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EXECUTIVE SUMMARY

The EnergyPROSPECTS project conducted **an online survey involving over 10,000 European citizens**. The main objective of the survey was to collect information about opinions, expectations and doubts of European citizens regarding the preferred forms of their involvement in the energy transition. Learning how respondents perceive energy citizenship in terms of participation, choices/options, opportunities and barriers has helped the EnergyPROSPECTS team to develop scenarios for strengthening the role of citizens in the transformation of the energy system in Europe.

The results of the survey provide a clear indication on perceptions and opinions of the respondents. However, this does not mean that the results can be interpreted as representative data of the state of energy citizenship in the countries involved. Although considerable care has been taken to ensure reliability and integrity of responses, it remains possible that in some cases respondents misunderstood the question or gave answers they perceived as "correct" or "desirable". Nevertheless, we believe that due to the size of the sample and the quality control measures that were undertaken, the survey produced a fairly accurate depiction of citizens' perception of the energy transition and their own role in this process.

The survey was conducted in nine countries participating in the project (Belgium, Bulgaria, France, Germany, Hungary, Ireland, Latvia, Spain, and The Netherlands). In each, at least 1,000 citizens completed the questionnaire. An additional 1,000 respondents were recruited from 10 other European countries (Austria, Denmark, Finland, Greece, Italy, Poland, Portugal, Sweden, Turkey, and United Kingdom).

To ensure the diversity of respondents, soft quotas on several demographic parameters were set, including age, gender, education and income. Sample parameters for individual countries slightly differed, but in general an effort was made to enable the comparability of data. The survey was active for three weeks – October 29 to November 17, 2023. After the process of data cleaning and the removal of questionnaires that did not pass the quality check, **a database with the survey results from 10,071 questionnaires** was generated.

Number of respondents per country:

Total	Ireland	Belgium	Bulgaria	Hungary	Latvia	France	Germany	Netherlands	Spain
10,071	1,018	1,016	1,010	1,008	1,005	1,000	1,000	1,000	1,000
UK	**Italy**	**Poland**	**Turkey**	**Austria**	**Portugal**	**Sweden**	**Denmark**	**Finland**	**Greece**
105	102	102	102	101	101	101	100	100	100

Part 1: Energy-related activities

The first part of the survey examined how the respondents reacted to the 2021-2022 energy crisis. They were asked the following questions:

- what they have done in response to the crisis;
- what are the energy saving activities they continue to perform;
- what are the main reasons or motivations for their energy actions or behaviour;
- who organised or initiated the activities they are or have been involved in.

Most respondents reacted to the energy price rise by decreasing the standard temperature in their homes, reducing or limiting use of various home appliances, turning off lights, washing at lower temperatures, and reducing use of air-conditioning. They also turned to using public transport, walking or bicycling more instead of using their cars. Less popular measures, undertaken by about one quarter of all respondents,

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were energy retrofitting of homes and a change of the electricity and/or gas supplier. One in every five of the respondents invested in renewable energy generation. As a result of these measures, more than 60% of the respondents reported that they succeeded to lower their energy consumption.

The survey shows that **the most widespread means by which survey participants engage in the energy transition relate to their concern for the consumption of energy in their private lives**:

- saving energy at home (82.5%);
- changing home appliances and/or lighting (61.3%;
- using green mobility options (52.4%);
- energy retrofitting of homes (36.5%).

Taking a step out of the private and into the public sphere, 35.3% of respondents try to motivate and mobilise other people to be more responsible in the way they consume energy. For one third of the respondents, positions of political actors on the energy issues are an important reason to vote or not to vote for a certain political party or a candidate. However, only 13.3% discuss energy topics on social media, and even fewer are active in a social movement (6.3%), are members of a RES cooperative (6.0%) or participate in protests focused on energy topics (5.5%).

Activities, which require a more substantial financial investment, are also not overly widespread among the survey participants: producing own electricity by installing solar panels (15.5%), buying an electric car (8.1%) or buying a share of a RES plant (5.8%).

Asked about **the reasons to perform these activities**, respondents arranged the eight suggested motivations in the following way (in parenthesis is % of respondents, for whom this reason was important or very important):

- Possibility to earn or save money (76.4%)
- Availability of financial subsidies (59.5%)
- Desire to contribute to the common good (55.4%)
- Ambition to reduce carbon footprint (55.2%)
- Recognition of own responsibility for the climate change (53.3%)
- Desire to increase self-sufficiency or to become energy independent (52.0%)
- Frustration due to inadequate action by decision-makers (51.3%)
- Inspiration by practices of somebody they trust (43.3%)

The overwhelming majority (74.8%) of **activities in which respondents are involved have been organised by themselves or together with other members of their households**. In 21.6% of cases, the activity was something conducted together with the local community in the neighbourhood in which the respondents live. The answers to this question were not mutually exclusive and in most cases, several different actors were involved in the organisation of the activity (as part of a larger initiative, project or event). These actors were national authorities in 23.6% of cases, local authorities in 21.8% of cases, a non-governmental or civil society organisation in 20.6 % of cases, and a private company (19.2% of cases).

Part 2: Views about the role of individuals in the energy system

The second part of the survey inquired whether the respondents agreed or disagreed with different statements. The first set of statements was about the role individuals could play in the energy transition. The second set asked respondents about their own energy consumption behaviour. The third and final group of questions invited respondents to look into the near future (2030) and think about their possible

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or desired role in the energy system.

The largest share of respondents agreed with two statements: that energy transition is a joint task of everyone in the society and therefore all citizens should become more active (69.5%) and that opinions of ordinary citizens about the development of the energy system are not considered enough by politicians (69.2%).

Four statements had an almost identical agreement rate. Two of them depicted a pessimistic view about what individual citizens can actually do in the energy transition. The **majority of respondents believe that the role of citizens is limited to actions concerning their private lives** (57.2%) and that even then they are **constrained by insufficient financial resources** (56.2%).

More encouraging, from the point of view of energy citizenship, was the opinion shared by 56.1% of respondents that it was possible to **save or earn money by producing own energy from renewable energy sources**. Equally large share of respondents (56.0%) agreed that it was a **civic duty to protest** against developments in the energy system that people perceive as unjust or harmful – another indication of considerable energy citizenship potential.

This view is contrasted by the more passive half of survey participants (49.5%), who prefer to **transfer the complete responsibility for the energy transition to the national governments and the European institutions**. Finally, the fact that only 44.2% of respondents believe that most people in Europe are well informed about what they can do to contribute to the energy transition is somewhat discouraging and indicates that more should be done to **increase awareness and inform citizens** about the available opportunities and potential benefits.

The next set of questions inquired about different aspects of **personal energy consumption**.

- Almost two thirds of respondents (63.3%) believe that most people are unlikely to limit their energy consumption unless new (presumably more restrictive) energy policies are adopted.
- A strong opinion (60.7%) was expressed that all members of the society regardless of their income should make a certain sacrifice in order to ensure the success of the energy transition.
- This opinion was supplemented by the readiness of over half of the respondents (52.4%) to abandon or strongly reduce certain forms of energy intensive habits and behaviours.
- Admitting that in the past they have often consumed more energy and resources than necessary (42.9% of responders), numerous survey participants agreed that the key to the successful energy transition lied in the reduction of everyone's personal energy consumption and not in the potential technological solutions (40.0%).

The third set of questions in part 2 invited the participants to **look into the near future and imagine themselves engaged in different energy citizenship manifestations**.

- By far the largest share of respondents (69.4%) found it easy to imagine their homes being equipped with energy efficient home appliances and smart devices that would help them to consume less energy.
- Over half (56.2%) were confident that by 2030 they would substantially change their energy consumption practices.
- In the coming years, exactly one half (50.0%) will probably vote for a political party or candidate that puts the energy transition in centre of their political programmes.
- Many respondents (48.6%) plan to play an active role in the change of energy consumption practices at the places where they work or study.
- About one fourth of the respondents are ready to participate in public debates and consultations, or other deliberative processes in the public sphere (27.9%).

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- A similar share is considering to join a citizen-based organisation or other collective form of citizen engagement (26.8%), or take part in demonstrations and protests linked to various aspects of the energy/climate transition (25.1%).
- One quarter of respondents (25.2%) has no interest in actively participating in the energy transition and is quite confident that this will not change in the near future (by 2030).

Part 3: General views about the energy system and the underlying values

The third part of the survey aimed to gather the following information:

- respondents' views about the energy system and energy transition;
- where and how respondents obtain information about these processes;
- the opinion of respondents about the main actors responsible for the planning and implementation of the energy transition.

Respondents were first asked to indicate **from which sources they obtain information on topics and issues connected with energy**. Ten different options were provided.

- Conventional media emerged as the most preferred information source, used by 61.8% of participants.
- A little less than one half of responders turn for energy-related information and advice to their families and friends (46.3%), or look it up on the social media (45.1%).
- For around one quarter of respondents, web pages of the relevant national institutions and agencies (25.4%), scholarly articles / journals (24.7%) and/or web pages of the EU institutions (22.1%) are also important references.
- Non-governmental and civic organisations (17.6%), blogs, forums and podcasts (17.4%), industry and business websites (15.7%) and books (10.1%) are the least used resources.

Interestingly, **the lists of the most used and of the most credible or trusted resources differ.**

- Asked to select the three sources of information that they find to be most credible when it comes to the topics related to energy, respondents did place the conventional media on the top of the list again (50.2%), but the other two most frequently used resources are not perceived to be exceptionally trustworthy – information obtained from family and friends is seen as credible only by one third of respondents, and the one disseminated through the social media only by 27.4%.
- The number of people who trust the information provided by the web pages of the national institutions (42.8%), scholarly articles / journals (42.3%) and web pages of the EU institutions (39.3%) is almost double the number of those who actually use these resources.
- In addition to be the least often used, non-governmental and civic organisations (23.7%), industry and business websites (18.6%), books (11.3%) and blogs, forums and podcasts (11.2%) are also perceived as the least credible resources.

The majority (56.8%) of **survey participants expect that in 2030 they will pay more for energy than they do today**. The opposite opinion that the energy will cost less in 2030 than it did in 2023 is held by 19.1%, while a small group of 12.6% expect that the prices will not change much.

The respondents were **very critical about the direction and pace of the energy transition**.

- 31.0% believe that the entire process is headed in the wrong direction.
- 42.8% think that the direction is good, but the progress has been way too slow.
- Only 14.0% think that the energy transition is progressing just fine.

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The underlined displeasure over the way the energy transition is unfolding may be an important reason why the majority of responders are unwilling to engage beyond their own household.

This critical evaluation is further emphasised by the **very negative opinion of respondents about the performance of institutions and organisations in the energy transition**. None of the actors listed in the survey has received a positive assessment.

- The role of the academic and research institutions in the energy transition was assessed the least harshly, with 24.1% of respondents saying that their performance was good.
- Public media, NGOs and civil society organisations, and schools and universities were evaluated positively by about 15% of participants.
- The respondents were particularly unsatisfied with the work of the EU Parliament and European Commission (11.9%), energy providers (11.5%), local authorities (10.7%), government agencies responsible for the energy-related matters (10.7%), actors from industry and business (9.2%), and the national governments and parliaments (8%).

Who should in the opinion of survey participants do more to advance the energy transition? The expectations for a better and more effective performance are foremost directed at the national policymakers (74.6%), energy providers (73.6%), relevant government agencies (70.5%) and industry and business actors (69.0%). Local authorities (65.7%) and the EU institutions are also widely expected to do more (62.7%).

The final question of the part 3 inquired whether respondents agree or disagree with different statements that describe hypothetical situations that might have an impact on the involvement of European citizens in the energy transition. According to the respondents, **the following developments would have the most pronounced positive effect on the energy citizenship in Europe**:

- Specific measures to support the vulnerable energy consumers and the energy poor people.
- Making access to affordable sustainable energy to all people a political priority.
- Simplification of administrative procedures for permits for renewable energy projects.
- Accessible grants, loans, subsidies and other market interventions that support a switch to renewable energy.
- Education and information campaigns to mitigate the concerns about the perceived impacts, benefits and costs of energy transition.
- Clear commitments of EU and national political institutions to involve citizens in energy transition.
- The legal status of prosumers, energy communities and peer-to-peer trading to be defined in all European states.

The majority of respondents think that if climate and energy policies are designed by the national governments and not coordinated by the EU institutions, if the consequences of the climate changes become even harsher, and if the energy prices continue to rise, this would not have a considerable effect on the mobilisation of citizens and the advancement of energy citizenship in Europe.

The fact that most of the measures, which would in the opinion of respondents encourage and strengthen energy citizenship in Europe, are of financial nature (support for vulnerable energy consumers, grants, loans and subsidies, affordability of sustainable energy) corresponds with the main motivations for own energy-related activities of survey participants. The two most important reasons to act are, as noted above, possibility to earn or save money and availability of financial subsidies. The financial aspect is further underlined by the prevailing opinion that individuals cannot do anything for the energy transition because they are constrained by limited financial resources.

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1. INTRODUCTION

The EnergyPROSPECTS project conducted an online survey involving over 10,000 European citizens. In each of the nine countries participating in the project (Belgium, Bulgaria, France, Germany, Hungary, Ireland, Latvia, Spain, and The Netherlands), at least 1,000 citizens completed the questionnaire. Additional 1,000 respondents were recruited from 10 other European countries in order to acquire a more varied responses and avoid a possible bias towards the nine project countries. This bias might stem from the fact that the content of the survey was informed by findings from previous project work. The ten additional countries are Austria, Denmark, Finland, Greece, Italy, Poland, Portugal, Sweden, Turkey, and United Kingdom.

The main aim of the survey is to obtain information about expectations and doubts of European citizens regarding the preferred forms and means of their engagement in the energy transition, and to learn how they perceive energy citizenship in terms of participation, choices/options, opportunities and barriers.

The survey findings were used to develop scenarios aimed at strengthening the role of citizens in the transformation of the energy system in Europe and have helped the EnergyPROSPECTS project team define how European residents expect to take advantage of existing options and opportunities to participate fairly and equitably in the energy transition.

The current document is divided into several parts. First, the survey methodology is presented, including the process that led to the selection of the implementing company and the design of the survey questionnaire. Next, the process of the survey implementation is described – from definition of the pool of survey participants to the delivery of the survey results.

The main part of the document is dedicated to the analysis and presentation of the survey results. This section is further organised into four sub-sections: energy-related activities; the role of individuals in the energy system; the energy system and the underlying values; and general information about the respondents.

The concluding section summarises the main findings from the survey and prepares the ground for the forthcoming work on the energy citizenship scenarios.

A word of caution – the results of the survey cannot and should not be confused with the national statistical data and understood as an undisputable assessment of the state of energy citizenship in the involved countries. The survey provides a good indication about perceptions and opinions of the respondents. Their responses to the survey questions have been analysed carefully and are presented validly and in detail in this report. However, given the nature of the online survey, it is not possible to guarantee that all respondents understood all the questions correctly, or that in some cases they did not select an answer they perceived as proper, correct or desirable. Different quality checks were in place to minimise the possible unconscientious completion of the questionnaires (see Chapter 3 – Implementation of the Survey). In addition, the sample was large enough to assure us that the survey has produced a fairly accurate depiction of citizens' perception of the energy transition and their own role in this process.

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2. METHODOLOGY AND PREPARATION OF THE SURVEY

The development of the survey was coordinated by the task leader ARC Fund, but all EnergyPROSPECTS consortium partners have been involved in its preparation. The preliminary consultations about the content and format of the survey started in the summer of 2022. As a result, the approximate length, preferred type of questions, and some of the topics that the survey should cover were identified.

After careful consideration, it was decided that services of a professional company will be enlisted. ARC Fund prepared and issued an open invitation for provision of service to implement a multi-national online survey on energy citizenship (the procedure is described in detail in the next section).

The invitation was published in July 2023 on the project's website. Information about the published invitation was also distributed through social media. The invitation outlined the purpose, scope, territorial coverage and provisional timeline of the survey. It signalled the eligibility criteria for the applicants, deadline and contact for submitting the application, conditions for the validity of the invitation and validity of the offers, and the selection procedure.

After consultations with other EnergyPROSPECTS partners, seven suitable agencies were selected: Ipsos, Kantar, JTN, Efficience3, iReach, RED C Research and Statista. ARC Fund sent the invitation to the contact persons of these agencies (in addition to the open invitation published on the website). Four replies were received – three agencies sent their offers and one replied that they did not believe it was feasible to perform the task with the foreseen budget.

A three-member evaluation committee selected the winning offer by assigning points according to four criteria:

1) sound and well-designed plan for satisfying the requirements listed in the invitation (max. 30 points);
2) good and verifiable track record of previous implementation of multi-national online surveys and evidence that Applicant's surveying quality allows scientific utilisation of the collected data (max. 20 points);
3) convincing recruitment strategy that would ensure the involvement of a required number of participants from all target countries (max. 20 points);
4) best price (max. 30 points).

After careful examination of the three submitted offers, the following evaluation results were achieved:

	Winning offer	**Second place offer**	**Third place offer**
Work plan (max. 30 points)	26.67	25.67	22.67
Track record (max. 20 points)	19.33	19.00	14.67
Recruitment strategy (max. 20 points)	17.33	17.67	17.33
Proposed price (max. 30 points)	28.00	24.00	28.33
TOTAL	**91.33**	**86.33**	**83.00**

Based on the evaluation, a French-based company Efficience3 was selected. Efficience3 is an independent opinion and market research institute, founded in 1985, with 30 permanent employees, international network of local research partners and experience in working in over 70 countries.

In parallel to the process of selecting the implementing company, the project partners continued to work on the survey content and structure. Several dedicated meetings were organised to discuss the objective

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of the survey, its role in the overall project progress, input from and contribution to other work packages and tasks, types of respondents the survey should target and the sampling methodology, and the tasks and roles of the partners.

The input from these meetings and from email exchanges helped ARC Fund to complete the first draft of the survey in July 2023. During August, all partners commented, edited and/or added additional questions to the survey.

After addressing the comments and suggestions, ARC Fund's team presented the final version of the questionnaire in early September. The final version was divided into four parts:

- Part 1: Energy-related activities
- Part 2: Views about the role of individuals in the energy system
- Part 3: General views about the energy system and the underlying values
- Part 4: General information about the participants

Each part consisted of several questions and a large number of sub-questions. Part 1 had five main questions and 39 sub-questions, part 2 three main questions and 23 sub-questions, part 2 six main questions and 49 sub-questions, and part 4 had seven questions.

The partners then translated the questionnaire into their national languages. In all nine EnergyPROSPECTS countries, the survey was available in the local language. In the case of Ireland, only the English language version was used. Respondents from Belgium had two language options to choose from – French and Dutch.

In ten other European countries, the survey was circulated only in English – this demanded that the potential participants go through a pre-screening to assess their English language knowledge. Only respondents who evaluated their English level as either intermediate or advanced were able to proceed to the next step, where they had to confirm that they understood and were comfortable with the English language.

At the end of September, ARC Fund held a kick-off meeting with Efficience3. Building on their extensive experience with conducting similar surveys, Efficience3 representatives made additional suggestions for optimisation of the survey and language revisions to ensure that the survey was easily understood by a wide variety of potential survey participants. The suggestions were approved and a final version of the questionnaire was produced. The changes necessitated only minor adjustments in the non-English versions of the survey but did require that partners translate a short additional text (guarantees about the anonymity of participants and a thank you note in the end of the survey).

With the survey content finalised, Efficience3 uploaded the survey onto its online platform and provided links for accessing all eight versions. Special care was taken to design a user friendly interface and attractive graphical solution, which fully corresponded with the project colours and logo, and visibly incorporated the EU funding text and logo. The EnergyPROSPECTS partners then tested the survey among their colleagues. The time needed to answer all the questions was recorded, and comments were collected about all questions and predefined answers that were hard to understand, or were illogical, irrelevant or inappropriate in any other way. Efficience3 also piloted the survey among its own pool of respondents (10 respondents per country). The testing and piloting took place in the first half of October. The feedback from both was used for the final modifications to the survey. This necessitated additional small translation effort from all partners. With this step, the survey was officially finalised and launched on October 30.

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3. IMPLEMENTATION OF THE SURVEY

The objective was to involve 10,000 survey participants: 1,000 residents per each consortium partner country (Belgium, Bulgaria, France, Germany, Hungary, Ireland, Latvia, the Netherlands, and Spain), and additional 1,000 participants in total from at least 10 other European countries (including non-EU member states and excluding Belarus, Russia and Ukraine).

To ensure a diversity of respondents, Efficience3 in agreement with ARC Fund set soft quotas on several demographic parameters, including age, gender, education and income. Sample parameters for individual countries slightly differed, but in general the effort was made to enable the comparability of data across countries.

All survey participants came from the panels routinely used by Efficience3. These panels are sufficiently diverse to best match the representativeness of each target country and large enough to ensure that hard to find target groups are also reached and that potential source bias is eliminated.

The use of a single ID process prevents the repeated participation of the same respondent, as well as the use of fake profiles. Additional quality checks that were applied during the implementation of the survey included:

- Logic checks in course of the questionnaire
- Time needed to complete the questionnaire (to exclude so-called “speeders”)
- Data consistency (to exclude so-called “straightliners” who give identical answers to completely different questions)
- Quality of answers to the open questions
- Removal of the questionnaires with the excessive number of “I don’t know” answers.

The survey and all data from the completed questionnaires were saved on secured Efficience3 servers, located in their offices in Reims, France. All data collection, storage and use were conducted in a manner that guarantees complete data confidentiality and security as per EU General Data Protection Regulation policy.

Ten days after the launch of the survey, Efficience3 delivered an intermediate progress report and a sample of the database with survey results obtained to this point. The report showed that the process was proceeding with an excellent pace and that in some countries, the target of 1,000 respondents was almost reached, and in others it was on a good track. No problems were noted and there was no need for corrective measures or a change in the approach.

The survey was closed as planned on November 17. After the process of data cleaning and generation of the database with the survey results, the database including responses from 10,071 questionnaires (see table 15 in Part 4 for details) was delivered to ARC Fund on November 28. The ARC Fund team then proceeded with the data analysis. The results of this analysis are presented in the next chapter.

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4. SURVEY RESULTS

Part 1: Energy-related activities

1. Response to the 2021-2022 energy crisis

In the first question, respondents were reminded about the 2021-2022 period, when the energy prices had risen considerably across Europe – a situation which has been frequently labelled as 'an energy crisis'. Respondents were then asked to indicate which actions they undertook in response to this situation. Seven options were provided, as well as an open question that gave respondents a chance to name activities that were not already listed. In some cases, those respondents who answered positively were asked an additional question – whether they have maintained the given practice until today.

1.1 Standard temperature at home

Table 1.1: Lowering the standard temperature in the house by more than 2°C

I lowered the standard temperature in my house by more than 2°C					
Country	**Yes**	**No**	**Country**	**Yes**	**No**
Belgium	66.6%	33.4%	Ireland	62.2%	37.8%
Bulgaria	54.8%	45.2%	Latvia	33.3%	66.7%
France	69.2%	30.8%	Spain	66.1%	33.9%
Germany	59.1%	40.9%	The Netherlands	64.8%	35.2%
Hungary	60.4%	39.6%	10 other countries	61.0%	39.0%
I have maintained this change in temperature until today (only answered by those who replied "Yes" to the previous question)					
Country	**Yes**	**No**	**Country**	**Yes**	**No**
Belgium	90.0%	10.0%	Ireland	90.8%	9.2%
Bulgaria	95.7%	4.3%	Latvia	86.9%	13.1%
France	95.5%	4.5%	Spain	93.2%	6.8%
Germany	93.7%	6.3%	The Netherlands	89.2%	10.8%
Hungary	93.8%	6.2%	10 other countries	89.0%	11.0%

Overall, out of 10,071 respondents, 6,018 had reduced the temperature in their homes in response to the crisis. In most countries, the ratio between those who did and those who did not reduce indoor temperature is similar: 60-66% versus 34-40%. The difference is most pronounced in France (69% to 31%).

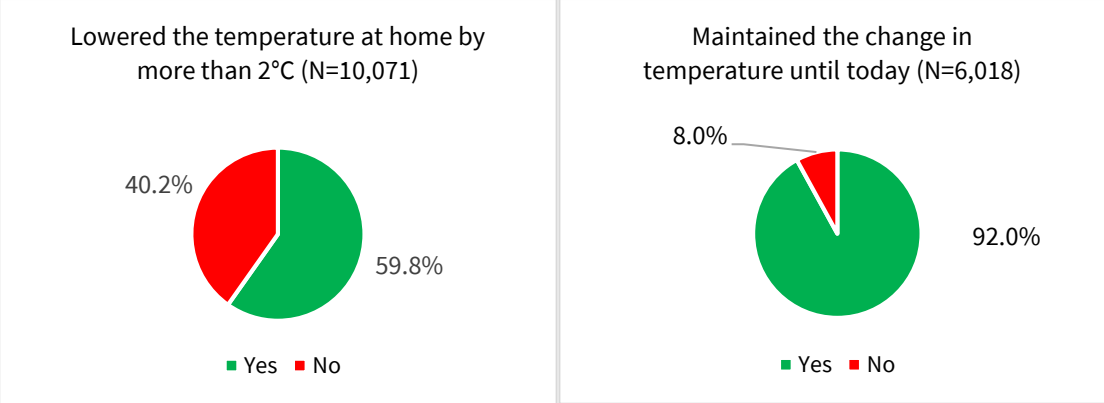
There are two exceptions: Bulgaria and especially Latvia, which is the only country where the ratio is reversed. These results should not be taken as an indication that in these two countries, respondents are less willing to sacrifice their thermal comfort in order to save energy. One consideration that needs to be made are the different weather conditions in the nine countries. Latvia has the lowest average temperatures and the coldest winters, which makes reducing the in-house temperature a much less comfortable (and healthy) action than in Spain or France. Another explanation for Latvia is of technical nature. There are no individual energy meters installed in Latvian multi-apartment buildings. Most people therefore maintain the same temperature that is set as a standard for the heating system. As no savings can be made by lowering temperature in the individual apartments, but only if the entire building undertakes such a measure, there is little incentive for households to reduce the indoor temperature.

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101022492.

A probable explanation for the lower share of respondents who have turned down the heating in their homes in Bulgaria could be the high level of energy poverty in this country. Bulgaria has the largest share of people saying that they were unable to keep their home adequately warm (22.5% according to Eurostat).[1] Options for additional temperature reduction among Bulgarian respondents can therefore be considered as more limited than in other countries.

An overwhelming majority of respondents claim to still maintain the indoor temperature at the lower level than before the criris. Latvia again stands slightly out with a bit larger share of those, who did not sustain this change.

Figure 1.1: Lowering the standard temperature in the house by more than 2°C



1.2 Use of air-conditioning at home

Table 1.2: Reducing the use of air-conditioning at home

I reduced the use of air-conditioning in my home.							
Country	**Yes**	**No**	**I do not have AC**	**Country**	**Yes**	**No**	**I do not have AC**
Belgium	21.2%	9.6%	69.2%	Ireland	13.0%	3.7%	83.3%
Bulgaria	47.5%	28.9%	23.6%	Latvia	14.8%	11.0%	74.1%
France	30.2%	7.8%	62.0%	Spain	58.6%	10.9%	30.5%
Germany	16.7%	10.5%	72.8%	The Netherlands	13.8%	12.1%	74.1%
Hungary	28.6%	13.4%	58.0%	10 other countries	38.3%	11.4%	50.3%
I still use air-conditioning less than before the crisis (only answered by those who replied "Yes" to the previous question)							
Country	**Yes**	**No**		**Country**	**Yes**	**No**	
Belgium	89.3%	10.7%		Ireland	85.6%	14.4%	
Bulgaria	92.9%	7.1%		Latvia	83.9%	16.1%	
France	91.1%	8.9%		Spain	85.7%	14.3%	
Germany	88.0%	12.0%		The Netherlands	89.9%	10.1%	
Hungary	93.1%	6.9%		10 other countries	84.3%	15.7%	

[1] See https://ec.europa.eu/eurostat/databrowser/view/ilc_mdes01/default/table?lang=en

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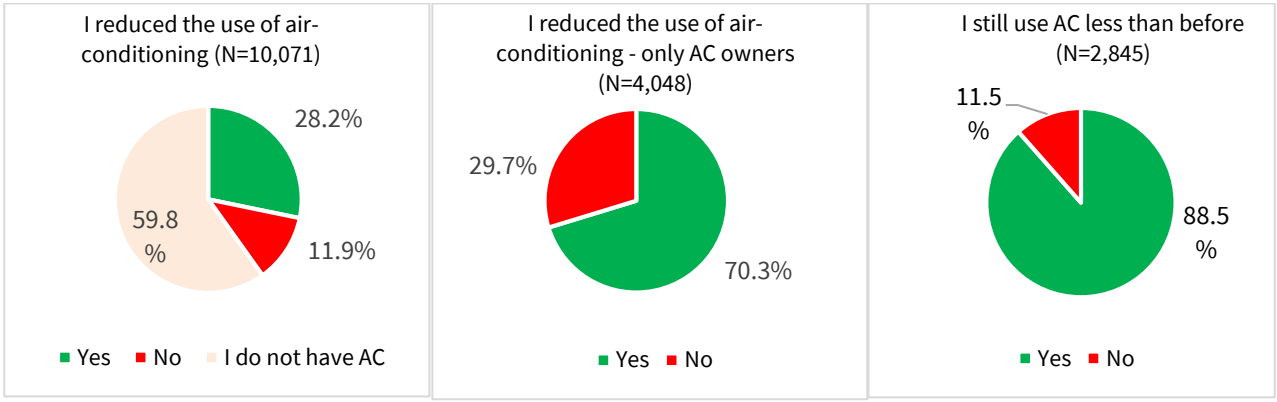
Among 10,071 respondents, 6,023 stated that they do not have air-conditioning in their homes. Of the remaining 4,048, who own an AC, 2,845 (70%) have reduced its use in response to the crisis. A huge majority (88.5%) of them still use air-conditioning less than they did before the crisis. Interestingly, Bulgaria stands out by having by far the largest share of respondents who own air-conditioning. This can be explained by the fact that over 90% of Bulgarian respondents reside in urban areas. Many Bulgarians living in large cities have in recent years stopped using the overly expensive district heating and switched to using air conditioners to heat their homes.[2] The second largest group of AC owners are residents of Spain, which is also not surprising, since Spain is one of the countries with the highest average temperatures in Europe. By far the largest share of "I do not have AC" answers was recorded in Ireland, followed by Latvia, The Netherlands, Germany and Belgium. This might be explained by geographical and weather conditions, but also cultural differences. North European countries traditionally do not use air-conditioning, but rely on natural or centralised ventilation in buildings.

Figure 1.2: Reducing the use of air-conditioning at home



Overall, seven out of ten AC owners have reduced the use of air-conditioning in their households. The largest share of AC owners, who have reduced their use in response to the crisis can be found in Spain (84%!), France, Ireland and 10 other countries (not participating in the EnergyPROSPECTS).

1.3 Use of car

Table 1.3: Reducing the use of the car

I reduced the use of my car							
Country	**Yes**	**No**	**I don't have a car**	**Country**	**Yes**	**No**	**I don't have a car**
Belgium	47.9%	36.5%	15.6%	Ireland	47.2%	36.4%	16.4%
Bulgaria	35.4%	45.1%	19.4%	Latvia	35.6%	38.8%	25.6%
France	58.3%	31.3%	10.4%	Spain	58.7%	29.1%	12.2%
Germany	43.5%	35.0%	21.5%	The Netherlands	43.2%	39.3%	17.5%
Hungary	43.3%	28.7%	28.1%	10 other countries	47.7%	33.9%	18.3%

[2] More than half of households in Bulgaria own air conditioners, according to the National Statistics Institute data from 2022. https://www.emi-bg.com/en/more-than-half-of-households-in-bulgaria-own-air-conditioners/

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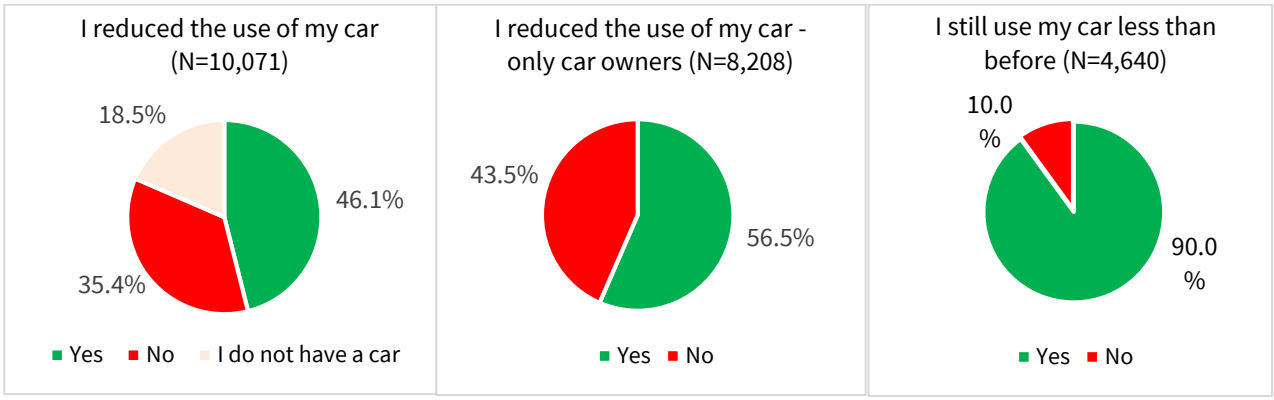
I still use my car less than before the crisis (only answered by those who replied "Yes" to the previous question)					
Country	**Yes**	**No**	**Country**	**Yes**	**No**
Belgium	87.5%	12.5%	Ireland	90.2%	9.8%
Bulgaria	90.5%	9.5%	Latvia	89.9%	10.1%
France	92.3%	7.7%	Spain	90.6%	9.4%
Germany	89.0%	11.0%	The Netherlands	88.0%	12.0%
Hungary	93.6%	6.4%	10 other countries	88.4%	11.6%

Compared to the AC, the use of a car seems to be a bit more entrenched habit or a necessity. A bit over 56% of the 8,208 car owners in our survey have reduced the time they spend driving their vehicles during the crisis. The "champions" are again the residents of Spain,[3] followed by respondents from France and Hungary. Reducing the use of a car seems to be the biggest challenge in Latvia and especially in Bulgaria. Some possible explanations for more intensive use of private cars in these two countries are the less efficient public transport system (compared to the other countries) and high unemployment outside the major urban centres. The latter means that many people are forced to commute daily to work in cities and back to where they reside, using their cars.

Figure 1.3: Reducing the use of the car



Driving one's car less often than before the crisis appears to be a resilient change – an overwhelming majority have maintained this behaviour until today.

[3] This result is consistent with data from the recent Eurobarometer No 538 (2023), which reports that 76% of Spaniards claim to have introduced lifestyle changes, with the fourth most important change being the use of alternatives to private car use (23%). https://europa.eu/eurobarometer/surveys/detail/2954
The Spanish Ministry of Transport also reports (2023) that although the carbon emissions from transport in Spain have increased again after the decrease observed during the pandemic, they remained below the pre-pandemic values. See https://cdn.mitma.gob.es/portal-web-drupal/OTLE/elementos_otle/20230911_monografico_descarbonizacion_del_transporte_vfinal_bis.pdf

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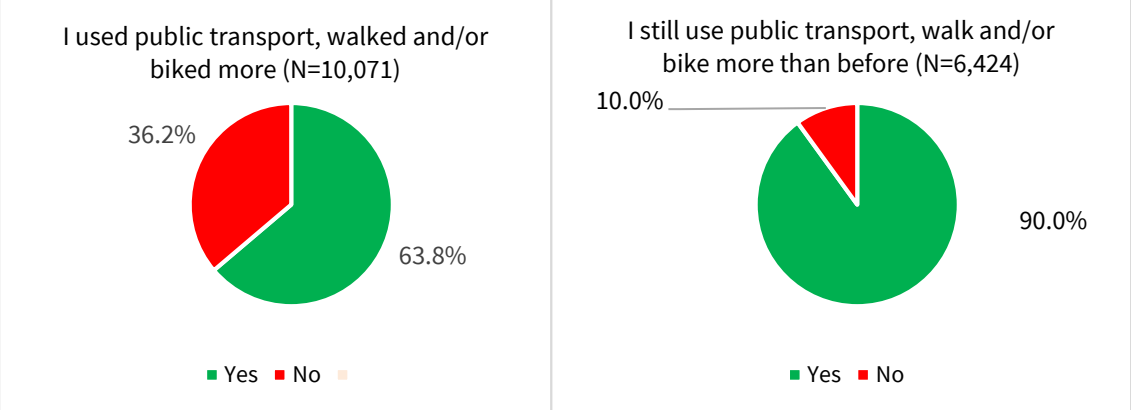
1.4 Use of public transport, walking and biking

Table 1.4: Increasing the use of the public transport, walking and biking

I used public transport, walked and/or biked more					
Country	**Yes**	**No**	**Country**	**Yes**	**No**
Belgium	58.7%	41.3%	Ireland	60.2%	39.8%
Bulgaria	60.8%	39.2%	Latvia	59.1%	40.9%
France	65.8%	34.2%	Spain	78.2%	21.8%
Germany	59.7%	40.3%	The Netherlands	60.4%	39.6%
Hungary	69.4%	30.6%	10 other countries	65.7%	34.3%
I still use public transport, walk and/or bike more than before the crisis (only answered by those who replied "Yes" to the previous question)					
Country	**Yes**	**No**	**Country**	**Yes**	**No**
Belgium	92.1%	7.9%	Ireland	88.6%	11.4%
Bulgaria	92.5%	7.5%	Latvia	78.5%	21.5%
France	95.4%	4.6%	Spain	90.9%	9.1%
Germany	90.1%	9.9%	The Netherlands	91.1%	8.9%
Hungary	91.1%	8.9%	10 other countries	89.0%	11.0%

Almost two thirds of respondents have changed their mobility habits because of the crisis. The results are similar across most countries – again with the notable exception of Spain, which is well ahead of the pack with more than 78% of respondents increasing their use of sustainable transport modes (mainly, walking, cycling, public transport or car sharing).[4]

Figure 1.4: Increasing the use of the public transport, walking and biking



It should be noted that people might change their mobility behaviours for a number of reasons, not only as a response to the higher costs of fuel. These reasons might include the improvement of the transport

[4] Data from the Spanish National Statistics Institute (Feb 2023) show a growing trend in the use of urban transport. The number of passengers using public transport in 2022 increased by 28.8% compared to 2021. https://www.ine.es/en/daco/daco42/daco4210/tv1222_en.pdf

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infrastructure (new or repaired bike lanes, better public transport services), or reduction of public transport fares (including free travel on certain occasions or journeys). In contrast, in some countries where governments took different measures to lower the price of fuel, citizens might have been less motivated to consider alternatives to the car use.

This reaction to the crisis has also proven to be very enduring (a bit less so in Latvia, where the share of people who reverted to their old habits is considerably higher than in other countries).

1.5 Investment in renewable energy generation

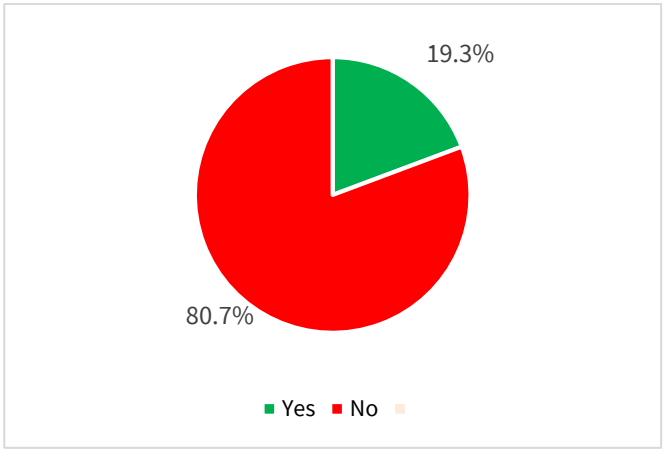
Table 1.5: Investing in renewable energy generation (per country)

I invested in renewable energy generation					
Country	**Yes**	**No**	**Country**	**Yes**	**No**
Belgium	30.9%	69.1%	Ireland	18.7%	81.3%
Bulgaria	10.0%	90.0%	Latvia	10.2%	89.8%
France	12.2%	87.8%	Spain	14.7%	85.3%
Germany	15.9%	84.1%	The Netherlands	43.0%	57.0%
Hungary	12.0%	88.0%	10 other countries	25.4%	74.6%

All previous four anti-crisis measures did not only save energy, but also reduced the expenses. In contrast, an investment in renewable energy generation requires a rather substantial financial cost for the purchase and installation of equipment. In addition, there are other obstacles involved, such as obtaining necessary permits, sort out the relationship with the electricity provider and other bureaucratic and procedural issues.

It needs to be noted that this question was intentionally broad and did not ask for a specific RES technology such as solar PV panels, but allowed the respondents to report their investment in different types of (what they considered to be) renewable energy generation. This may include, in addition to the solar photovoltaic panels, also the use of solar energy for water heating, air source and ground source heat pumps, small wind turbines, biomass heating systems, and others.

Figure 1.5: Investing in renewable energy generation (N=10,071)



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Starting to produce energy from RES is neither easy nor very cheap and understandably, not many people are willing to consider this option – less than 20% of respondents have invested in RES installations. Two countries stand out – Belgium and The Netherlands. Particularly the latter is very impressive with its 43% of respondents, who declared that they have invested in renewable energy generation as a response to the crisis. The number of positive answers is also very high for the 10 non-project countries, but it should be kept in mind that in these countries, the sample of respondents was much smaller – about 100 per country, compared to about 1,000 for the countries involved in the project. Four deserve to be mentioned specifically due to a very high share of respondents stating that they have invested in RES – Austria (35%), Italy (39%), Poland (37%) and Turkey (46%).[5] Bulgaria, France, Hungary and Latvia have the smallest sample of survey participants, who reported that they have made a RES investment. The results are (somewhat surprisingly) only slightly better in Germany and Spain. However, one aspect that needs to be taken into account is the already very high level of RES uptake in these two countries well before the 2021-2022 crisis.

Another explanation for lower number of people investing in renewable energy generation is the type of building in which they live. Spain, Latvia, Germany and Bulgaria are among the countries with the highest share of people living in multi-apartment buildings, which suggests that opportunities for individual RES initiatives are limited. RES installation in a multi-apartment building usually requires a collective decision of all apartment owners, which is often hard to obtain, and a strict observation of building regulations.

1.6 Changing the electricity and/or gas supplier

Table 1.6: Changing the electricity and/or gas supplier (per country)

Country	Yes	No	Country	Yes	No
Belgium	30.0%	70.0%	Ireland	41.3%	58.7%
Bulgaria	4.4%	95.6%	Latvia	31.1%	68.9%
France	19.7%	80.3%	Spain	34.7%	65.3%
Germany	29.3%	70.7%	The Netherlands	22.8%	77.2%
Hungary	4.2%	95.8%	10 other countries	30.7%	69.3%

The application of this measure strongly depends on the conditions on the energy markets in different countries.[6] The main reasons why electricity or gas consumers would want to change their supplier would be a better price or a better service, or a combination of both. For some people, environmental concerns might also be an important reason. However, there is a crucial precondition – such change has to be possible. In most EU countries, changing one's electricity or gas supplier should have become a relatively easy and straightforward process by 2023, but this is not necessarily so. Even with the relevant legislation in place, in some countries (e.g. Bulgaria, Hungary, France), the virtually monopolistic energy providers continue to dominate the market, leaving the energy consumers without a genuine option to choose their energy providers.

[5] For a huge country such as Turkey, the sample of 100 is way too small to allow for a categorical conclusion, however the result nevertheless indicates a quite widespread uptake of RES technologies in this country.

