SOLAR ENERGY SURVEY RESULTS

This survey was conducted at the initiative of **energyefficiency.ie**

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LOCATION
Ireland

TIME
2023

- September
- October
- November
- December

2 955 RESPONDENTS

Homeowners

Renters

Living at Home

Other

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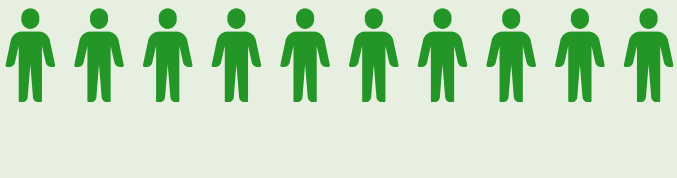
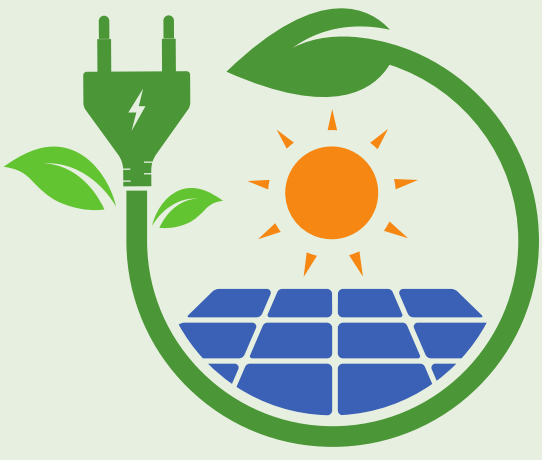
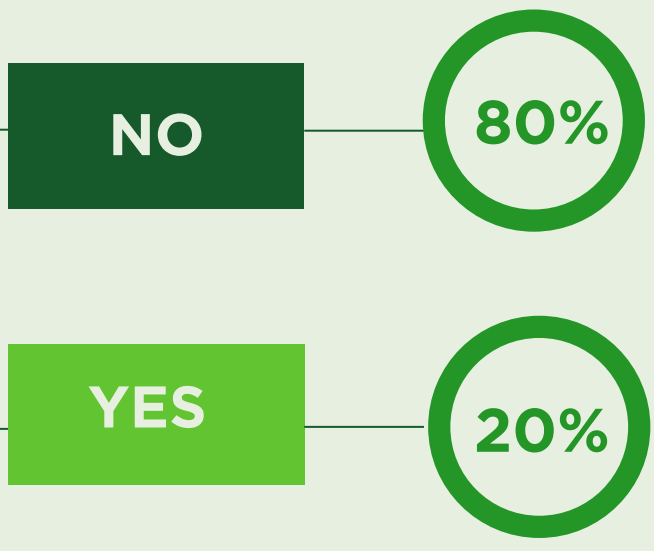
Do you view solar energy positively ?

