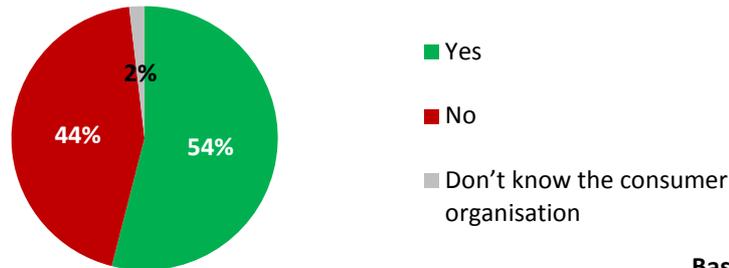


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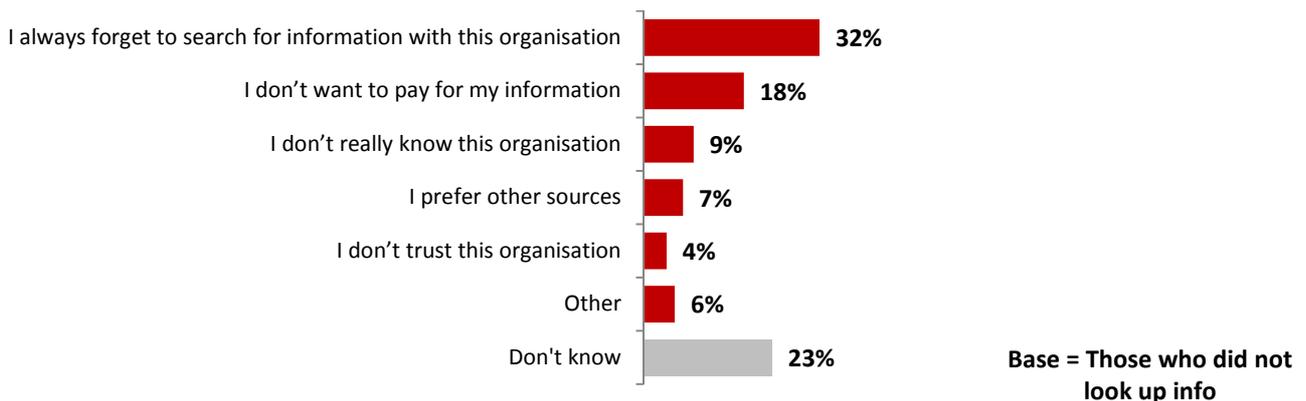
5 DECO

54% has already used DECO to look up information, 44% hasn't used DECO and 2% claims not to know DECO. There is no difference between intender, thinkers and adopters.



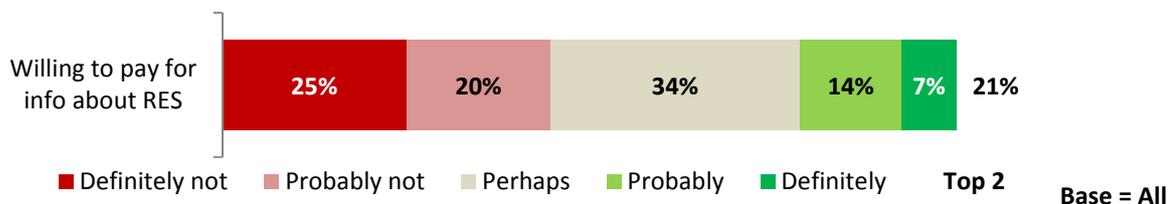
Base = All

The main reason respondents don't use DECO, is because they don't think of DECO (32%) or don't want to pay for information (18%). 1 in 4 can't give a reason why they haven't used DECO in the past.



Base = Those who did not look up info

45% of the respondents is not willing to pay more for independent, accurate and reliable information regarding RES, 34% would perhaps pay more and 21% would probably/definitely pay more. Intenders are more willing to pay more than average with a top 2 of 28%.



Base = All





6 Overall management summary Clear survey 1 and 2

Within the first survey drivers and barriers to invest in Renewable Energy Systems were determined. Together with the second survey the most important information needs and group offer benefits were determined.

This is the overall summary of both surveys;

Attitude regarding environment and climate is highly important

When respondents have a positive attitude towards the environment they are more likely to invest in RES. Also, respondents with a negative attitude are less likely to invest.

Consumers should be convinced of the value of environmental consciousness and the positive impact of RES. Changing an attitude is not only the task of consumer organizations and is influenced by several different factors.

The financial aspects

Lower energy cost & increase of the property value are important drivers.

Reassure

Consumers need general information to confirm and reassure that the decision to invest in RES is the right decision. This information should revolve around the return on investment (the profit in comparison to the costs).

Intention

When consumers are convinced that RES is the right fit for them, that they are better off when they invest in RES, consumers will have a higher intention rate.

Group offer

Information needs shift from general needs to product specific needs. However reassurance remains an important element in the step and within the benefits of the group offer. The group offer should satisfy the following needs; financial (what is the return on investment) environmental (the first step towards RES remains important), reassurance (this group offer provides all I need and has important insurances, guarantees and warranties I need).

However

Each country has its own difficulties within the purchase journey. For Belgium and The Netherlands, the attitude among consumers isn't as positive compared to Italy, Spain and Portugal. In Italy the satisfaction regarding RES among adopters isn't as high compared to the other countries. In Spain the recommendation of RES is lower than it should be.

Although the attitude towards RES's is positive, the financial needs as well as the information needs are still to be met. A consumer can identify with all the positive aspects of RES, but still may not invest in RES's. High instalment costs, the lack of possibilities regarding property and not owning an own home are some of the key factors preventing potential investors from investing.



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| Survey 1 | Total | Belgium | The Netherlands | Italy | Spain | Portugal |
|------------------------------|------------|------------|-----------------|------------|------------|------------|
| Being economical with energy | 77% | 73% | 65% | 78% | 84% | 86% |
| Something for you | 49% | 41% | 42% | 52% | 62% | 50% |
| Sacrifise comfort | 38% | 22% | 22% | 53% | 44% | 47% |
| Willingness to pay more | 23% | 17% | 16% | 33% | 31% | 17% |
| Group offer | 35% | 27% | 28% | 42% | 40% | 38% |

Base: Adopters, intenders, thinkers and rejectors

| Survey 2 | Total | Belgium | The Netherlands | Italy | Spain | Portugal |
|------------------------------|------------|------------|-----------------|------------|------------|------------|
| Being economical with energy | 76% | 72% | 64% | 75% | 81% | 86% |
| Something for you | 49% | 38% | 41% | 47% | 65% | 52% |
| Sacrifise comfort | 34% | 22% | 21% | 46% | 38% | 42% |
| Willingness to pay more | 34% | 26% | 27% | 42% | 44% | 29% |
| Group offer | 37% | 23% | 29% | 48% | 47% | 38% |

Base: Adopters, intenders, thinkers