[6] See sections 'EC3. Energy market (degree of liberalisation, existing decentralisation/ centralisation of the market)' for the nine countries in Hajdinjak, M. et al (2023). *Analytical report on PESTEL factors in the national and local contexts*. https://www.energyprospects.eu/fileadmin/user_upload/lu_portal/www.energycitizen.eu/D5.2_Analytical_report_on_PESTEL_factors_in_the_national_and_local_contexts-FINAL.pdf

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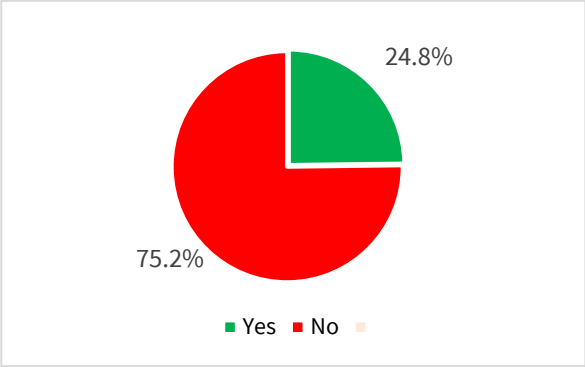
Figure 1.6: Changing the electricity and/or gas supplier (N=10,071)



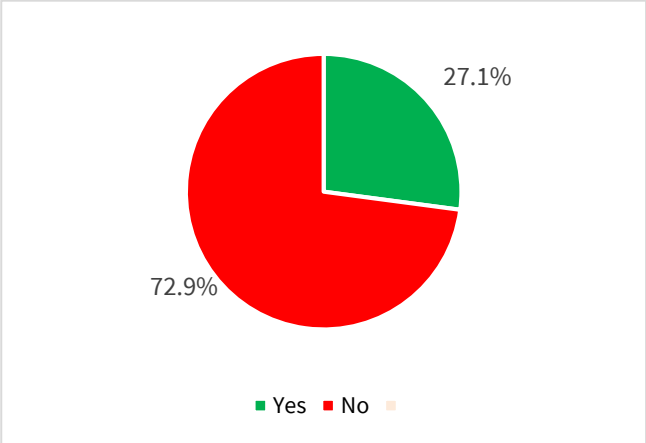
1.7 Energy retrofitting of the home

Table 1.7: Undertaking energy retrofitting of home (e.g. insulation, installed a heat pump) (per country)

Country	Yes	No	Country	Yes	No
Belgium	23.5%	76.5%	Ireland	25.0%	75.0%
Bulgaria	43.1%	56.9%	Latvia	26.1%	73.9%
France	26.9%	73.1%	Spain	23.6%	76.4%
Germany	12.7%	87.3%	The Netherlands	26.2%	73.8%
Hungary	34.3%	65.7%	10 other countries	29.1%	70.9%

Energy retrofitting of homes has been done by just over a quarter of respondents. The number of positive answers gravitates around 25% in most countries, but there are three exceptions. This measure appears to be very widespread in Bulgaria and Hungary. Several explanations can be brought forth – a large number of residents living in old and energy inefficient multi-apartment buildings from the communist period, and availability of different financial mechanisms supporting the energy retrofitting.

Figure 1.7: Undertaking energy retrofitting of home (e.g. insulation, installed a heat pump) (N=10,071)



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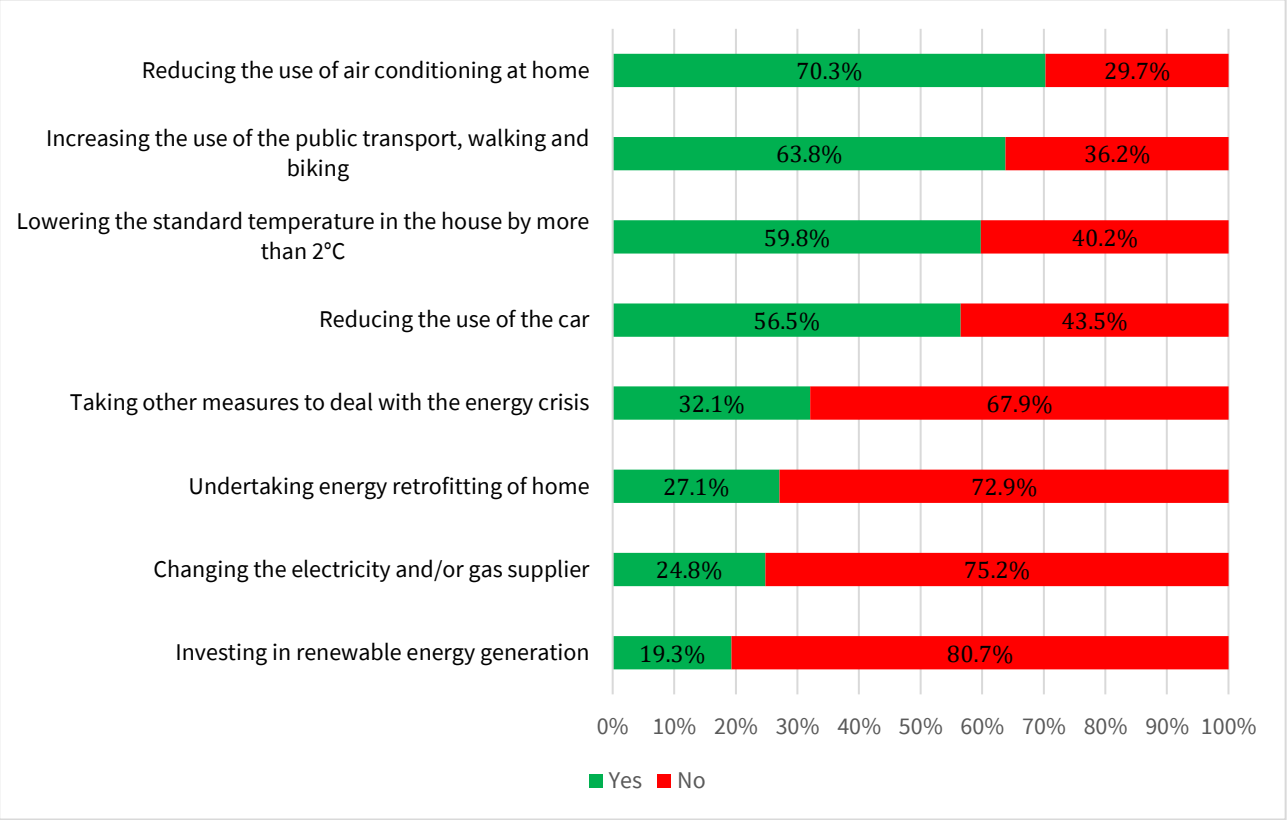
On the opposite end is Germany, where the share of people who insulated their homes is substantially lower than the average score for the entire survey sample. This low result is confirmed by the question 3.12, where over half of the German respondents firmly state that they have no intention to do the energy retrofitting of their homes. Two possible explanations can be offered. One is that on average, residential buildings in Germany are far better insulated than in many other European countries, hence no need to undertake similar measures during the crisis. Something similar can be said for The Netherlands, where practically all houses have cavity wall insulation.

The other reason is that among the EU countries, Germany has the lowest share of people living in households that they own. It can be assumed that people who rent an apartment or a house have a smaller interest or even freedom to decide over retrofitting the home they live in.[7]

1.8 Measures taken in response to the 2021-2022 energy crisis – an overview

Figure 1.8 Measures taken in response to the 2021-2022 energy crisis



[7] See https://ec.europa.eu/eurostat/cache/digpub/housing/bloc-1a.html

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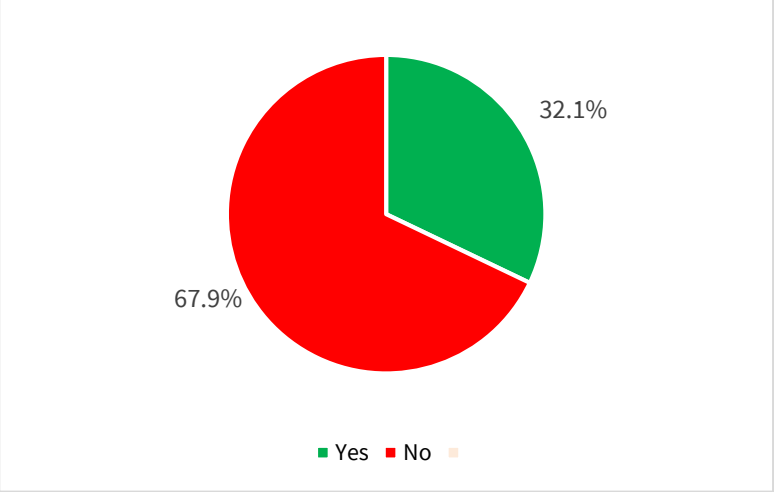
1.9 Other measures to deal with the energy crisis

Table 1.9: Taking other measures to deal with the energy crisis (per country)

Country	Yes	No	Country	Yes	No
Belgium	28.4%	71.6%	Ireland	35.1%	64.9%
Bulgaria	22.7%	77.3%	Latvia	27.3%	72.7%
France	28.2%	71.8%	Spain	52.1%	47.9%
Germany	34.5%	65.5%	The Netherlands	30.4%	69.6%
Hungary	28.9%	71.1%	10 other countries	33.9%	66.1%

This question showed that the proposed list of anti-crisis activities was way too short to cover the considerable variety of measures European citizens undertook to deal with the rising energy prices and insecurity of the energy supply as a result of the Russian invasion of Ukraine. The extent of anti-crisis responses is particularly impressive in Spain, where over half of respondents did something not listed above. German and Irish energy consumers can also be mentioned for their ingenuity. In a large number of cases, the answers describe different lifestyle and behaviour changes, most often motivated by the need to lower the energy costs.

Figure 1.9: Taking other measures to deal with the energy crisis (N=10,071)



1.9a Which other actions did you take to deal with the situation?

Those respondents, who answered “Yes” to the previous question, were asked to name or shortly describe what they have done. Over 3,200 answers were received, which makes it impossible to include here a complete list of all actions. Similar actions or actions with a similar effect have been clustered together. Some respondents gave answers that were actually already covered by previous questions, or answered “None” or “I don't know.” Such answers were not included in the analysis.

A substantial number of respondents did not name only one activity or measure, but several. These multiple answers have been divided and added to different clusters. However, in most cases these different

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activities have a common denominator – saving and cost cutting. A huge majority of answers reveals ways in which survey participants are trying to spend less. They have reduced their consumption of electricity, fuel, water, heating, travel, but in some cases even clothing and food. Many use cheaper (off-peak) electricity and/or have switched to a cheaper heating source. Only a minority have invested in energy efficient lightning and energy-efficient appliances, or smart devices that help them to monitor and optimise energy consumption. Some recycle and try to reduce waste.

About 40% of all answers to this question represent a large variety of concrete actions and activities aimed at reducing the energy consumption at home. The list of these actions is very long, but the most typical are turning off home appliances (not leaving them on standby or unplugging them), turning off lights when not in the room, careful or reduced use of water heaters, reducing the wattage of light bulbs, washing at lower temperatures, using less appliances or using them less often, using natural light as much as possible, and watching less TV.

Three clusters of answers contain a very similar number of replies – about 10% of answers each. There three groups are reduction of heating-related consumption and maintaining overall low temperature at home, investment in energy efficient lightning and energy-efficient appliances, and different activities that improve the thermal efficiency of home. Of course, the first of these three clusters overlaps with the question 1.1 (Lowering the standard temperature in the house by more than 2°C) and the third one has a lot in common with question 1.7 (energy retrofitting of home). While it is safe to assume that some respondents neglected the fact that they have already replied to a question about such activities and should have skipped this question, the diversity and depth of their responses to this open question show that many felt the need to explain in detail what have they done to maintain the lower temperature at home, or increase the thermal efficiency of their dwellings.

The cluster reduction of heating and keeping low temperature at home contains answers such as dressing warmly at home; using blankets, hot water bottles, electric blankets or heating plates instead of heating; not heating the home and spending more time elsewhere (at work, at public places such as libraries, at parents' home); opening windows less often; spending more time in bed to keep warm; heating only certain rooms or only at certain hours.

About 10% of answers referred to the substitution of old domestic appliances and lightning with the energy efficient alternatives.

Respondents undertook different actions to improve the energy and thermal efficiency of their homes. These actions include installation of roller shutters, external or internal insulation of walls, replacement of windows, attic and roof insulation, curtains, weather strips on doors and windows, aluminium foil behind the radiators, carpets, fixing potential heat leaks.

About 6% of answers concerned general reduction of costs and consumption and different ways to save money. Some of the answers are spending less on non-essential items such as leisure, but also on clothing and food, buying second hand items, keeping an eye out for discounts, buying less things than before, and using things until they break down beyond repair.

About 5% of answers focused on reducing the use of water. A similar share of responders have switched to a cheaper heating source (mainly wood-burning stoves and fireplaces, and using firewood or pellets). Some have started using air-conditioning for heating instead of central heating.

Smaller answer clusters (2-3% of all given answers) are predominant use of cheaper (off-peak) electricity, recycling and reduction of waste, and use of different devices to optimise the consummation of energy (timers, switches, app control, energy saving functions, etc.).

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2. Decrease of energy consumption due to the undertaken measures

Respondents, who replied with "Yes" to at least one of the questions in the previous section (i.e. they took at least one measure in response to energy crisis) were asked to evaluate if their energy consumption has decreased as a result of these measures. Their responses are summarised in the table below.

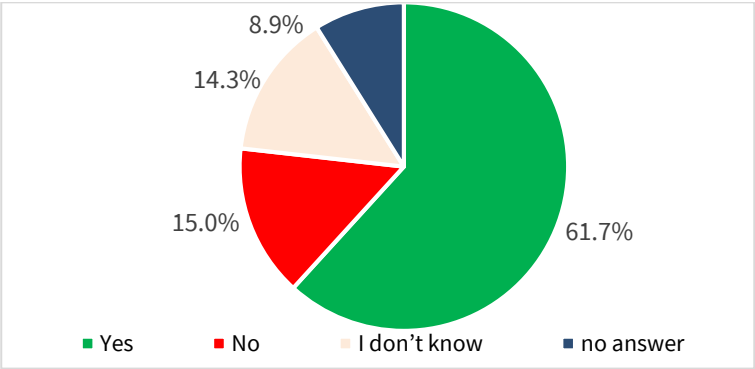
Table 2: My energy consumption has decreased as a result of the measures (per country)

Country	Yes	No	I don't know	No answer*
Belgium	64.1%	13.3%	16.5%	6.1%
Bulgaria	53.3%	18.9%	14.9%	13.0%
France	63.0%	15.3%	13.3%	8.4%
Germany	57.5%	13.8%	17.9%	10.8%
Hungary	64.6%	16.1%	11.5%	7.8%
Ireland	58.3%	16.7%	16.7%	8.3%
Latvia	45.6%	22.7%	15.4%	16.3%
Spain	78.7%	9.8%	8.1%	3.4%
The Netherlands	71.1%	10.0%	11.7%	7.2%
10 other countries	60.9%	13.7%	17.4%	8.0%
Total	61.7%	15.0%	14.3%	8.9%

*Note: "No answer" indicates that this question was not asked, because the respondent replied with "No" to all questions in the previous section (i.e. did not take any specific measures to deal with the energy crisis).

As can be seen from the table, 60% of respondents believe that the actions they undertook to mitigate the consequences of the energy crisis resulted in a lower energy consumption. A similar share (about 15%) either could not evaluate their energy consumption or stated that they did not reduce their energy use. The percentage of respondents who estimated that their actions led to reduction of energy consumption was lowest in Latvia. Bulgarian respondents have reported slightly higher numbers, but are still below the average of the total sample. On the other hand, a high share of the Dutch and Spanish respondents have estimated that their actions led to noteworthy reduction of their energy consumption.[8]

Figure 2: My energy consumption has decreased as a result of the measures (N=10,071)



[8] Although this is certainly not the only reason, part of the explanation for the highest share of affirmative answers and the lowest share of "I do not know" answers among Dutch and Spanish responders is that all households in Spain and almost all in The Netherlands are equipped with smart meters, which allows consumers to be more aware of their energy savings. See https://www.statista.com/statistics/916317/share-of-households-equipped-with-a-smart-meter-in-europe/.

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101022492.

3. Current energy-saving activities

In this set of questions, respondents were offered a list of different energy-saving activities and asked whether they were currently engaged in any of them or have been in the past, and if not – did they believe they might practice any of these activities in the future.

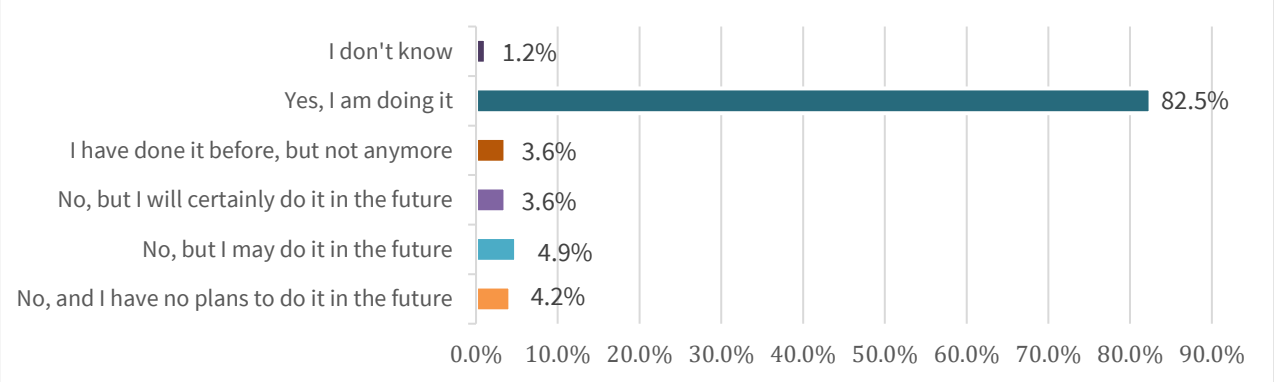
3.1 Saving energy at home (e.g. by switching off the lights, lowering room temperature, putting a lid on pans while cooking, etc.).

Table 3.1: I try to save energy in most of my activities at home (per country)

Country	No, and I have no plans to do it in the future	No, but I may do it in the future	No, but I will certainly do it in the future	I have done it before, but not anymore,	Yes, I am doing it	I don't know
Belgium	3.7%	4.4%	4.6%	5.1%	81.4%	0.7%
Bulgaria	6.9%	7.4%	5.2%	3.9%	75.5%	1.0%
France	3.6%	4.1%	2.8%	5.3%	83.1%	1.1%
Germany	6.2%	4.2%	2.8%	2.7%	82.9%	1.2%
Hungary	3.5%	3.5%	3.3%	2.3%	86.4%	1.1%
Ireland	2.0%	3.7%	2.7%	2.7%	87.8%	1.2%
Latvia	6.2%	5.9%	3.0%	4.3%	78.6%	2.1%
Spain	1.8%	3.8%	3.6%	3.3%	86.7%	0.8%
The Netherlands	4.4%	5.9%	3.4%	1.4%	83.8%	1.1%
10 other countries	3.9%	6.3%	4.7%	4.6%	78.8%	1.6%
Total	4.2%	4.9%	3.6%	3.6%	82.5%	1.2%

Saving energy at daily activities at home is a simple low-cost measure that does not require any special investments and only a little effort. Not surprisingly, a huge majority of respondents has declared that this was something they do, while the opposition to this measure is marginal. Despite the differences being too small to draw any conclusions, it is curious to note that Ireland and Spain, which have the largest share of affirmative answers, have also the biggest number of "Yes" answers to the question 1.9 (Other measures to deal with the energy crisis). Bulgaria, on the other hand, has the lowest result in both cases (Taking other measures to deal with the energy crisis and Saving energy at home).

Figure 3.1: I try to save energy in most of my activities at home (N=10,071)



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101022492.

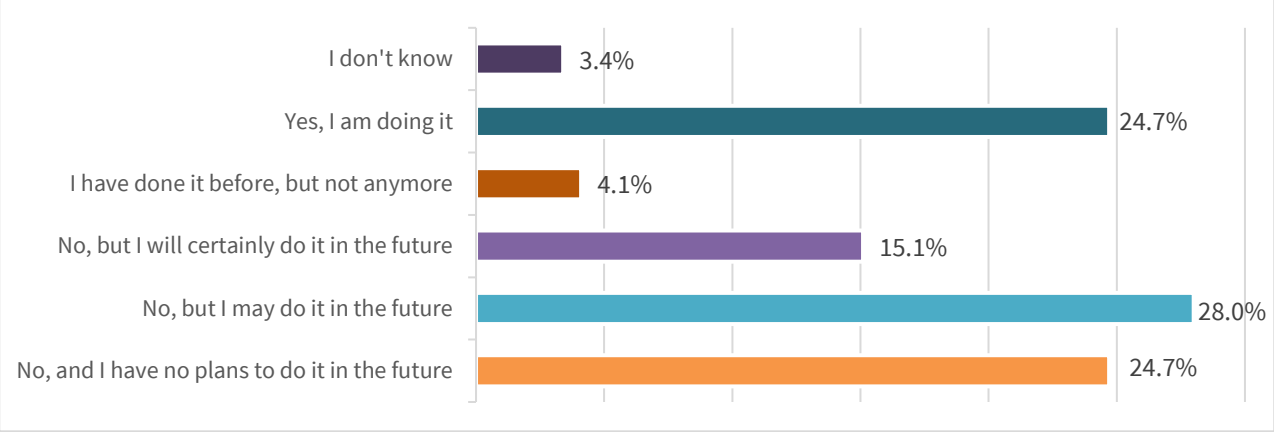
3.2 Use of different smart devices and digital apps to follow and measure energy consumption

Table 3.2: I use different smart devices and digital apps to follow and measure my energy consumption (per country)

Country	No, and I have no plans to do it in the future	No, but I may do it in the future	No, but I will certainly do it in the future	I have done it before, but not anymore,	Yes, I am doing it	I don't know
Belgium	28.6%	26.1%	15.1%	3.8%	22.7%	3.6%
Bulgaria	21.3%	36.7%	17.5%	3.9%	16.5%	4.1%
France	24.0%	22.0%	16.8%	3.6%	30.2%	3.4%
Germany	38.6%	26.0%	11.0%	4.4%	17.2%	2.8%
Hungary	26.0%	31.3%	17.4%	2.2%	19.0%	4.1%
Ireland	17.9%	32.6%	16.8%	4.1%	25.4%	3.1%
Latvia	26.4%	25.6%	11.5%	4.7%	27.6%	4.3%
Spain	17.2%	31.8%	20.6%	3.5%	24.4%	2.5%
The Netherlands	27.4%	21.7%	9.8%	2.5%	36.1%	2.5%
10 other countries	20.1%	26.1%	14.5%	8.5%	27.4%	3.4%
Total	24.7%	28.0%	15.1%	4.1%	24.7%	3.4%

A word of caution is in place for the results in the figure 3.2. It appears that many respondents understood this question in terms of the individual use of smart devices and digital applications in the home, and did not take into account the obligatory installation of smart meters in countries such as Spain (in which 100% of households have smart meters as of 2023), France and Ireland.[9] On the other hand, the three countries in which the smallest number of respondents replied affirmatively (Bulgaria, Germany and Hungary) are also among those EU countries in which the installation of smart meters has proceeded very slowly, or has not started yet.

Figure 3.2: I use different smart devices and digital apps to follow and measure my energy consumption (N=10,071)



[9] A good overview of the smart meter rollout in Europe can be found here: https://www.ffe.de/en/publications/the-smart-meter-rollout-in-germany-and-europe/.

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The installation of smart meters is only one aspect of the question above. Indeed, as already mentioned, it is likely that many participants understood the question in terms of their own decision to apply different smart devices and digital applications to monitor and regulate their energy consumption. Being less accessible or inaccessible to wide segments of the population (energy poor, elderly, residents of rural areas and other vulnerable communities), it will take time and targeted support for these tools to become widely used. Still, the prospects for the wider use of smart devices are good – 43% of respondents indicated that they might or will certainly use digital tools in the future. Curiously, the opposition to the use of such tools is most pronounced in Germany – 38.6% of responses "No, and I have no plans to do it in the future." In contrast, Bulgarian and Hungarian participants (along with the Irish and Spanish ones) are the ones most inclined to give the digital devices a try in the future.

3.3 Membership in a renewable energy cooperative (a local community or citizens' initiative to produce and consume renewable energy).

Table 3.3: I am a member of a renewable energy cooperative (per country)

Country	No, and I have no plans to do it in the future	No, but I may do it in the future	No, but I will certainly do it in the future	I have done it before, but not anymore,	Yes, I am doing it	I don't know
Belgium	51.3%	23.4%	9.3%	3.1%	6.2%	6.7%
Bulgaria	45.1%	33.9%	9.3%	2.1%	3.1%	6.5%
France	50.8%	23.2%	10.0%	3.6%	5.9%	6.5%
Germany	64.7%	19.4%	5.3%	2.7%	4.5%	3.4%
Hungary	47.9%	31.9%	9.8%	1.4%	3.9%	5.1%
Ireland	40.8%	35.5%	10.1%	2.5%	5.2%	6.0%
Latvia	57.3%	20.3%	8.5%	2.3%	3.8%	7.9%
Spain	37.0%	38.8%	12.1%	3.5%	4.7%	3.9%
The Netherlands	47.5%	18.3%	6.4%	1.4%	13.2%	13.2%
10 other countries	38.7%	29.9%	11.1%	5.4%	9.9%	5.0%
Total	48.1%	27.5%	9.2%	2.8%	6.0%	6.4%

The survey indicates that the participation in RES communities or cooperatives is still rather rare. In most countries, only between 3 and 5% of respondents are engaged in this activity.[10] Additional 2-3% have previous experience of participating in energy communities but have for various reasons stopped their involvement. Slightly more (about 10%) respondents from Belgium and France have previous or current experience with involvement in energy cooperatives. The most notable exception is The Netherlands,

[10] These results seem to be quite high. According to the data about deployment of energy communities in the European Union, only about 0.2% of EU residents are members of the energy communities. See https://www.mdpi.com/2071-1050/15/10/8201. However, our questions was designed somewhat wider and looks beyond the scope of officially registered energy communities (in Hungary and Bulgaria, for example, there is only one official RES community) to include also unofficial and informal citizens' initiatives to produce and consume energy from renewable sources. These informal initiatives are usually not-for-profit, local (confined to a neighbourhood or a village) and with limited production capacity.

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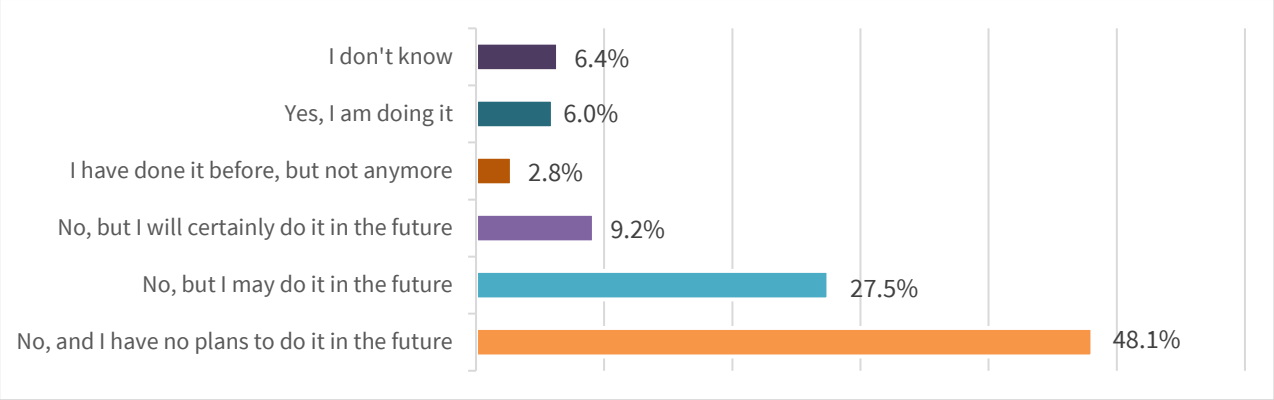
where the share of RES community members is considerably higher than in other countries. Interestingly, the survey indicates that RES communities are a much more established practice in countries that are not part of the EnergyPROSPECTS project. Their average score for the affirmative answers is almost double the average for the nine project countries.

A rather pessimistic finding is that almost half of all respondents have no intention of ever joining a local community or citizens' initiative to produce and consume renewable energy. Only 9% would definitely take such step in the future, and 27.5% are open to this possibility.

Figure 3.3: I am a member of a renewable energy cooperative (N=10,071)



3.4 Use of green mobility options (walking, biking, e-car or e-bike sharing service, electric scooters, public transport).

Table 3.4: I usually use green mobility options (per country)

Country	No, and I have no plans to do it in the future	No, but I may do it in the future	No, but I will certainly do it in the future	I have done it before, but not anymore,	Yes, I am doing it	I don't know
Belgium	21.5%	13.4%	8.8%	6.1%	48.0%	2.3%
Bulgaria	13.3%	17.6%	9.6%	7.2%	49.7%	2.6%
France	17.8%	10.1%	8.5%	6.3%	55.1%	2.2%
Germany	26.9%	10.0%	5.6%	5.2%	50.3%	2.0%
Hungary	14.0%	14.2%	8.0%	3.2%	57.9%	2.7%
Ireland	17.4%	17.1%	9.5%	6.3%	46.7%	3.0%
Latvia	23.0%	17.4%	7.7%	4.9%	44.3%	2.8%
Spain	7.5%	10.3%	7.5%	4.9%	68.2%	1.6%
The Netherlands	23.1%	12.2%	7.0%	3.0%	52.9%	1.8%
10 other countries	15.1%	13.1%	9.9%	7.6%	51.6%	2.8%
Total	17.9%	13.6%	8.2%	5.5%	52.4%	2.4%

Use of green mobility options is another easy to implement and (in most cases) inexpensive energy saving activity. Therefore it comes as no surprise that just over half of the respondents are practicing it. The share

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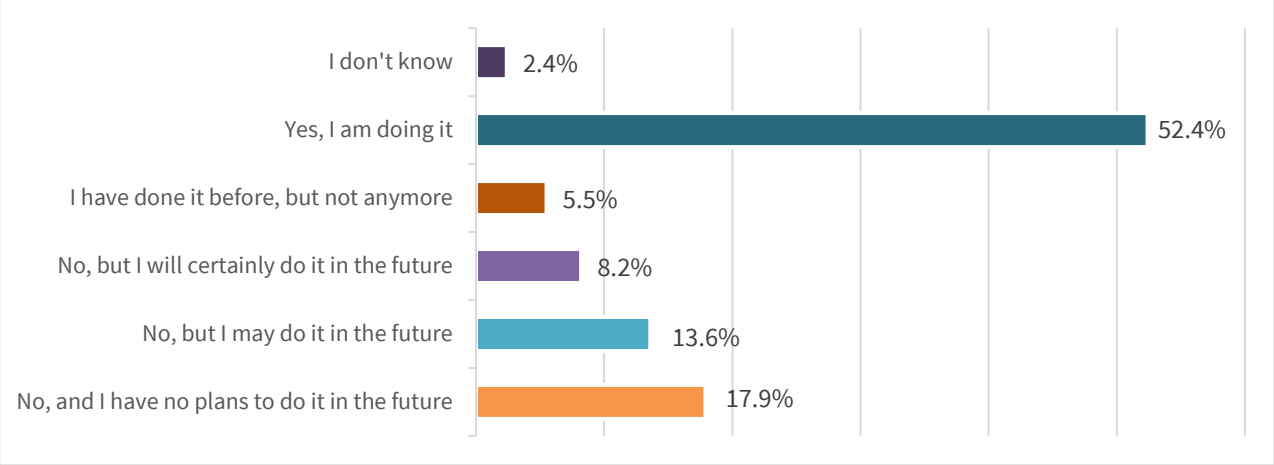
of those who are categorically against walking, biking or using public transport is rather small – 17.9%. Spanish respondents are well ahead of all others, but survey participants from France and Hungary have also reported to be practicing green mobility more frequently than the residents of other countries.[11]

Compared to others, Latvian responders seem to be a bit more attached to conventional transport options using fossil fuels. This might be explained by the lack of good cycling infrastructure, poor road safety for bikers and pedestrians and ineffective public transport. On the other hand, the use of electric cars in Latvia appears to be gaining pace, supported by the state aid for purchasing e-cars.

In addition to Latvia, the highest share of "No, and I have no plans to do it in the future" answers was recorded in Germany, followed by (somewhat surprisingly) The Netherlands and Belgium.

Figure 3.4: I usually use green mobility options (N=10,071)



3.5 Purchasing electricity from a supplier with a green electricity plan

Table 3.5: I get my electricity from an electricity supplier with a green electricity plan (per country)

Country	No, and I have no plans to do it in the future	No, but I may do it in the future	No, but I will certainly do it in the future	I have done it before, but not anymore,	Yes, I am doing it	I don't know
Belgium	7.1%	7.6%	6.3%	4.5%	46.6%	28.0%
Bulgaria	21.5%	30.2%	12.6%	1.7%	7.9%	26.1%
France	12.6%	12.0%	7.0%	3.2%	33.2%	32.0%
Germany	17.5%	12.9%	6.9%	3.6%	45.1%	14.0%
Hungary	26.5%	22.7%	10.3%	1.2%	8.4%	30.9%
Ireland	6.6%	14.5%	8.6%	5.0%	41.7%	23.5%
Latvia	19.2%	16.4%	8.1%	3.1%	13.2%	40.0%

[11] The Spanish results corelate well with current data from Spanish National Statistics Institute that show a 28.8% increase in the number of passengers using public transport in 2022 compared to 2021. See https://www.ine.es/en/daco/daco42/daco4210/tv1222_en.pdf.

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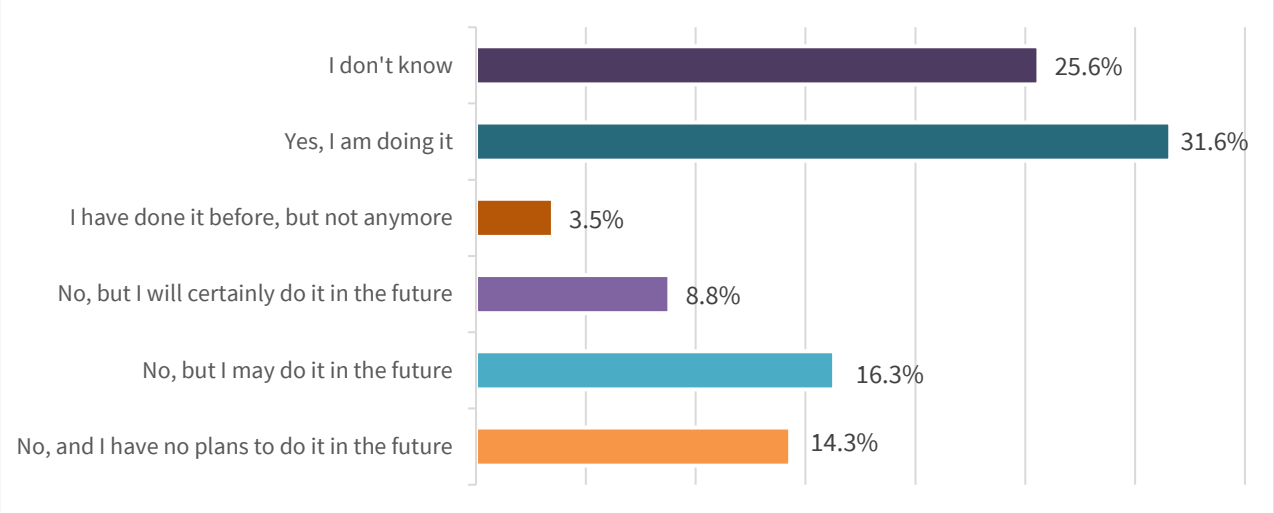
Spain	9.9%	20.9%	12.3%	4.4%	29.2%	23.3%
The Netherlands	11.5%	10.4%	5.3%	2.2%	52.3%	18.3%
10 other countries	10.6%	14.9%	10.2%	5.9%	38.3%	20.2%
Total	14.3%	16.3%	8.8%	3.5%	31.6%	25.6%

Admittedly, this was a rather hard question to answer, as it entails a clear and understandable billing explanation provided by the electricity supplier (which might not be the case in all studied countries), and the interest or desire of the consumer to study this information. Therefore, the share of "I don't know" answers was much higher here than in the case of other questions. These answers were particularly frequent among the Latvian respondents. In contrast, respondents from Belgium, Germany, Ireland and in particular The Netherlands appear to be best informed where their electricity is coming from. Hungarians, Bulgarians and Latvians seem to be the least interested or perhaps most suspicious towards offers to receive electricity generated from green energy sources, possibly suspecting that this would negatively reflect on their monthly electricity bills.

It should also be noted that in Hungary it is still next to impossible to change the energy provider, while in Bulgaria households have little incentive to change their electricity supplier and thus pay the market price, which is considerably higher than the price on the regulated market. However, this will change in 2026, when all consumers will be obliged to purchase electricity on the free market.

In Latvian case, there is no requirement to define source of energy in the electricity bills. As hydropower is the dominant source for electricity production, many Latvians assume that the energy they consume is green. The process of energy market liberalisation is still a novelty, including the possibility to change the energy provider. Finally, the considerable public distrust to green energy stems from the fact that in the past, the compulsory inclusion of green energy in the mix and the cost of subsidies to green energy producers have indeed contributed to the higher energy bills.

Figure 3.5: I get my electricity from an electricity supplier with a green electricity plan (N=10,071)



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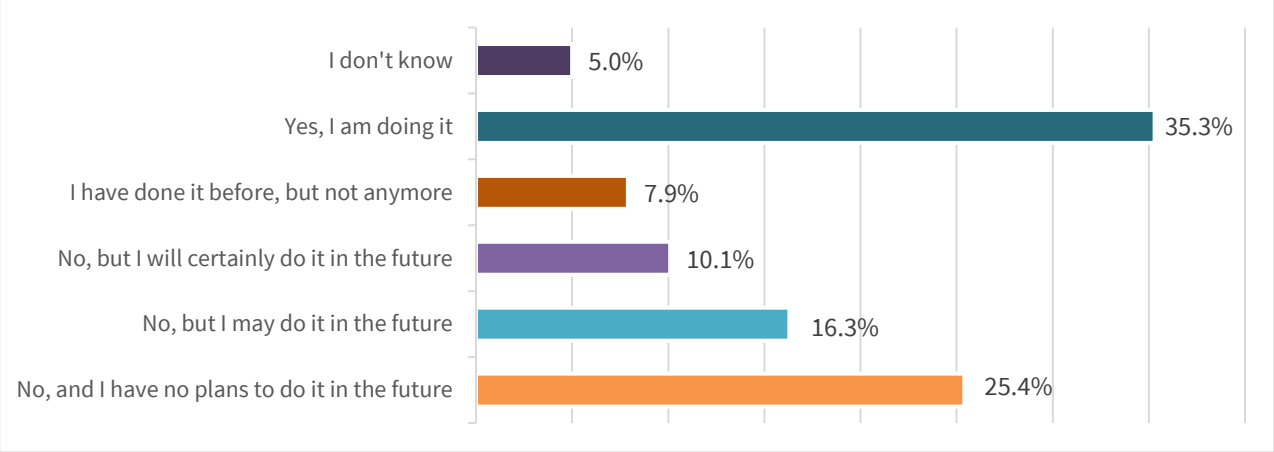
3.6 Mobilising other people to consume energy responsibly

Table 3.6: I often try to mobilise the people I know to be more responsible in the way they consume energy (per country)

Country	No, and I have no plans to do it in the future	No, but I may do it in the future	No, but I will certainly do it in the future	I have done it before, but not anymore,	Yes, I am doing it	I don't know
Belgium	30.2%	15.2%	11.0%	8.7%	28.7%	6.2%
Bulgaria	16.9%	18.5%	10.1%	8.5%	41.8%	4.2%
France	21.4%	15.6%	11.3%	9.7%	37.3%	4.7%
Germany	32.7%	13.8%	9.5%	8.0%	30.5%	5.5%
Hungary	18.5%	16.3%	10.7%	6.3%	44.3%	3.9%
Ireland	23.7%	18.3%	8.7%	7.7%	35.2%	6.5%
Latvia	34.7%	18.7%	8.4%	6.0%	26.5%	5.8%
Spain	14.9%	16.1%	13.1%	6.8%	45.8%	3.3%
The Netherlands	42.1%	15.6%	7.9%	7.1%	23.0%	4.3%
10 other countries	19.4%	14.5%	10.1%	10.2%	40.0%	5.8%
Total	25.4%	16.3%	10.1%	7.9%	35.3%	5.0%

Mobilising other people to consume energy responsibly is an activity that might be conditioned by the prevailing traditional patters of social interactions in the society. The largest share of people who report that they try to mobilise others to be more responsible in the way they consume energy is found in Bulgaria, France, Hungary, Spain, and also in Greece, Poland, Portugal and Turkey. Latvian and Dutch respondents are the least willing to interfere in other people's lives, but Germans and Belgians also do not seem to be particularly enthusiastic about telling others how to consume their energy.

Figure 3.6: I often try to mobilise the people I know to be more responsible in the way they consume energy (N=10,071)



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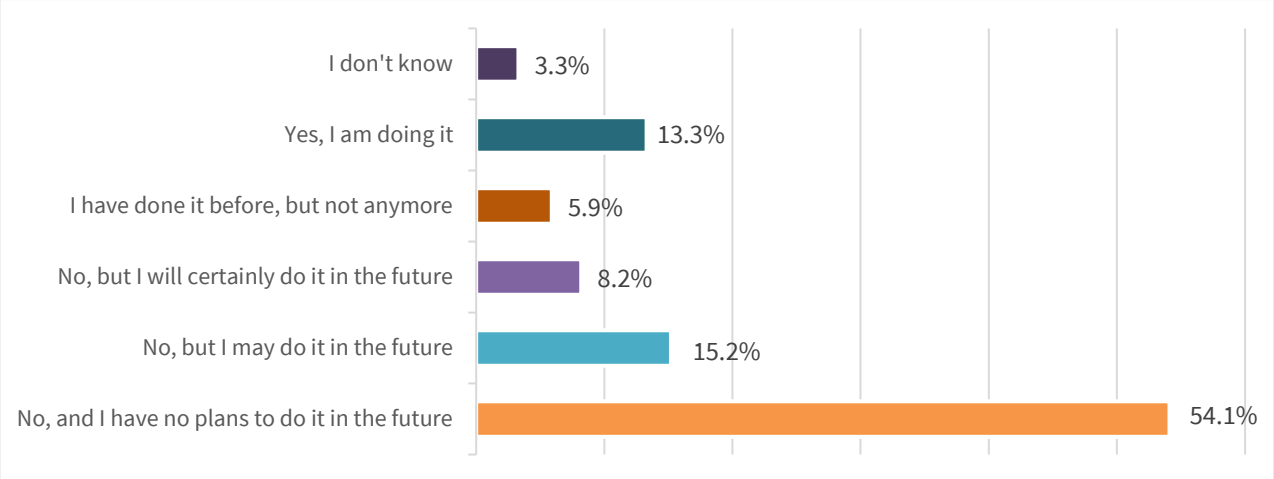
3.7 Social media activity on energy-related issues (e.g., Facebook, Twitter/X, online forums)

Table 3.7: I comment on energy-related issues on online social media (per country)

Country	No, and I have no plans to do it in the future	No, but I may do it in the future	No, but I will certainly do it in the future	I have done it before, but not anymore,	Yes, I am doing it	I don't know
Belgium	61.5%	11.0%	9.7%	5.6%	9.2%	3.0%
Bulgaria	41.9%	22.3%	8.8%	5.7%	17.7%	3.6%
France	53.5%	13.6%	10.0%	5.4%	12.9%	4.6%
Germany	62.1%	11.4%	6.7%	5.0%	11.7%	3.1%
Hungary	50.2%	17.1%	8.6%	5.1%	16.3%	2.8%
Ireland	51.5%	18.2%	6.6%	7.1%	12.9%	3.8%
Latvia	62.9%	13.4%	6.5%	5.6%	8.1%	3.6%
Spain	37.1%	21.7%	11.1%	7.5%	20.1%	2.5%
The Netherlands	74.6%	8.2%	5.1%	3.6%	6.7%	1.8%
10 other countries	45.8%	15.4%	9.0%	8.2%	17.8%	3.9%
Total	54.1%	15.2%	8.2%	5.9%	13.3%	3.3%

Social media are among the most important sources of information on energy issues (see questions 9 and 10), but are only moderately used by respondents to produce and share information. Spanish, Bulgarian and Hungarian respondents seem to be most active in this respect. Interestingly, social media are the most important source of information for two thirds of Bulgarians and Hungarians, but for only one third of Spanish respondents (see question 9). The lowest percentage of people who share information on energy-related issues via online social media was noted among the Belgian, German, Latvian and especially Dutch respondents. Several potential explanations for this reluctance can be proposed. The topic is quite complex and requires confidence in one's knowledge and energy literacy. Social media also expose individuals to critique regarding their opinions and beliefs.