99.8 % YES

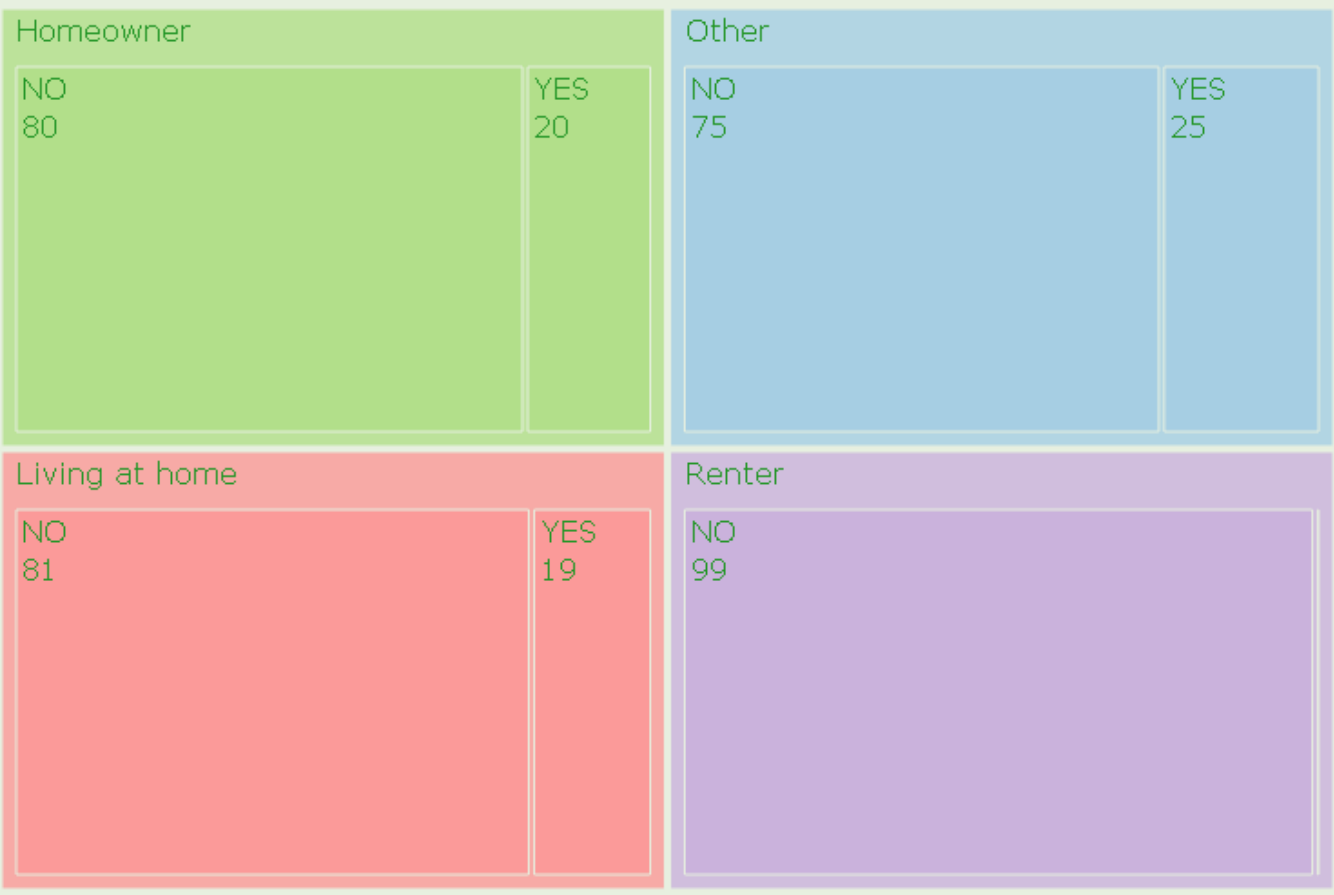




Do you currently have solar panels installed?



Currently have solar panels installed by Homeownership Status (%)



The proportion of individuals who have installed solar panels and those who have not installed depends on homeownership status:

- "Homeowners," "Living at home," and "Other" groups show a similar tendency to install solar panels, with a proportion of 80% installed and 20% not installed.
- Almost all "Renters" prefer not to install solar panels

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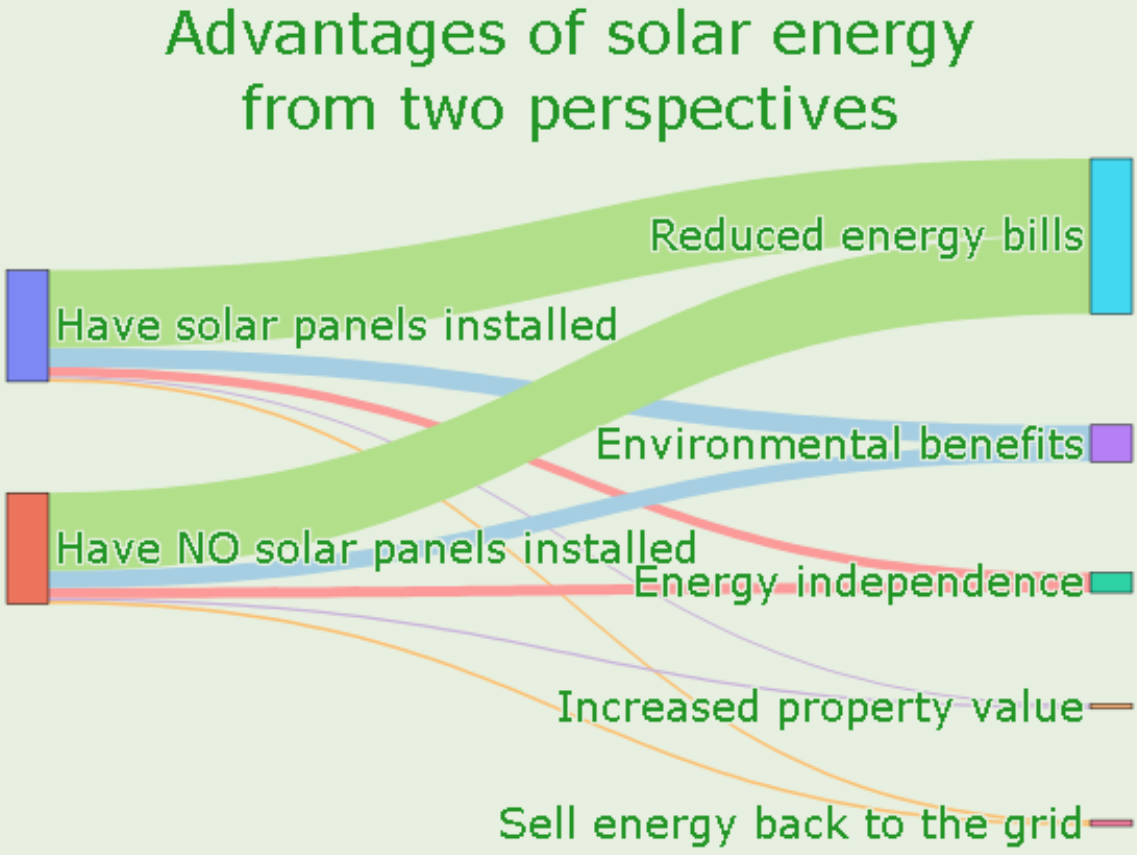
Would you recommend solar to a friend or family member?