Figure 3.7: I comment on energy-related issues on online social media (N=10,071)



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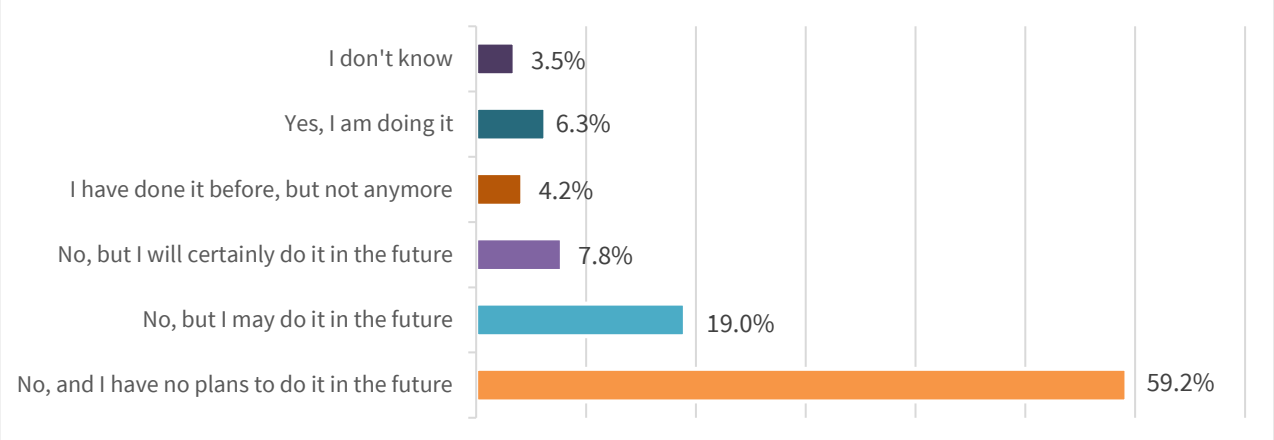
3.8 Involvement in an organisation that seeks social, political or societal change related to the energy system (a social movement)

Table 3.8: I am active in an organisation that seeks social, political or societal change related to the energy system (per country)

Country	No, and I have no plans to do it in the future	No, but I may do it in the future	No, but I will certainly do it in the future	I have done it before, but not anymore,	Yes, I am doing it	I don't know
Belgium	66.0%	14.5%	6.6%	5.0%	4.8%	3.1%
Bulgaria	49.4%	26.1%	11.1%	3.2%	5.2%	5.0%
France	58.3%	18.5%	7.1%	4.7%	6.9%	4.5%
Germany	70.4%	13.0%	5.0%	3.6%	5.3%	2.7%
Hungary	61.1%	20.9%	6.1%	2.6%	4.6%	4.8%
Ireland	53.3%	22.4%	8.5%	4.3%	8.4%	2.9%
Latvia	67.4%	15.9%	5.4%	2.6%	4.4%	4.4%
Spain	42.8%	28.8%	11.2%	6.1%	9.2%	1.9%
The Netherlands	77.0%	8.8%	4.3%	2.9%	5.3%	1.7%
10 other countries	46.9%	21.3%	12.7%	6.6%	8.6%	3.8%
Total	59.2%	19.0%	7.8%	4.2%	6.3%	3.5%

Similarly to the question about participation in renewable energy cooperatives, the question about participation in social movements did not result in a large share of affirmative answers. Spanish, Irish and French respondents are the ones that reported a somewhat higher activity in different organisations that seek social, political or societal change related to the energy system. A large majority of Dutch, German, Latvian and Belgian respondents have no intentions of ever joining a social movement and prefer limiting their energy-related activities to their private lives. In Latvian case, this might be linked to a very low public trust in institutions and democratic participation.

Figure 3.8: I am active in an organisation that seeks social, political or societal change related to the energy system (N=10,071)



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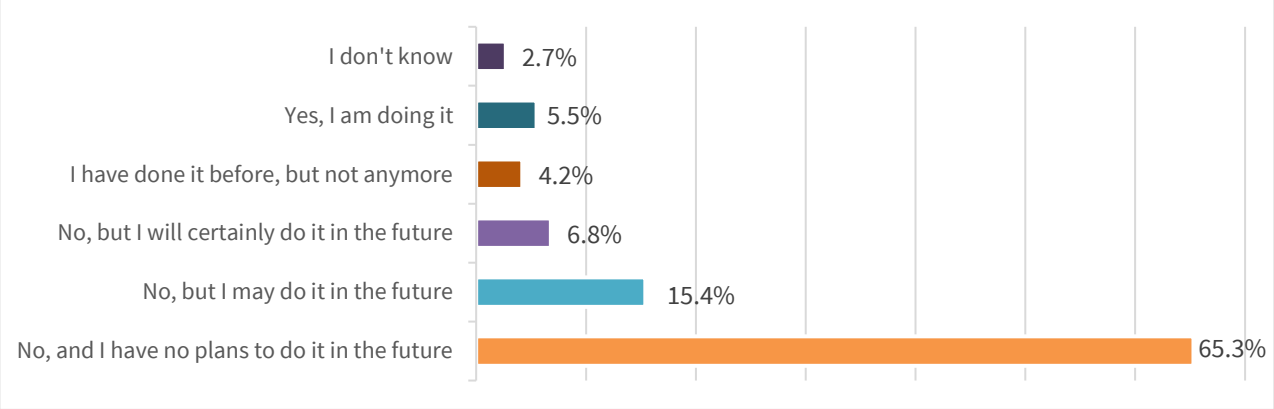
3.9 Participation in protests against certain types of energy production (wind/nuclear/coal)

Table 3.9: I participate in protests against certain types of energy production (wind/nuclear/coal) (per country)

Country	No, and I have no plans to do it in the future	No, but I may do it in the future	No, but I will certainly do it in the future	I have done it before, but not anymore,	Yes, I am doing it	I don't know
Belgium	71.7%	11.1%	5.7%	4.6%	4.3%	2.6%
Bulgaria	56.8%	23.2%	8.1%	3.6%	4.2%	4.2%
France	62.8%	15.5%	7.2%	4.4%	6.8%	3.3%
Germany	74.0%	9.7%	4.4%	3.1%	6.0%	2.8%
Hungary	71.6%	13.3%	5.9%	2.4%	4.4%	2.5%
Ireland	62.2%	18.9%	7.2%	3.9%	5.5%	2.4%
Latvia	72.8%	11.7%	5.4%	3.4%	3.3%	3.4%
Spain	46.8%	25.7%	10.8%	7.7%	7.4%	1.6%
The Netherlands	80.2%	7.4%	4.1%	2.3%	4.7%	1.3%
10 other countries	53.8%	17.3%	9.7%	7.1%	8.7%	3.5%
Total	65.3%	15.4%	6.8%	4.2%	5.5%	2.7%

Participating in protests focused on energy issues might be considered going a step further from the membership in a social movement. As expected, the share of those who are willing to go out on the streets and protest is indeed smaller compared to the previous question, if only just marginally. Curiously, German respondents are the only ones that appear to prefer protests to membership in social movement organisations (although the difference is very small). One possible explanation might be the considerable historic experience with large anti-nuclear protests. Answers from the German survey participants are interesting from another angle as well – the share of 9.1% of people who declared that they are either active protesters or have protested in the past is among the highest, but so is the 74% portion of those who are confident that they would never take part in an energy-focused protest.

Figure 3.9: I participate in protests against certain types of energy production (wind/nuclear/coal) (N=10,071)



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In contrast to the Germans, Irish (and to a bit smaller extent Spanish) responders are much less likely to engage in protest actions than be active in an organisation that seeks a change in the energy system through other means. The Dutch are the most categorical that protesting is not the way, with Belgian, Latvian and Hungarian respondents also being less than enthusiastic about voicing their opinions on the streets.

When talking about protests pertaining to energy issues, a word of caution is in place. Very often, such protests are local in nature and focused on the opposition to a particular project or energy installation (wind farms as the most prominent case). This is one of the questions where the place of residence of respondents may have had quite a notable influence on the results.

3.10 Producing own electricity (via solar panels or other means)

Table 3.10: I cover part of my household's energy needs by producing my own electricity (per country)

Country	No, and I have no plans to do it in the future	No, but I may do it in the future	No, but I will certainly do it in the future	I have done it before, but not anymore,	Yes, I am doing it	I don't know
Belgium	38.5%	16.7%	9.9%	4.3%	28.3%	2.2%
Bulgaria	37.2%	37.7%	13.9%	1.7%	6.8%	2.7%
France	49.0%	24.5%	10.9%	2.6%	9.5%	3.5%
Germany	55.6%	18.1%	7.2%	3.3%	13.7%	2.1%
Hungary	45.6%	27.8%	11.3%	1.7%	10.7%	2.9%
Ireland	36.6%	32.7%	13.1%	3.9%	11.6%	2.1%
Latvia	49.9%	27.5%	7.9%	2.4%	9.0%	3.5%
Spain	35.9%	33.5%	15.1%	3.9%	10.2%	1.4%
The Netherlands	36.9%	12.9%	6.9%	2.7%	38.7%	1.9%
10 other countries	37.0%	24.8%	12.9%	6.3%	16.1%	3.0%
Total	42.2%	25.6%	10.9%	3.3%	15.5%	2.5%

Data in the table 3.10 compare well with the table 1.5 and the share of respondents who have invested in renewable energy generation. On average, the share of "Yes" answers is a few percentage points higher in the table 1.5, which covered a broader understanding of RES generation (e.g. use of solar energy for water heating and biomass heating systems), and did not focus only on electricity production.

Overall, the group of those who do not consider to ever produce their own energy is almost three times larger than the share of respondents who are generating (a part of) the electricity they consume. Bulgarian survey participants are well behind their peers from other countries, but the share of responders who generate their own electricity is not much higher in France, Hungary, Ireland, Latvia and Spain. The expected frontrunners in this area are Belgium and The Netherlands.

Germans, Latvians and French seem to be least inclined towards the idea of producing one's own electricity ("I have no plans to do it in the future"). The reasons for this attitude would require further study, but one possible explanation might be the housing situation. Germany is the country with the lowest percentage of house owners in the EU, which means that the pool of people who actually have the possibility to install PVs on their roofs is considerably smaller. In Latvia, on the other hand, most people live in multi-apartment multi-storey blocks or in historical buildings with architectural limitations. In both

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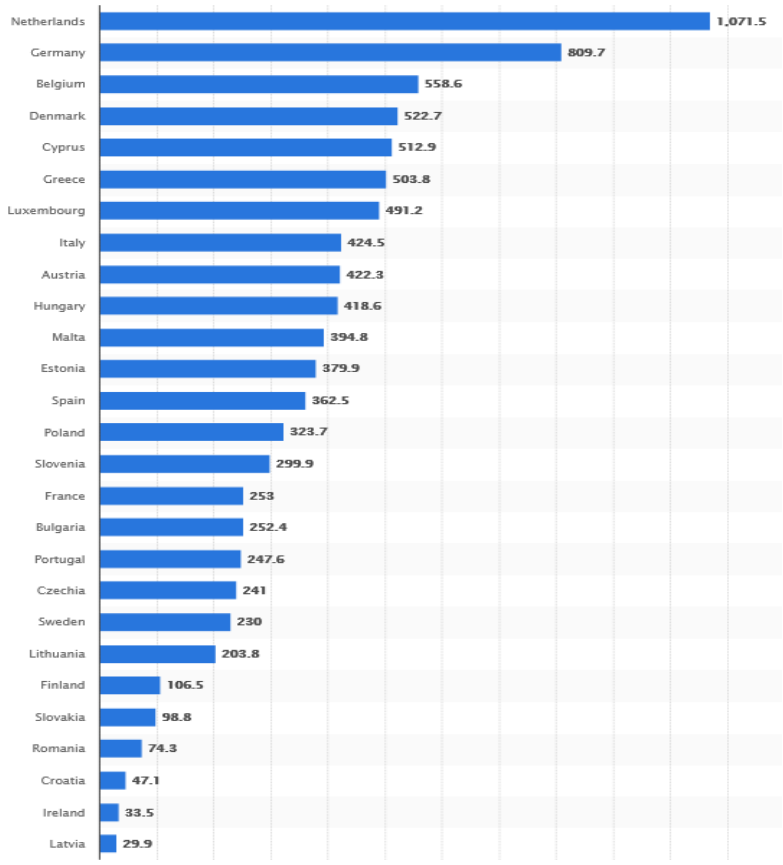
cases, installation of PV panels is an immense challenge.

Bulgarian, Spanish and Irish respondents are the ones most open to the idea of installing solar panels on their roofs in the future.

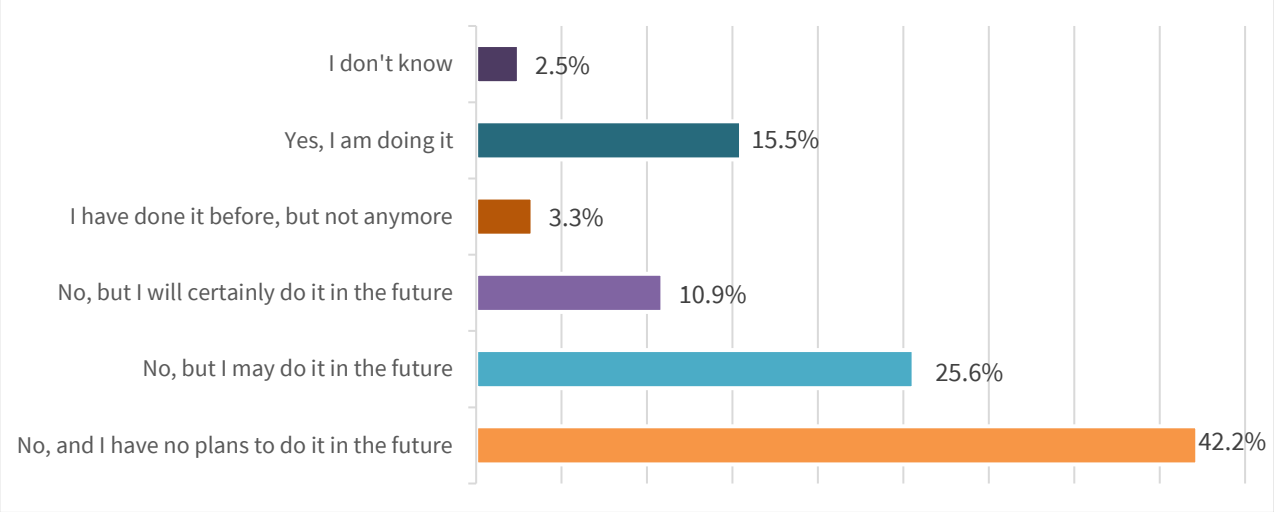
It is interesting to compare the data in table 3.10 with the data about the installed solar photovoltaics capacity per capita in the EU countries in 2022. The Netherlands had the highest installed solar PV capacity per capita – 1,071 watts per inhabitant. Germany and Belgium follow on rather distant second and third places with 810 and 559 watts per inhabitant, respectively. Other EnergyPROSPECT countries are arranged in the following order: Hungary (418 watts), Spain (362 watts), France (253 watts), Bulgaria (252 watts), Ireland (33 watts) and Latvia (30 watts). It is estimated that the rooftop PV installations represent around 60% of the total solar installations in the EU.

Figure 3.10a: Installed solar photovoltaics capacity per capita in the European Union (EU-27) in 2022, by country (in watts per inhabitant)



Source: https://www.statista.com/statistics/612412/installed-solar-photovoltaics-capacity-eu

Figure 3.10b: I cover part of my household's energy needs by producing my own electricity (N=10,071)



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3.10.a) Selling the surplus of self-generated electricity back to the grid

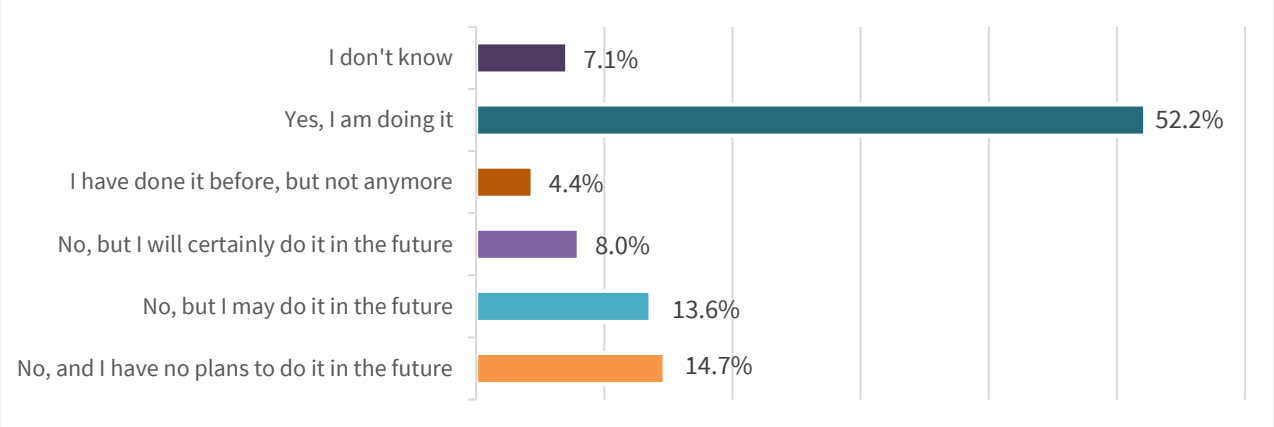
Those respondents, who replied "Yes, I am doing it" to the previous question, were asked two additional questions about what they do with the electricity they generate. Just over one half (52.2%) of electricity producing respondents sell the electricity they do not consume to the grid, and less than a quarter (22.5%) are storing it with the help of a battery.

Table 3.10.a): I sell the surplus of my self-generated electricity (the part I do not consume on-site) back to the grid (per country)

Country	No, and I have no plans to do it in the future	No, but I may do it in the future	No, but I will certainly do it in the future	I have done it before, but not anymore,	Yes, I am doing it	I don't know
Belgium	13.5%	16.7%	8.0%	4.2%	43.4%	14.2%
Bulgaria	33.3%	21.7%	18.8%	7.2%	13.0%	5.8%
France	20.0%	14.7%	7.4%	6.3%	48.4%	3.2%
Germany	16.8%	8.8%	4.4%	4.4%	64.2%	1.5%
Hungary	20.4%	9.3%	9.3%	3.7%	50.9%	6.5%
Ireland	12.7%	18.6%	11.0%	5.1%	49.2%	3.4%
Latvia	30.0%	22.2%	12.2%	2.2%	30.0%	3.3%
Spain	13.7%	19.6%	14.7%	5.9%	43.1%	2.9%
The Netherlands	5.9%	4.7%	2.8%	3.1%	74.9%	8.5%
10 other countries	14.7%	19.6%	9.8%	6.1%	43.6%	6.1%
Total	14.7%	13.6%	8.0%	4.4%	52.2%	7.1%

The differences between countries are exceptionally pronounced, reflecting the legal and energy market conditions in the nine countries. The answers imply that selling electricity to the grid is a well-regulated and straightforward procedure in The Netherlands and Germany, but also Belgium, France, Hungary, Ireland and Spain, and a very slow and bureaucratic affair in Bulgaria.

Figure 3.10.a): I sell the surplus of my self-generated electricity (the part I do not consume on-site) back to the grid (N=1,557)



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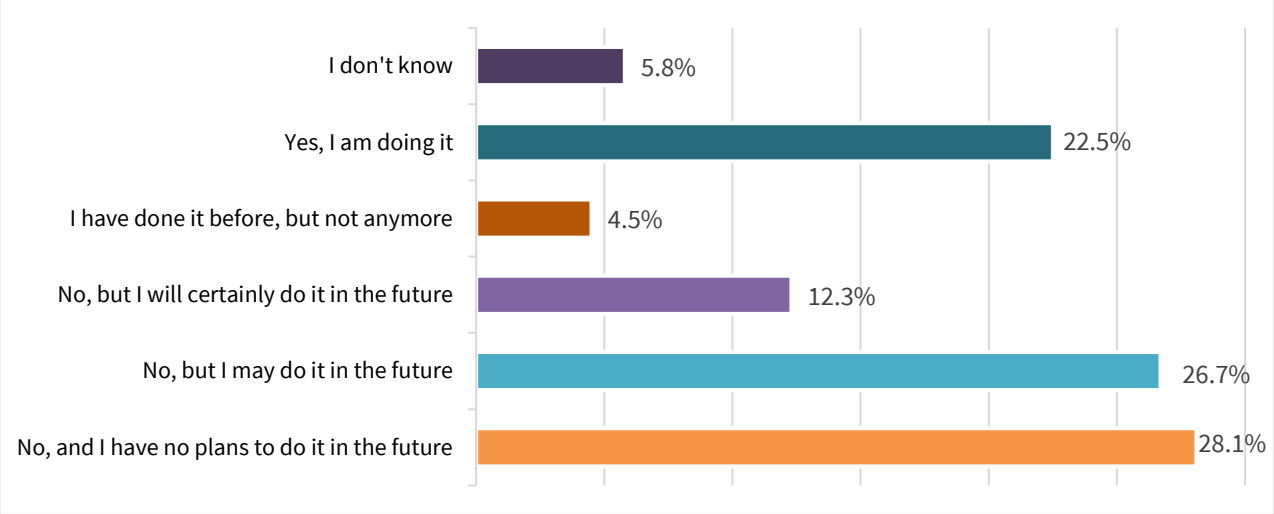
3.10.b) Storing the surplus of self-generated electricity using an individual or community storage (battery)

Table 3.10.b): I store the surplus of self-generated electricity using an individual or community storage (battery) (per country)

Country	No, and I have no plans to do it in the future	No, but I may do it in the future	No, but I will certainly do it in the future	I have done it before, but not anymore,	Yes, I am doing it	I don't know
Belgium	31.9%	28.1%	16.0%	2.4%	16.0%	5.6%
Bulgaria	24.6%	15.9%	13.0%	11.6%	30.4%	4.3%
France	31.6%	21.1%	13.7%	8.4%	22.1%	3.2%
Germany	17.5%	24.8%	5.8%	5.1%	41.6%	5.1%
Hungary	31.5%	26.9%	12.0%	4.6%	21.3%	3.7%
Ireland	19.5%	28.8%	11.9%	5.1%	29.7%	5.1%
Latvia	30.0%	23.3%	7.8%	5.6%	27.8%	5.6%
Spain	16.7%	17.6%	19.6%	5.9%	37.3%	2.9%
The Netherlands	38.8%	31.8%	11.6%	3.6%	5.4%	8.8%
10 other countries	14.7%	27.6%	10.4%	2.5%	39.3%	5.5%
Total	28.1%	26.7%	12.3%	4.5%	22.5%	5.8%

Germany and Spain, but also Bulgaria, Ireland and Latvia, are the countries with the highest share of respondents, who declared to use batteries to store the surplus of generated electricity. Almost 40% of the Dutch respondents would never consider using a battery, which again indicates how easy and hassle-free it is to sell self-produced electricity to the grid in The Netherlands.

Figure 3.10.b): I store the surplus of self-generated electricity using an individual or community storage (battery) (N=1,557)



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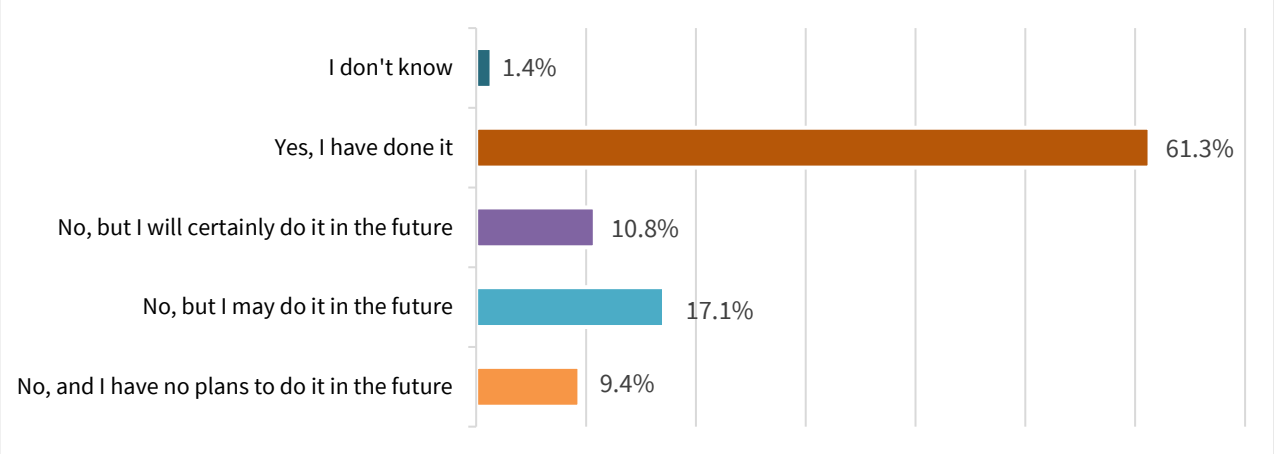
3.11 Energy efficient home appliances and/or lighting

Table 3.11: I have (partially or fully) changed my home appliances and/or lighting with more energy efficient ones (per country)

Country	No, and I have no plans to do it in the future	No, but I may do it in the future	No, but I will certainly do it in the future	Yes, I have done it	I don't know
Belgium	12.0%	17.0%	11.5%	58.2%	1.3%
Bulgaria	5.8%	16.3%	7.7%	69.7%	0.4%
France	15.0%	18.5%	9.3%	55.2%	2.0%
Germany	11.8%	15.8%	9.1%	61.2%	2.1%
Hungary	7.7%	15.1%	10.1%	65.7%	1.4%
Ireland	5.6%	19.2%	10.5%	63.8%	1.0%
Latvia	9.1%	17.0%	10.6%	61.8%	1.5%
Spain	10.0%	20.0%	16.2%	53.1%	0.7%
The Netherlands	7.4%	15.4%	11.7%	64.3%	1.2%
10 other countries	9.7%	16.9%	11.2%	60.3%	2.0%
Total	9.4%	17.1%	10.8%	61.3%	1.4%

Among the 15 energy-related activities, considered in this set of questions, partial or complete change of home appliances and/or lighting with more energy efficient ones is the second most popular one (after saving energy at home). This is consistent with the answers given to the open question 1.9a (Which other actions did you take to deal with the energy crisis?). As a reminder, investment in energy efficient lightning and energy-efficient appliances was the second most common action after the overall reduction of energy consumption.

Figure 3.11: I have (partially or fully) changed my home appliances and/or lighting with more energy efficient ones (N=10,071)



Over 60% of respondents said that they have already purchased (some) energy efficient home appliances and/or changed the lighting with a more energy efficient one. Additional 28% are thinking about doing this in the future. Bulgarian and Hungarian respondents have been most active in replacing their inefficient lightning and home appliances, while the share of positive answers is lowest in France and Spain.

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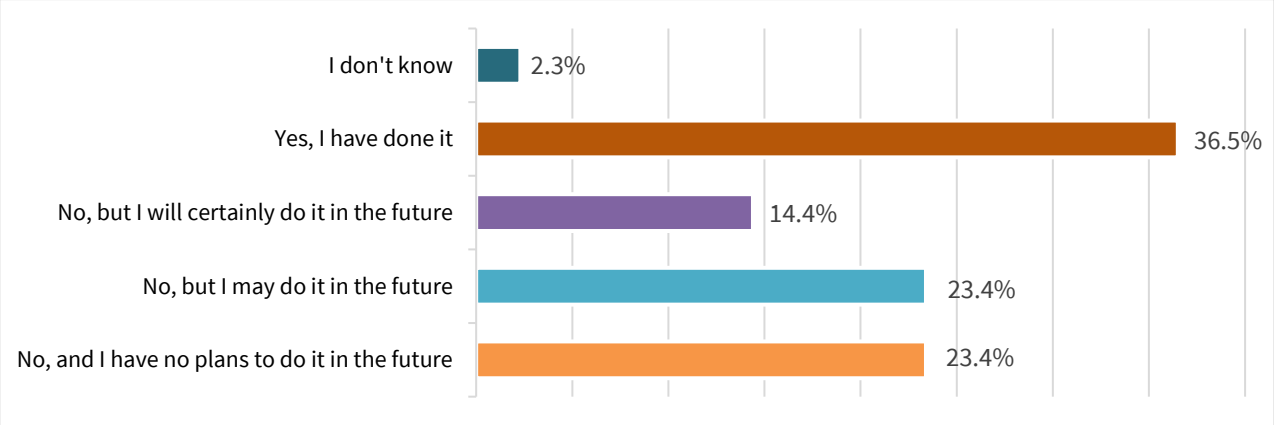
3.12 Energy retrofitting of home (e.g., insulation of walls, installation of a heat pump, replacement of windows, etc.).

Table 3.12a: I have done (partial or full) energy retrofitting of my home (per country)

Country	No, and I have no plans to do it in the future	No, but I may do it in the future	No, but I will certainly do it in the future	Yes, I have done it	I don't know
Belgium	31.3%	22.6%	13.3%	30.1%	2.7%
Bulgaria	7.6%	18.6%	11.8%	61.1%	0.9%
France	28.2%	20.4%	13.4%	35.7%	2.3%
Germany	51.6%	17.6%	10.2%	16.3%	4.3%
Hungary	14.8%	22.9%	16.8%	44.0%	1.5%
Ireland	17.0%	30.9%	16.2%	34.1%	1.8%
Latvia	17.2%	23.3%	14.9%	42.4%	2.2%
Spain	17.6%	32.3%	19.0%	29.7%	1.4%
The Netherlands	26.5%	19.5%	12.6%	38.1%	3.3%
10 other countries	22.8%	25.4%	15.5%	33.3%	3.0%
Total	23.4%	23.4%	14.4%	36.5%	2.3%

Energy insulation of walls and change of windows with more energy efficient ones are fairly popular energy-saving measures. Such changes have already been made by just over a third of respondents, with additional 38% being open to this possibility. A notable exception here are Bulgarians – 61.1% of respondents have done energy retrofitting of their homes, which is considerably more than in all other countries. On the other side of the spectrum are Germans – only 16.3% have made energy improvements to their homes. A plausible explanation for this huge difference is that the construction standards and quality of buildings are much better in Germany than in Bulgaria. On the other hand, there is also a huge difference in the homeownership between the two countries. 85% of Bulgarians own the homes in which they live, compared to only 49% of Germans – this also considerably influences the ability or desire to renovate the house or apartment. A somewhat higher share of positive answers were given also in Latvia and Hungary. This can be partially explained by the available state support for energy efficiency in housing sector and awareness raising campaigns to this end.

Figure 3.12: I have done (partial or full) energy retrofitting of my home (N=10,071)



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An interesting comparison can be made with the question 1.7, where practically the same thing was asked but in a more specific context and shorter time frame (namely, if energy retrofitting of home was done in response to the energy crisis). The answers to both questions are quite consistent, indicating that in roughly 75% of cases, energy retrofitting measures were taken in the aftermath of the crisis, possibly as an attempt of responders to mitigate the crisis-invoked insecurity. The largest share of respondents who have renovated their homes to make them more energy efficient even before the crisis appears to be in Latvia (almost 40%).

Table 3.12b: I have done (partial or full) energy retrofitting of my home (per country)

Country	I have done energy retrofitting of my home (time not specified)	I have done energy retrofitting of my home (in response to 2021-2022 energy crisis)	Ratio post-crisis to overall
Belgium	30.1%	23.5%	78.1%
Bulgaria	61.1%	43.1%	70.5%
France	35.7%	26.9%	75.4%
Germany	16.3%	12.7%	77.9%
Hungary	44.0%	34.3%	78.0%
Ireland	34.1%	25.0%	73.3%
Latvia	42.4%	26.1%	61.6%
Spain	29.7%	23.6%	79.5%
The Netherlands	38.1%	26.2%	68.8%
10 other countries	33.3%	29.1%	87.4%

3.13 Purchase of an electric car

Table 3.13: I (my household) bought an electric car (per country)

Country	No, and I have no plans to do it in the future	No, but I may do it in the future	No, but I will certainly do it in the future	Yes, I have done it	I don't know
Belgium	50.3%	25.3%	12.4%	8.7%	3.3%
Bulgaria	47.2%	34.7%	12.2%	4.1%	1.9%
France	43.8%	25.5%	17.2%	10.1%	3.4%
Germany	59.8%	18.9%	9.1%	9.7%	2.5%
Hungary	58.4%	25.6%	8.4%	4.2%	3.4%
Ireland	38.6%	32.5%	15.0%	12.2%	1.7%
Latvia	56.7%	26.9%	8.7%	4.4%	3.4%
Spain	35.2%	36.0%	18.8%	8.3%	1.7%
The Netherlands	47.1%	29.7%	10.4%	10.4%	2.4%
10 other countries	39.3%	32.6%	16.5%	9.3%	2.4%
Total	47.6%	28.8%	12.9%	8.1%	2.6%

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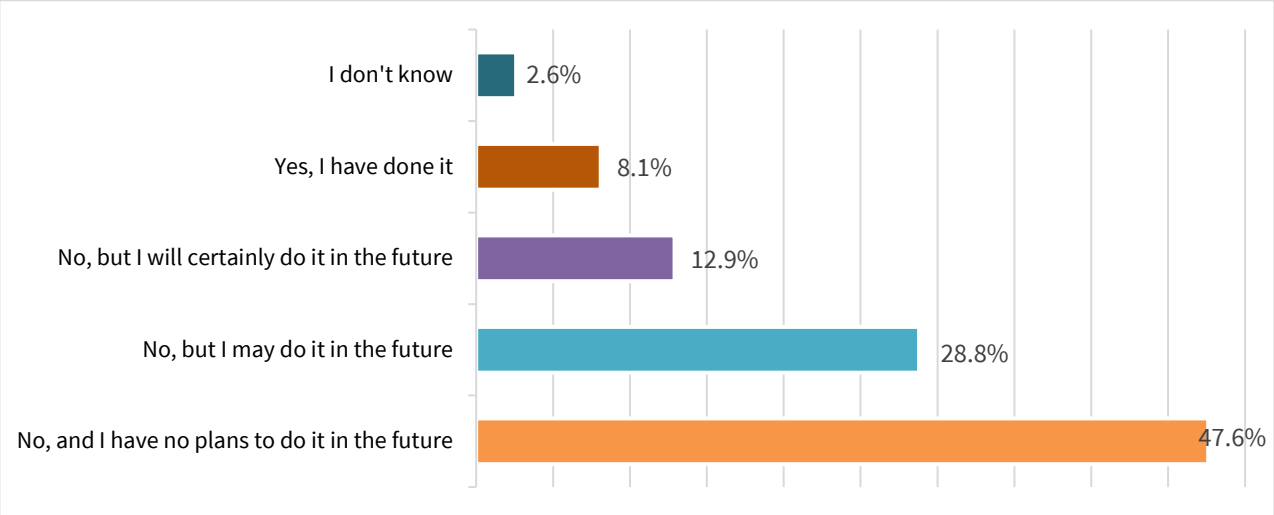
Electric cars are still a relative novelty and apparently not a very attractive, but also a non-affordable, option to consider. Ireland, The Netherlands, France and Germany are the frontrunners, but even there the owners of electric cars are still a very clear minority. Furthermore, close to one half of all respondents do not even consider this as a viable option. The share of people who say they have no intention to consider purchasing an electric car is the highest in Germany, Hungary and Latvia. Of course, personal preferences are only one part of the explanation – other factors that might influence such opinion are concerns over the environmental impacts of used cars/batteries, costs and availability of support schemes, and the state of development of charging stations network.

Figure 3.13: I (my household) bought an electric car (N=10,071)



3.14 Buying a share of a renewable energy plant operated by an energy provider

Table 3.14: I bought a share of a renewable energy plant operated by an energy provider (per country)

Country	No, and I have no plans to do it in the future	No, but I may do it in the future	No, but I will certainly do it in the future	Yes, I have done it	I don't know
Belgium	62.6%	19.5%	7.2%	6.8%	3.9%
Bulgaria	63.4%	24.4%	5.5%	3.1%	3.7%
France	63.1%	16.6%	9.2%	6.7%	4.4%
Germany	67.4%	17.3%	5.9%	6.4%	3.0%
Hungary	68.8%	18.1%	6.0%	4.0%	3.2%
Ireland	58.3%	25.3%	8.1%	6.1%	2.2%
Latvia	62.1%	18.0%	6.9%	3.1%	10.0%
Spain	58.4%	26.5%	7.9%	5.0%	2.2%
The Netherlands	66.9%	18.5%	5.6%	5.8%	3.2%
10 other countries	43.8%	28.7%	11.4%	11.0%	5.0%
Total	61.5%	21.3%	7.4%	5.8%	4.1%

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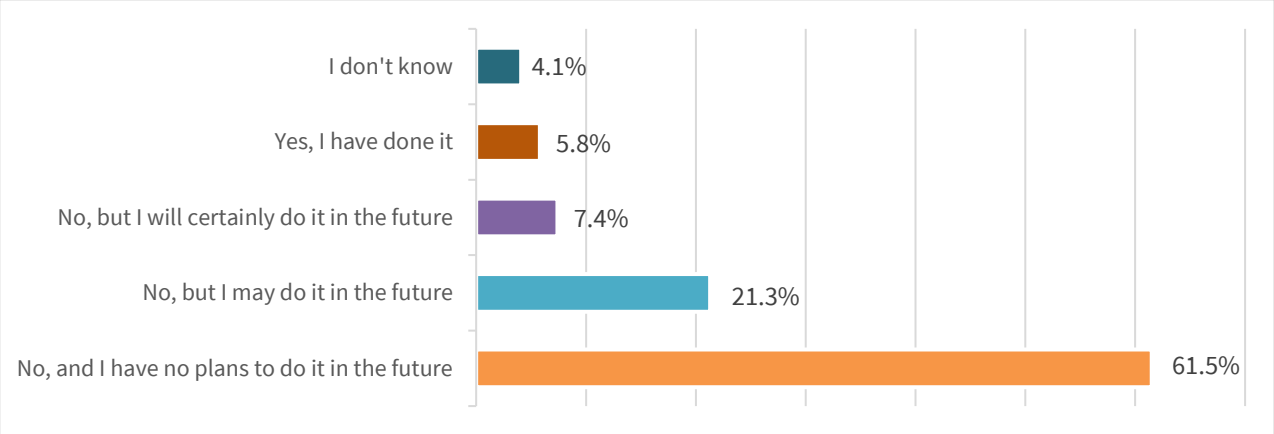
Buying a share of a renewable energy plant operated by an energy provider appears to be a very exotic idea. The portion of people who have done this is very small in all countries, while the refusal to even consider such a possibility is strongly underlined. Looking beyond the nine project countries, however, it is curious to note that this option is moderately popular in Italy and Poland (15% in both countries) and quite popular in Turkey, where 25% of respondents claim to be proud owners of RES plant shares.[12]

Figure 3.14: I bought a share of a renewable energy plant operated by an energy provider (N=10,071)



3.15 Voting for a political party or a candidate based on their positions on energy topics

Table 3.15: When I choose a political party or a candidate, their positions on energy topics are a crucial issue for me (per country)

Country	No, and this will not change in the future	No, but they may be in the future	No, but they will certainly be in the future	It has been like this before, but not anymore	Yes, they are	I don't know
Belgium	25.0%	19.5%	12.7%	6.5%	26.0%	10.3%
Bulgaria	15.2%	27.2%	16.0%	4.2%	30.2%	7.1%
France	21.6%	17.6%	15.6%	7.6%	28.4%	9.2%
Germany	23.1%	14.2%	9.5%	5.9%	35.4%	11.9%
Hungary	16.9%	21.7%	15.5%	2.9%	32.7%	10.3%
Ireland	15.4%	24.0%	13.8%	5.7%	33.7%	7.5%
Latvia	21.3%	24.1%	13.1%	3.9%	28.1%	9.6%
Spain	10.3%	16.7%	17.7%	5.6%	44.1%	5.6%
The Netherlands	22.9%	16.4%	9.2%	3.7%	34.9%	12.9%
10 other countries	12.6%	17.2%	14.1%	7.1%	40.8%	8.2%
Total	18.4%	19.9%	13.7%	5.3%	33.4%	9.3%

[12] A reminder is in place that in these countries, the sample of respondents was much smaller – about 100 per country, compared to about 1,000 for the countries involved in the project. Hence, the date for Italy, Poland, Turkey and other seven countries can only be interpreted as a possible indication of a trend.

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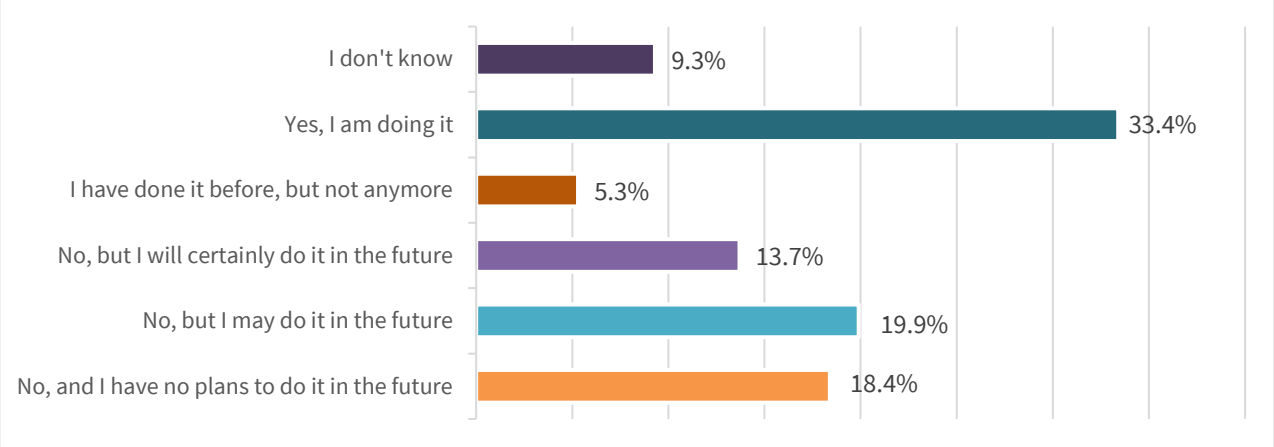
Considering where the political parties or political candidates stand in the energy debates is a very significant issue for one third of all respondents, but the differences between countries are considerable. This aspect is important for less than 30% of Belgian, French and Latvian respondents, but for 44% of Spanish ones. It is correct to note that the question is neutral regarding the precise nature of political positions on energy topics, but only asks the respondents whether energy is an important electoral issue for them. The relatively high importance of the energy matters should by no means be translated into the assessment of electoral potential of green parties. For some respondents, crucial subjects might be continuous operation of coal-burning power plants, construction of new nuclear power plants, or opposition to solar and wind energy parks.

Figure 3.15: When I choose a political party or a candidate, their positions on energy topics are a crucial issue for me (N=10,071)



3.16 Ranking of energy-saving activities

In the figure below, all 15 activities discussed in this section are ranked – first according to the positive answers (share of respondents who are or have been engaged in this activity) and second according to the negative answers (share of respondents who do not plan to engage in the activity at no point in the future).

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Figure 3.16: Ranking of energy-saving activities – "Yes, I am doing it" or "Yes, I have done it" (N=10,071)

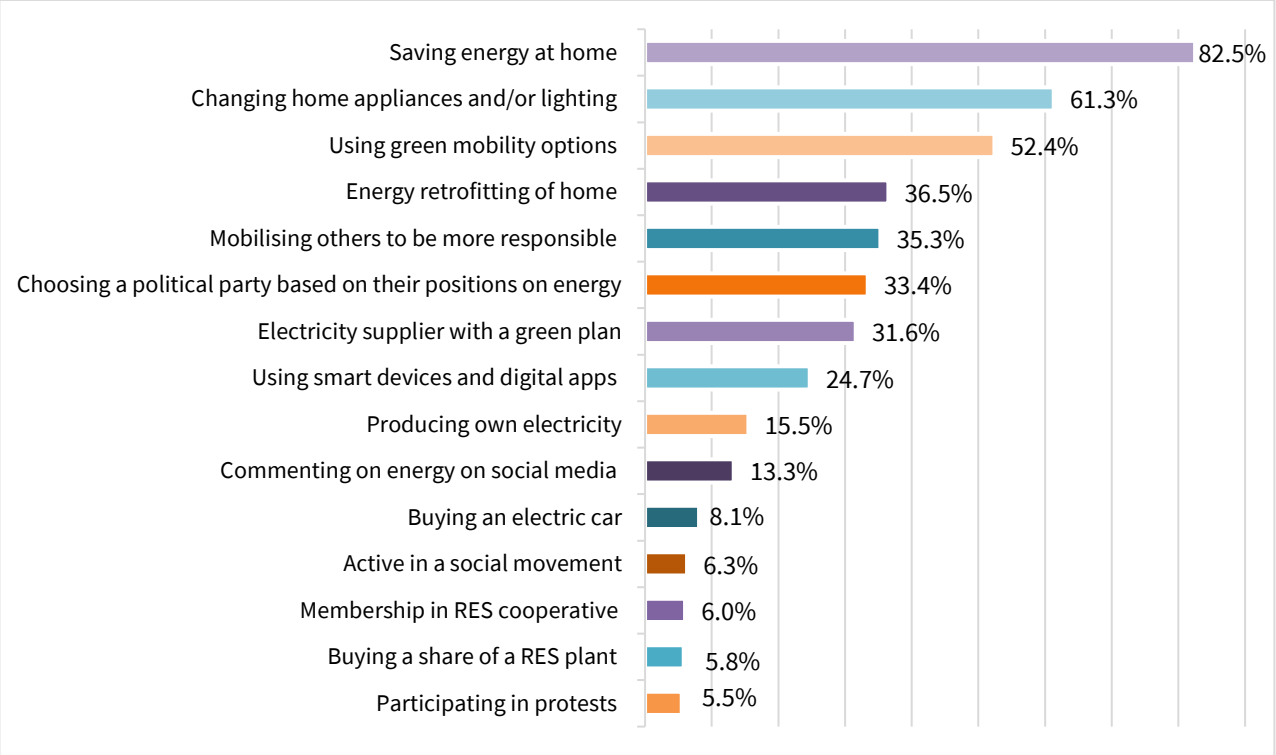
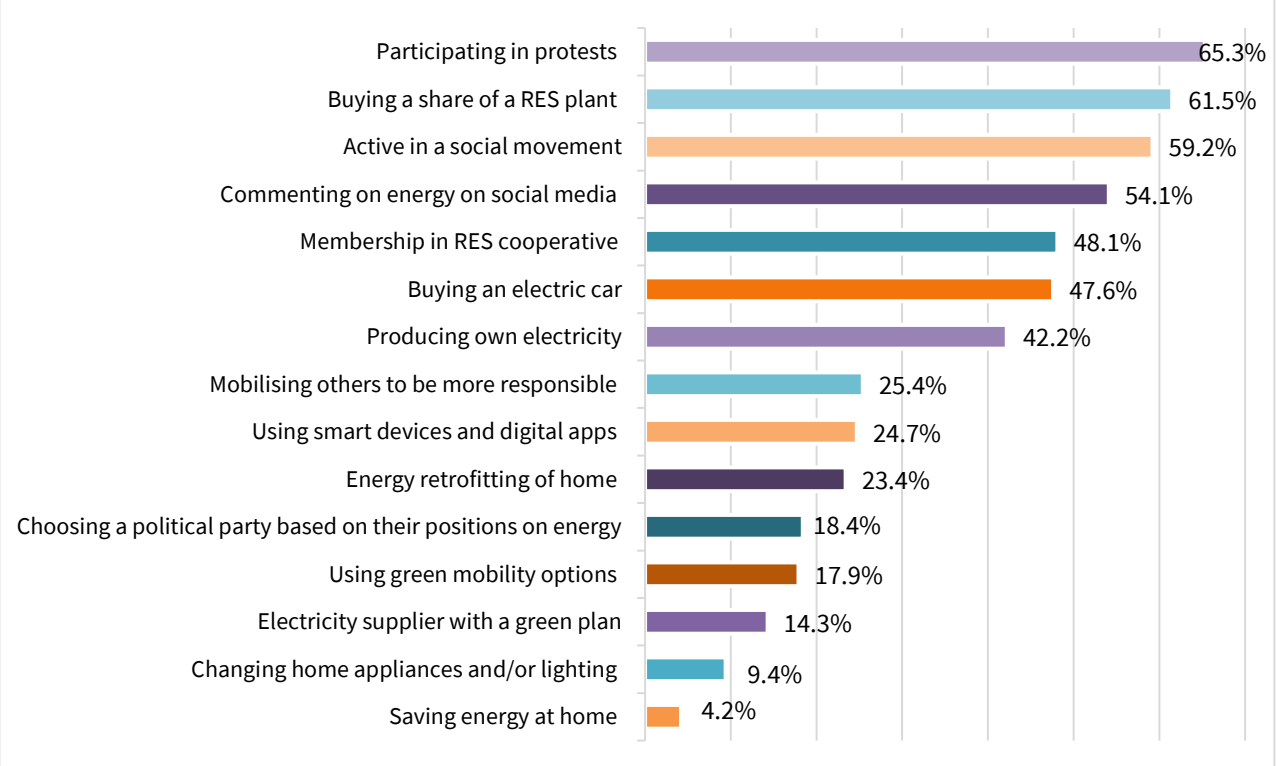


Figure 3.17: Ranking of energy-saving activities – "No, and this will not change in the future" (N=10,071)



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101022492.

4. Motivations for energy-related activities

In this set of questions, respondents were asked what motivated them to perform activities listed in the previous section, or what motivated them to engage with other energy-related activities not mentioned above. Eight potential options were presented, and respondents assessed how important the proposed reason was in their case.

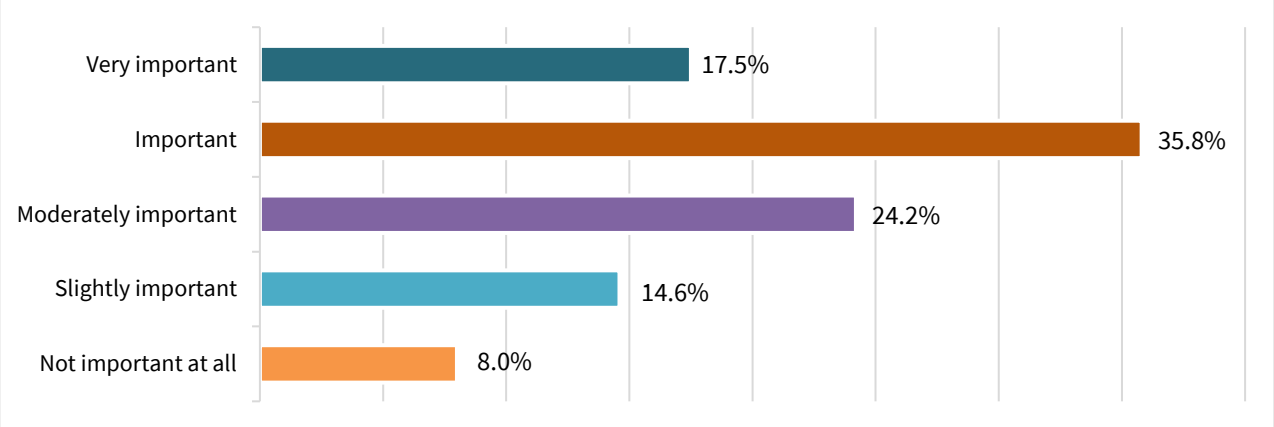
4.1 Recognition of own responsibility for the climate change

Table 4.1: Recognition of my own responsibility for the climate change (per country)

Country	Not important at all	Slightly important	Moderately important	Important	Very important
Belgium	7.5%	16.7%	23.7%	37.2%	14.9%
Bulgaria	6.1%	9.5%	28.0%	37.5%	18.8%
France	7.0%	13.9%	21.0%	37.8%	20.3%
Germany	13.3%	11.5%	27.6%	32.9%	14.7%
Hungary	4.4%	15.2%	17.1%	41.2%	22.2%
Ireland	7.1%	16.7%	22.2%	34.0%	20.0%
Latvia	12.3%	17.5%	31.6%	31.0%	7.5%
Spain	6.3%	13.7%	22.0%	34.8%	23.2%
The Netherlands	10.2%	17.4%	25.1%	36.7%	10.6%
10 other countries	6.1%	13.4%	23.6%	34.6%	22.3%
Total	8.0%	14.6%	24.2%	35.8%	17.5%

Recognition of own responsibility for the climate change is an important or very important motivation to act for 53.3% of respondents. The differences between most countries are small. Two that stand out are Hungary (63.4%) and Latvia (38.5%). One possible explanation for Latvia is that due to its small population, the country is sometimes considered insignificant in terms of its contribution to certain matters of global importance. This perspective aligns with Eurobarometer surveys, where respondents often attribute a majority of responsibility to large businesses and governments.

Figure 4.1: Recognition of my own responsibility for the climate change (N=10,071)



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101022492.

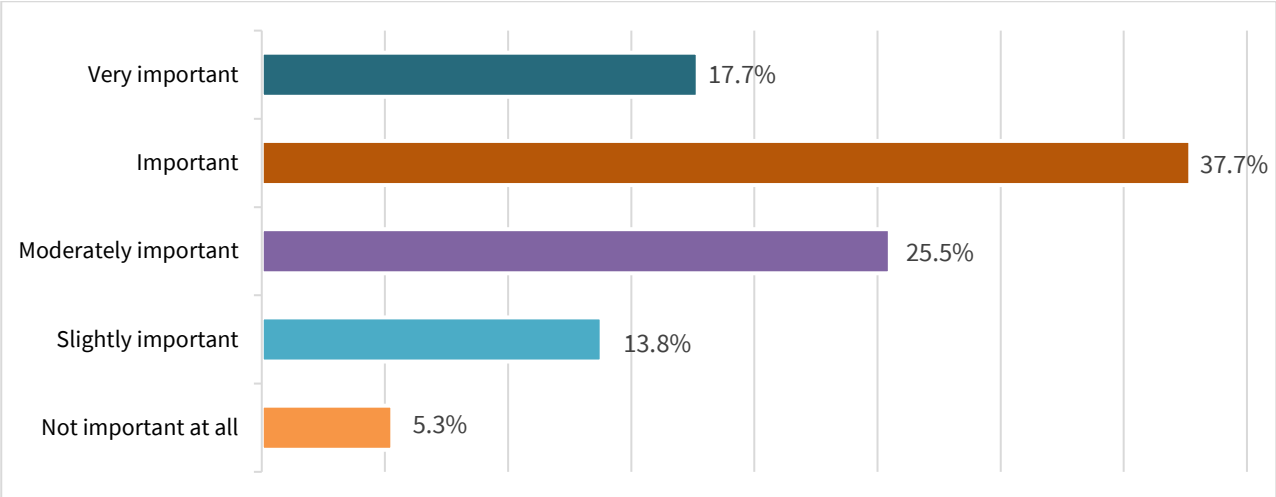
4.2 Desire to contribute to the common good

Table 4.2: Desire to contribute to the common good (per country)

Country	Not important at all	Slightly important	Moderately important	Important	Very important
Belgium	4.1%	14.4%	25.2%	39.9%	16.4%
Bulgaria	3.1%	8.2%	30.6%	40.2%	17.9%
France	5.3%	12.3%	21.8%	39.1%	21.5%
Germany	7.4%	9.9%	29.0%	39.2%	14.5%
Hungary	6.6%	16.8%	27.4%	37.9%	11.3%
Ireland	3.7%	13.5%	23.1%	36.1%	23.7%
Latvia	9.1%	19.4%	31.9%	33.6%	6.0%
Spain	2.4%	12.5%	16.3%	39.0%	29.8%
The Netherlands	8.3%	17.2%	24.7%	38.0%	11.8%
10 other countries	3.2%	14.1%	24.8%	33.7%	24.3%
Total	5.3%	13.8%	25.5%	37.7%	17.7%

The desire to contribute to the common good has been evaluated similarly as the previous motivational factor – with 55.4% of respondents saying this is an important or very important reason for them to act. Latvian survey participants seem to be the least concerned with the common good (39.6%), while Spaniards are the most eager to contribute (68.8%).[13]

Figure 4.2: Desire to contribute to the common good (N=10,071)



[13] This is in line with findings from Special Eurobarometer No 531, namely that in Spain, there has been a considerable increase in recent years in the consolidation of certain socially established pro-environmental behaviours and daily routines (e.g. sharing car, walking/cycling, purchasing low consumption appliances, reducing heating consumption). See https://data.europa.eu/data/datasets/s2892_98_1_sp531_eng?locale=en. In contrast, Latvian society appears to be characterised by individualism, low trust in institutions, and a strong influence of free-market ideology, which might partially explain the answers of Latvian responders to this question.

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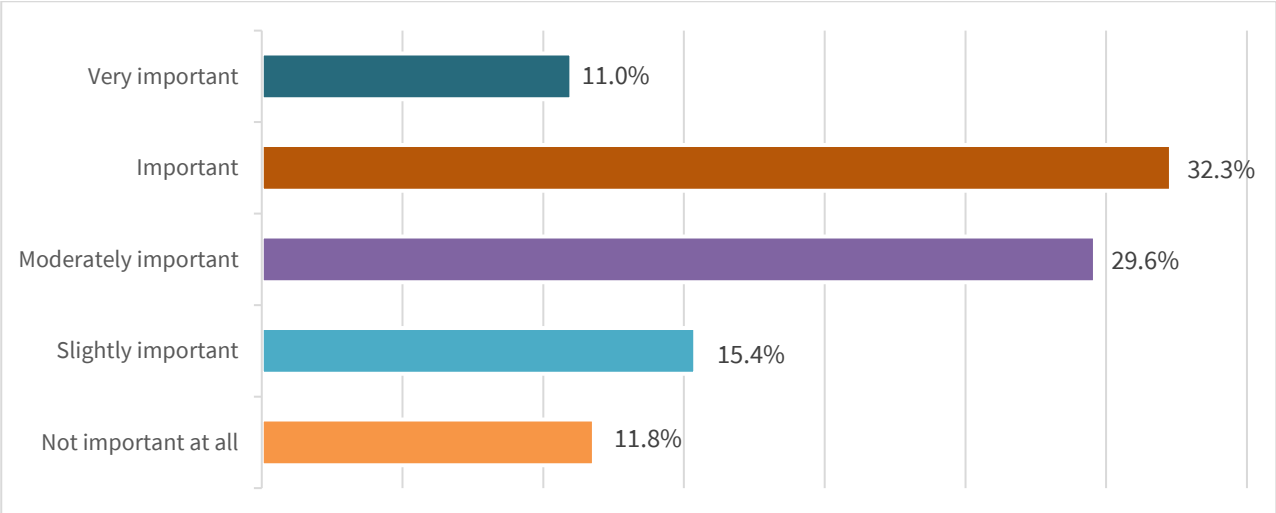
4.3 Inspiration by practices of somebody I trust

Table 4.3: Inspiration by practices of somebody I trust (per country)

Country	Not important at all	Slightly important	Moderately important	Important	Very important
Belgium	13.1%	15.6%	29.6%	32.7%	9.0%
Bulgaria	6.6%	13.2%	33.3%	35.3%	11.6%
France	11.4%	13.5%	27.0%	36.1%	12.0%
Germany	13.0%	13.1%	35.3%	29.6%	9.0%
Hungary	11.8%	17.7%	25.8%	33.1%	11.6%
Ireland	13.9%	14.4%	25.1%	31.3%	15.2%
Latvia	16.3%	19.6%	33.6%	25.4%	5.1%
Spain	7.9%	13.8%	27.9%	35.4%	15.0%
The Netherlands	16.1%	17.3%	27.5%	31.9%	7.2%
10 other countries	8.0%	15.3%	30.5%	32.1%	14.2%
Total	11.8%	15.4%	29.6%	32.3%	11.0%

Being inspired by someone they trust is an important reason to act for large number of participants, although this motivation is not as prominent as the previous two. It is important for 43.3% of respondents, particularly those in France and Spain. Latvian and Dutch respondents are the least prone to be inspired or influenced by good practices of other people.

Figure 4.3: Inspiration by practices of somebody I trust (N=10,071)



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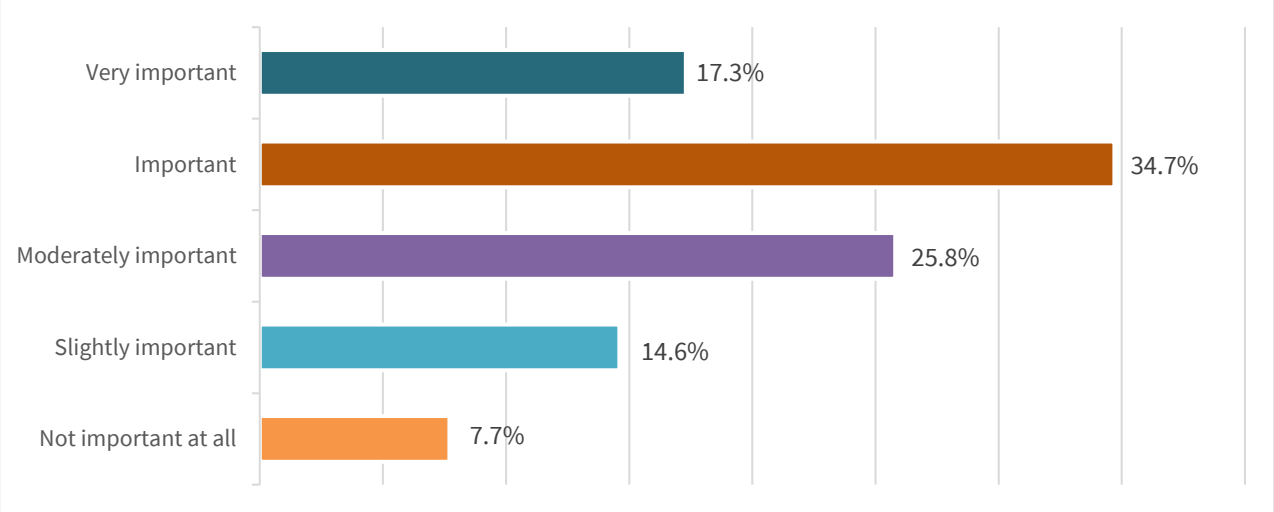
4.4 Desire to increase self-sufficiency or to become energy independent

Table 4.4: Desire to increase self-sufficiency or to become energy independent (per country)

Country	Not important at all	Slightly important	Moderately important	Important	Very important
Belgium	8.7%	15.6%	26.8%	34.3%	14.8%
Bulgaria	6.3%	11.4%	29.1%	37.3%	15.8%
France	10.4%	17.3%	25.8%	32.9%	13.6%
Germany	9.2%	10.6%	27.2%	36.4%	16.6%
Hungary	3.1%	13.1%	20.7%	40.0%	23.1%
Ireland	7.1%	14.5%	23.6%	32.2%	22.6%
Latvia	6.5%	13.3%	29.2%	35.9%	15.1%
Spain	5.6%	17.1%	24.7%	32.0%	20.6%
The Netherlands	11.6%	18.5%	25.9%	32.1%	11.9%
10 other countries	8.3%	14.8%	24.7%	33.9%	18.3%
Total	7.7%	14.6%	25.8%	34.7%	17.3%

A desire to increase self-sufficiency or to become energy independent is important or very important for exactly 52% of respondents. This share is similar to several other possible motivations listed here, which is perhaps somewhat surprising given that a certain element of self-interest or self-content is involved, unlike in more altruistic motivations such as contributing to the common good. The importance of this motivation is considerably lower than in the case of two other motives that most clearly pursue one's own benefit or interest – possibility to earn or save money, and availability of funding. The differences among countries are again rather small. This reason is most important for Hungarians (63.1%) and least important for the Dutch survey participants (44%).

Figure 4.4: Desire to increase self-sufficiency or to become energy independent (N=10,071)



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101022492.

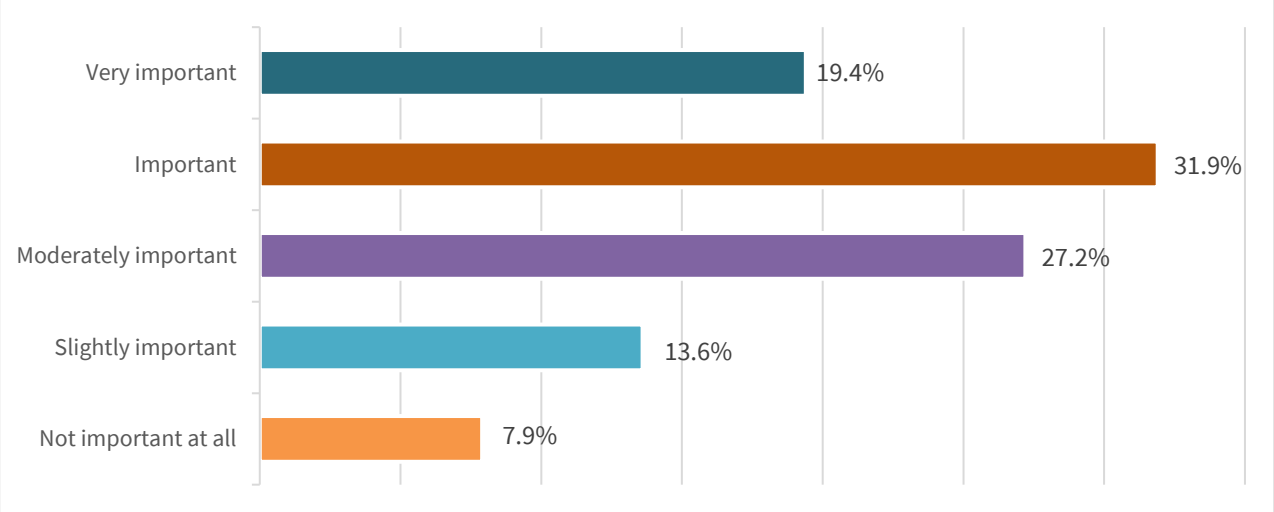
4.5 Frustration due to inadequate action by decision-makers

Table 4.5: Frustration due to inadequate action by decision-makers (per country)

Country	Not important at all	Slightly important	Moderately important	Important	Very important
Belgium	8.2%	14.0%	27.8%	33.9%	16.2%
Bulgaria	2.6%	8.1%	22.6%	37.9%	28.8%
France	10.6%	13.6%	30.0%	29.4%	16.4%
Germany	9.5%	13.2%	31.6%	28.3%	17.4%
Hungary	8.7%	15.5%	26.7%	31.7%	17.4%
Ireland	8.9%	12.5%	25.1%	29.6%	23.9%
Latvia	5.8%	13.3%	29.6%	36.3%	15.0%
Spain	3.8%	12.7%	21.6%	34.4%	27.5%
The Netherlands	14.4%	18.3%	27.5%	27.6%	12.2%
10 other countries	7.0%	14.7%	29.6%	29.8%	18.9%
Total	7.9%	13.6%	27.2%	31.9%	19.4%

A frustration due to inadequate action by decision-makers is a marginally less important motivation to act, compared to most other potential reasons, but as already mentioned, the differences in the middle of the table (see figure 4.9) are rather small. Frustration does appear to be a quite prominent element in Bulgaria (a country characterised by a very low trust towards political actors and state institutions). This interpretation could also be considered in the Spanish case, where the second highest result has been obtained. Compared to the overall score of 51.3%, 66.7% of Bulgarian respondents and 61.9% of the Spanish ones have stated that for them, disappointment with the policymakers' response to the energy transition is an important or very important motivation to act.

Figure 4.5: Frustration due to inadequate action by decision-makers (N=10,071)



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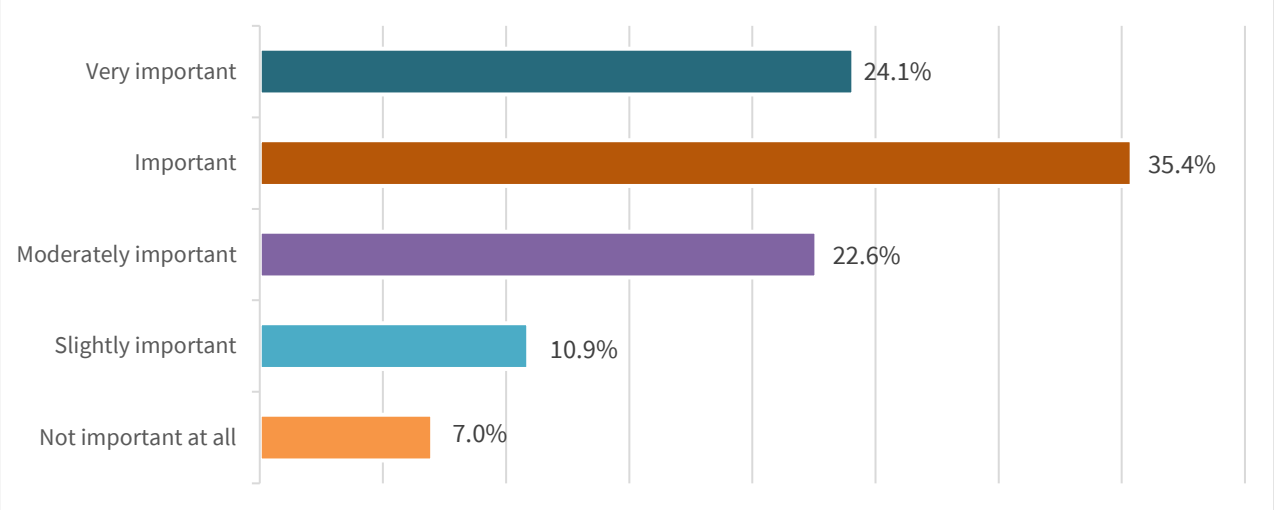
4.6 Availability of financial subsidies (e.g. funding for renovation, funding for campaign, etc.)

Table 4.6: Availability of financial subsidies (per country)

Country	Not important at all	Slightly important	Moderately important	Important	Very important
Belgium	9.2%	12.0%	25.1%	34.3%	19.5%
Bulgaria	2.4%	6.4%	18.8%	38.7%	33.7%
France	9.9%	10.3%	23.4%	37.1%	19.3%
Germany	10.0%	11.2%	26.4%	32.2%	20.2%
Hungary	4.5%	10.9%	18.5%	38.1%	28.1%
Ireland	3.8%	7.1%	20.2%	33.7%	35.2%
Latvia	7.3%	11.4%	22.1%	39.3%	19.9%
Spain	4.7%	10.0%	21.8%	35.8%	27.7%
The Netherlands	10.8%	15.2%	24.1%	33.2%	16.7%
10 other countries	7.7%	14.2%	25.3%	31.9%	20.9%
Total	7.0%	10.9%	22.6%	35.4%	24.1%

Availability of financial subsidies is the second most important motivation to act (59.5%). It is particularly important for Bulgarians (72.4), Hungarians (66.2%), Irish (68.9%) and Spaniards (63.5).

Figure 4.6: Availability of financial subsidies (N=10,071)



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101022492.

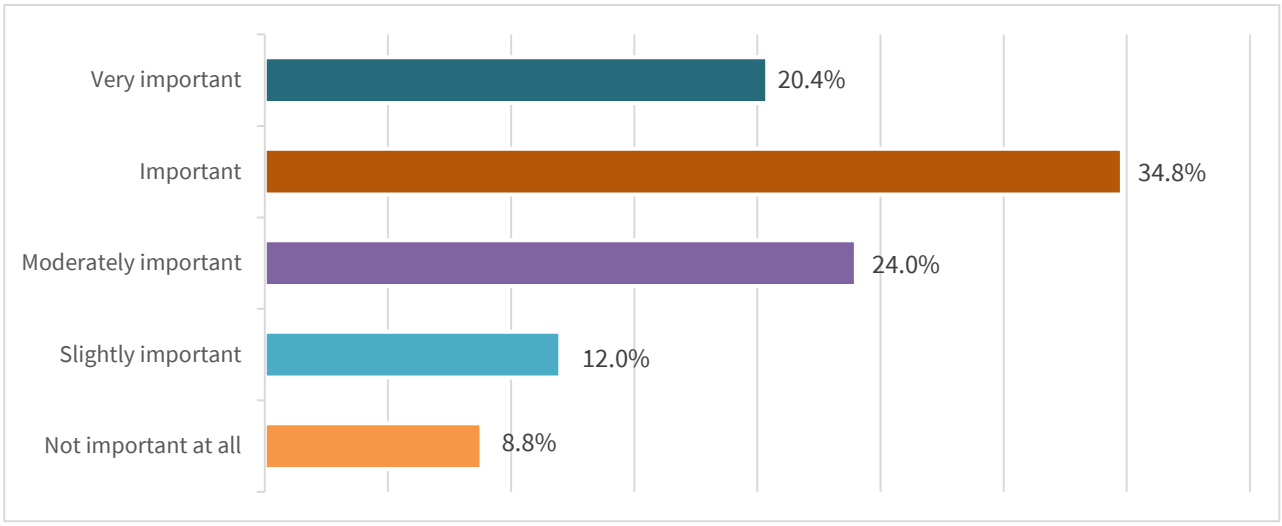
7 Ambition to reduce carbon footprint (individual and of the household)

Table 4.7: Ambition to reduce my carbon footprint (per country)

Country	Not important at all	Slightly important	Moderately important	Important	Very important
Belgium	7.6%	13.2%	22.2%	37.0%	20.0%
Bulgaria	5.9%	8.7%	26.8%	38.0%	20.5%
France	8.1%	10.3%	21.0%	38.1%	22.5%
Germany	11.9%	9.1%	26.4%	34.5%	18.1%
Hungary	5.3%	12.7%	20.9%	36.5%	24.6%
Ireland	5.8%	11.9%	21.8%	33.2%	27.3%
Latvia	16.2%	16.8%	30.2%	30.4%	6.3%
Spain	6.1%	10.4%	18.8%	35.7%	29.0%
The Netherlands	13.5%	14.8%	25.0%	33.3%	13.4%
10 other countries	7.5%	12.4%	26.3%	31.2%	22.6%
Total	8.8%	12.0%	24.0%	34.8%	20.4%

Ambition to reduce the personal carbon footprint has a similar pull as other reasons without a monetary dimension. It is important or very important for 55.2% of participants. It appears to be slightly more important for Spanish respondents (64.7%), but is a considerably smaller concern for Latvians (36.7%). This perception about Latvian respondents is in line with the findings from the question 4.1, namely that many Latvians consider that issues such as climate change are beyond their personal responsibility and are something to be taken care of by large businesses and governments.

Figure 4.7: Ambition to reduce my carbon footprint (N=10,071)



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101022492.

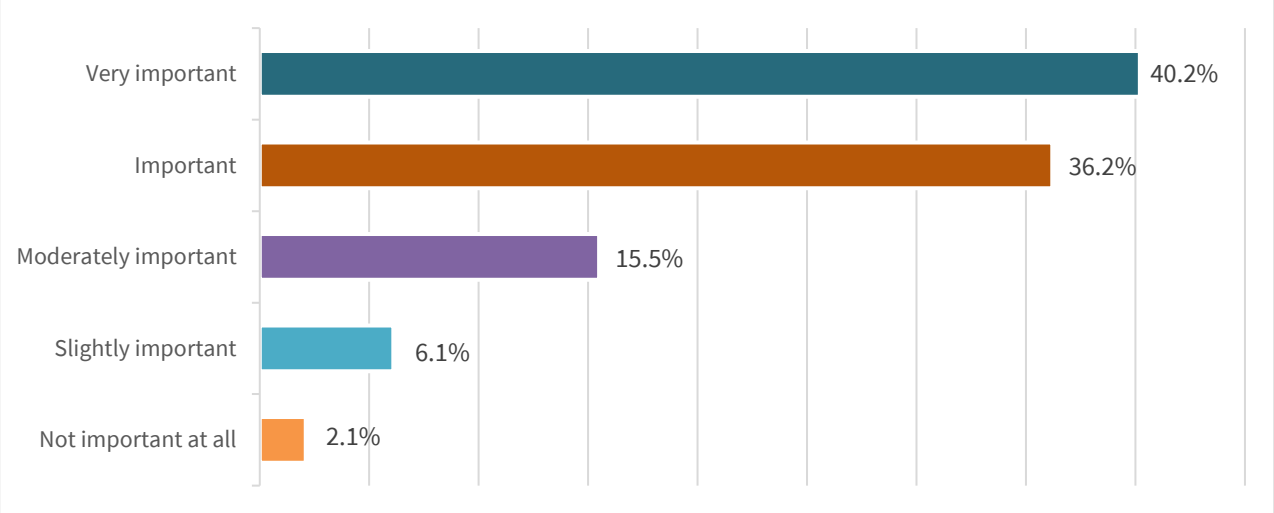
4.8 Possibility to earn or save money

Table 4.8: Possibility to earn or save money (per country)

Country	Not important at all	Slightly important	Moderately important	Important	Very important
Belgium	1.6%	5.8%	15.7%	34.5%	42.3%
Bulgaria	1.8%	4.3%	16.3%	37.3%	40.3%
France	1.9%	6.5%	14.7%	35.6%	41.3%
Germany	2.8%	4.1%	21.4%	37.0%	34.7%
Hungary	2.3%	7.2%	11.9%	38.8%	39.8%
Ireland	1.5%	4.8%	13.5%	31.7%	48.5%
Latvia	2.0%	4.9%	14.6%	37.5%	41.0%
Spain	0.7%	6.3%	15.9%	33.6%	43.5%
The Netherlands	3.9%	7.6%	16.9%	41.4%	30.2%
10 other countries	2.7%	9.2%	14.1%	34.3%	39.7%
Total	2.1%	6.1%	15.5%	36.2%	40.2%

Possibility to earn or save money emerged as the most important reason why survey participants would want to engage in different energy-saving activities. It is important for 76.4% of respondents. The cross-country differences are minimal.

Figure 4.8: Possibility to earn or save money (N=10,071)



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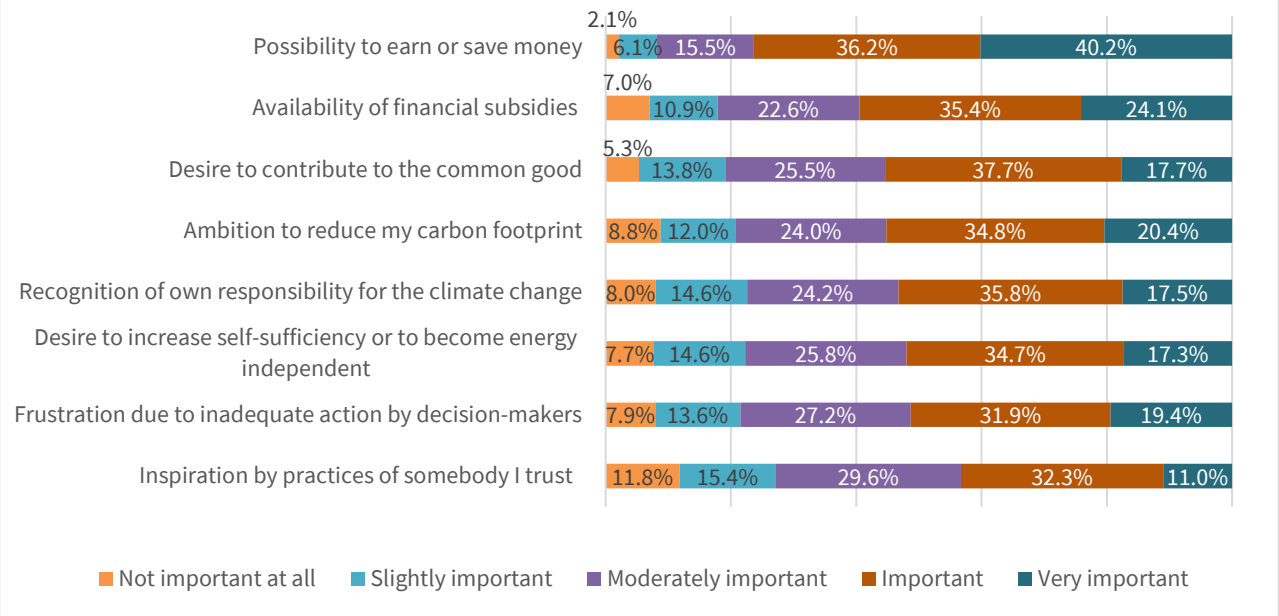
4.9 Motivations for energy-related activities – an overview

Figure 4.9 Overview of motivations for energy-related activities

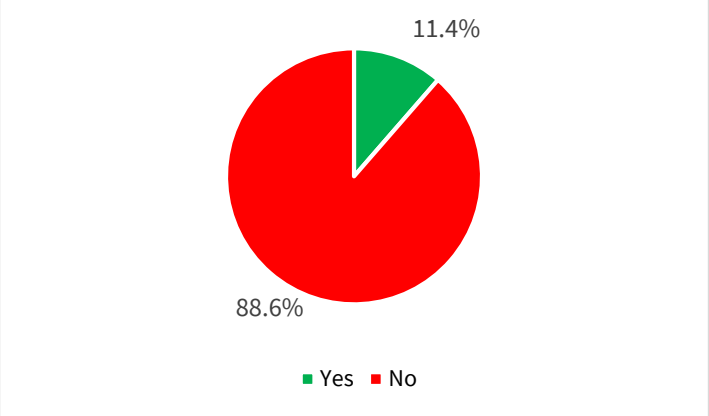


4.10 Other reasons that prompted respondents to act

Table 4.10: Did any other reason than those already mentioned prompted you to act? (per country)

Country	Yes	No	Country	Yes	No
Belgium	11.1%	88.9%	Ireland	10.8%	89.2%
Bulgaria	11.8%	88.2%	Latvia	6.7%	93.3%
France	12.8%	87.2%	Spain	15.6%	84.4%
Germany	9.6%	90.4%	The Netherlands	7.9%	92.1%
Hungary	16.3%	83.7%	10 other countries	11.8%	88.2%

Figure 4.10: Did any other reason than those already mentioned prompted you to act? (N=10,071)



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4.10.a) Which other reasons motivated you to act?

Those respondents, who answered "Yes" to the previous question, were asked to name or shortly describe what the other reasons that prompted them to act were. Around 1,150 answers were given. About 25% of the answers were not considered for the analysis for different reasons (did not concern the question, were incomplete, or were not understandable). There were also many "I don't know" or "None" answers. The summary of the remaining answers is presented below.

Two clusters of answers stand out. About one half of all answers to the question "Which other reasons motivated you to act?" are of financial nature. The necessity to reduce energy costs, lack of income or insufficient income, need to increase saving to provide for the family, but also availability of financial stimulus and financial opportunities are the most typical explanations of respondents for taking action. The necessity to act due to the combination of high energy costs and low or insufficient incomes has been most profoundly underlined by respondents from Hungary and Latvia, but it is also very prominent in more affluent countries such as Germany and The Netherlands. Interestingly, this is only the second most important motivation in the poorest EU country Bulgaria, where environmental protection and the need to ensure an environmentally safe future have been named as the most important reasons to act. Bulgaria and France are the only two countries where environmental concerns seem to matter (a little bit) more than the financial anxieties.

Other reasons or motivations that prompted respondents to act are:

- Desire or ambition to reduce energy consumption
- Wellbeing of future generations
- Political reasons (dissatisfaction with national and/or international developments and decisions)[14]
- Advice provided by other people
- Personal reasons (better self-perception, health needs, better quality of life and comfort)
- Condition or age of the property / residence
- Incentives or requirements from the energy supplier

[14] This was particularly pronounced in Bulgaria – about 10% of answers. This is also in line with the answers to question 4.5.

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5. Organisers and initiators of energy-related activities

In this section, respondents were asked who organised or initiated the energy-related activity/activities they have been involved in. Six possible options were offered, to which respondents replied with a simple "yes" or "no."

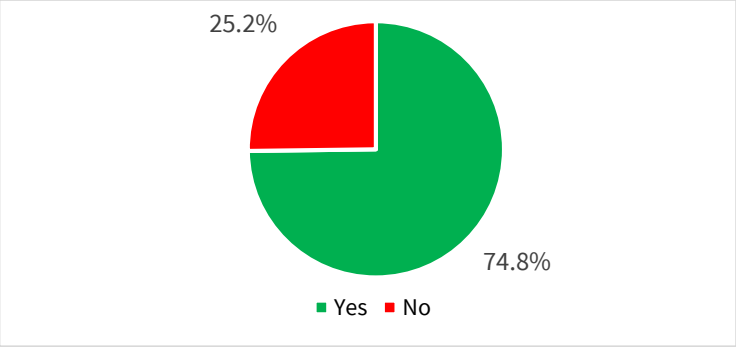
5.1 Respondent's own independent activity or organised by their household

Table 5.1: The activity is my own independent action (per country)

Country	Yes	No	Country	Yes	No
Belgium	68.5%	31.5%	Ireland	86.0%	14.0%
Bulgaria	70.6%	29.4%	Latvia	64.3%	35.7%
France	62.7%	37.3%	Spain	88.9%	11.1%
Germany	74.0%	26.0%	The Netherlands	71.8%	28.2%
Hungary	78.2%	21.8%	10 other countries	82.8%	17.2%

As can be seen from the table above, in all countries a clear majority of respondents have taken their own independent decision to act, but the Spaniards, Irish and Hungarians are the ones most likely to take action on their own. The largest share of respondents who acted on the initiative of someone else can be found in France and Latvia.

Figure 5.1: The activity is my own independent action (N=10,071)



5.2 The local community in respondent's neighbourhood

Table 5.2: The activity is something we do together with the local community in my neighbourhood (per country)

Country	Yes	No	Country	Yes	No
Belgium	16.2%	83.8%	Ireland	24.2%	75.8%
Bulgaria	24.0%	76.0%	Latvia	26.8%	73.2%
France	21.9%	78.1%	Spain	28.0%	72.0%
Germany	14.5%	85.5%	The Netherlands	12.9%	87.1%
Hungary	17.6%	82.4%	10 other countries	30.3%	69.7%

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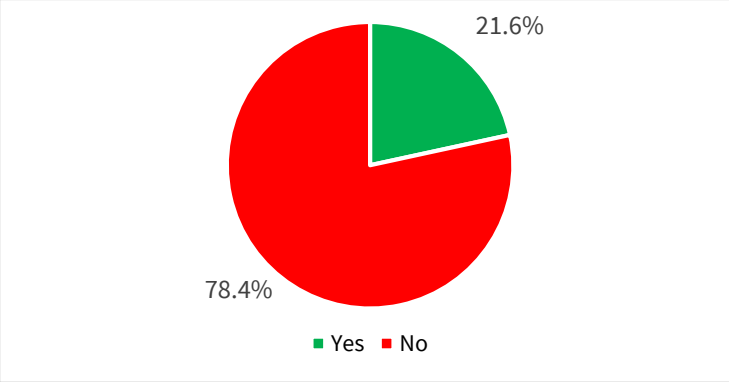
Just over 21% of respondents have been involved in energy-related activities initiated in their local communities. This trait of neighbour cooperation is a bit more strongly underlined in Spain, Latvia, Ireland and Bulgaria, but appears to be particularly characteristic for Greece, Italy, Poland and Turkey.