99.6%

What do you consider to be the best advantage of solar energy?

1. **Reducing energy bills** — 69.9%
2. **Environmental benefits** — 15.8%
3. **Energy independance** — 9.1%



Both groups of respondents (those who have and those who have no solar panels installed) agree on the advantages of solar energy with similar distributions of preferences:

Reducing energy bills: 70 % of respondents without panels,
69.5 %.of respondents with panels.

Environmental benefits: 15.4% of respondents without panels,
17.4% of respondents with panels,

Energy independance: 9.3 % of respondents without panels,
8.4%.of respondents with panels.

Sell energy back to the grid: 2.9% of respondents without panels,
2.5% of respondents with panels.

Increased property value: 2.4% of respondents without panels,
2.1% of respondents with panels.

Respondents with solar panels more often mention environmental benefits as the best advantage of solar enegry compared to those who have no solar panels (difference in proportions is 2%).

Respondents without solar panels more often mention energy independence as the best advantage of solar energy compared to those who have solar panels (difference in proportions is 0.9%).

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How much are you saving each month on your electric bill?

Average monthly savings	€95.5
Average solar installation cost	€9 093
Average period to pay off installation expenses	8 years

Has installing solar been a good financial decision?

100%

YES

Solar energy systems costing €4k-14k
provide energy bill savings in a similar range of:

€50 - 150 monthly.

Solar energy systems with a cost over €15k
could provide energy bill savings in the range of

€200 - 500 monthly*.

* The number of respondents with solar systems costing over €15k is very small (3 respondents only). Therefore, insights on systems with prices over €15k reflect only potential trends and require additional data collection for verification.

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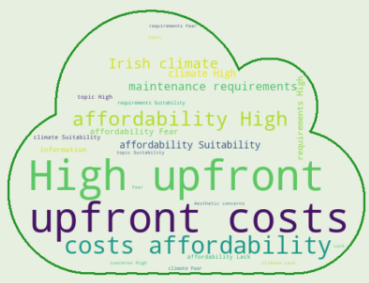
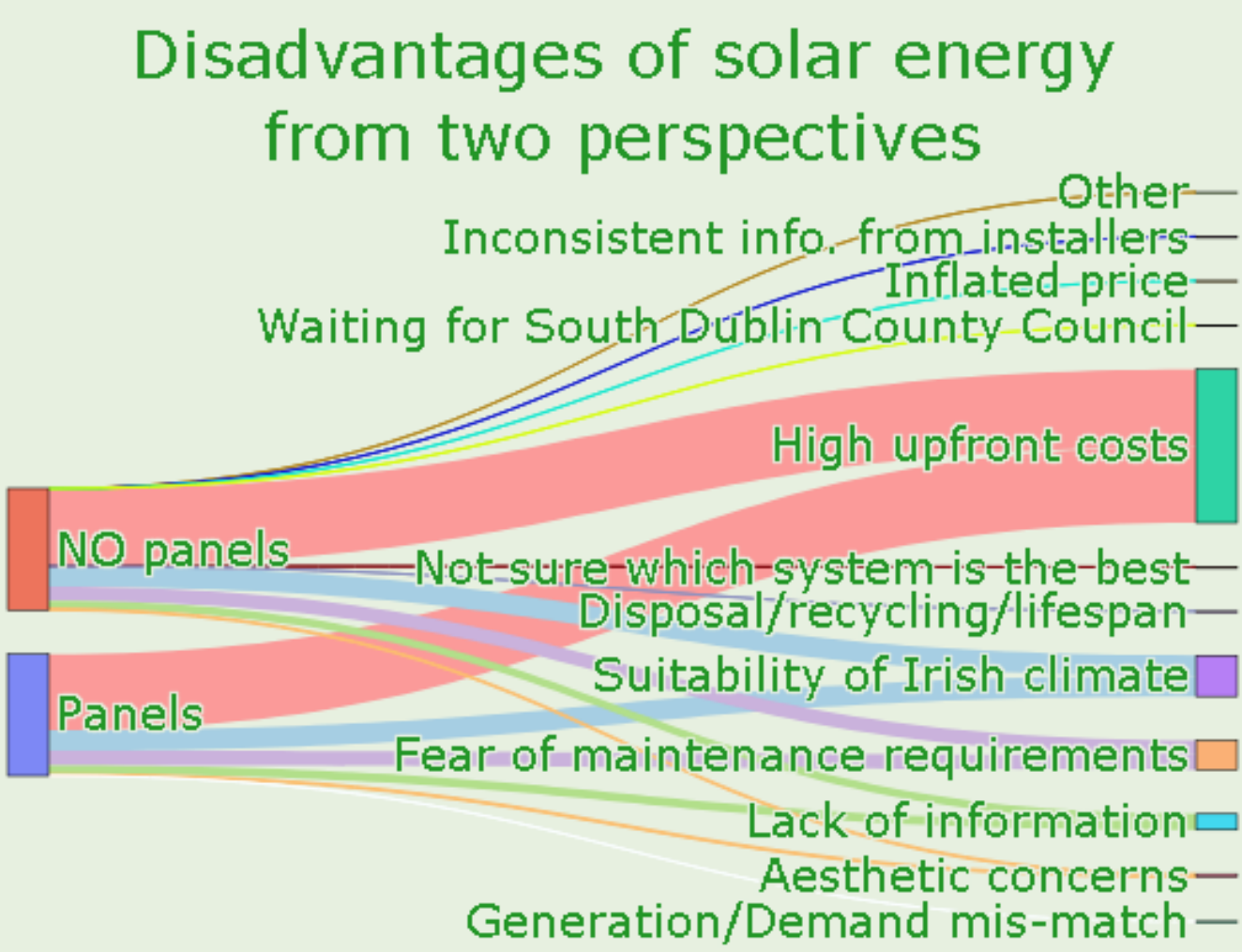
If majority of respondents see the economic benefits of solar energy why don't they install solar panels?