Figure 5.2: The activity is something we do together with the local community in my neighbourhood (N=10,071)



5.3 A larger initiative, project or event organised by a non-governmental or civil society organisation.

Table 5.3: The activity is a part of a larger initiative, project or event organised by a non-governmental or civil society organisation (per country)

Country	Yes	No	Country	Yes	No
Belgium	18.7%	81.3%	Ireland	22.9%	77.1%
Bulgaria	21.1%	78.9%	Latvia	22.4%	77.6%
France	23.0%	77.0%	Spain	23.9%	76.1%
Germany	14.1%	85.9%	The Netherlands	16.3%	83.7%
Hungary	13.1%	86.9%	10 other countries	30.0%	70.0%

Similarly to the local communities, NGOs and CSOs have been involved in the organisation of just over 20% of activities respondents have been or are involved in. The involvement of NGOs is a bit more pronounced in France, Spain, Latvia, Ireland and Bulgaria, and somewhat less so in Hungary and Germany. At least for Hungary, part of the explanation lies in the fact that the government does not provide enough funding for such projects, and most of the existing initiatives are financed directly from the EC or by private companies. Very prominent role of non-governmental and civil society organisations has been also noted in cases of Greece, Italy, Poland, Portugal and Turkey.

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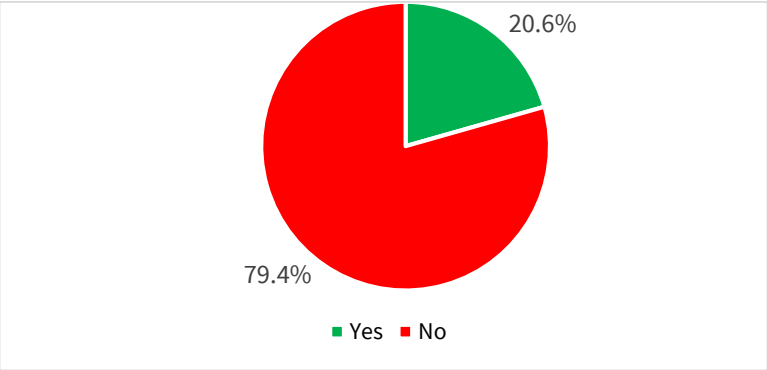
Figure 5.3: The activity is a part of a larger initiative, project or event organised by a non-governmental or civil society organisation (N=10,071)



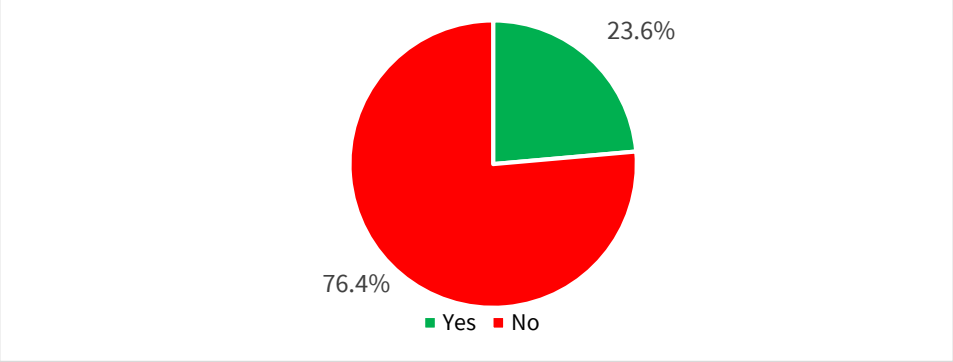
5.4 A larger initiative, project, event, or procedure organised by the national authorities, or other public bodies on the national level

Table 5.4: The activity is (or has been) a part of a larger initiative, project, event, or procedure organised by the national authorities, or other public bodies on the national level (per country)

Country	Yes	No	Country	Yes	No
Belgium	20.5%	79.5%	Ireland	26.0%	74.0%
Bulgaria	24.9%	75.1%	Latvia	27.4%	72.6%
France	26.6%	73.4%	Spain	27.4%	72.6%
Germany	13.4%	86.6%	The Netherlands	16.3%	83.7%
Hungary	19.8%	80.2%	10 other countries	33.2%	66.8%

The role of the state and the national public bodies appears to be only marginally more important than the role of local communities and NGOs, but a more detailed study of the issue would probably uncover a much greater importance of the state in particular energy saving actions – for example the energy retrofitting of buildings or support programmes for purchasing RES installations. State-organised activities seem to be most important in Spain, Latvia, Ireland and France, and least important in Germany.

Figure 5.4: The activity is (or has been) a part of a larger initiative, project, event, or procedure organised by the national authorities, or other public bodies on the national level (N=10,071)



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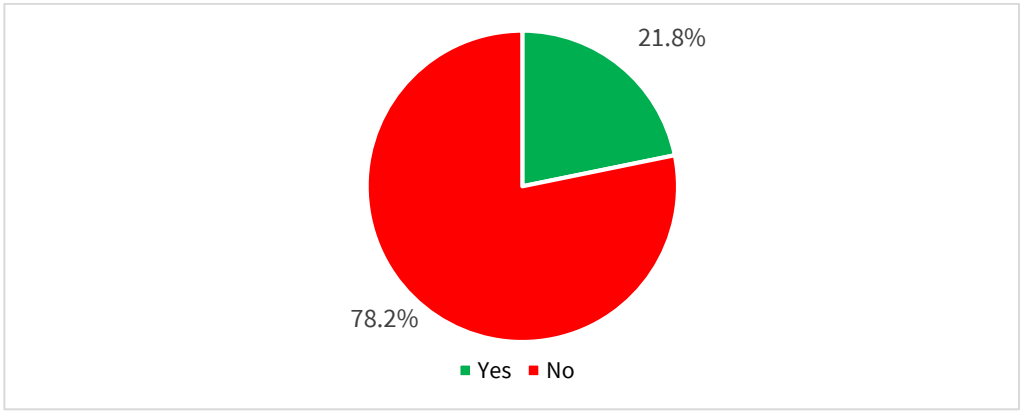
5.5 A larger initiative, project, event, or procedure organised by the local authorities, or other public bodies on the local level

Table 5.5: The activity is (or has been) a part of a larger initiative, project, event, or procedure organised by the local authorities, or other public bodies on the local level (per country)

Country	Yes	No	Country	Yes	No
Belgium	19.7%	80.3%	Ireland	24.3%	75.7%
Bulgaria	22.3%	77.7%	Latvia	25.7%	74.3%
France	25.5%	74.5%	Spain	25.1%	74.9%
Germany	11.6%	88.4%	The Netherlands	14.0%	86.0%
Hungary	20.9%	79.1%	10 other countries	29.2%	70.8%

The responses regarding the role of local authorities follow a very similar pattern to responses about the role of national authorities, the main difference being a slightly lower share of affirmative answers.

Figure 5.5: The activity is (or has been) a part of a larger initiative, project, event, or procedure organised by the local authorities, or other public bodies on the local level (N=10,071)



5.6 A larger initiative, project or event organised by a private company

Table 5.6: The activity is (or has been) a part of a larger initiative, project or event organised by a private company (per country)

Country	Yes	No	Country	Yes	No
Belgium	18.7%	81.3%	Ireland	20.6%	79.4%
Bulgaria	19.7%	80.3%	Latvia	20.2%	79.8%
France	19.0%	81.0%	Spain	21.9%	78.1%
Germany	15.0%	85.0%	The Netherlands	13.8%	86.2%
Hungary	14.3%	85.7%	10 other countries	28.6%	71.4%

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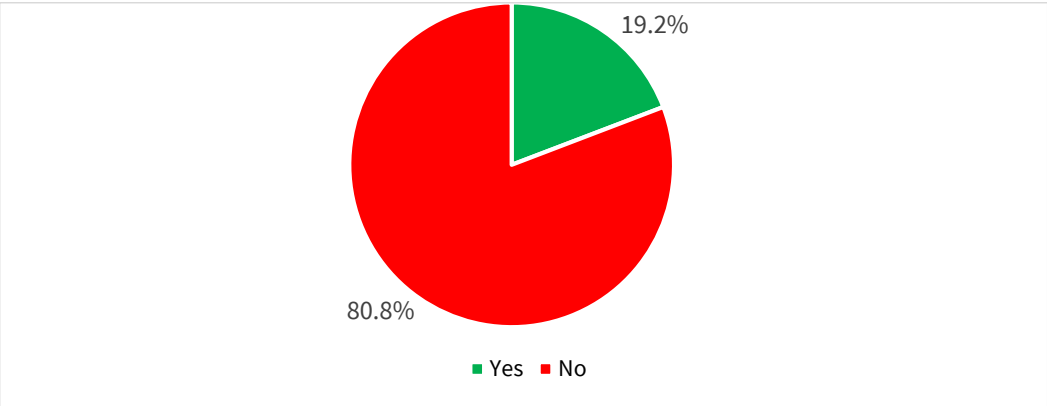
The respondents claim that private companies have initiated about 19% of the activities respondents are involved in. This is true for most countries, with the exception of The Netherlands, Hungary and Germany, where this share is 4-5% lower.

Figure 5.6: The activity is (or has been) a part of a larger initiative, project or event organised by a private company (N=10,071)

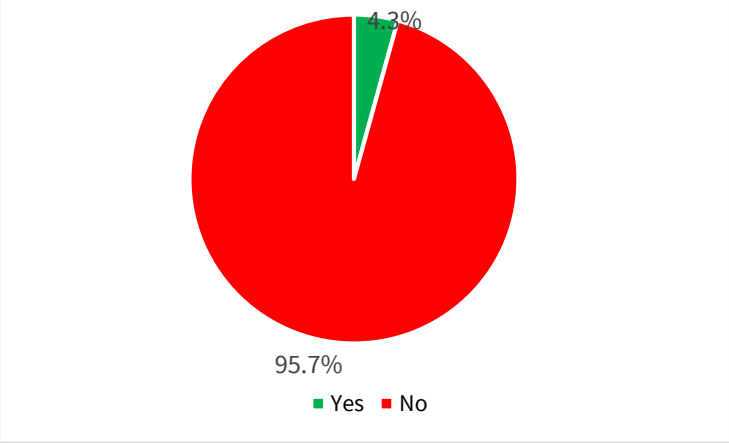


5.7 Other organisers or initiators of the activity

Table 5.7: Did anyone else not yet mentioned organise the action? (per country)

Country	Yes	No	Country	Yes	No
Belgium	6.3%	93.7%	Ireland	2.8%	97.2%
Bulgaria	3.9%	96.1%	Latvia	1.9%	98.1%
France	6.4%	93.6%	Spain	5.2%	94.8%
Germany	3.7%	96.3%	The Netherlands	3.6%	96.4%
Hungary	3.5%	96.5%	10 other countries	5.9%	94.1%

Figure 5.7: Did anyone else not yet mentioned organise the action? (N=10,071)



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5.7.a) Who has organised the action (if not already mentioned in the previous questions)?

Again, those respondents, who answered that the activities they have been involved in were organised by someone not yet mentioned, were given a chance to answer an open-ended question. Around 430 answers were provided, but again a considerable part was not suitable for inclusion in the analysis (irrelevant, non-understandable or incomplete).

By far the most prominent initiator of energy-related activities are the family members of respondents (38%) – their partners, parents, siblings, children. Involvement of the family is very strong in France, Germany and Spain, relatively strong in Bulgaria, Hungary and The Netherlands, and minimal among respondents from Latvia and Ireland. The second largest group of action organisers (22%) are friends, colleagues and/or neighbours of responders. About 12% of survey participants have been drawn into action by representatives of different national and local institutions. For about 8%, the action was initiated by residents' association, housing office at their residence, building collective or other similar association.

In a handful of cases, the action organisers were the following organisations or individuals:

- NGOs or other organizations
- Businesses
- Inventors, experts
- The media
- Trade union
- Landlord
- Electricity supplier

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Part 2: Views about the role of individuals in the energy system

In the second part of the survey, the respondents were asked to indicate their agreement or disagreement with different statements about: 1) the role individuals in general can play in the energy transition in their countries; 2) the personal energy consumption; and 3) possible or desired role of respondents in the energy system in the near future (2030).

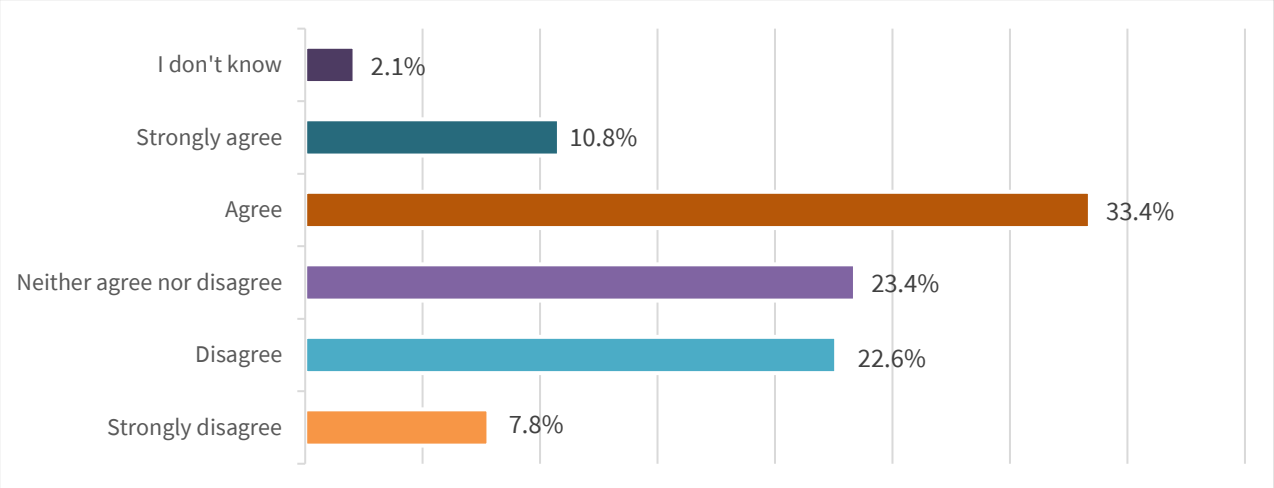
6. The role of individuals in the energy transition

6.1 I believe that most people are well informed about what they can do to contribute to the energy transition

Table 6.1: I believe that most people are well informed about what they can do to contribute to the energy transition (per country)

Country	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	I don't know
Belgium	9.1%	21.9%	26.1%	33.3%	8.7%	1.1%
Bulgaria	14.1%	25.7%	26.1%	24.7%	6.9%	2.5%
France	7.1%	20.6%	26.0%	28.6%	16.1%	1.6%
Germany	5.0%	18.1%	21.2%	38.1%	16.0%	1.6%
Hungary	8.4%	26.1%	15.0%	40.1%	7.1%	3.3%
Ireland	5.9%	21.9%	21.2%	36.1%	13.2%	1.8%
Latvia	6.8%	23.7%	27.3%	32.0%	6.5%	3.8%
Spain	11.6%	27.9%	21.5%	25.9%	11.6%	1.5%
The Netherlands	3.8%	16.8%	27.8%	39.5%	10.0%	2.1%
10 other countries	5.8%	23.2%	21.4%	36.0%	11.5%	2.1%
Total	7.8%	22.6%	23.4%	33.4%	10.8%	2.1%

Figure 6.1: I believe that most people are well informed about what they can do to contribute to the energy transition (N=10,071)



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This question is based on the opinion of respondents about the general level of energy literacy and awareness in their countries. Overall, the optimistic view that the majority of citizens are well informed prevails over the opposite opinion, but there are large differences between the countries. Bulgarians stand out – those who do not agree with this statement outnumber the supporters in the ratio 4:3 (39.8% to 31.6%). Spain is the second country where the negative opinion prevails over the positive one, albeit by only 2%. Respondents from Germany (54.1% against 23.1%) and The Netherlands (49.5% against 20.6%) are most confident in the energy literacy of their compatriots.

6.2 In the country I reside in, it is possible to save or earn money by producing your own electricity and/or heat from renewable energy sources

Table 6.2: In the country I reside in, it is possible to save or earn money by producing your own electricity and/or heat from renewable energy sources (per country)

Country	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	I don't know
Belgium	4.8%	9.6%	18.6%	40.4%	18.3%	8.3%
Bulgaria	10.2%	15.5%	23.4%	32.1%	12.4%	6.4%
France	3.0%	6.2%	21.5%	41.1%	21.1%	7.1%
Germany	4.6%	7.9%	18.3%	41.8%	20.5%	6.9%
Hungary	11.5%	19.5%	14.2%	38.2%	8.4%	8.1%
Ireland	3.0%	11.4%	17.5%	39.6%	16.6%	11.9%
Latvia	7.7%	14.4%	23.8%	36.3%	8.4%	9.5%
Spain	6.1%	11.6%	19.6%	35.5%	20.7%	6.5%
The Netherlands	1.8%	6.2%	20.2%	48.0%	18.5%	5.3%
10 other countries	2.8%	8.9%	17.9%	43.1%	20.2%	7.1%
Total	5.6%	11.1%	19.5%	39.6%	16.5%	7.7%

A clear majority of respondents (56.1%) agree that in their countries it is possible to save or earn money from producing your own energy from RES. Those who disagree with this opinion are only 16.7%. However, the differences between countries are huge. While in The Netherlands the ratio between those who agree and those who disagree is 8.3 to 1, in France 6.8 to 1 and in Germany 5:1, in Bulgaria it is 1.7 to 1 and in Hungary only 1.5 to 1. An interesting juxtaposition can be made with the question 3.10. The strong opinion that in The Netherlands it is possible to earn money by self-producing electricity corresponds well with the information that 39% of Dutch respondents are actually generating their own electricity. But it is somewhat surprising to see how prominent this opinion is in France, where less than 10% of respondents are prosumers. The sceptical opinions of Bulgarians and Hungarians correspond with the limited uptake of RES installations in these two countries.

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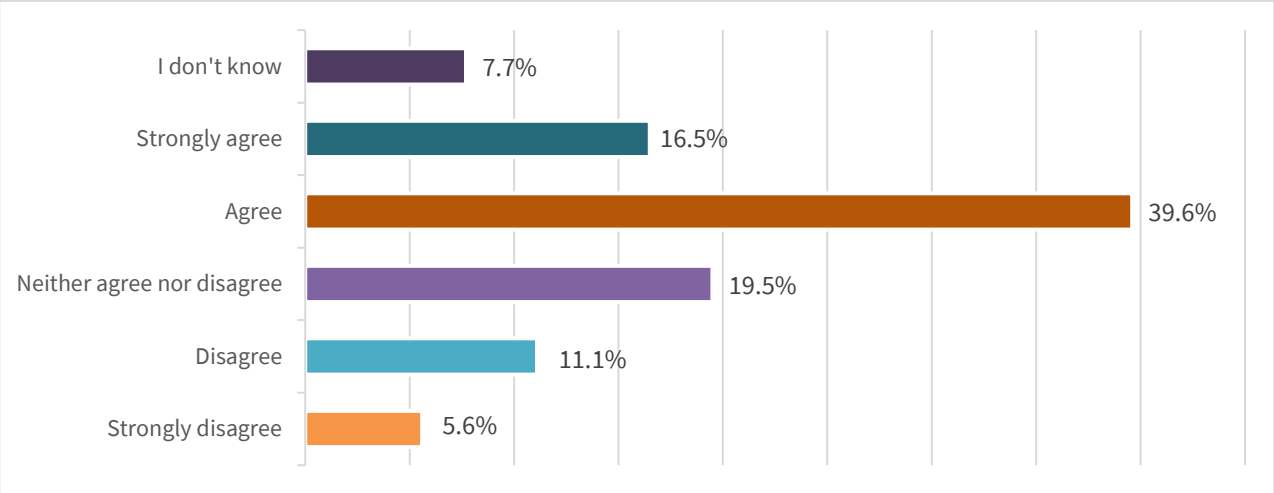
Figure 6.2: In the country I reside in, it is possible to save or earn money by producing your own electricity and/or heat from renewable energy sources (N=10,071)



6.3 Individuals cannot do anything for the energy transition because they are constrained by limited financial resources

Table 6.3: Individuals cannot do anything for the energy transition because they are constrained by limited financial resources (per country)

Country	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	I don't know
Belgium	3.4%	9.3%	20.4%	36.3%	26.2%	4.4%
Bulgaria	6.0%	12.2%	21.0%	35.0%	23.1%	2.7%
France	3.1%	6.0%	21.7%	37.2%	28.0%	4.0%
Germany	12.1%	23.6%	20.9%	22.7%	18.0%	2.7%
Hungary	9.2%	20.0%	14.0%	32.7%	21.3%	2.7%
Ireland	2.2%	9.0%	15.5%	37.7%	33.2%	2.4%
Latvia	2.6%	12.0%	23.1%	37.0%	21.4%	3.9%
Spain	8.8%	18.3%	25.3%	29.2%	16.0%	2.4%
The Netherlands	6.3%	19.7%	26.9%	27.9%	15.9%	3.3%
10 other countries	1.9%	9.6%	23.0%	37.8%	25.0%	2.9%
Total	5.6%	14.0%	21.2%	33.4%	22.8%	3.1%

Interestingly, respondents in Ireland, France and Belgium are the ones most convinced that limited financial resources prevent individual citizens from taking any action that could contribute to the energy transition. Germany is the only country, where there is (almost) a parity between those who agree and those who disagree with this statement. In Spain and The Netherlands, the predominance of pessimistic opinions over the optimistic ones is also relatively small.

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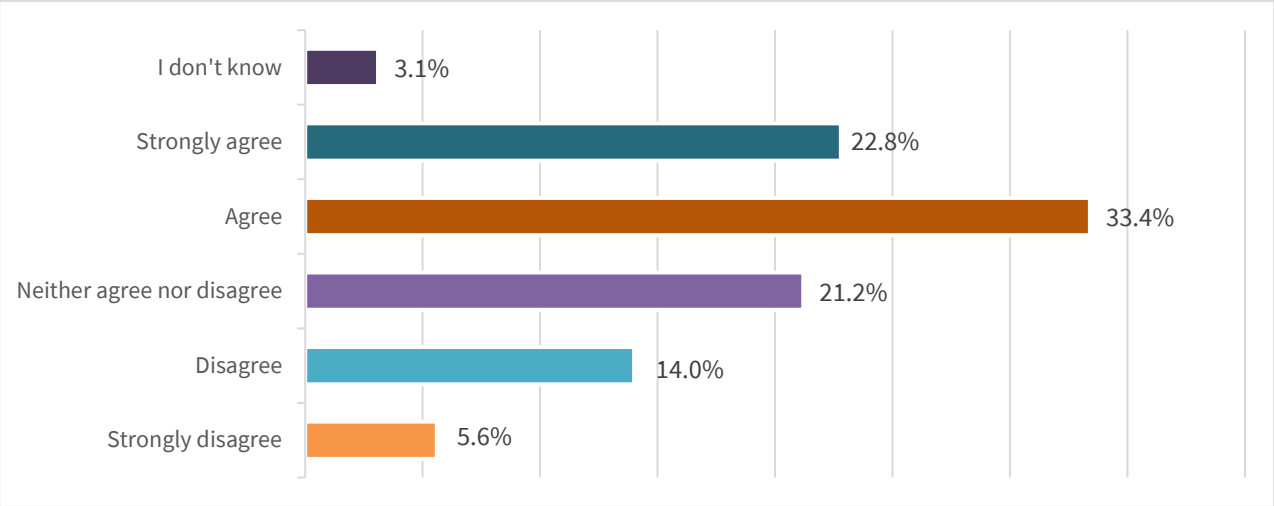
Figure 6.3: Individuals cannot do anything for the energy transition because they are constrained by limited financial resources (N=10,071)



6.4 In my opinion, the views and ideas of ordinary citizens are not taken seriously enough by politicians when it comes to the development of the energy system

Table 6.4: In my opinion, the views and ideas of ordinary citizens are not taken seriously enough by politicians when it comes to the development of the energy system (per country)

Country	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	I don't know
Belgium	1.4%	5.9%	22.5%	36.3%	28.5%	5.3%
Bulgaria	2.8%	3.3%	13.3%	41.4%	36.7%	2.6%
France	2.4%	5.8%	19.9%	39.4%	28.6%	3.9%
Germany	1.7%	7.4%	21.5%	34.1%	31.1%	4.2%
Hungary	2.2%	6.9%	12.6%	34.7%	40.6%	3.0%
Ireland	1.2%	5.1%	19.1%	37.9%	33.9%	2.8%
Latvia	1.2%	4.7%	24.1%	37.9%	26.9%	5.3%
Spain	1.9%	4.3%	12.8%	38.4%	40.5%	2.1%
The Netherlands	1.6%	9.0%	26.6%	38.8%	21.2%	2.8%
10 other countries	2.0%	7.1%	21.4%	38.8%	25.8%	4.9%
Total	1.8%	5.9%	19.4%	37.8%	31.4%	3.7%

The opinion that politicians do not consider the views and ideas of ordinary citizens when designing policies pertaining to development of the energy system is predominant in all countries (69.2% of all respondents). Spanish, Bulgarian, Hungarian and Irish respondents are most strongly convinced that politicians do not care enough about the views of citizens. The Dutch respondents, although predominantly sceptical as well, seem to have a bit better opinion about the policymakers and their inclination to consider the opinions of the citizens.

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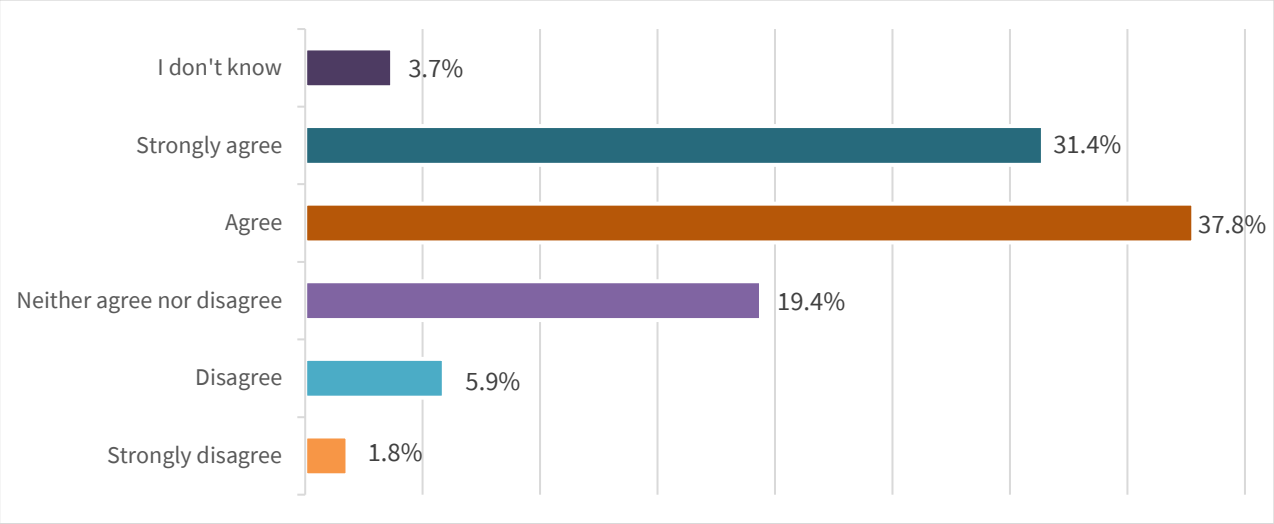
Figure 6.4: In my opinion, the views and ideas of ordinary citizens are not taken seriously enough by politicians when it comes to the development of the energy system (N=10,071)



6.5 I believe that it is a civic duty to protest against developments in the energy system that people perceive as unfair, unjust or harmful

Table 6.5: I believe that it is a civic duty to protest against developments in the energy system that people perceive as unfair, unjust or harmful (per country)

Country	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	I don't know
Belgium	6.6%	8.8%	31.7%	30.3%	17.7%	4.9%
Bulgaria	3.2%	4.3%	24.3%	37.2%	28.0%	3.1%
France	4.1%	7.9%	29.4%	34.2%	20.4%	4.0%
Germany	6.4%	7.9%	29.7%	30.8%	19.5%	5.7%
Hungary	1.6%	4.9%	19.9%	39.3%	31.0%	3.4%
Ireland	2.6%	7.4%	33.9%	33.2%	16.4%	6.6%
Latvia	2.3%	6.3%	24.4%	40.1%	22.6%	4.4%
Spain	1.6%	3.9%	19.5%	44.2%	28.8%	2.0%
The Netherlands	11.4%	17.7%	30.1%	24.5%	11.1%	5.2%
10 other countries	3.1%	7.3%	32.4%	34.6%	16.2%	6.4%
Total	4.3%	7.6%	27.5%	34.8%	21.2%	4.6%

This slightly provocative statement divided the opinions of the respondents and exposed considerable differences between countries. Spanish, Hungarian and Bulgarian respondents are the most outspoken supporters of the idea that citizens should protest against developments in the energy system, which they perceive as unjust and unfair. This is supported by question 3.9, which has shown that the largest share of people who actually participate in energy-focused protests, is found among the Spanish respondents. In addition, Spanish and Bulgarian respondents (along with the French) have given the largest share of

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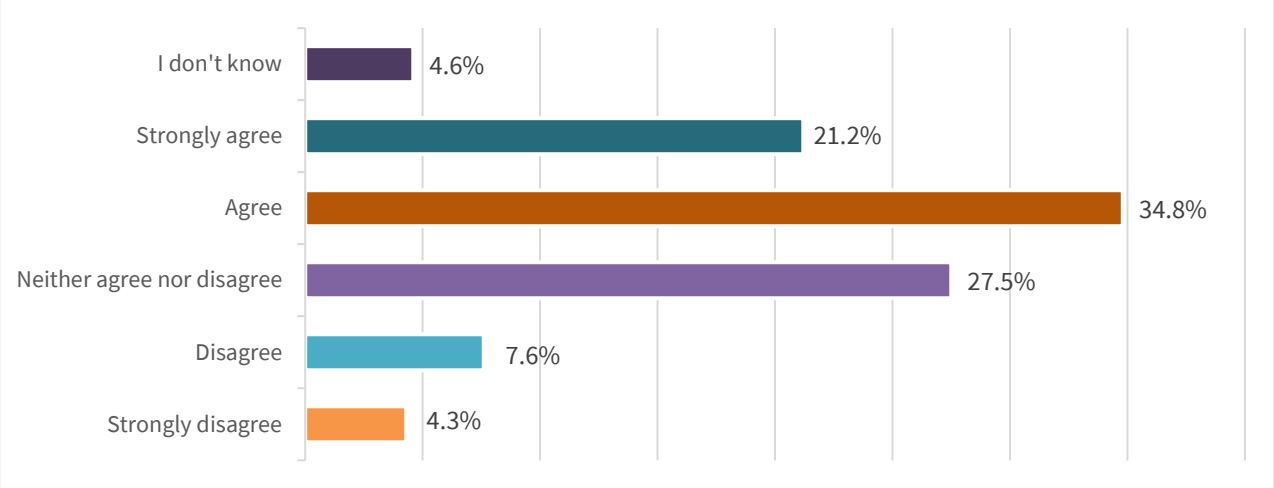
affirmative answers to question 8.5 (I can see myself participating in social movements such as demonstrations and protests linked to various aspects of the energy/climate transition).

The ratio between those who agree and those who disagree with this statement for the three countries is respectively 13.3 to 1 (Spain), 10.8 to 1 (Hungary) and 8.7 to 1 (Bulgaria). In contrast, the Dutch respondents are the ones most doubtful that protests are the proper way for citizens to have their say about how the energy system should develop. This result also corresponds with the question 3.9 – The Netherlands had by far the highest share of respondents who stated that they did not participate in protests and had no plans to do it in the future (80%).

Figure 6.5: I believe that it is a civic duty to protest against developments in the energy system that people perceive as unfair, unjust or harmful (N=10,071)



6.6 The energy transition is the responsibility of the national government and the European institutions, not of ordinary people

Table 6.6: The energy transition is the responsibility of the national government and the European institutions, not of ordinary people (per country)

Country	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	I don't know
Belgium	3.2%	12.9%	25.7%	29.9%	24.2%	4.0%
Bulgaria	4.6%	12.1%	29.6%	28.5%	23.3%	2.0%
France	4.5%	13.4%	31.6%	26.6%	20.1%	3.8%
Germany	7.6%	19.3%	26.2%	24.6%	18.9%	3.4%
Hungary	4.2%	22.7%	19.8%	31.9%	17.1%	4.3%
Ireland	5.1%	17.7%	25.9%	30.5%	16.8%	4.0%
Latvia	2.8%	11.5%	24.3%	34.4%	22.4%	4.6%
Spain	5.4%	17.8%	23.3%	29.7%	21.5%	2.3%
The Netherlands	5.5%	18.5%	28.7%	27.0%	17.4%	2.9%
10 other countries	3.7%	14.9%	26.6%	31.9%	18.8%	4.0%
Total	4.7%	16.1%	26.2%	29.5%	20.0%	3.5%

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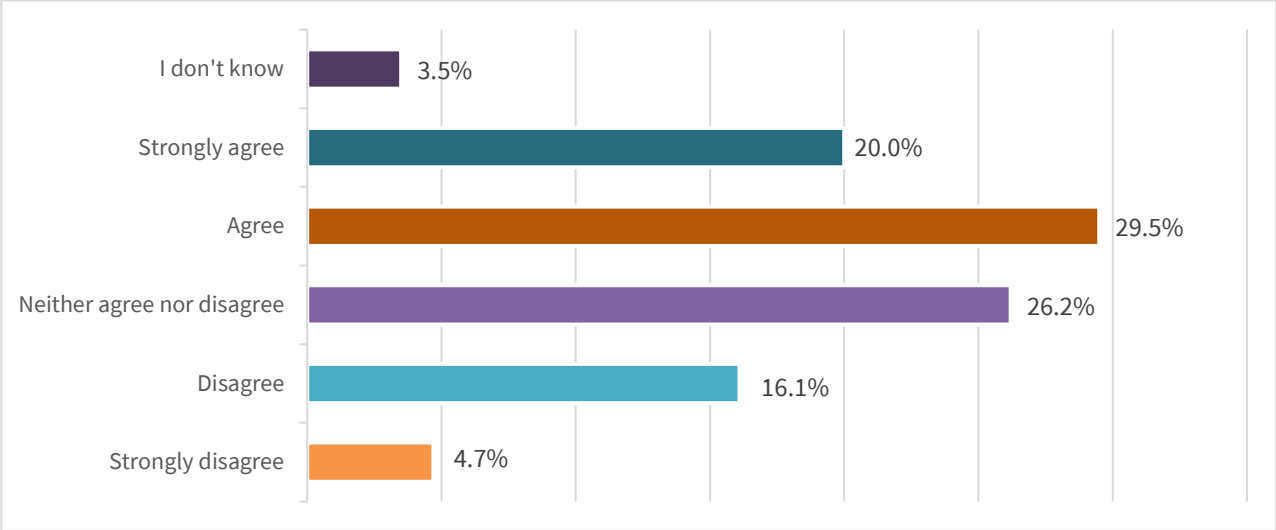
This question aimed to provoke the respondents to show their disagreement with the assumption that the responsibility for the energy transition should be borne by the political actors, leaving ordinary citizens aside. Surprisingly, most respondents do not seem to mind and agree with their passive role in the process. This is especially true for the Latvians, while the idea does not sit well with Germans and Hungarians. The number of those who disagree with this assumption is above the average also in Ireland, Spain and The Netherlands.

An interesting observation can be made if comparing the answers to this and the previous question. It appears that Spanish and Hungarian respondents, who are the strongest supporters of not just the right but obligation of citizens to protest, are also among those who are most doubtful that the national and EU policymakers should assume full responsibility for the energy transition and minimise the role of the citizens.

Figure 6.6: The energy transition is the responsibility of the national government and the European institutions, not of ordinary people (N=10,071)



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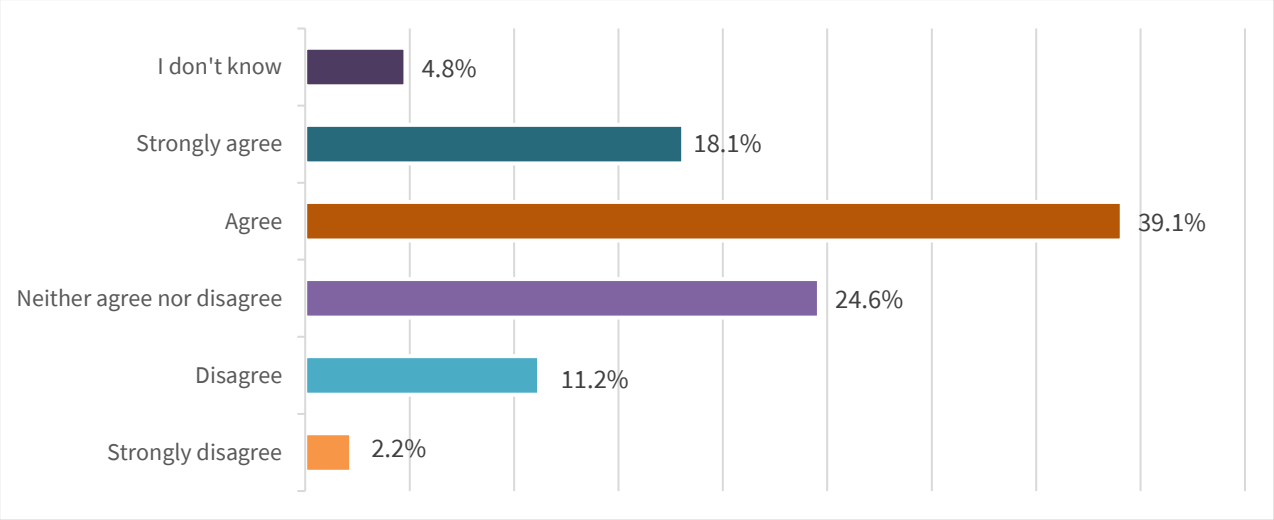
6.7 The options individuals have to contribute to developments in the energy system are limited to their private lives

Table 6.7: The options individuals have to contribute to developments in the energy system are limited to their private lives (per country)

Country	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	I don't know
Belgium	2.1%	8.5%	23.3%	41.3%	19.1%	5.7%
Bulgaria	2.3%	6.7%	20.6%	42.0%	25.8%	2.6%
France	2.5%	8.2%	25.2%	39.3%	19.9%	4.9%
Germany	3.1%	13.3%	26.3%	33.6%	18.5%	5.2%
Hungary	1.8%	14.0%	14.9%	44.3%	21.9%	3.1%
Ireland	1.2%	11.7%	24.8%	38.0%	19.7%	4.6%
Latvia	1.8%	10.5%	27.3%	38.1%	14.7%	7.6%
Spain	3.0%	15.9%	26.1%	35.2%	17.0%	2.8%
The Netherlands	2.0%	12.9%	30.0%	38.1%	10.9%	6.1%
10 other countries	2.1%	10.2%	27.9%	40.9%	13.2%	5.7%
Total	2.2%	11.2%	24.6%	39.1%	18.1%	4.8%

This question is a milder modification of the previous one. It does not exclude citizens from the energy transition, but does confine their role to activities in their private lives. The opposition to this view was not particularly strong in none of the countries, a somewhat stronger objections arose only in Spain, Germany, Hungary and The Netherlands. In contrast, in Bulgaria for every person who disagreed with this statement, there were 7.5 persons who were content with it.

Figure 6.7: The options individuals have to contribute to developments in the energy system are limited to their private lives (N=10,071)



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6.8 The energy transition is a joint task of everyone in the society, therefore it is a responsibility of all citizens to become more active

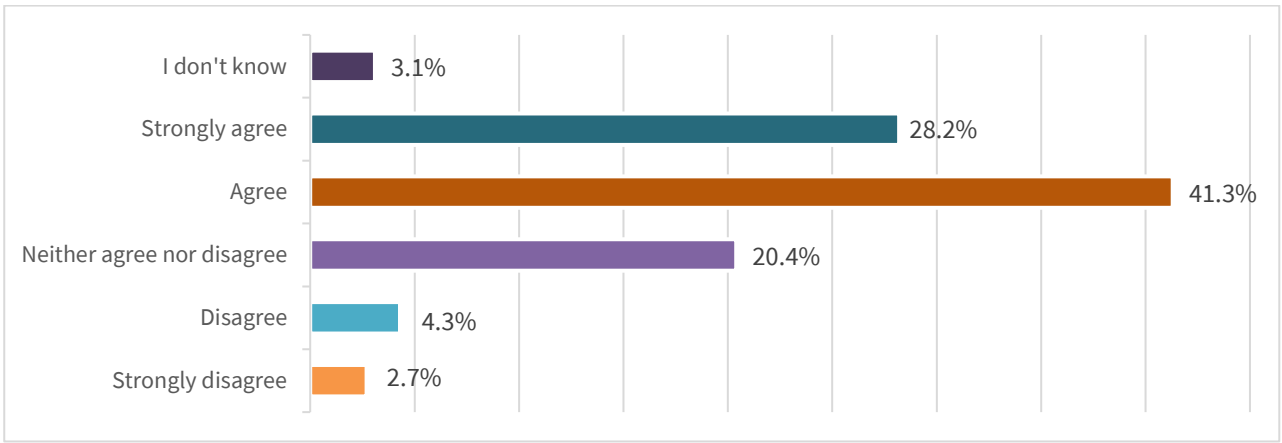
Table 6.8: The energy transition is a joint task of everyone in the society, therefore it is a responsibility of all citizens to become more active (per country)

Country	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	I don't know
Belgium	2.9%	3.9%	21.0%	42.7%	25.9%	3.6%
Bulgaria	2.8%	3.4%	20.1%	43.0%	29.1%	1.7%
France	2.8%	3.4%	18.7%	38.5%	33.7%	2.9%
Germany	4.6%	5.2%	21.0%	36.3%	29.6%	3.3%
Hungary	0.9%	3.7%	18.1%	46.5%	28.0%	2.9%
Ireland	2.4%	3.7%	18.3%	42.1%	30.5%	3.0%
Latvia	4.0%	5.7%	28.0%	45.0%	13.1%	4.3%
Spain	2.1%	4.5%	16.1%	34.5%	41.3%	1.5%
The Netherlands	3.5%	5.0%	24.0%	42.5%	21.7%	3.3%
10 other countries	1.4%	4.5%	19.0%	41.4%	28.8%	4.8%
Total	2.7%	4.3%	20.4%	41.3%	28.2%	3.1%

The opinion that all members of the society should do their bit in one way or another is universally supported in all countries, only Latvians and Germans appear to be a bit more cautious regarding this statement.

Some interesting observations emerge when comparing this questions to 6.6. (The energy transition is the responsibility of the national government and the European institutions, not of ordinary people). Among the nine counties, Latvian respondents have the smallest share (58.1%) of "Agree" or "Strongly agree" answers to question 6.8, and the largest share (56.8%) of "Agree" or "Strongly agree" answers to question 6.6. This concurs with the impression formed by several other questions that taking energy-related decisions and actions into their own hands is not their most characteristic feature. On the other pole are responders from France, Hungary, Ireland and Spain, with the highest share of agreement over the joint responsibility of all citizens for the energy transition, and comparatively low level of agreement with the statement that citizens should delegate all responsibility to the policymakers.

Figure 6.8: The energy transition is a joint task of everyone in the society, therefore it is a responsibility of all citizens to become more active (N=10,071)



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101022492.