What do you consider to be the main disadvantage of solar energy?



Both groups of respondents (who have and have no solar panels installed) agree that the main disadvantage of solar energy is

High upfront costs: 64 % of respondents without panels,
63 %.of respondents with panels.

Second most frequently mentioned disadvantage is
Suitability of Irish climate: 19.9% of respondents without panels,
16.7 % of respondents with panels.

Third most frequently mentioned disadvantage is
Fear of maintenance requirements: 11.7% of respondents without panels,
12.3 % of respondents with panels.

Forth place among frequently mentioned disadvantages belongs to
Lack of information on the topic: 6.2% of respondents without panels,
6.9 % of respondents with panels.

The last shared opinion on solar energy disadvantages between owners of solar panels and those who have no installed solar panels is
Aesthetic concerns: 1.2% of respondents without panels,
1.3 % of respondents with panels.

The most notable difference in opinions between the two respondent groups relates to the suitability of the Irish climate, with solar panel owners expressing less concern about it.Does it mean that the idea of unsuitability of solar panels for the Irish climate is overestimated?

Owners of solar panels and those without solar panels do not agree on the following disadvantages of solar energy:

Generation/Demand mis-match and lack of software controls: 0.2% of owners of solar panels.

Other: 0.08% of respondents without panels,
Disposal and recycling and lifespan and maintenance: 0.04% of respondents without panels,
Inconsistent information from installers: 0.04% of respondents without panels,
Inflated price: 0.04% of respondents without panels,
So much information out there and not sure which system is the best or most suitable one: 0.04% of respondents without panels,
Waiting for South Dublin County Council: 0.04% of respondents without panels.

Respondents without solar panels mention twice as many disadvantages of solar energy compared to owners of solar panels (with 11 and 6 points on the list, respectively).

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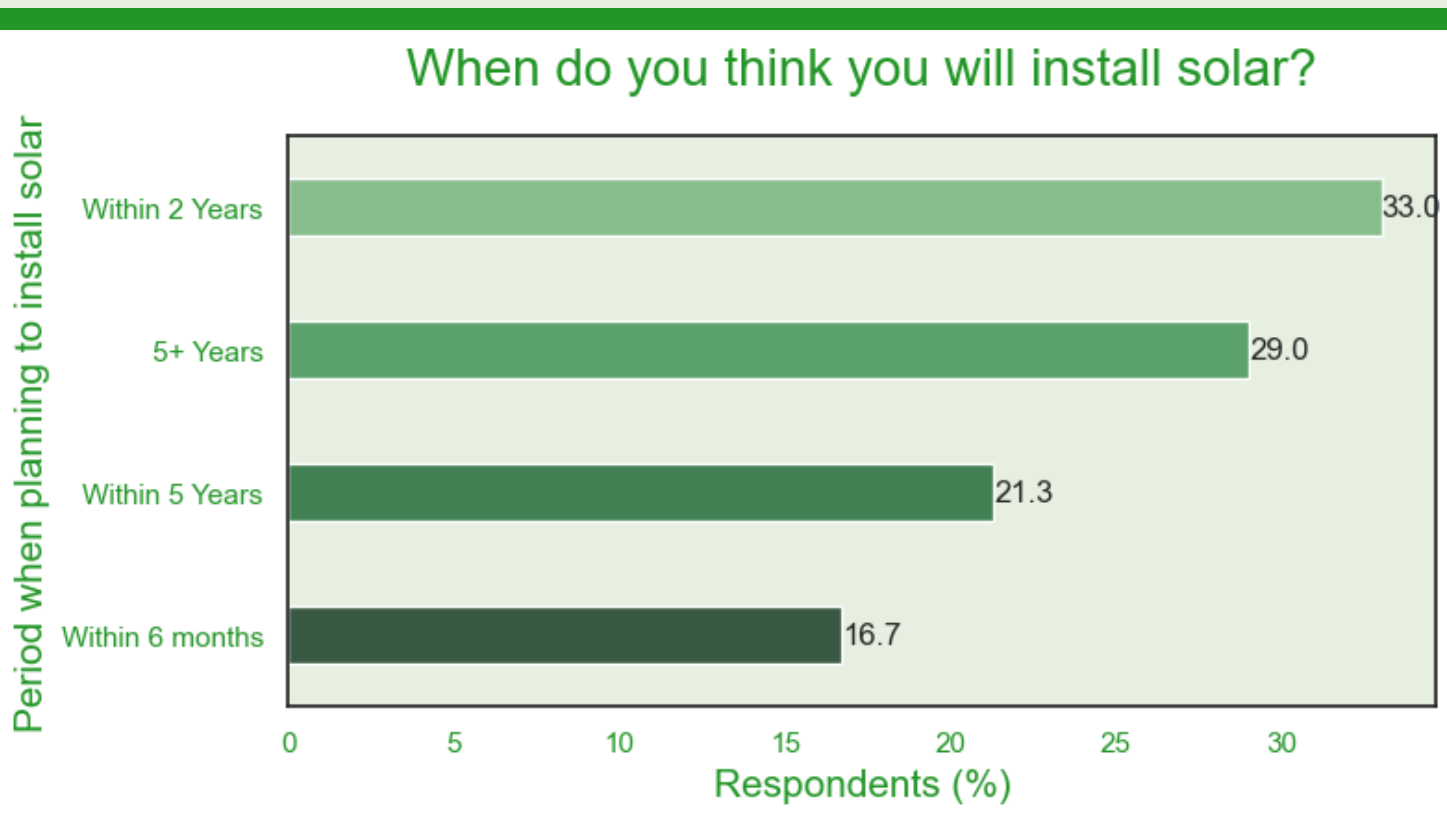
Do you think you will have solar panels installed on your home in the future?

83% YES

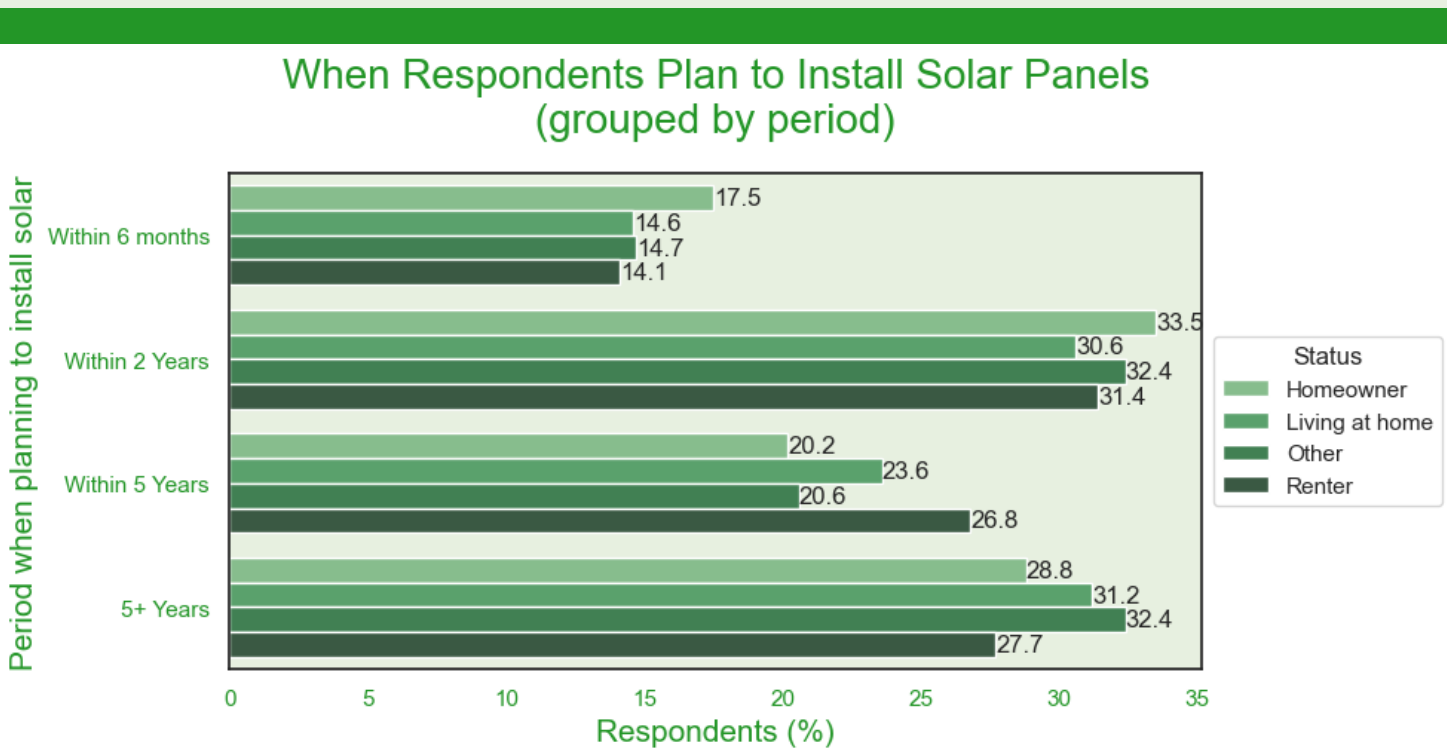
17% NO



The majority of respondents believe that they will have solar panels installed in their homes in the future (83%).