7. The role of personal energy consumption

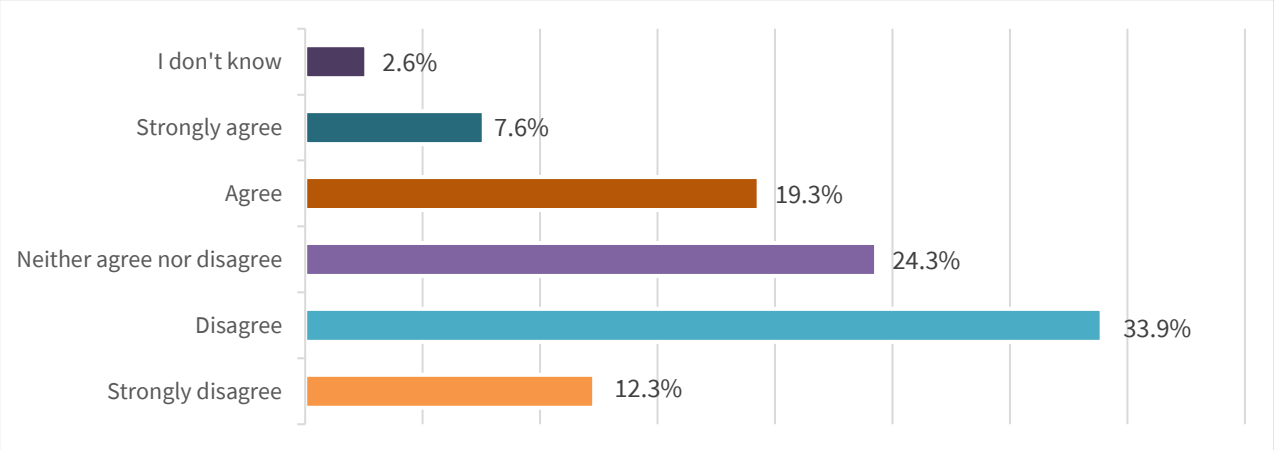
7.1 Technological developments are enough for a successful energy transition. I do not personally need to make lifestyle changes to reduce my energy consumption

Table 7.1: Technological developments are enough for a successful energy transition. I do not personally need to make lifestyle changes to reduce my energy consumption (per country)

Country	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	I don't know
Belgium	13.1%	30.6%	25.7%	20.2%	7.1%	3.3%
Bulgaria	6.0%	26.4%	33.8%	23.0%	9.0%	1.8%
France	12.4%	30.8%	26.1%	19.3%	8.5%	2.9%
Germany	18.8%	34.7%	20.2%	15.3%	8.7%	2.3%
Hungary	16.8%	39.9%	17.5%	18.7%	4.8%	2.5%
Ireland	14.3%	41.6%	22.1%	13.9%	5.2%	2.8%
Latvia	5.0%	29.9%	25.9%	27.5%	8.6%	3.3%
Spain	13.8%	31.0%	24.6%	19.7%	8.9%	2.0%
The Netherlands	9.4%	36.0%	25.0%	18.0%	8.8%	2.8%
10 other countries	12.9%	38.0%	22.6%	17.7%	6.5%	2.4%
Total	12.3%	33.9%	24.3%	19.3%	7.6%	2.6%

The suggestion to refrain from any personal effort and discomfort, and rely solely on technology, was flatly rejected by the majority of respondents. This assumption was most strongly opposed by respondents in Germany, Hungary and Ireland. Bulgarians and Latvians are the only ones, whose opinions were almost equally divided between those who agree and those who disagree.

Figure 7.1: Technological developments are enough for a successful energy transition. I do not personally need to make lifestyle changes to reduce my energy consumption (N=10,071)



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101022492.

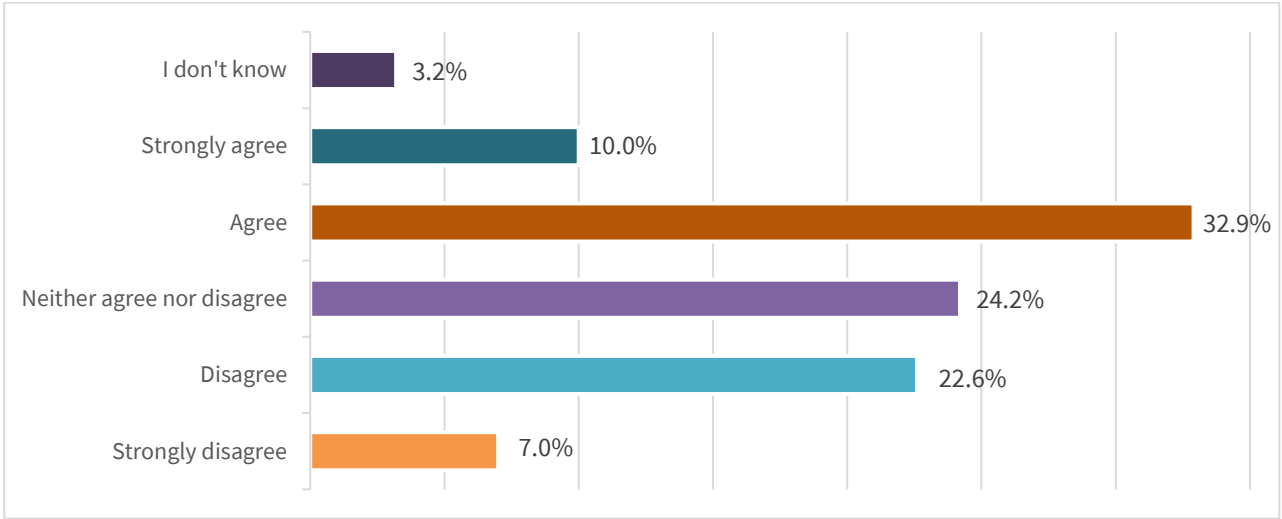
7.2 I have often consumed energy and resources that I could have easily done without

Table 7.2: I have often consumed energy and resources that I could have easily done without (per country)

Country	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	I don't know
Belgium	7.1%	22.0%	24.8%	30.3%	12.3%	3.4%
Bulgaria	6.4%	21.9%	29.8%	32.9%	6.1%	2.9%
France	7.1%	19.5%	23.6%	32.0%	14.2%	3.6%
Germany	9.9%	21.4%	23.2%	30.6%	12.1%	2.8%
Hungary	13.1%	38.7%	18.9%	20.9%	5.0%	3.4%
Ireland	5.9%	18.8%	18.5%	42.2%	12.0%	2.7%
Latvia	4.9%	24.2%	25.0%	35.3%	7.8%	2.9%
Spain	4.8%	16.8%	21.9%	40.5%	13.4%	2.6%
The Netherlands	5.4%	22.9%	27.5%	31.3%	8.4%	4.5%
10 other countries	5.5%	19.8%	28.8%	33.2%	9.2%	3.5%
Total	7.0%	22.6%	24.2%	32.9%	10.0%	3.2%

Asked to assess their past behaviour, respondents in most countries self-critically admitted to being careless. Irish and Spanish respondents were most categorical that their (past) consumption of energy and resources has not been very considerate. These answers also demonstrate the potential for present and future energy savings. Hungarian participants are the only ones who strongly rejected the assumption that there was something wrong with their behaviour.

Figure 7.2: I have often consumed energy and resources that I could have easily done without (N=10,071)



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101022492.

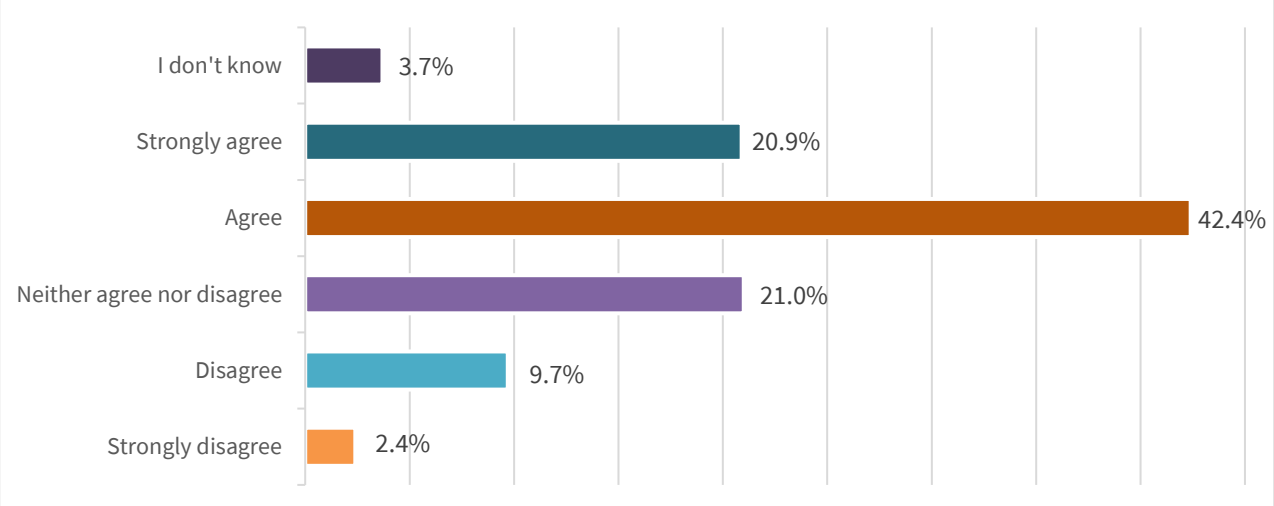
7.3 Without changes in policy, people will continue to consume as much energy as they have before

Table 7.3: Without changes in policy, people will continue to consume as much energy as they have before (per country)

Country	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	I don't know
Belgium	2.4%	9.0%	21.2%	40.8%	23.0%	3.6%
Bulgaria	2.6%	7.9%	20.2%	45.9%	21.3%	2.1%
France	2.3%	7.5%	22.7%	38.2%	26.2%	3.1%
Germany	3.9%	10.1%	19.6%	39.1%	22.9%	4.4%
Hungary	2.3%	14.7%	18.7%	44.7%	14.6%	5.1%
Ireland	2.4%	7.3%	16.1%	46.4%	24.5%	3.4%
Latvia	2.5%	11.5%	27.4%	41.2%	11.8%	5.6%
Spain	2.0%	8.3%	20.4%	42.4%	24.6%	2.3%
The Netherlands	1.3%	11.2%	24.1%	44.0%	15.5%	3.9%
10 other countries	2.0%	9.2%	19.6%	41.6%	24.1%	3.6%
Total	2.4%	9.7%	21.0%	42.4%	20.9%	3.7%

In their replies to this question, the respondents strongly underlined their expectations for a more efficient, clear and supportive policy framework. This question corresponds well with questions 13.1, 13.2 and 13.3, which show that the majority of respondents are not particularly satisfied with the political institutions on the EU, national and local levels, and expect them to do much more. This question also implies the expectation of a policy change as a prerequisite for a social change. Such opinions prevail in all countries, but are the strongest in Ireland, and a bit more cautious in Hungary, The Netherlands and Latvia.

Figure 7.3: Without changes in policy, people will continue to consume as much energy as they have before (N=10,071)



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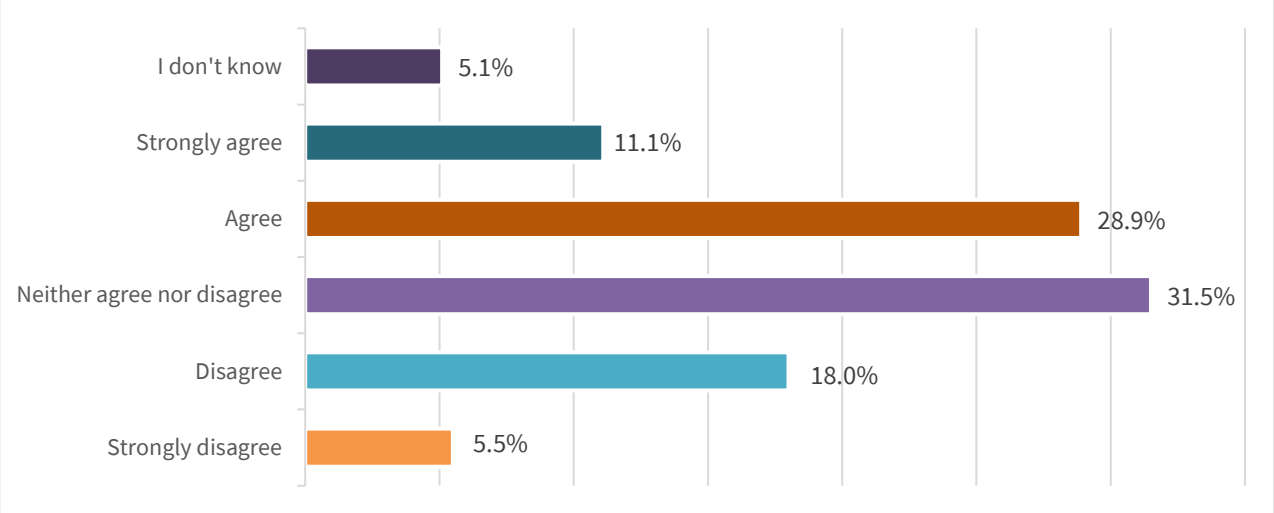
7.4 To achieve a successful energy transition, it is more important to reduce energy consumption than to focus on technological solutions for increasing efficiency

Table 7.4: To achieve a successful energy transition, it is more important to reduce energy consumption than to focus on technological solutions for increasing efficiency (per country)

Country	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	I don't know
Belgium	4.4%	15.2%	34.4%	27.3%	13.7%	5.1%
Bulgaria	8.5%	25.4%	34.1%	22.5%	7.0%	2.5%
France	5.1%	11.2%	32.5%	30.6%	16.9%	3.7%
Germany	6.3%	12.2%	33.5%	28.0%	13.1%	6.9%
Hungary	6.0%	23.8%	20.6%	32.6%	8.7%	8.2%
Ireland	3.6%	14.3%	29.3%	34.9%	13.2%	4.7%
Latvia	7.4%	26.9%	28.7%	25.2%	5.1%	6.9%
Spain	4.9%	16.6%	34.7%	29.3%	11.5%	3.0%
The Netherlands	4.5%	18.1%	35.2%	27.3%	9.2%	5.7%
10 other countries	3.8%	16.1%	32.3%	31.2%	12.5%	4.0%
Total	5.5%	18.0%	31.5%	28.9%	11.1%	5.1%

This question is a variation of question 7.1, but asked from a reverse perspective. It confirms the opinion of the respondents that technology can help, but it is not the sole or even the most important solution. Bulgarian and Latvian respondents again stand apart from the others, being the only ones where the group of those who rely on technologies is larger than the group of those who think that the personal effort is what matters most. French and Irish respondents are most categorical that reducing energy consumption is the most important precondition for a successful energy transition. Worth noting is an unusually high percentage of people who are indifferent to this question.

Figure 7.4: To achieve a successful energy transition, it is more important to reduce energy consumption than to focus on technological solutions for increasing efficiency (N=10,071)



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101022492.

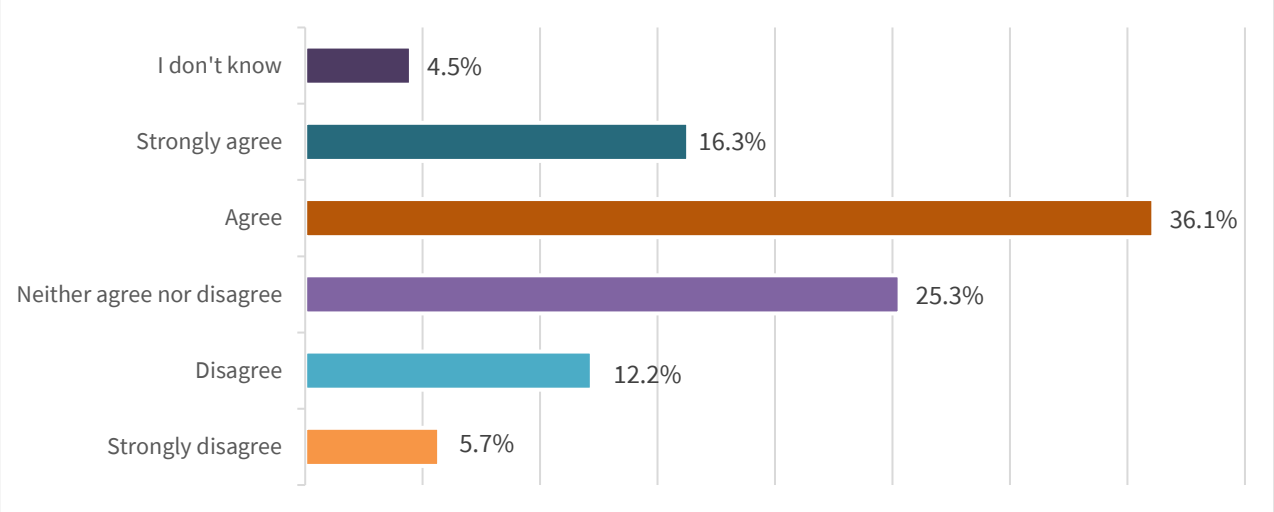
7.5 A successful energy transition requires from me to forego or strongly reduce certain forms of energy intensive consumption (e.g. flying)

Table 7.5: A successful energy transition requires from me to forego or strongly reduce certain forms of energy intensive consumption (per country)

Country	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	I don't know
Belgium	5.9%	10.3%	22.9%	36.5%	19.6%	4.7%
Bulgaria	7.1%	18.2%	32.4%	28.5%	9.9%	3.9%
France	5.0%	8.4%	23.1%	37.9%	22.4%	3.2%
Germany	7.4%	7.6%	18.8%	36.5%	25.6%	4.1%
Hungary	4.2%	10.7%	23.4%	42.1%	14.6%	5.1%
Ireland	4.8%	12.1%	25.1%	39.5%	13.2%	5.3%
Latvia	8.6%	23.4%	30.8%	23.5%	6.1%	7.7%
Spain	5.7%	12.4%	24.4%	38.3%	16.6%	2.6%
The Netherlands	5.1%	8.8%	25.2%	38.0%	18.5%	4.4%
10 other countries	3.4%	9.7%	26.3%	40.1%	16.9%	3.6%
Total	5.7%	12.2%	25.3%	36.1%	16.3%	4.5%

This question is an addition to the previous one, asking for a direct engagement and (a possible) change of lifestyle from respondents. A much stronger opposition to this suggestion compared to the other countries has been noted in Bulgaria and Latvia. This concurs with their previously expressed (over)reliance on the technological solutions. The majority of survey participants from other countries agree that certain changes in the way they live are imminent. The determination to abandon or reduce energy intensive behaviour is particularly strong in France and Germany.

Figure 7.5: A successful energy transition requires from me to forego or strongly reduce certain forms of energy intensive consumption (N=10,071)



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101022492.

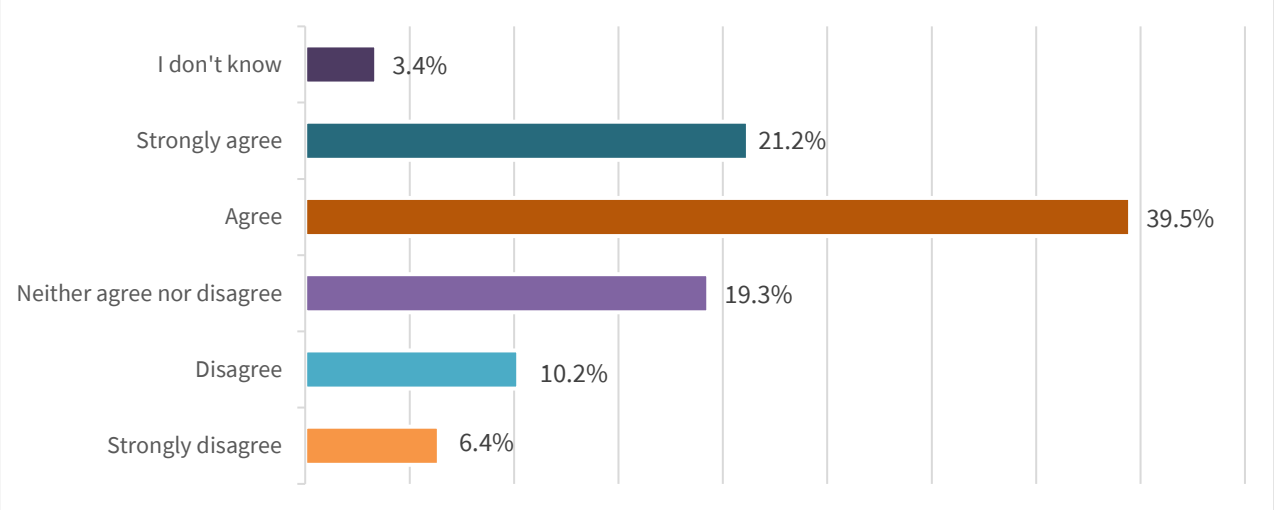
7.6 A successful energy transition requires everyone to make sacrifices regardless of their income

Table 7.6: A successful energy transition requires everyone to make sacrifices regardless of their income (per country)

Country	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	I don't know
Belgium	6.7%	8.4%	20.1%	37.3%	24.5%	3.1%
Bulgaria	8.8%	11.4%	19.5%	41.5%	15.6%	3.2%
France	5.2%	7.5%	16.5%	37.6%	30.5%	2.7%
Germany	8.8%	11.0%	16.4%	35.5%	24.1%	4.2%
Hungary	4.2%	9.0%	15.2%	47.2%	20.9%	3.5%
Ireland	5.5%	10.1%	17.6%	43.4%	20.3%	3.0%
Latvia	10.2%	19.7%	29.8%	27.2%	7.3%	5.9%
Spain	5.6%	8.1%	16.5%	41.6%	25.9%	2.3%
The Netherlands	5.4%	7.1%	20.6%	44.1%	20.6%	2.2%
10 other countries	3.6%	9.9%	20.6%	39.7%	22.2%	3.9%
Total	6.4%	10.2%	19.3%	39.5%	21.2%	3.4%

Demonstrating readiness to compromise or reduce their personal comfort, the respondents were then asked whether they think that all members of the society, including its more vulnerable members, should make a sacrifice. The clearest opposition to the idea that the burden of energy transition should be distributed among all members of the society was expressed by the Latvian respondents, but the idea was not received well also with one in every five Bulgarians and Germans. In the case of Latvia and Bulgaria, this position could be explained by relatively low incomes. In France, Hungary, Spain and The Netherlands, the group of those that believe everyone should make a sacrifice is five times larger than the group of people who disagree.

Figure 7.6: A successful energy transition requires everyone to make sacrifices regardless of their income (N=10,071)



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8. How do respondents see their role in the energy system in 2030?

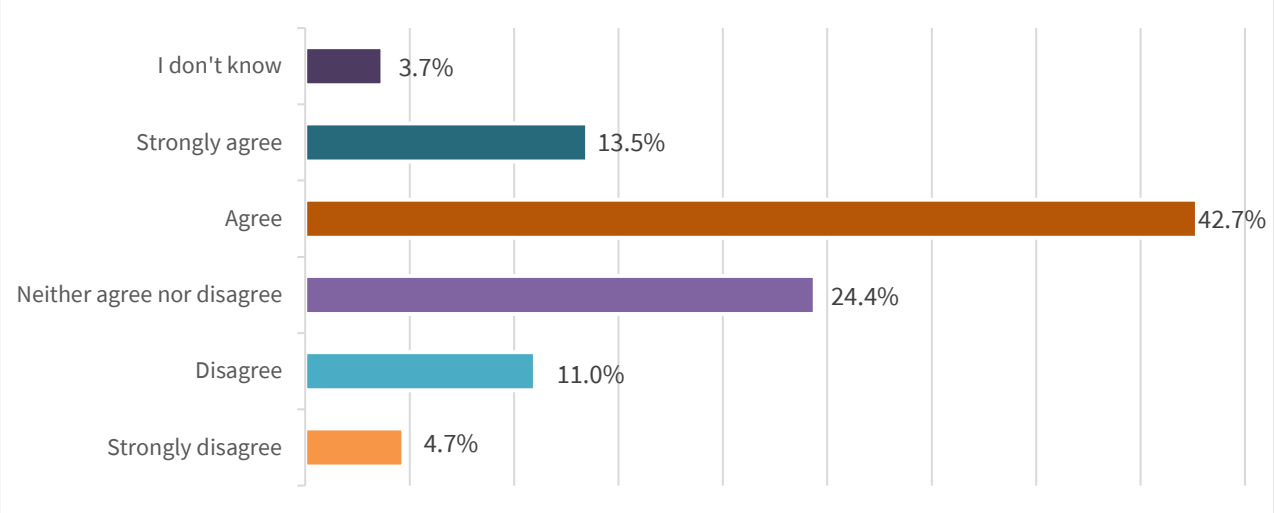
8.1. I can see myself substantially changing my energy consumption practices

Table 8.1: I can see myself substantially changing my energy consumption practices (per country)

Country	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	I don't know
Belgium	5.4%	12.0%	27.4%	39.4%	13.3%	2.6%
Bulgaria	3.7%	11.6%	32.8%	39.8%	8.5%	3.7%
France	5.7%	11.2%	25.1%	40.1%	15.6%	2.3%
Germany	7.3%	11.7%	21.8%	39.7%	16.1%	3.4%
Hungary	4.4%	11.2%	16.6%	48.8%	13.8%	5.3%
Ireland	3.6%	9.9%	18.7%	46.9%	17.4%	3.5%
Latvia	6.3%	18.8%	32.7%	31.5%	4.4%	6.3%
Spain	4.4%	5.6%	20.0%	48.7%	19.4%	1.9%
The Netherlands	3.4%	10.0%	26.3%	44.5%	12.4%	3.4%
10 other countries	2.9%	8.3%	22.4%	47.5%	14.6%	4.3%
Total	4.7%	11.0%	24.4%	42.7%	13.5%	3.7%

Overall, 56% of respondents believe that by 2030, they will substantially change the way they consume energy. As shown also by a number of previous questions, the Spanish respondents are the most enthusiastic ones, while the Latvian ones are not particularly convinced that there is a pressing need to change.

Figure 8.1: I can see myself substantially changing my energy consumption practices (N=10,071)



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101022492.

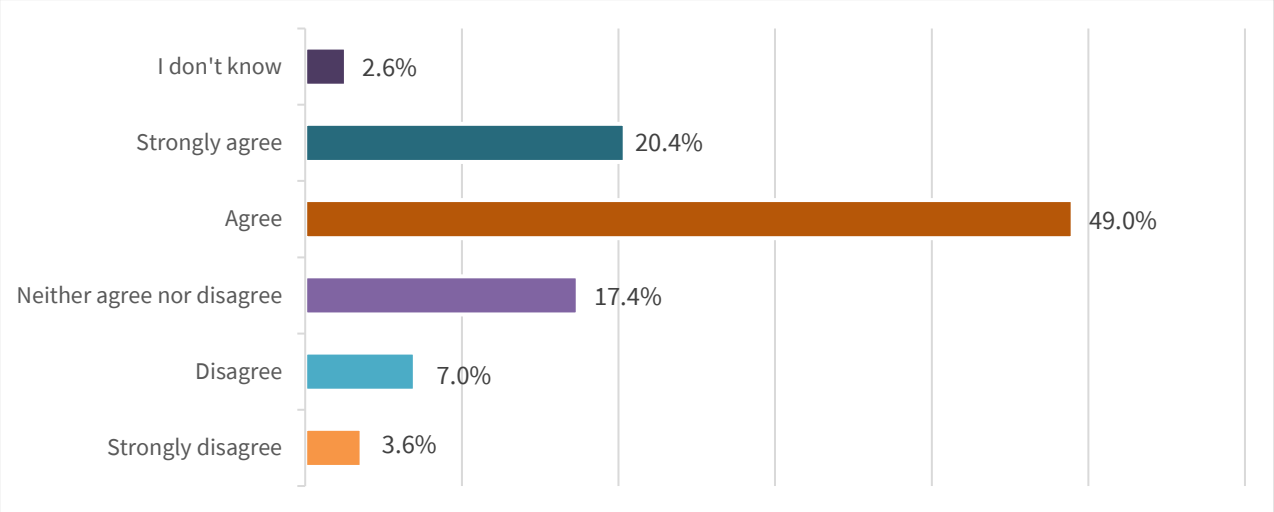
8.2 I can see myself substituting my household equipment with energy efficient and/or smart devices

Table 8.2: I can see myself substituting my household equipment with energy efficient and/or smart devices (per country)

Country	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	I don't know
Belgium	4.9%	8.1%	18.0%	45.7%	20.7%	2.7%
Bulgaria	2.6%	7.4%	18.5%	53.6%	15.8%	2.1%
France	5.0%	6.8%	18.9%	43.4%	23.6%	2.3%
Germany	5.0%	5.2%	13.6%	45.7%	26.9%	3.6%
Hungary	2.8%	6.3%	9.5%	54.2%	24.6%	2.6%
Ireland	3.2%	6.6%	16.1%	48.3%	23.2%	2.6%
Latvia	3.4%	9.1%	23.5%	50.0%	10.6%	3.4%
Spain	3.9%	5.8%	19.7%	47.0%	21.2%	2.4%
The Netherlands	3.4%	7.3%	19.4%	51.9%	16.6%	1.4%
10 other countries	2.2%	7.3%	17.0%	49.7%	20.7%	3.2%
Total	3.6%	7.0%	17.4%	49.0%	20.4%	2.6%

Asked a more concrete question about a particular activity, which also entails a certain financial cost, respondents were even more categorical. The rejection of this suggestion was below 10% in most countries, and just slightly higher in Belgium, France and Latvia. Hungarians are considerably above the average score in their determination to upgrade their household appliances in the coming years.

Figure 8.2: I can see myself substituting my household equipment with energy efficient and/or smart devices (N=10,071)



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101022492.

8.3 I can see myself participating in public debates and consultations, deliberative processes, and referendums focused on energy

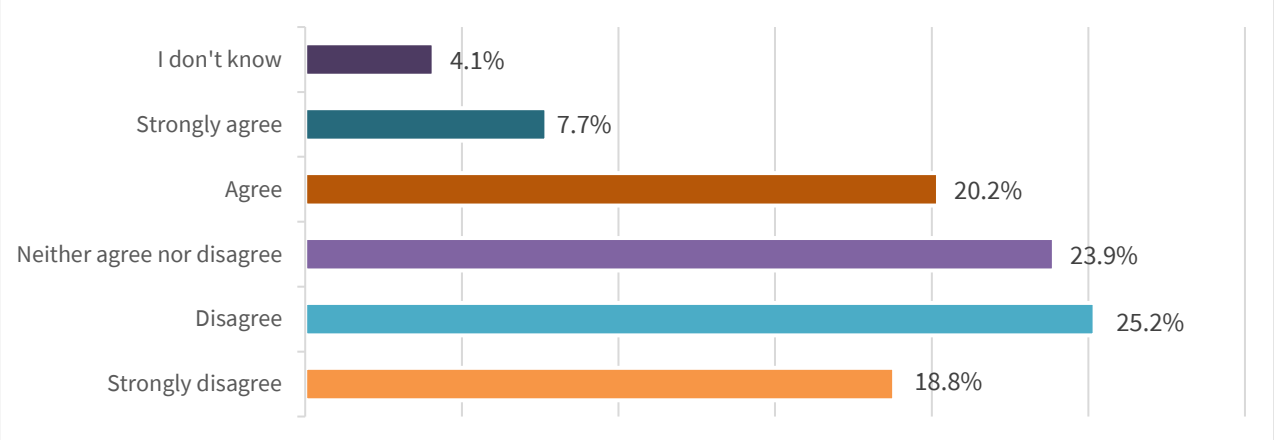
Table 8.3: I can see myself participating in public debates and consultations, deliberative processes, and referendums focused on energy (per country)

Country	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	I don't know
Belgium	21.8%	25.6%	22.8%	16.7%	9.1%	4.0%
Bulgaria	9.1%	19.0%	31.0%	29.3%	6.2%	5.3%
France	14.9%	18.6%	26.4%	25.9%	11.4%	2.8%
Germany	25.9%	23.1%	21.2%	18.5%	7.7%	3.6%
Hungary	16.9%	24.5%	20.7%	22.9%	8.9%	6.1%
Ireland	15.7%	26.9%	26.9%	19.0%	7.6%	3.9%
Latvia	16.5%	36.2%	25.7%	12.9%	3.1%	5.6%
Spain	19.3%	24.6%	24.6%	20.3%	9.0%	2.2%
The Netherlands	34.5%	32.8%	15.0%	10.2%	4.7%	2.8%
10 other countries	13.8%	20.8%	25.0%	26.2%	9.6%	4.5%
Total	18.8%	25.2%	23.9%	20.2%	7.7%	4.1%

Questions 3.7 (Social media activity on energy-related issues) and 3.8 (Involvement in a social movement) inquired about the participation of respondents in social and political processes regarding the energy transition. The responses showed that only a small minority of survey participants are engaged in such activities, while majority (55-60%) are determined to stay away from similar undertakings.

The answers to this question confirm that most respondents (44%) are not interested in taking a public stand on energy issues, or do not believe that they would have the option to do it. However, 28% of respondents expressed openness to this possibility. The disagreement with this statement was strongest among the Dutch respondents, but Latvians, Germans and Belgians also indicated that this was not their cup of tea. The largest share of those who do believe they will be engaging in public energy debates is found among Bulgarian and French survey participants.

Figure 8.3: I can see myself participating in public debates and consultations, deliberative processes, and referendums focused on energy (N=10,071)



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101022492.

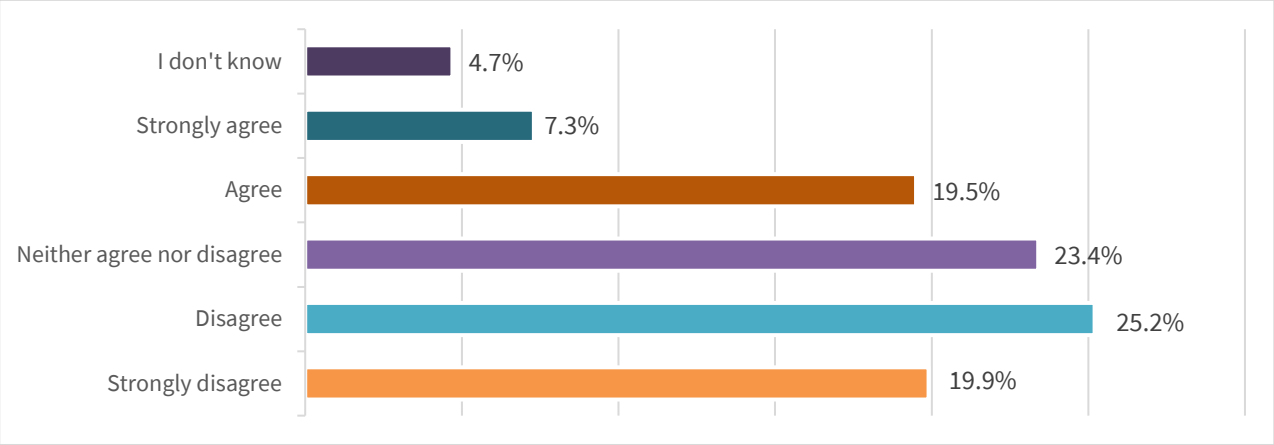
8.4 I can see myself joining a citizen-based organisation or other collective form of citizen engagement

Table 8.4: I can see myself joining a citizen-based organisation or other collective form of citizen engagement (per country)

Country	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	I don't know
Belgium	23.6%	27.0%	20.4%	16.6%	7.4%	5.0%
Bulgaria	10.3%	17.9%	32.3%	27.8%	5.9%	5.7%
France	16.7%	23.8%	24.9%	20.7%	10.4%	3.5%
Germany	29.1%	24.2%	18.9%	15.9%	7.3%	4.6%
Hungary	20.3%	26.5%	20.6%	20.2%	5.3%	7.0%
Ireland	17.4%	26.9%	23.8%	18.6%	8.9%	4.4%
Latvia	18.8%	36.3%	23.6%	11.2%	3.9%	6.2%
Spain	14.9%	18.8%	25.6%	26.7%	10.9%	3.1%
The Netherlands	32.1%	29.6%	17.0%	14.1%	4.7%	2.5%
10 other countries	15.6%	21.2%	27.0%	23.4%	8.0%	4.8%
Total	19.9%	25.2%	23.4%	19.5%	7.3%	4.7%

This question is an upgrade of the previous one, as it asks the respondents to go a step further and join an organisation, community or collective. As already reminded, a very small share of respondents is currently active in a social movement or is a member of an energy community (about 6% in both cases), and about half of respondents are determined not to engage in such organisations anytime in the future. The answers above confirm that joining a citizen-based organisation or other collective form of citizen engagement in the energy transition is not something that appeals to most citizens, but nevertheless a bit over a quarter of them are open to such a possibility. This is particularly valid for respondents from Spain and Bulgaria, while those from Latvia and The Netherlands are most sceptical about the benefits of such endeavours.

Figure 8.4: I can see myself joining a citizen-based organisation or other collective form of citizen engagement (N=10,071)



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101022492.

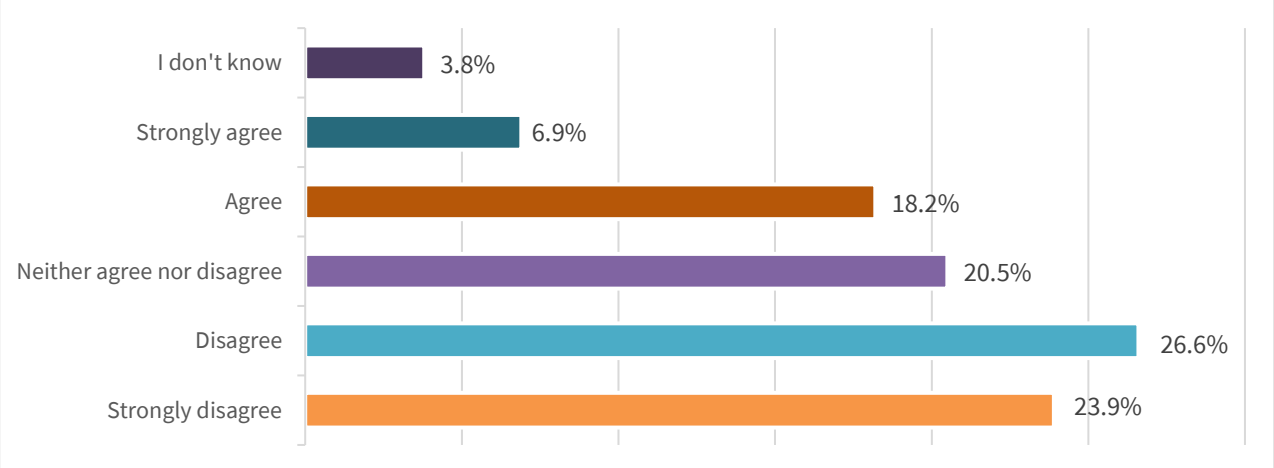
8.5 I can see myself participating in social movements such as demonstrations and protests linked to various aspects of the energy/climate transition

Table 8.5: I can see myself participating in social movements such as demonstrations and protests linked to various aspects of the energy/climate transition (per country)

Country	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	I don't know
Belgium	28.2%	28.7%	18.1%	16.8%	5.8%	2.3%
Bulgaria	11.9%	21.9%	30.2%	24.9%	5.9%	5.2%
France	20.5%	24.5%	21.3%	21.1%	9.6%	3.0%
Germany	34.0%	23.5%	15.3%	16.2%	6.9%	4.1%
Hungary	23.4%	27.3%	17.3%	18.8%	6.7%	6.4%
Ireland	22.7%	28.4%	19.8%	17.2%	7.7%	4.2%
Latvia	20.7%	37.8%	23.1%	9.6%	2.9%	6.0%
Spain	17.0%	19.6%	25.1%	25.7%	10.3%	2.3%
The Netherlands	41.2%	30.4%	11.7%	10.9%	4.3%	1.5%
10 other countries	19.7%	24.3%	23.5%	21.2%	8.4%	3.0%
Total	23.9%	26.6%	20.5%	18.2%	6.9%	3.8%

Participation in protests (question 3.9) was at the bottom of energy-related activities list, with only 5% of respondents saying that they are participating in protests, and at the top of the list of activities participants were convinced never to engage in (65%). The answers to this question confirm that most survey participants are not particularly fond of participating in protests themselves, although about a quarter of them do believe it is possible for them to partake in protests and demonstrations in the coming years. The Dutch respondents confirm that for them protesting is almost unacceptable, and Latvian, German and Belgian participants also clearly expressed their lack of interest in such engagement. Spanish, French and Bulgarian respondents are most likely to be seen on the streets to voice their demands in the near future.

Figure 8.5: I can see myself participating in social movements such as demonstrations and protests linked to various aspects of the energy/climate transition (N=10,071)



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101022492.

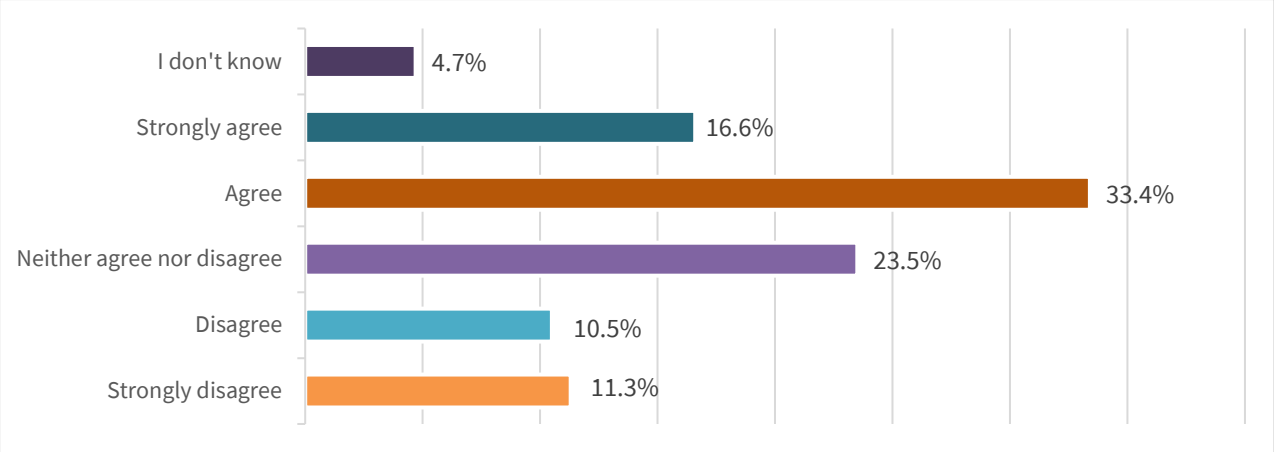
8.6 I can see myself voting for a political party or candidate that puts the energy transition in centre

Table 8.6: I can see myself voting for a political party or candidate that puts the energy transition in centre (per country)

Country	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	I don't know
Belgium	14.7%	11.2%	23.6%	28.8%	16.6%	5.0%
Bulgaria	9.2%	8.2%	25.0%	41.8%	10.9%	4.9%
France	10.9%	10.1%	24.8%	31.3%	18.2%	4.7%
Germany	19.8%	12.0%	20.3%	26.2%	16.3%	5.4%
Hungary	8.9%	8.5%	17.9%	40.9%	18.5%	5.4%
Ireland	9.9%	10.1%	21.9%	35.1%	19.3%	3.7%
Latvia	11.1%	14.7%	31.4%	29.8%	5.9%	7.1%
Spain	8.1%	7.1%	22.6%	37.4%	21.6%	3.2%
The Netherlands	13.7%	12.5%	26.5%	26.6%	16.7%	4.0%
10 other countries	6.7%	10.5%	21.3%	35.9%	22.0%	3.6%
Total	11.3%	10.5%	23.5%	33.4%	16.6%	4.7%

Political options that are promising to work towards advancement of the energy transition might be the preferred choice for exactly half of all respondents. Two countries, where energy issues seem to be more important than in others are Hungary and Spain, while in Germany other topics appear to be more decisive when deciding who to vote for. One possible explanation for this outcome in Germany might be that the energy transition is already rather advanced in this country, and the process is supported (to a different degree) by most of the political parties.