Respondents interested in installing solar panels more frequently indicate plans for installation in the distant future (within 2 years) rather than the near future (within 6 months):

- 33% intend to realize their plans within 2 years.
- 16.7% plan to install solar panels within 6 months



Homeowners more frequently indicate that they are planning to install solar panels in the near future (within 6 months or 2 years), while the other groups with different homeownership statuses have plans for a more distant future (they mention 5 and 5+ year periods more often than homeowners). However, the majority of homeowners also have plans to install solar panels in a more distant period (within 2 years or more).

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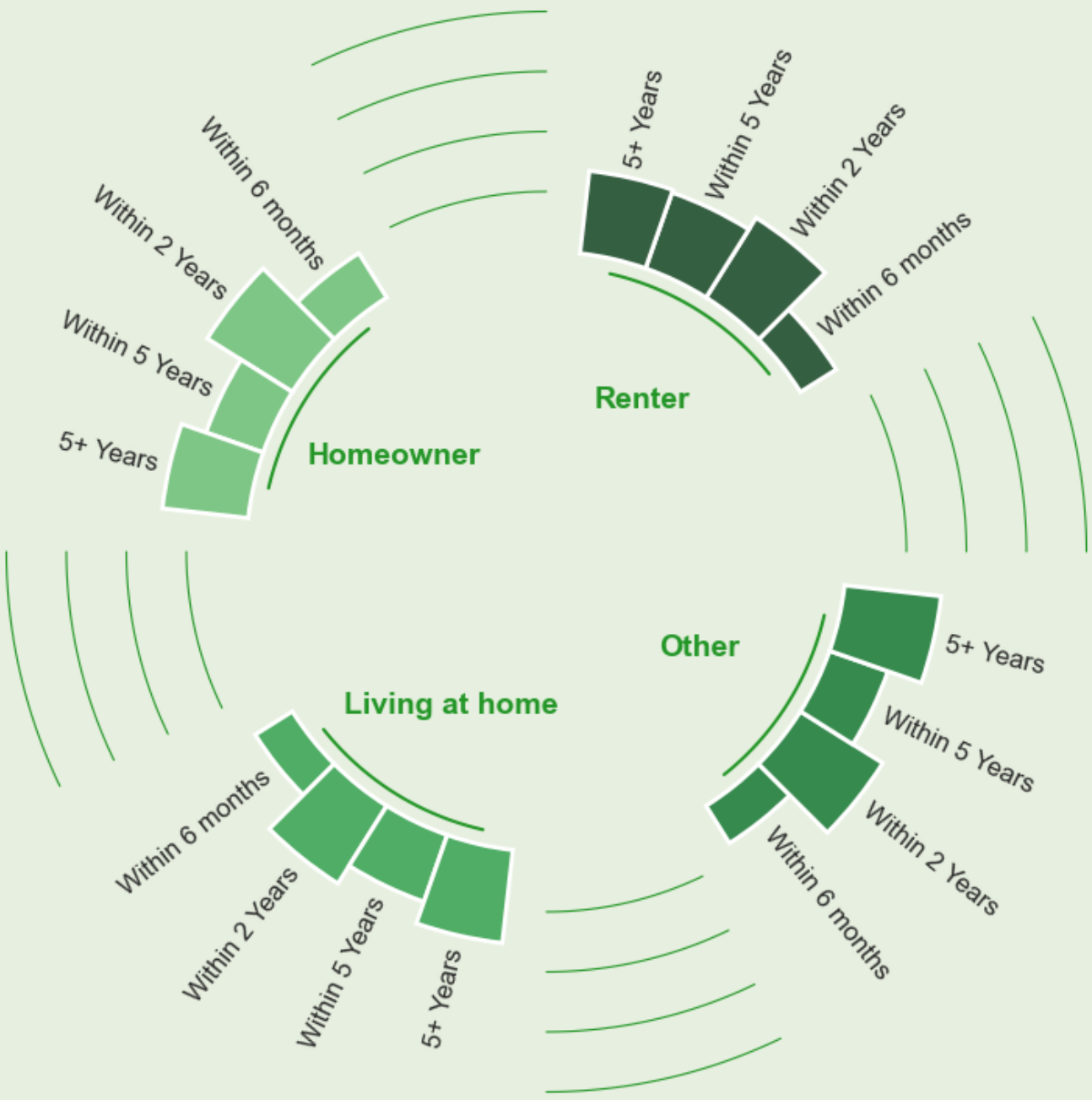
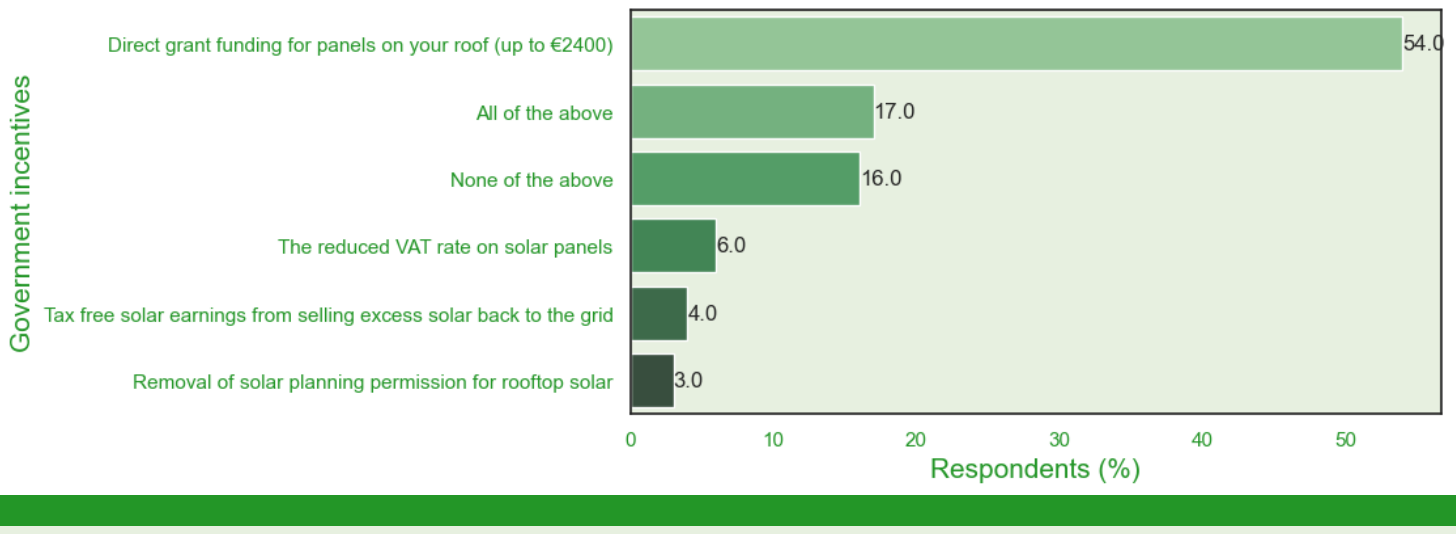
When Respondents Plan to Install Solar Panels (grouped by homeownership status)