Figure 8.6: I can see myself voting for a political party or candidate that puts the energy transition in centre (N=10,071)



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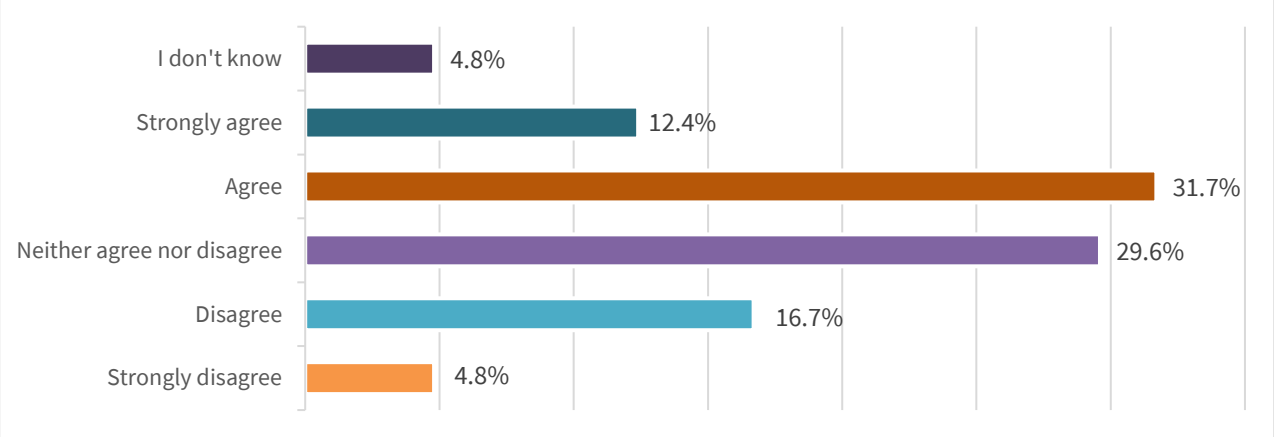
8.7 I can imagine that my role in the energy system will not significantly change

Table 8.7: I can imagine that my role in the energy system will not significantly change (per country)

Country	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	I don't know
Belgium	6.0%	12.6%	30.8%	29.8%	16.0%	4.7%
Bulgaria	3.3%	12.5%	32.2%	37.0%	10.2%	4.9%
France	5.7%	17.3%	30.4%	28.6%	13.5%	4.5%
Germany	7.8%	19.3%	27.6%	27.1%	13.1%	5.1%
Hungary	3.6%	17.2%	21.9%	37.3%	13.7%	6.3%
Ireland	3.7%	19.8%	28.8%	31.9%	10.3%	5.4%
Latvia	2.3%	10.4%	31.9%	36.9%	11.8%	6.6%
Spain	5.5%	21.2%	32.4%	27.9%	10.5%	2.5%
The Netherlands	4.7%	16.1%	30.8%	33.2%	11.7%	3.5%
10 other countries	5.4%	20.3%	29.7%	27.4%	12.6%	4.5%
Total	4.8%	16.7%	29.6%	31.7%	12.4%	4.8%

The answers to this question in a way confirm the responses provided in many of the previous questions – that the majority of respondents are content with making certain steps in their private lives towards becoming more energy efficient and responsible, but have no plans to become more active in the public sphere. Only 21.5% of all participants believe that their role in the energy-related processes might change in the coming years. This share is a bit higher in Germany, Spain, France and Ireland, and lowest in Latvia and Bulgaria.

Figure 8.7: I can imagine that my role in the energy system will not significantly change (N=10,071)



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101022492.

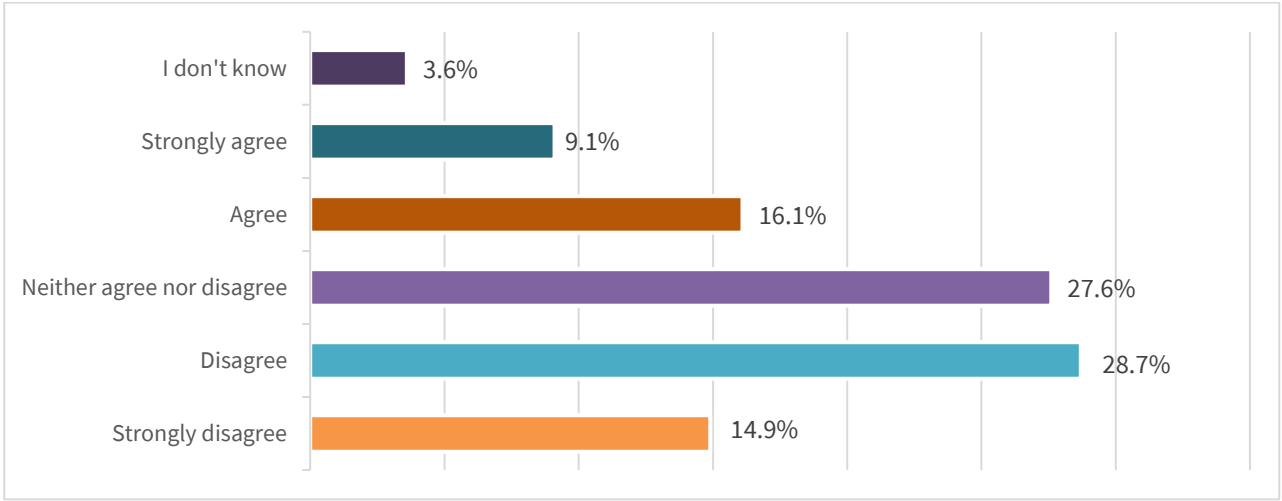
8.8 I have no interest in actively participating in the energy transition

Table 8.8: I have no interest in actively participating in the energy transition (per country)

Country	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	I don't know
Belgium	15.6%	26.4%	27.2%	15.7%	11.0%	4.1%
Bulgaria	10.3%	31.4%	34.3%	14.0%	6.2%	3.9%
France	18.1%	25.9%	27.1%	15.1%	11.5%	2.3%
Germany	22.5%	23.6%	23.7%	16.5%	11.0%	2.7%
Hungary	10.9%	33.4%	25.6%	16.4%	7.6%	6.1%
Ireland	15.4%	34.2%	26.0%	15.0%	6.7%	2.7%
Latvia	5.3%	22.2%	39.7%	17.9%	8.6%	6.4%
Spain	21.8%	31.6%	22.9%	14.3%	7.3%	2.1%
The Netherlands	11.5%	27.2%	26.1%	17.9%	14.8%	2.5%
10 other countries	17.7%	30.9%	23.7%	17.8%	6.7%	3.4%
Total	14.9%	28.7%	27.6%	16.1%	9.1%	3.6%

With this question, respondents confirmed their interest and intention to be more than just passive consumers and observers in the energy transition. In most countries, disagreement with the assumption that respondents have no interest in participating in the energy transition is between 42 and 46%, except in Ireland and Spain, where it is higher, and in Latvia, where it is considerably lower. At almost 33%, The Netherlands has the highest share of people who are determined to stay out of these processes.

Figure 8.8: I have no interest in actively participating in the energy transition (N=10,071)



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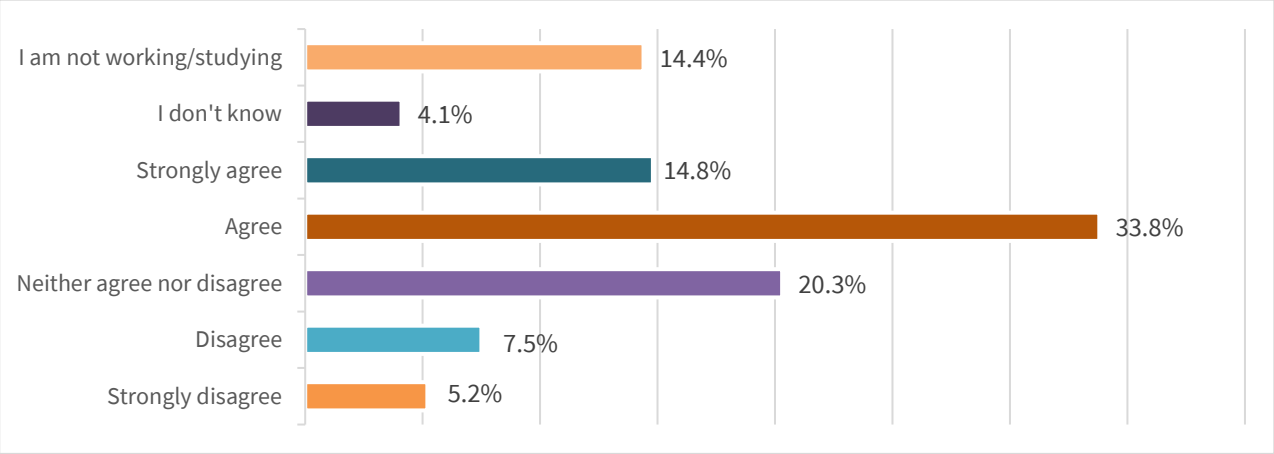
8.9 I can see myself contributing to the change of energy consumption practices at my work/school/university

Table 8.9: I can see myself contributing to the change of energy consumption practices at my work/school/university (per country)

Country	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	I don't know	I am not working / studying
Belgium	6.5%	6.6%	18.5%	29.4%	17.0%	2.3%	19.7%
Bulgaria	3.3%	7.3%	32.4%	38.0%	9.5%	4.8%	4.8%
France	4.9%	5.7%	18.2%	34.6%	21.5%	2.5%	12.6%
Germany	8.2%	7.4%	17.6%	27.9%	14.8%	2.6%	21.5%
Hungary	4.0%	5.5%	18.2%	40.1%	12.0%	7.1%	13.2%
Ireland	3.8%	8.0%	17.5%	37.5%	15.7%	3.3%	14.1%
Latvia	5.7%	12.4%	27.8%	31.8%	5.9%	8.0%	8.5%
Spain	4.6%	5.6%	16.1%	36.9%	22.9%	3.0%	10.9%
The Netherlands	6.8%	9.4%	17.9%	26.0%	11.1%	2.2%	26.6%
10 other countries	4.5%	6.7%	18.5%	35.6%	17.6%	4.7%	12.3%
Total	5.2%	7.5%	20.3%	33.8%	14.8%	4.1%	14.4%

Somewhere between the changes in one's own household and active involvement in public and social processes are the actions individuals can undertake in places where they work and study. The responses show that almost half of the respondents are quite comfortable with this role and are very positive about their ability to participate or even influence the energy consumption practices in this area of their lives. This determination is most strongly expressed in France, Hungary and Spain, while Latvians and the Dutch are – as in many other questions – most restrained. The reasons for their reservations might be the perception that they have no influence over the energy consumption practices at their work/school/university, in contrast to their ability to change energy consumption in their personal life.

Figure 8.9: I can see myself contributing to the change of energy consumption practices at my work/school/university (N=10,071)



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Part 3: General views about the energy system and the underlying values

In the third part of the survey, respondents were asked a wide range of questions that aimed to establish how they form their views about energy-related topics, and what are their opinions and expectations about the energy transition in Europe.

9. Sources of information about the energy-related topics

Respondents were instructed to select all sources, from which they obtain information on topics and issues connected with energy. The following option were given:

- Family or friends
- Web pages of the EU institutions (including documents available on these websites)
- Web pages of the national institutions (including documents available on these websites)
- Online social media
- Conventional media (TV, radio, newspapers, etc.), including online appearance
- Scholarly articles / journals
- Books
- Industry and business websites
- Non-governmental and civic organisations
- Blogs, forums, podcasts

Table 9.1: Number of sources of information used by the respondents

Country	One	Two	Three	Four	Five	Six	Seven	Eight	Nine	Ten
Belgium	100.0%	70.4%	41.9%	21.2%	10.3%	4.0%	1.5%	1.0%	0.5%	0.1%
Bulgaria	100.0%	82.1%	61.2%	35.2%	20.3%	11.0%	6.0%	2.8%	1.2%	0.6%
France	100.0%	64.8%	40.9%	20.6%	10.3%	5.4%	2.5%	1.1%	0.5%	0.4%
Germany	100.0%	73.6%	48.7%	27.5%	14.5%	7.0%	2.8%	1.4%	1.0%	0.6%
Hungary	100.0%	80.3%	57.1%	29.9%	15.0%	6.8%	3.1%	1.1%	0.5%	0.2%
Ireland	100.0%	77.9%	57.0%	34.1%	17.3%	8.8%	3.7%	1.9%	1.1%	0.5%
Latvia	100.0%	84.2%	61.4%	34.7%	18.5%	8.4%	4.9%	2.2%	0.6%	0.5%
Spain	100.0%	79.1%	55.6%	31.5%	16.5%	8.4%	3.9%	1.5%	0.7%	0.2%
The Netherlands	100.0%	66.7%	40.7%	19.8%	8.7%	3.2%	1.4%	0.3%	0.2%	0.0%
10 other countries	100.0%	80.5%	58.0%	34.2%	20.5%	12.5%	5.6%	2.7%	1.3%	0.7%
Total	100.0%	76.0%	52.3%	28.9%	15.2%	7.6%	3.5%	1.6%	0.8%	0.4%

As can be seen from the table, most respondents obtain information from one to three different types of information sources. A very small minority is obtaining information about energy topics from more than

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six different information providers.

The figure below shows that respondents from Bulgaria, Latvia and Ireland are slightly more likely to diversify the means from which they obtain information, while Belgians, French and Dutch appear to be somewhat less interested in inspecting a variety of sources.

Figure 9.1: Average number of sources of information used by the respondents

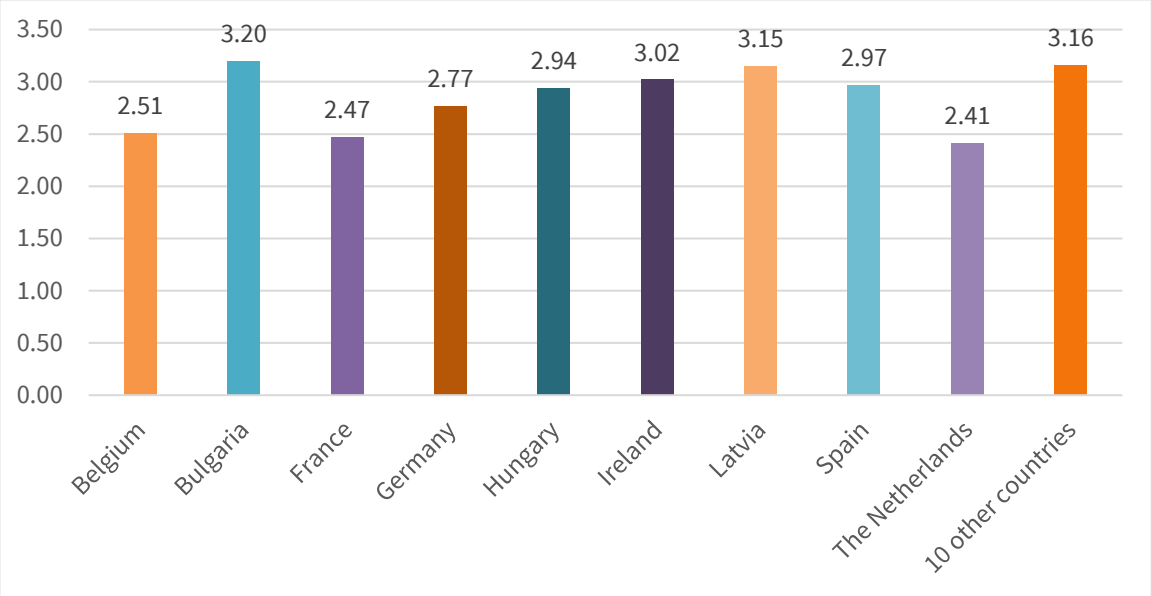

Table 9.2: Type of sources of information used by the respondents (per country)

	Belgium	Bulgaria	France	Germany	Hungary	Ireland	Latvia	Spain	Nether-lands	10 other countries
Family or friends	**44.3%**	**44.3%**	**49.3%**	**48.8%**	**49.8%**	**47.1%**	**49.0%**	**44.9%**	**41.3%**	**44.2%**
Web pages of EU institutions	21.9%	24.7%	23.9%	16.0%	18.0%	26.0%	26.6%	25.4%	13.4%	25.2%
Web pages of national institutions	26.7%	24.7%	**29.8%**	20.8%	18.3%	29.1%	24.7%	25.0%	23.8%	31.1%
Online social media	**33.5%**	**64.8%**	27.4%	34.4%	**61.2%**	**48.8%**	**65.2%**	**37.4%**	**29.5%**	**48.7%**
Conventional media	**64.1%**	**55.7%**	**53.8%**	**63.1%**	**58.5%**	**64.0%**	**63.0%**	**63.9%**	**67.2%**	**64.6%**
Scholarly articles / journals	18.4%	29.3%	10.8%	**34.9%**	40.2%	13.8%	26.7%	25.5%	25.6%	22.1%
Books	7.9%	10.2%	9.9%	11.7%	6.9%	13.1%	8.0%	11.6%	6.0%	15.3%
Industry and business websites	9.4%	24.9%	7.9%	13.8%	10.3%	18.4%	21.6%	22.1%	8.0%	20.2%
Non-governmental and civic organisations	15.4%	14.8%	19.8%	20.1%	5.6%	22.6%	9.6%	24.6%	19.2%	24.5%
Blogs, forums, podcasts	9.4%	27.2%	13.9%	13.5%	25.2%	19.4%	21.2%	17.0%	7.0%	20.1%

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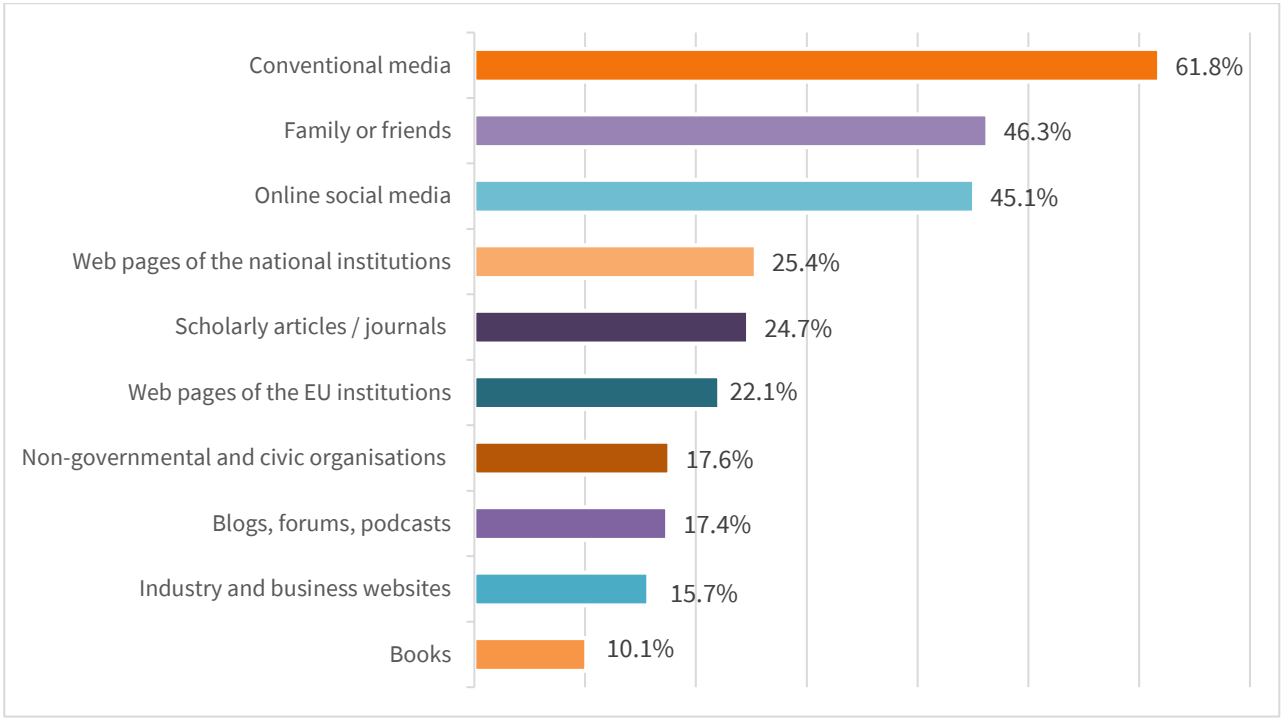
Conventional media, family or friends, and online social media are the three most popular sources from which respondents get informed about what they want to know about energy. Traditional media are still the preferred resource for most people, with the exception of Bulgarian, who have a pronounced preference, and Hungarians and Latvians, who have a slight preference for online social media. Online social media are the most controversial source of information – used by about two thirds of Bulgarians, Hungarians and Latvians, but by only one third or less of respondents in Belgium, France, Germany and The Netherlands. Consulting with friends and family members is equally popular in all countries and practiced by just under half of respondents.

Information provided by different national institutions and published on their web pages is followed by about one quarter of respondents – particularly in France and Ireland, and a bit less often in Germany and Hungary. Germans and Hungarians, along with the Dutch, are also not particularly interested in the information provided on the websites of the EU bodies. Interestingly, the Dutch respondents are almost twice more likely to look for information on the web pages of their national institutions than visiting the EU related websites.

The interest in scholarly articles and journals varies considerably across countries – from only 10.8% in France to impressive 40.2% in Hungary.

Non-governmental and civic organisations, various online sources such as blogs, forums and podcasts, industry and business websites, and books are the least used sources of information on energy-related topics. There are some exceptions. About a quarter of Bulgarians and Hungarians follow blogs and forums. The knowledge shared by NGOs and CSOs is well received in Spain, Ireland and Germany, and practically ignored in Hungary and Latvia. Industry and business websites have the largest share of followers in Bulgaria, Latvia and Spain, and a very small one in France and The Netherlands. Books are not particularly popular in any country.

Figure 9.2: Type of sources of information used by the respondents (N=10,071)



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10. Sources of information perceived by respondents to be most credible

Table 10.1: Credibility of sources of information on energy-related issues as seen by the respondents (per country and per type of source)

	Belgium	Bulgaria	France	Germany	Hungary	Ireland	Latvia	Spain	Nether-lands	10 other countries
Family or friends	33.9%	28.9%	**38.2%**	**38.4%**	31.5%	32.6%	31.4%	29.9%	33.1%	33.7%
Web pages of EU institutions	**44.4%**	**42.6%**	37.7%	30.6%	**40.7%**	**43.1%**	32.4%	**50.4%**	32.9%	**38.5%**
Web pages of national institutions	**45.4%**	**42.5%**	**48.3%**	37.5%	35.1%	**44.5%**	**45.5%**	**40.9%**	**45.8%**	**43.0%**
Online social media	21.9%	37.7%	23.9%	23.3%	34.2%	28.7%	35.1%	21.8%	17.0%	30.7%
Conventional media	**54.1%**	40.4%	**50.8%**	**51.6%**	**40.1%**	**55.4%**	**52.9%**	**45.3%**	**60.7%**	**50.2%**
Scholarly articles / journals	42.1%	**42.2%**	30.3%	**57.0%**	**63.5%**	26.5%	**40.2%**	33.8%	**58.0%**	29.5%
Books	11.8%	9.2%	15.6%	12.6%	10.1%	11.5%	7.4%	12.3%	8.5%	13.6%
Industry and business websites	11.4%	26.4%	10.7%	12.8%	16.6%	19.2%	32.5%	23.5%	11.6%	21.5%
Non-governmental and civic organisations	26.7%	14.5%	34.6%	26.4%	12.0%	26.2%	9.4%	30.4%	26.8%	29.8%
Blogs, forums, podcasts	8.4%	15.6%	9.9%	9.8%	16.2%	12.3%	13.1%	11.7%	5.6%	9.6%

Asked to select those sources of information they consider to be most credible on energy-related topics, the respondents again placed the conventional media on top of the list. On average, the trust in the traditional media is about 50%, but drops to just 40% in Bulgaria and Hungary, and reaches 60% in The Netherlands.

Although actually used by only about 25% of respondents, web pages of national institutions and scholarly journals are trusted by slightly more than 42% of survey participants, making them the second and third most credible sources of information. The credibility score of the EU web pages is only marginally lower. The confidence that the government websites provide credible information is similar in most countries, except in Germany and Hungary where it is about 10% lower. The relevant EU web pages are perceived as credible by one half of Spanish respondents, but by less than one third of those from Germany, Latvia and The Netherlands. The assessment of credibility of scholarly journals varies considerably – from about 60% in Germany, Hungary and The Netherlands, to only about 30% in France, Ireland and Spain.

Information obtained from family and friends, the second most popular source of information, is not considered to be particularly credible (with minor exceptions of France and Germany). A similar conclusion can be made about the third most used source – online social media. It should be noted that the overall score of 27.4% would be considerably lower if respondents from Bulgaria, Hungary and Latvia had not shown a relatively high confidence in their credibility. Curiously, the same three countries are "responsible" for the low credibility score of non-governmental and civic organisations. In comparison, only 9.4% of Latvians believe that NGOs are credible, against 34.6% of French respondents.

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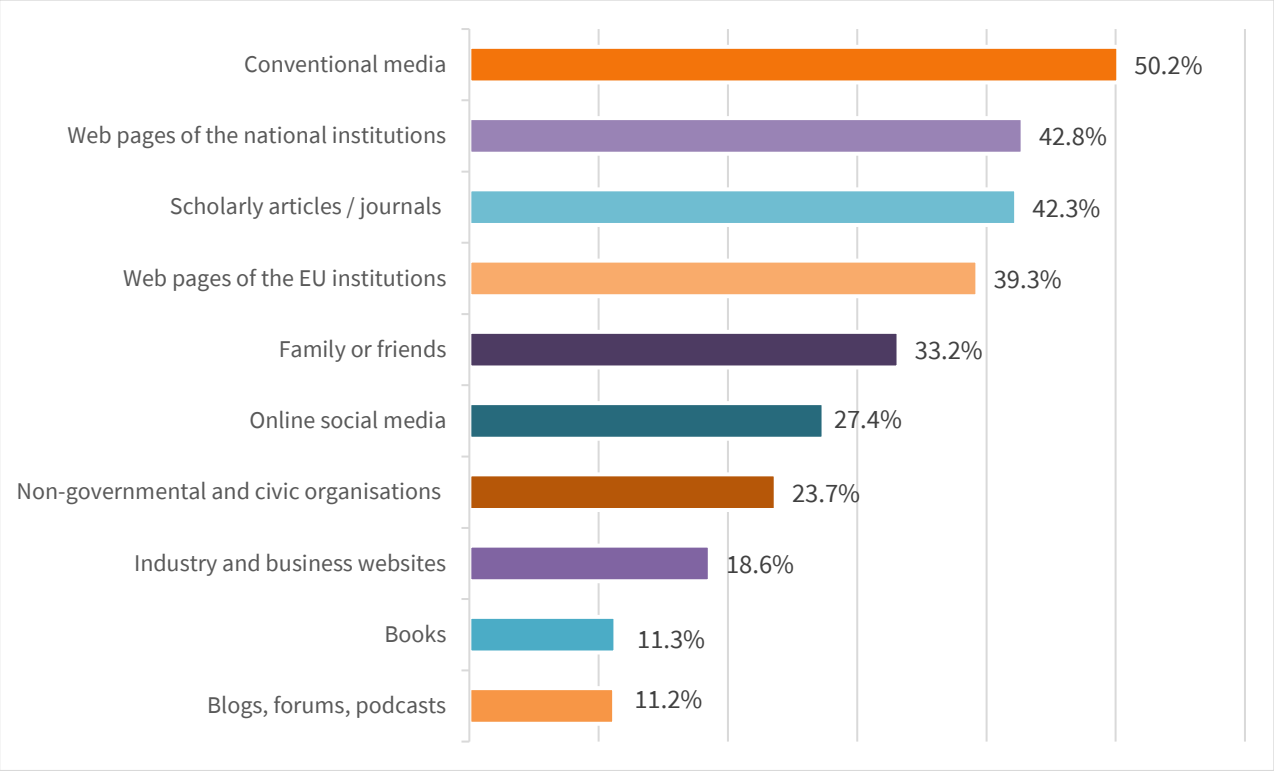
Figure 10.1: Credibility of sources of information on energy-related issues as seen by the respondents (N=10,071)



11. Expectations about the future energy prices

Table 11.1: What are your expectations about future energy prices? (per country)

Country	I expect that in 2030 I will pay more for energy than I do today	I expect that in 2030 I will pay less for energy than I do today	I expect that in 2030 I will pay for energy about the same as I do today	I do not know
Belgium	58.8%	15.4%	13.4%	12.5%
Bulgaria	64.4%	18.3%	10.4%	6.9%
France	64.1%	13.5%	9.5%	12.9%
Germany	58.5%	15.5%	13.0%	13.0%
Hungary	55.4%	19.7%	14.7%	10.2%
Ireland	54.4%	24.6%	9.9%	11.1%
Latvia	54.9%	20.4%	13.9%	10.7%
Spain	51.0%	22.1%	11.8%	15.1%
The Netherlands	60.8%	13.0%	14.8%	11.4%
10 other countries	46.3%	28.7%	14.8%	10.3%
Total	56.8%	19.1%	12.6%	11.4%

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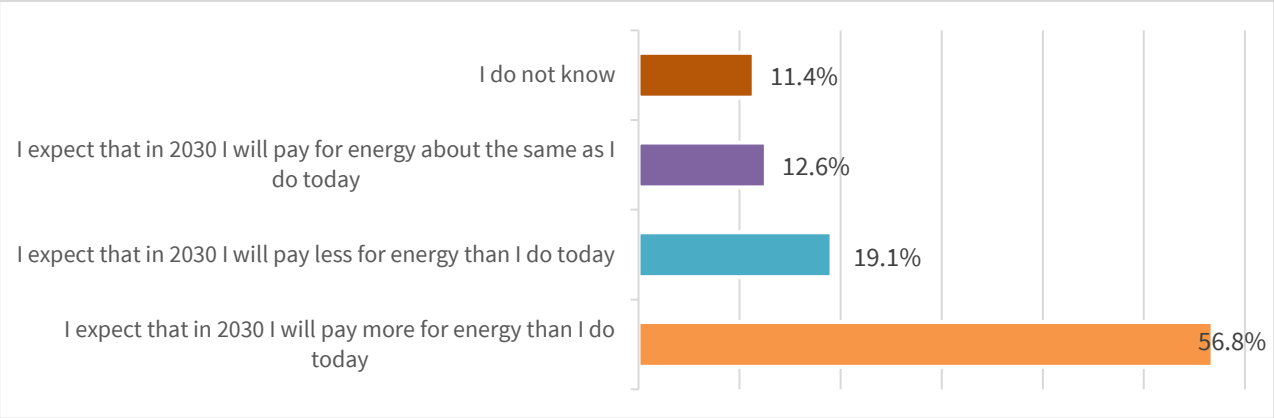
Most respondents believe that the energy prices will continue to increase. The largest pessimists in this respect are Bulgarian and French survey participants. Interestingly, southern countries such as Greece, Italy, Portugal and Turkey are quite optimistic – between 31% (Turkey) and 45% (Greece) of respondents believe that in 2030 they will be paying less for energy than they do today. This can be at least partially explained with excellent conditions for the use of solar energy in these countries. Here we can also add the Spanish respondents, who appear, if not optimistic, at least less pessimistic than their peers in other countries (with a notable exception of Ireland).

Figure 11.1: What are your expectations about future energy prices? (N=10,071)



12. Opinion about how the energy system is currently developing

Table 12.1: What is your opinion about how the energy system is developing? (per country)

Country	I believe it is headed in the wrong direction	I believe it is headed in the right direction at the appropriate pace	I believe it is headed in the right direction but at a slow pace	I do not know
Belgium	39.7%	13.6%	35.6%	11.1%
Bulgaria	33.3%	12.6%	42.0%	12.2%
France	36.9%	13.6%	37.9%	11.6%
Germany	34.2%	12.6%	42.9%	10.3%
Hungary	27.9%	12.0%	47.4%	12.7%
Ireland	22.7%	14.1%	51.6%	11.6%
Latvia	32.4%	11.8%	40.1%	15.6%
Spain	26.6%	14.3%	49.3%	9.8%
The Netherlands	34.0%	12.8%	39.7%	13.5%
10 other countries	22.3%	22.8%	41.7%	13.2%
Total	31.0%	14.0%	42.8%	12.2%

A very small share of respondents is satisfied with the way the energy transition is happening. This share is quite similar across all nine countries involved in the project, but much larger in the other 10 countries – especially in Finland, Italy, Poland and Turkey.

The largest group is comprised of those who believe that the energy system is changing in the right way,

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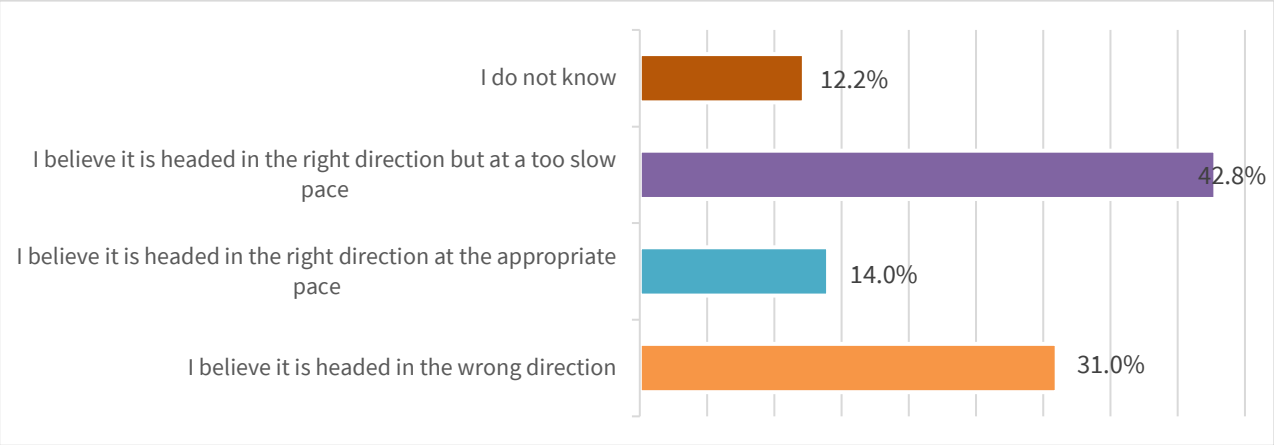
but the change is taking place too slow. A bit less than one third of participants is of the opinion that the process is headed in the wrong direction altogether. Irish, Spanish and Hungarian respondents are most approving of the way the energy system is changing, and Belgians and French have the most critical view.

Figure 12.1: What is your opinion about how the energy system is developing? (N=10,071)



13. Opinion about the performance of institutions and organisations in the energy transition

In this set of questions, respondents were asked to evaluate how different institutions, organisations, bodies and even individuals are dealing with their share of responsibility for the energy transition. Respondents had also a possibility to indicate that a given actor should not be involved in the energy transition.

13.1: EU parliament / European Commission

Table 13.1: EU parliament / European Commission

Country	Their performance is good	They should be doing more	This is not their task	I do not know
Belgium	9.4%	67.0%	9.4%	14.1%
Bulgaria	13.6%	63.5%	9.6%	13.4%
France	9.5%	63.0%	10.8%	16.7%
Germany	7.2%	63.0%	11.7%	18.1%
Hungary	18.2%	62.0%	5.8%	14.1%
Ireland	14.8%	63.8%	7.2%	14.2%
Latvia	10.6%	53.1%	9.8%	26.5%
Spain	11.7%	71.9%	7.0%	9.4%
The Netherlands	9.5%	56.0%	13.2%	21.3%
10 other countries	14.8%	63.5%	9.8%	11.9%
Total	11.9%	62.7%	9.4%	16.0%

Respondents in all countries were very critical and expressed a clear dissatisfaction with the EU institutions. Belgians and Spaniards were particularly of the opinion that the EU Commission and the EU

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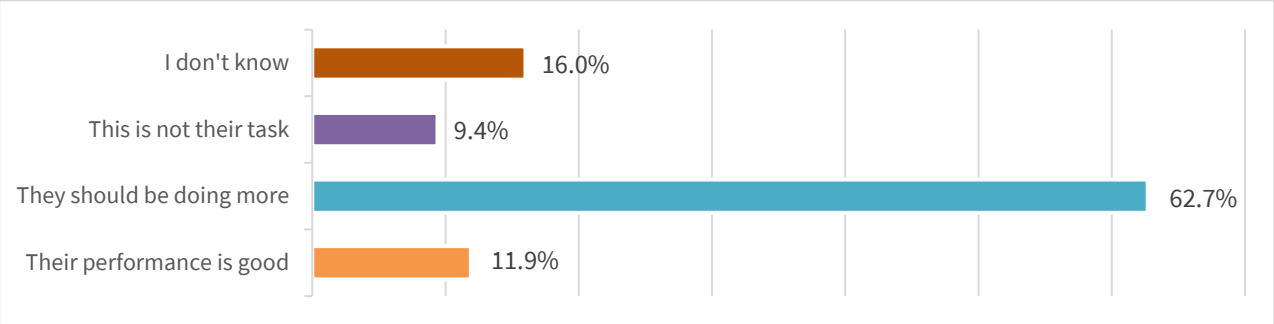
Parliament should be doing a better job. The largest group of those who believe that the EU policymakers are performing well is found in Hungary. The opinion that the EU institutions should not interfere with the energy affairs is not particularly strong. It is above average in Germany and The Netherlands – this result corresponds with the low interest and trust in the information coming from the EU sources in these two countries, as seen in questions 9 and 10.

Figure 13.1: EU parliament / European Commission (N=10,071)



13.2: National authorities (government, parliament, etc.)

Table 13.2: National authorities

Country	Their performance is good	They should be doing more	This is not their task	I do not know
Belgium	6.9%	72.3%	9.1%	11.7%
Bulgaria	4.0%	82.1%	5.3%	8.6%
France	9.8%	69.6%	8.0%	12.6%
Germany	6.6%	70.1%	9.6%	13.7%
Hungary	10.2%	77.4%	4.3%	8.1%
Ireland	10.4%	77.0%	5.4%	7.2%
Latvia	3.1%	77.3%	7.3%	12.3%
Spain	8.0%	78.6%	6.9%	6.5%
The Netherlands	9.8%	69.7%	6.6%	13.9%
10 other countries	11.0%	71.5%	8.6%	8.9%
Total	8.0%	74.6%	7.1%	10.3%

The performance of the national governments and parliaments has been evaluated even more harshly – three quarters of respondents are not satisfied with their work. The opinion that national policymakers should be doing more is quite strong in many countries, but when juxtaposing this column with the one where positive opinions are noted, we see that the discontent in nowhere as strong as in Bulgaria and Latvia. Part of the explanation might be found in slow regulatory development to support the energy transition, in particular the legislation to enable operation of energy communities. There are also suspicions that the government decisions are influenced by energy lobbies and are tailored to serve the interests of particular business and political actors.

Although also subject to strong criticism, the authorities in France and The Netherlands appear to be performing a little better than their colleagues in other countries.

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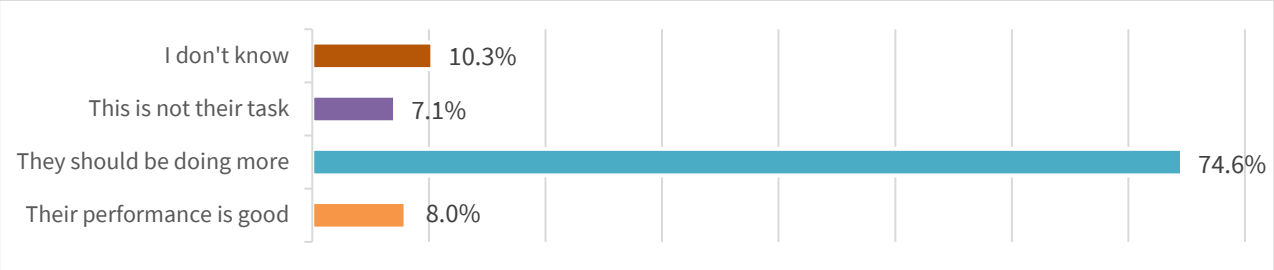
Figure 13.2: National authorities (N=10,071)



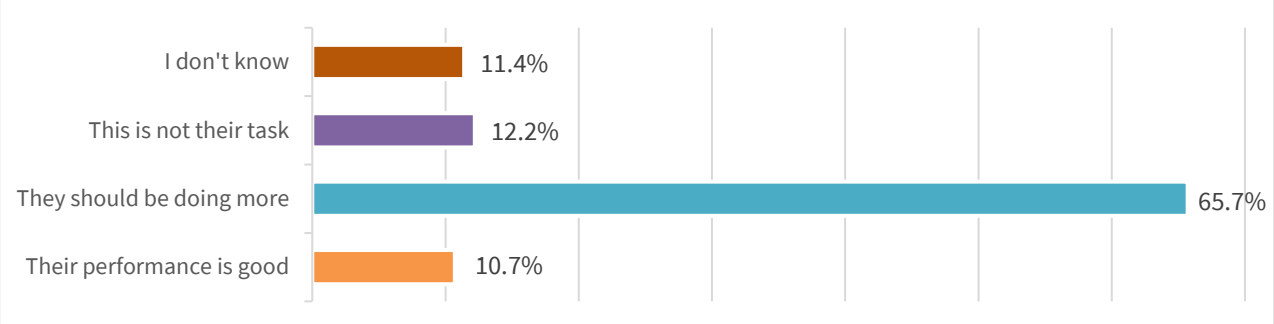
13.3: Local authorities (city council, mayor, etc.)

Table 13.3: Local authorities

Country	Their performance is good	They should be doing more	This is not their task	I do not know
Belgium	10.2%	62.3%	15.6%	11.9%
Bulgaria	6.2%	72.3%	12.7%	8.8%
France	17.2%	57.6%	11.1%	14.1%
Germany	11.1%	63.2%	12.7%	13.0%
Hungary	10.4%	69.4%	9.8%	10.3%
Ireland	10.3%	71.6%	9.7%	8.3%
Latvia	5.7%	66.5%	12.4%	15.4%
Spain	10.9%	71.8%	9.8%	7.5%
The Netherlands	12.2%	56.4%	17.2%	14.2%
10 other countries	12.9%	65.3%	10.9%	10.8%
Total	10.7%	65.7%	12.2%	11.4%

The evaluation of local policymakers' performance falls somewhere in the middle between the national and the EU policymakers. Two thirds of respondents expect them to do more to advance the energy transition, but the differences between countries are more pronounced than in the case of the previous two questions. Nevertheless, the pattern from the previous question is repeated here – Bulgarian and Latvian respondents are the most and the French and Dutch ones are least critical of their local authorities.

Figure 13.3: Local authorities (N=10,071)



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13.4: Relevant government agencies (e.g. energy regulatory commission or council, energy office, energy markets inspectorate, consumer protection agency, etc.)

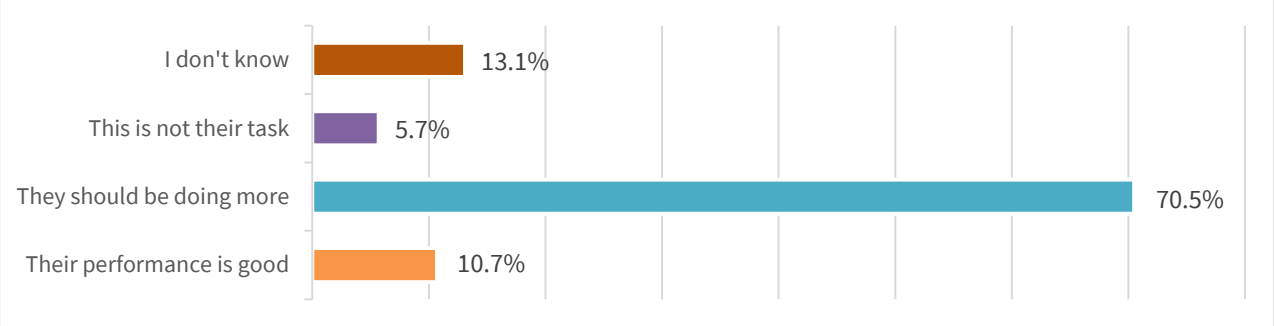
Table 13.4: Relevant government agencies

Country	Their performance is good	They should be doing more	This is not their task	I do not know
Belgium	12.6%	68.7%	6.6%	12.1%
Bulgaria	5.7%	80.2%	4.4%	9.7%
France	14.4%	64.5%	5.4%	15.7%
Germany	12.0%	65.4%	8.2%	14.4%
Hungary	10.7%	73.5%	3.4%	12.4%
Ireland	11.0%	72.5%	5.0%	11.5%
Latvia	7.2%	70.0%	4.7%	18.2%
Spain	10.3%	75.1%	5.6%	9.0%
The Netherlands	10.7%	66.6%	6.4%	16.3%
10 other countries	12.1%	68.9%	7.4%	11.5%
Total	10.7%	70.5%	5.7%	13.1%

The answer to this question shows that the dissatisfaction of respondents is not directed only at their elected representatives, but also at other state institutions such as different government agencies that regulate or have other roles in the energy market. It should be noted that this question is particularly unsuitable for drawing conclusions based on comparisons, as different relevant agencies were added in parentheses in questionnaires for different countries. Additional questions would be needed to properly assess the opinion of respondents about such different bodies such as energy regulatory commission and consumer protection agency.