- **Respondents of all homeownership statuses plan to install solar panels in the distant future.** The most frequently mentioned periods by all the respondent groups are 'Within 2 years' and '5+ years'.

- **The longest periods were most often mentioned by renters.**

Which of the following government incentives have you heard about?



The chart above reflects that 54% of respondents have heard about direct grant funding, while the less known government incentive is the removal of solar planning permission for rooftop solar, with 3% of respondents aware of it.

Other government incentives, such as the reduced VAT rate on solar panels and tax-free solar earnings from selling excess solar back to the grid, are also not well known, with 6% and 4% of respondents having heard about them respectively. Only 17% of respondents have heard about all the government initiatives mentioned in the survey. About the same proportion of the respondents (16%) have not heard about all the government initiatives mentioned in the survey.

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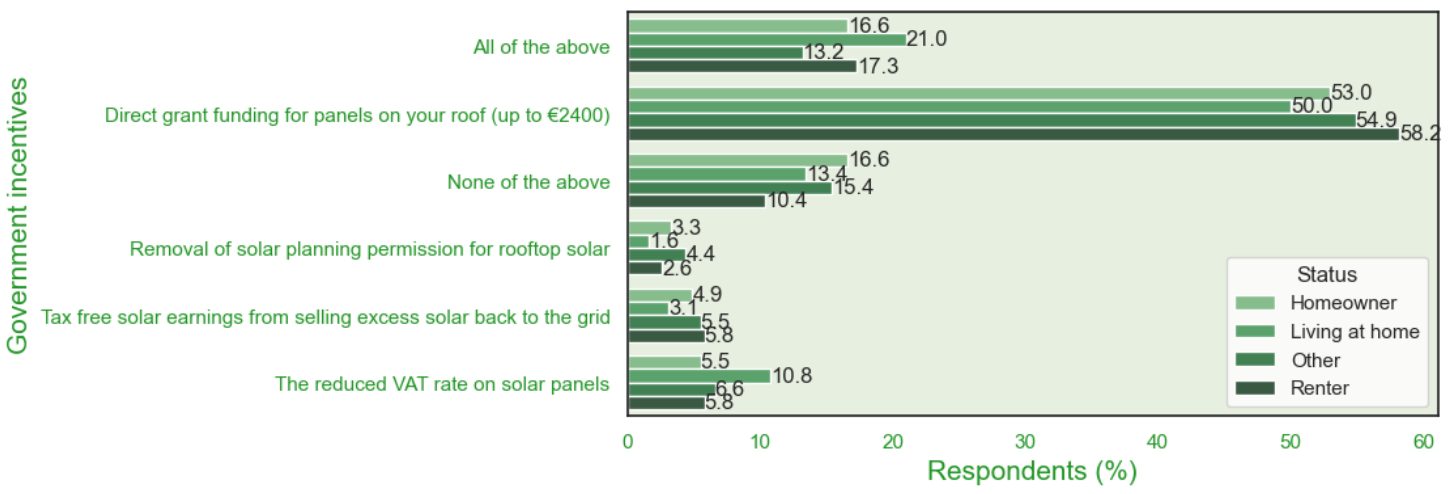
Are homeowners more aware of government incentives?

Awareness of Government Incentives by Homeownership Status



The graph above reveals that **homeowners are not more aware of government incentives for solar energy compared to other groups**.

Other respondent groups show even higher awareness of certain incentives:

- 'Renters' are more aware of the Direct grant funding for panels on your roof (up to €2400).
- 'Living at home' respondents are more aware of the reduced VAT rate on solar panels.
- 'Renters' are also more aware of tax-free solar earnings from selling excess solar back to the grid.

Interestingly, homeowners more frequently indicated that they hadn't heard about any of the government incentives (16.6% compared to 10.4% of renters).

The distribution of responses within each group looks similar. All types of participants have heard about the 'Direct grant funding for panels on your roof (up to €2400)' incentive and are less aware of the 'Removal of solar planning permission for rooftop solar' incentive.

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Takeaways

1. Majority of respondents are homeowners (78%). Renters were represented with 12%.
2. 99.8% of respondents view solar energy positively. Only 4 of 2955 respondents gave negative answer.
3. 80% of respondents currently have no solar panels installed.
4. The proportion of individuals who have installed solar panels and those who have not installed depends on homeownership status: "Homeowners," "Living at home," and "Other" groups show a similar tendency to install solar panels, with a proportion of 80% installed and 20% not installed. Almost all "Renters" prefer not to install solar panels.
5. All respondents with installed solar panels would recommend solar energy to a friend or family member, indicating a high level of satisfaction with their solar panels.
6. Both groups of respondents (those who have and those who have no solar panels installed) agree on the advantages of solar energy with similar structure of preferences:

1st place - Reducing energy bills (69.9%)
2nd place - Environmental benefits (15.8%)
3rd place - Energy independance (9.1%)
4th place - Sell energy back to the grid (2.8%)
5th place - Increased property value (2.3%)

7. Respondents with solar panels more often mention environmental benefits as the best advantage of solar enegry compared to those who have no solar panels (difference in proportions is 2%).

8. Respondents without solar panels more often mention energy independence as the best advantage of solar energy compared to those who have solar panels (difference in proportions is 0.9%).

9. All respondents with solar panels answered that installing solar had been a good financial decision. It could be explained by monthly savings on electric bills (in range of €50-150). Average monthly savings don’t depend on the solar cost: €95.5 are average savings for systems with cost in range of €4k-€12. Solar energy systems costing over €15K potentially could provide larger monthly savings

10. The most significant disadvantages of solar energy are:

1st place - High upfront costs (63.5%)
2nd place - Suitability of Irish climate (16.9%)
3rd place - Fear of maintenance requirements (11.8%)
4th place - Lack of information on the topic (6.3%)

Other disadvantages were represented with few number of respondents (1 respondent per category respectively).

11. Both groups of respondents (who have and have no solar panels installed) agree on the following disadvantage of solar energy:

- High upfront costs
- Suitability of Irish climate
- Fear of maintenance requirements
- Lack of information on the topic
- Aesthetic concerns

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Takeaways

12. The most significant difference in opinions between the two respondent groups pertains to the suitability of the Irish climate, with solar panel owners expressing less concern about it. Does it mean that the idea of unsuitability of solar panels for the Irish climate is overestimated?

11. Respondents without solar panels mention 2 times more disadvantages of solar energy compared to owners of solar panels.

12. 83% of respondents without solar panels believe that they will have solar panels installed on their homes in the future.

13. Respondents interested in installing solar panels more frequently indicate plans for installation in the distant future (within 2 years) rather than the near future (within 6 months):

- 33% intend to realize their plans within 2 years.
- 16.7% plan to install solar panels within 6 months.

14. Homeowners more frequently indicate that they are planning to install solar panels in the near future (within 6 months or within 2 years). At the same time majority of homeowners have plans to install solar panels in a distant period (2 years or more)

15. Other groups of respondents have plans for a more distant future (they mention 5 and 5+ year periods more often than homeowners). This is likely due to the fact that before they can install solar panels, these respondents need to become homeowners.

16. The most commonly mentioned periods by representatives of all homeownership status groups are 'Within 2 years' and '5+ years'.

17. The most well known government incentive is the 'Direct grant funding' - 54% of respondents have heard about it.

The less known government incentive is the 'Removal of solar planning permission for rooftop solar' - only 3% of respondents aware of it.

18. Homeowners are not more aware of government incentives for solar energy compared to other groups. Other respondent groups show even higher awareness of following incentives:

- 'Renters' are more aware of the Direct grant funding for panels on your roof (up to €2400)
- 'Living at home' respondents are more aware of the reduced VAT rate on solar panels
- 'Renters' are also more aware of tax-free solar earnings from selling excess solar back to the grid.