Bearing these reservations in mind, the answers above again confirm that the majority of respondents are dissatisfied with the way energy transition is progressing and are eager to point a finger of blame at someone. Bulgarians and Latvians, but also Hungarians, Irish and Spaniards appear to be least satisfied with the performance of governmental agencies related to energy issues in their countries. At least in the case of some of these countries, this could be attributed to bureaucracy, which lacks the administrative and material capacity to implement the national energy transition plans/strategies, potentially causing delays in the execution of energy policies and measures. This might create a perception among citizens that government agencies and other relevant bodies are not doing enough.

Figure 13.4: Relevant government agencies (N=10,071)



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101022492.

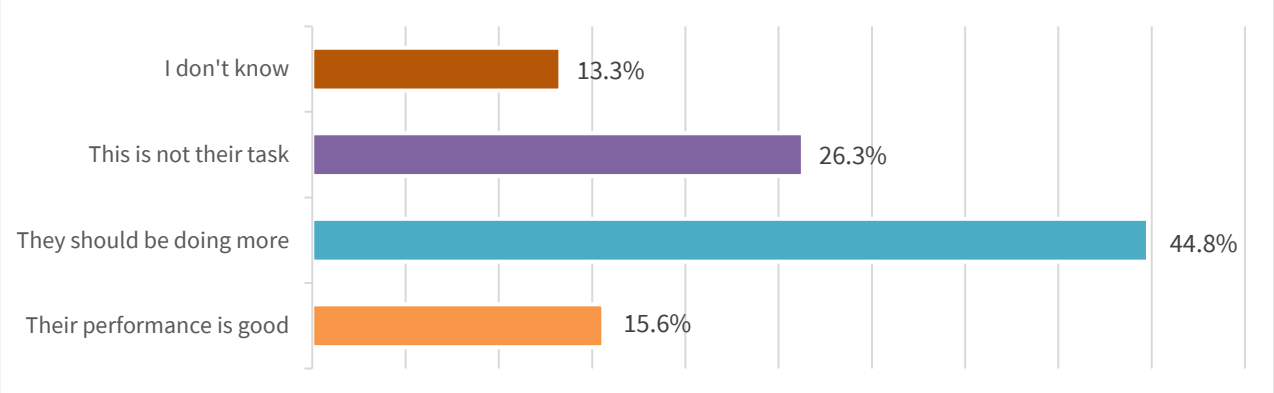
13.5: Public media (TV, radio, newspapers, etc.)

Table 13.5: Public media

Country	Their performance is good	They should be doing more	This is not their task	I do not know
Belgium	16.4%	35.9%	33.5%	14.2%
Bulgaria	11.4%	56.0%	23.4%	9.2%
France	12.4%	42.1%	28.4%	17.1%
Germany	17.9%	40.8%	26.5%	14.8%
Hungary	9.1%	53.0%	26.9%	11.0%
Ireland	18.0%	46.3%	23.9%	11.9%
Latvia	19.8%	38.0%	24.7%	17.5%
Spain	14.8%	55.3%	20.1%	9.8%
The Netherlands	19.4%	28.2%	36.4%	16.0%
10 other countries	16.8%	52.6%	19.1%	11.5%
Total	15.6%	44.8%	26.3%	13.3%

The public media were evaluated much less harshly than the local, national and EU decision-makers, but still their "approval rate" seems to be very low, considering that questions 9 and 10 revealed that they were both the most popular and most trusted source of information on energy issues. While the assessment that the public media are doing a good job is not particularly high in any country, it is the highest in The Netherlands, Latvia, Ireland and Germany, and lowest in Hungary. A relatively large group of respondents think that media have no role in the energy transition – this opinion is especially prominent in The Netherlands and Belgium. This is a rather curious outcome, considering, as already stated, that most people count on the public media to provide them with trustworthy and up-to-date information on the energy-related processes in their countries and in the EU.

Figure 13.5: Public media (N=10,071)



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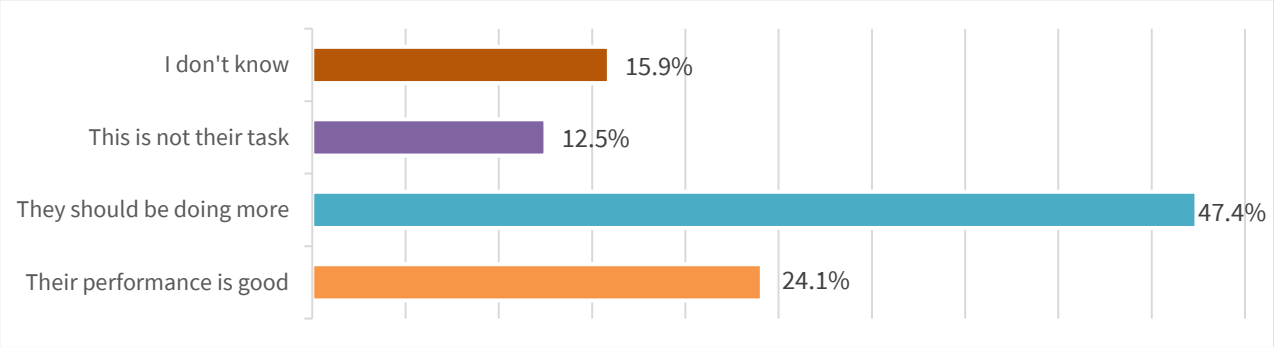
13.6: Academic and research institutions

Table 13.6: Academic and research institutions

Country	Their performance is good	They should be doing more	This is not their task	I do not know
Belgium	29.8%	39.4%	14.5%	16.3%
Bulgaria	14.6%	61.9%	9.5%	14.1%
France	23.4%	43.1%	13.8%	19.7%
Germany	24.4%	43.5%	15.8%	16.3%
Hungary	29.3%	50.4%	8.0%	12.3%
Ireland	25.5%	44.1%	14.7%	15.6%
Latvia	17.6%	48.1%	11.2%	23.1%
Spain	26.5%	53.6%	10.0%	9.9%
The Netherlands	27.8%	36.2%	16.7%	19.3%
10 other countries	22.6%	53.7%	10.7%	12.9%
Total	24.1%	47.4%	12.5%	15.9%

Academic and research institutions have received the highest approval rate of all actors evaluated in this set of questions (24.1%), but even in their case, the approval rate is rather low. Their efforts are judged slightly more favourably in Belgium and Hungary. In contrast, Bulgarians are of the opinion that academia is not doing enough to contribute to a faster and more efficient energy transition. Overall, the conclusion is that in the opinion of responders, academic and research institutions should also be doing more to support the energy transition.

Figure 13.6: Academic and research institutions (N=10,071)



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101022492.

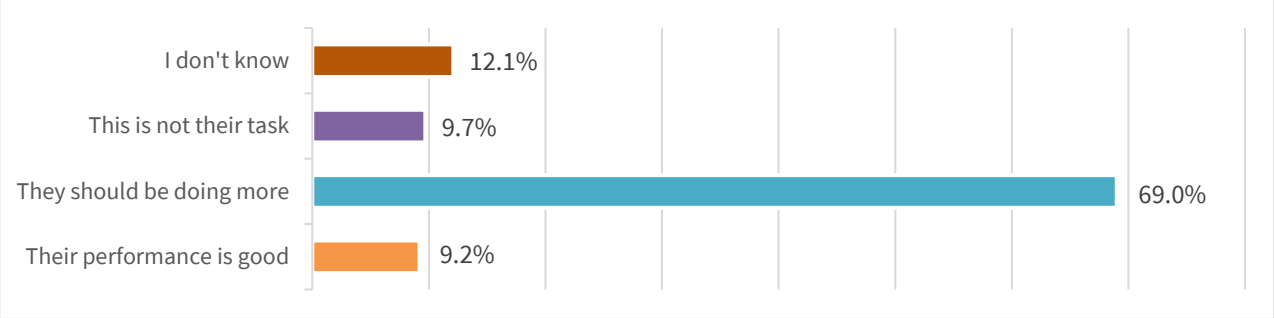
13.7: Industry and business

Table 13.7: Industry and business

Country	Their performance is good	They should be doing more	This is not their task	I do not know
Belgium	9.5%	67.3%	11.1%	12.0%
Bulgaria	7.1%	72.3%	9.8%	10.8%
France	9.6%	66.5%	9.0%	14.9%
Germany	10.4%	69.6%	8.4%	11.6%
Hungary	6.6%	74.3%	8.1%	10.9%
Ireland	11.1%	71.6%	8.1%	9.2%
Latvia	10.0%	50.9%	16.3%	22.7%
Spain	8.9%	73.8%	9.1%	8.2%
The Netherlands	7.4%	73.4%	7.4%	11.8%
10 other countries	10.7%	70.3%	9.8%	9.2%
Total	9.2%	69.0%	9.7%	12.1%

Respondents have expressed a clear dissatisfaction with the role of industry and business actors in the energy transition. Their approval rate is among the lowest, and the share of those who think that they should be doing more is one of the highest. Bulgarians, Hungarians and Dutch are the most critical, but overall the role of business is not really commended in any country.

Figure 13.7: Industry and business (N=10,071)



13.8: Energy providers

Table 13.8: Energy providers

Country	Their performance is good	They should be doing more	This is not their task	I do not know
Belgium	10.9%	72.6%	7.6%	8.9%
Bulgaria	7.4%	78.9%	5.3%	8.3%
France	14.0%	70.1%	5.9%	10.0%
Germany	13.1%	70.2%	5.8%	10.9%
Hungary	10.0%	77.9%	3.0%	9.1%
Ireland	13.0%	76.2%	5.3%	5.5%
Latvia	10.0%	72.2%	6.7%	11.1%

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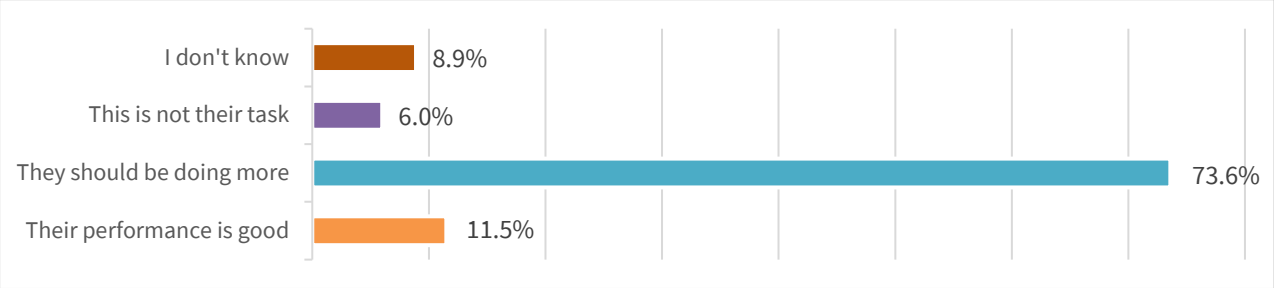
Spain	9.0%	77.9%	6.6%	6.5%
The Netherlands	15.4%	69.1%	4.8%	10.7%
10 other countries	12.3%	70.8%	8.9%	8.0%
Total	11.5%	73.6%	6.0%	8.9%

The energy providers are second only to the national authorities in terms of unfulfilled expectations. Almost three quarters of respondents expects them to do a better job, dissatisfaction being highest in Bulgaria, Hungary and Spain, and somewhat less pronounced in The Netherlands, Germany and France.

Figure 13.8: Energy providers (N=10,071)



13.9: Schools and universities

Table 13.9: Schools and universities

Country	Their performance is good	They should be doing more	This is not their task	I do not know
Belgium	18.4%	37.9%	26.7%	17.0%
Bulgaria	9.2%	49.2%	28.4%	13.2%
France	12.5%	39.5%	27.6%	20.4%
Germany	14.4%	41.5%	27.2%	16.9%
Hungary	13.1%	41.4%	31.3%	14.2%
Ireland	19.5%	38.3%	28.6%	13.6%
Latvia	13.3%	33.2%	29.1%	24.4%
Spain	17.9%	51.1%	19.1%	11.9%
The Netherlands	14.0%	40.5%	28.0%	17.5%
10 other countries	14.9%	46.4%	24.4%	14.4%
Total	14.7%	41.9%	27.0%	16.3%

Compared with other actors, schools and universities are seen as playing a rather marginal role in the energy transition – their share of "This is not their task" answers is second only to the social media influencers. The expectations that they should be doing more to support the changes in the energy system are also comparatively low.

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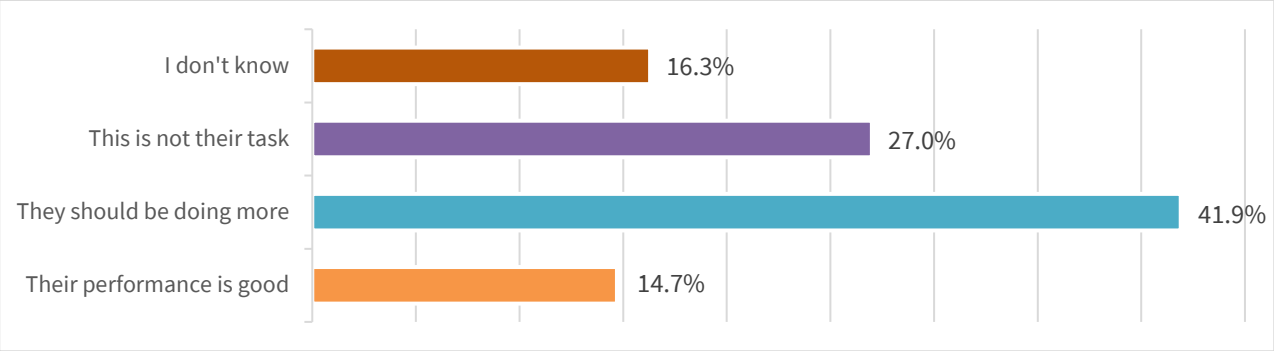
Figure 13.9: Schools and universities (N=10,071)



13.10: Social media influencers

Table 13.10: Social media influencers

Country	Their performance is good	They should be doing more	This is not their task	I do not know
Belgium	6.4%	28.2%	47.5%	17.8%
Bulgaria	6.1%	51.8%	26.2%	15.8%
France	6.0%	31.1%	42.9%	20.0%
Germany	6.9%	27.3%	47.2%	18.6%
Hungary	6.5%	39.0%	37.5%	17.0%
Ireland	8.7%	34.6%	39.1%	17.6%
Latvia	10.0%	33.6%	30.9%	25.4%
Spain	8.0%	38.6%	37.6%	15.8%
The Netherlands	5.3%	22.5%	51.9%	20.3%
10 other countries	10.4%	39.4%	33.9%	16.3%
Total	7.4%	34.6%	39.5%	18.4%

Social media influencers are definitely the odd one out. During the EnergyPROSPECTS study of energy citizenship cases across Europe, several examples of influential social media celebrities were mapped and included in the database (see https://data.energyprospects.eu/). For this reason, they were added to the present questionnaire as well. It seems that their role is far from being universally recognised, but it does appear to carry some weight in countries where online social media are an important source of information about energy issues (such as Bulgaria and Latvia, and to a bit smaller extent Hungary). A question that calls for further research is the actual role of social media influencers. While here it was assumed that their role is positive, it should not be overlooked that social media are an exceptionally important tool of the climate change deniers and – particularly in Eastern European countries – actors in service of Russian energy interests.

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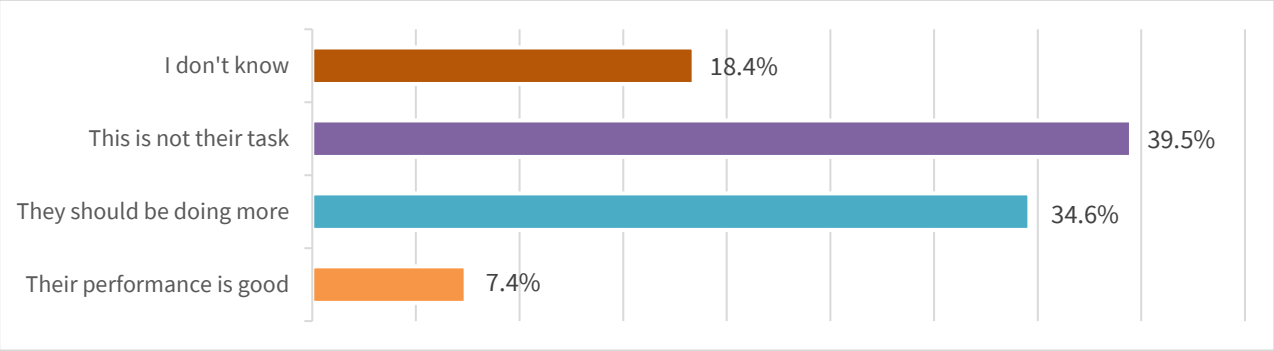
Figure 13.10: Social media influencers (N=10,071)



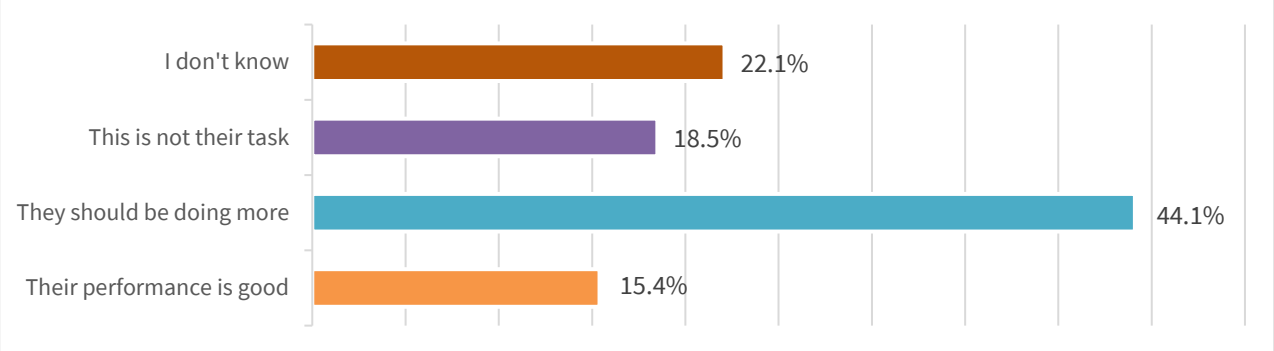
13.11: NGOs and civil society organisations

Table 13.11: NGOs and civil society organisations

Country	Their performance is good	They should be doing more	This is not their task	I do not know
Belgium	17.4%	40.6%	21.4%	20.7%
Bulgaria	8.4%	54.5%	19.2%	17.9%
France	19.5%	41.2%	17.6%	21.7%
Germany	20.9%	38.1%	21.2%	19.8%
Hungary	15.0%	42.4%	20.2%	22.4%
Ireland	14.8%	47.9%	15.0%	22.2%
Latvia	10.0%	38.0%	18.8%	33.1%
Spain	20.9%	48.6%	18.6%	11.9%
The Netherlands	10.0%	39.6%	20.8%	29.6%
10 other countries	17.0%	49.7%	11.8%	21.5%
Total	15.4%	44.1%	18.5%	22.1%

With a disclaimer that none of the actors received a very positive evaluation, the NGOs and CSOs obtained the third highest share of opinions that they are doing a good job in supporting the energy transition. Their work was most positively evaluated in Spain, Germany, France and Belgium, and most critically in Bulgaria, Latvia and The Netherlands.

Figure 13.11: NGOs and civil society organisations (N=10,071)



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13.12 Ranking of institutions and organisations

Figure 13.12: Ranking of institutions and organisations – "Their performance is good" (N=10,071)

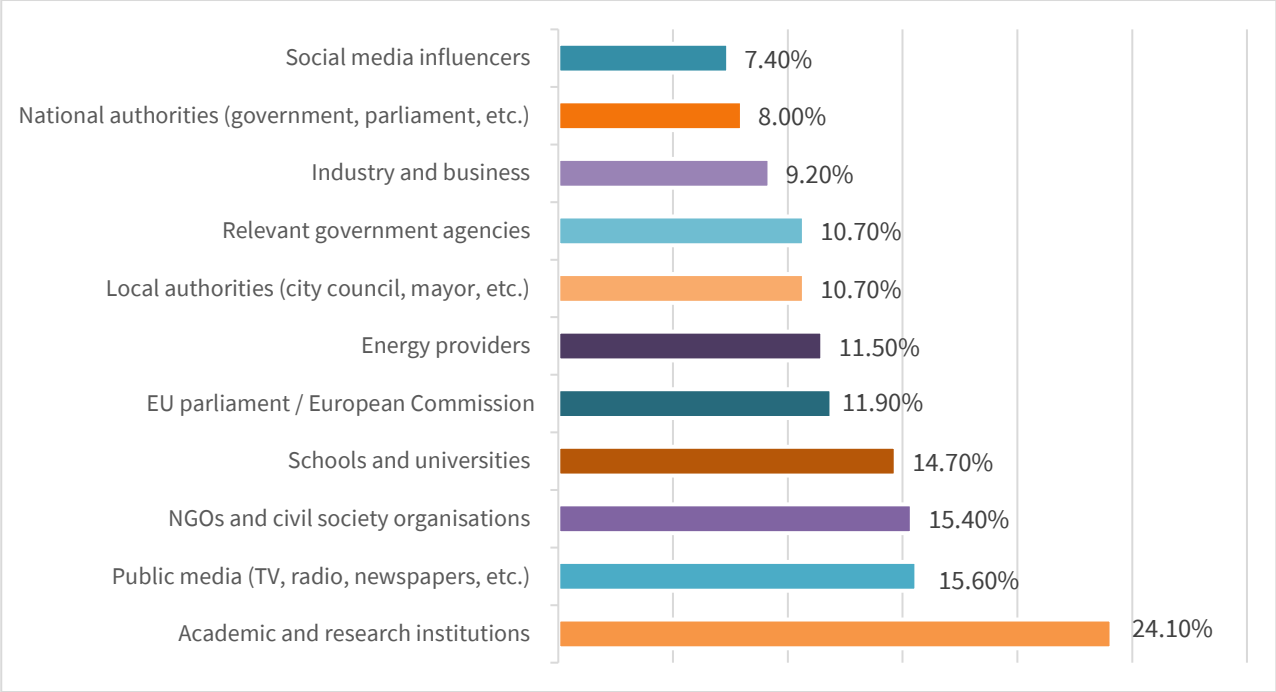

Figure 13.13: Ranking of institutions and organisations – "They should be doing more" (N=10,071)

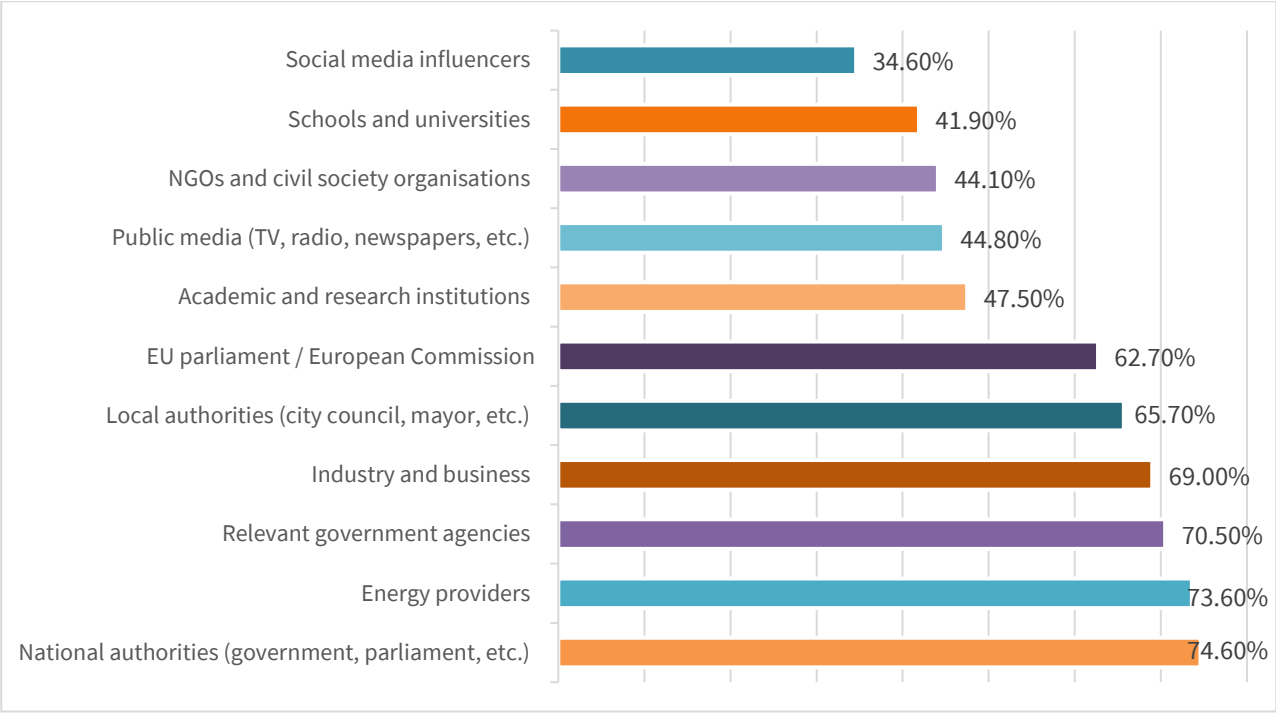

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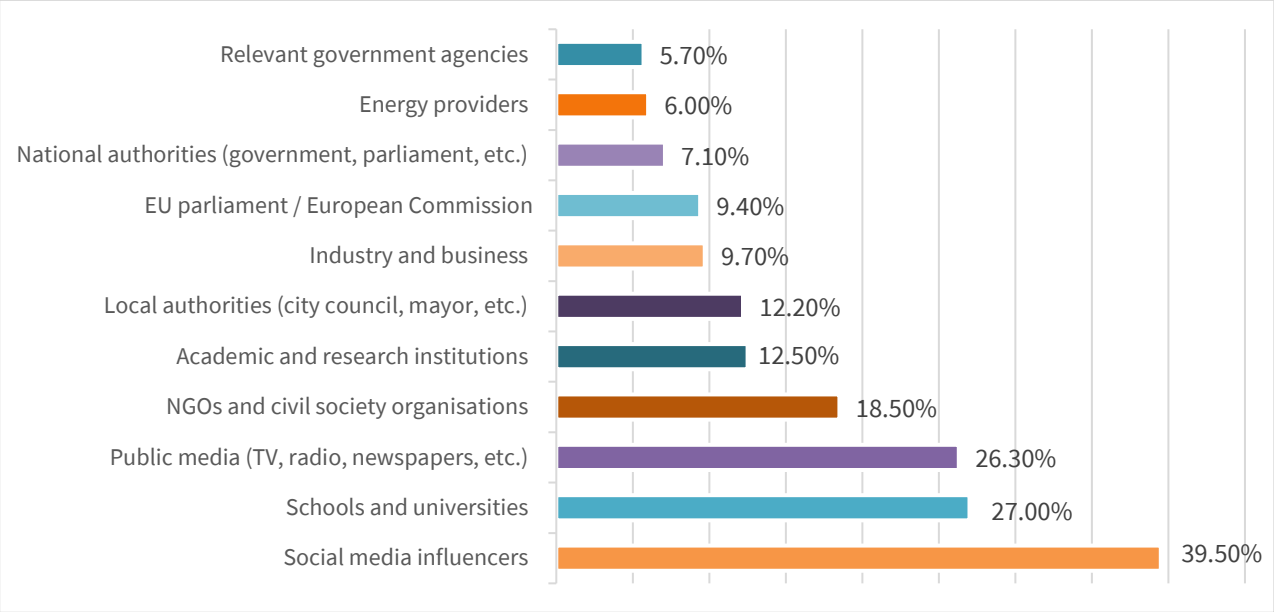
Figure 13.14: Ranking of institutions and organisations – "This is not their task" (N=10,071)



14. What needs to happen so that more Europeans would become involved in the energy transition?

In this set of questions, respondents were asked to express their agreement or disagreement with different statements that describe various situations that might have an impact on the involvement of European citizens in the energy transition.

14.1 European and national political institutions should make clear commitments to involving citizens in preparation of the energy and climate policies

Table 14.1: European and national political institutions should make clear commitments to involving citizens (per country)

Country	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	I don't know
Belgium	4.4%	5.3%	20.6%	42.5%	22.3%	4.8%
Bulgaria	3.9%	5.0%	19.8%	45.6%	21.3%	4.4%
France	5.3%	4.4%	19.3%	38.8%	27.2%	5.0%
Germany	3.4%	5.0%	17.6%	38.9%	28.3%	6.8%
Hungary	2.2%	3.2%	16.5%	52.4%	20.1%	5.7%
Ireland	2.9%	4.7%	21.3%	52.7%	12.9%	5.5%
Latvia	5.4%	7.5%	25.8%	46.2%	8.9%	6.4%
Spain	3.9%	4.0%	15.4%	40.9%	34.0%	1.8%
The Netherlands	2.7%	7.0%	19.6%	49.7%	17.1%	3.9%
10 other countries	3.7%	6.5%	25.9%	43.8%	14.4%	5.6%
Total	3.8%	5.3%	20.2%	45.2%	20.6%	5.0%

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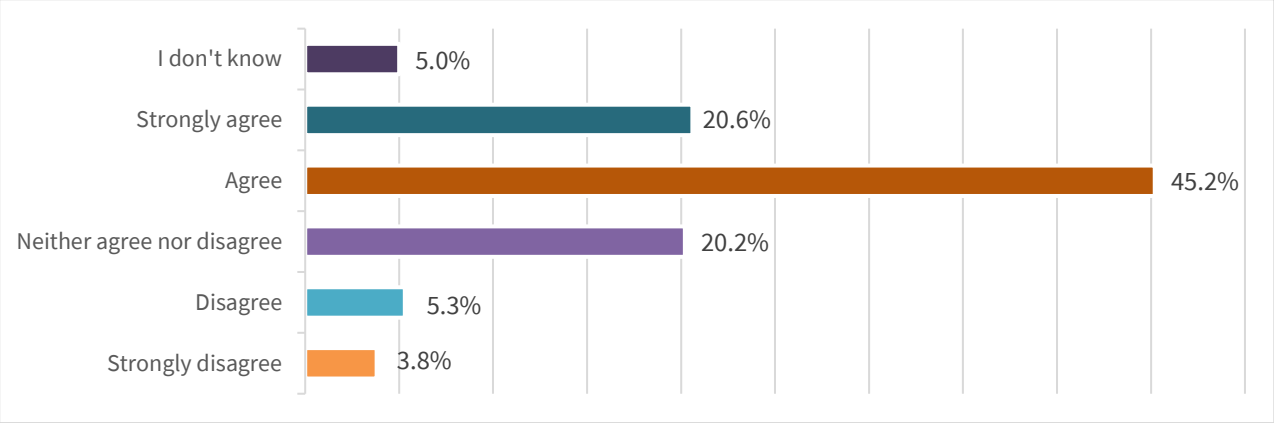
Respondents clearly expressed their agreement with the opinion that European and national policymakers should ensure that future energy policies will not be developed without the engagement and participation of citizens. This opinion has been most categorical in Hungary, where the ratio between those who agree and those who disagree with this statement was 13.4 to 1. This commitment is also highly important for respondents from Spain, Ireland, Germany and Bulgaria, but somewhat less crucial (although still important) for Latvians.

Figure 14.1: European and national political institutions should make clear commitments to involving citizens (N=10,071)



14.2 Climate and energy policies should not be designed in Brussels, but by national governments.

Table 14.2: Climate and energy policies should not be designed in Brussels, but by national governments (per country)

Country	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	I don't know
Belgium	4.7%	12.4%	28.4%	30.7%	13.7%	10.0%
Bulgaria	3.7%	8.7%	29.3%	34.9%	17.7%	5.7%
France	3.4%	9.0%	25.2%	32.7%	22.5%	7.2%
Germany	3.0%	9.2%	24.3%	32.4%	22.4%	8.7%
Hungary	4.6%	14.8%	18.3%	37.7%	16.7%	8.0%
Ireland	2.3%	14.3%	33.7%	33.0%	8.2%	8.5%
Latvia	2.3%	8.3%	25.8%	42.2%	13.3%	8.2%
Spain	5.3%	12.5%	32.3%	29.3%	14.9%	5.7%
The Netherlands	2.8%	13.1%	30.4%	30.3%	16.5%	6.9%
10 other countries	2.6%	14.4%	32.9%	28.7%	11.7%	9.7%
Total	3.5%	11.7%	28.1%	33.2%	15.7%	7.9%

Questions 9 and 10 have shown that the information provided by the national institutions is slightly more often used and a bit more trusted compared to what is being disseminated by the EU institutions, but questions 13.1 and 13.2 showed that the work of the EU institutions is evaluated marginally better than those of the national authorities. It is therefore interesting to see that almost half of respondents support

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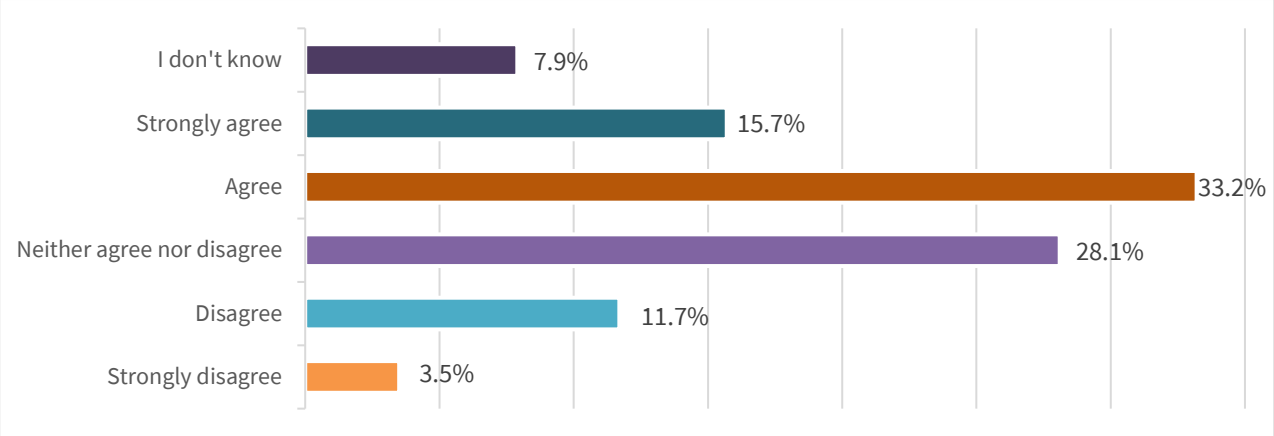
the view that more citizens would become interested or engaged in energy topics if the national governments had the decisive word when it comes to the climate and energy policies. The most outspoken supporters of this view reside in Bulgaria, France, Germany, Hungary and Latvia. It should be noted that the opinions are nowhere as polarised as in Hungary, which has the highest share of people who disagree with this statement, but also one of the highest shares of those who agree with it. The Irish, Spanish and Belgian respondents appear to be the least "Euro-sceptical."

Figure 14.2: Climate and energy policies should not be designed in Brussels, but by national governments (N=10,071)



14.3 Energy prices should continue to rise, and security of energy supply should become even more unstable for Europeans to become more involved in energy transition.

Table 14.3 Energy prices should continue to rise, and security of supply should become more unstable (per country)

Country	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	I don't know
Belgium	31.7%	19.6%	15.1%	16.6%	10.1%	6.9%
Bulgaria	30.5%	33.5%	18.8%	8.5%	3.7%	5.0%
France	16.1%	14.9%	20.5%	26.3%	12.8%	9.4%
Germany	19.2%	17.2%	18.2%	24.5%	11.4%	9.5%
Hungary	51.3%	22.3%	8.9%	8.4%	4.3%	4.8%
Ireland	5.9%	8.3%	18.4%	40.9%	18.2%	8.3%
Latvia	44.0%	31.1%	11.5%	6.3%	2.2%	4.9%
Spain	41.3%	23.4%	16.1%	11.5%	5.2%	2.5%
The Netherlands	37.1%	29.6%	17.0%	8.9%	3.4%	4.0%
10 other countries	4.6%	9.7%	21.9%	36.9%	19.0%	7.9%
Total	28.1%	20.9%	16.6%	18.9%	9.0%	6.3%

Respondents clearly rejected the suggestion that more European citizens would become active in the energy transition if energy prices continued to rise and the energy supplies became more unstable. That

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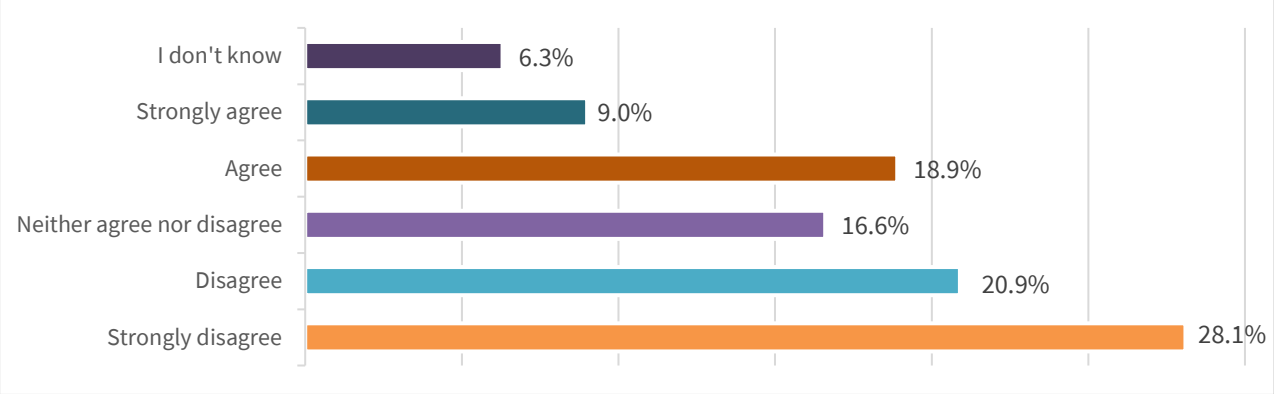
said, there are prominent differences among countries. Respondents from Ireland categorically support the view that a shock therapy would make more citizens aware and prepared to take action. Albeit with a smaller margin of difference, French respondents also support this view. Interestingly, this statement was supported by between 57% and 64% of respondents in 7 out of 10 countries not involved in the EnergyPROSPECTS project (all except Austria, Denmark and Greece). The highest share of respondents who agree with it was recorded in Sweden, Turkey and United Kingdom.

Quite understandably, the strongest opposition to this suggestion came from the three countries with the highest levels of energy poverty – Bulgaria, Hungary and Latvia. What is perhaps surprising is the categorical disagreement observed also in Spain and The Netherlands. Respondents from Germany are almost equally divided into both camps.

Figure 14.3 Energy prices should continue to rise, and security of supply should become more unstable (N=10,071)



14.4 Grants, loans, subsidies and other market interventions that support a switch to renewable energy should become more accessible for small producers.

Table 14.4 Grants, loans and subsidies for renewable energy should become more accessible (per country)

Country	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	I don't know
Belgium	2.7%	4.5%	14.2%	37.4%	36.0%	5.2%
Bulgaria	1.7%	3.1%	15.0%	42.9%	33.1%	4.3%
France	2.8%	4.3%	17.8%	38.1%	30.5%	6.5%
Germany	3.2%	4.0%	13.1%	41.8%	30.4%	7.5%
Hungary	2.1%	2.4%	10.9%	43.9%	36.7%	4.0%
Ireland	1.5%	3.1%	11.7%	42.8%	36.1%	4.8%
Latvia	2.6%	3.0%	16.3%	47.2%	22.8%	8.2%
Spain	2.2%	4.2%	13.9%	35.9%	41.2%	2.6%
The Netherlands	2.1%	3.5%	19.9%	44.4%	23.6%	6.5%
10 other countries	1.4%	3.8%	20.3%	44.6%	22.1%	7.8%
Total	2.2%	3.6%	15.3%	41.9%	31.2%	5.7%

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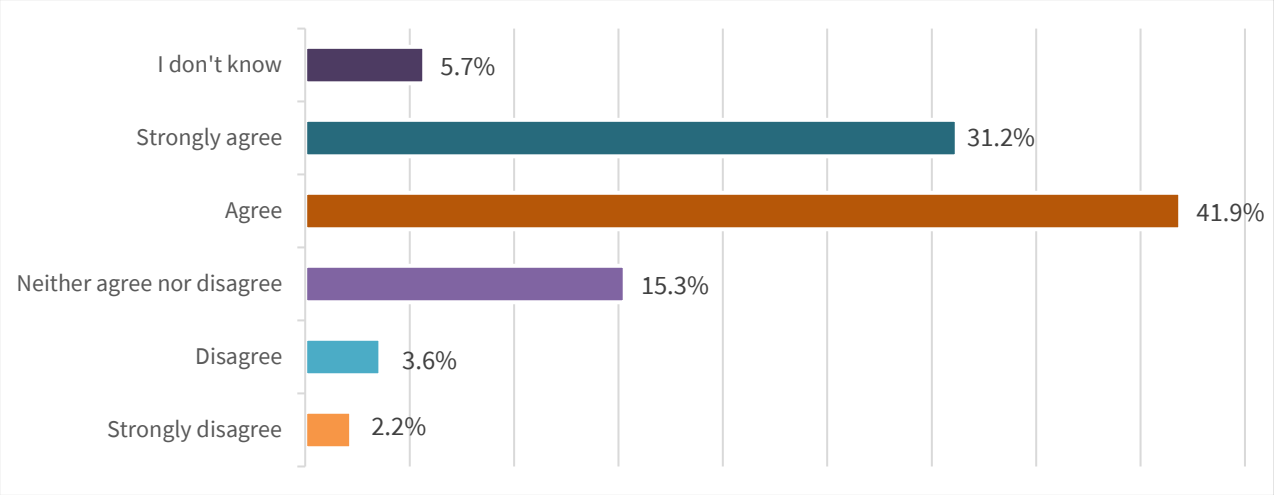
Unlike the previous question which polarised the opinions, here we have an almost universal consensus that grants, loans and subsidies supporting the citizens to become RES prosumers would boost the energy citizenship in Europe. A very small minority of respondents believe that financial support mechanisms would make no difference. Their crucial importance has been most clearly underlined in Bulgaria, Hungary, Ireland and Spain.

Figure 14.4 Grants, loans and subsidies for renewable energy should become more accessible (N=10,071)



14.5 Specific measures should be taken to support the vulnerable energy consumers and people living in the energy poverty.

Table 14.5 Specific measures to support vulnerable energy consumers and people in energy poverty (per country)

Country	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	I don't know
Belgium	2.0%	4.5%	12.1%	33.4%	43.4%	4.6%
Bulgaria	1.5%	1.8%	11.9%	41.0%	41.1%	2.8%
France	2.7%	5.3%	15.9%	35.1%	36.3%	4.7%
Germany	2.2%	3.5%	12.3%	35.4%	40.0%	6.6%
Hungary	1.1%	1.3%	11.8%	45.0%	36.3%	4.5%
Ireland	0.9%	2.7%	12.4%	42.5%	36.8%	4.7%
Latvia	1.9%	2.3%	13.4%	44.4%	34.3%	3.7%
Spain	1.3%	2.3%	10.4%	37.7%	45.7%	2.6%
The Netherlands	1.4%	3.0%	15.7%	39.1%	37.2%	3.6%
10 other countries	1.9%	5.2%	21.9%	39.3%	22.8%	9.0%
Total	1.7%	3.2%	13.8%	39.3%	37.4%	4.7%

The pattern from the previous questions was repeated here as well – a strong consensus that dedicated measures to support the vulnerable energy consumers and people living in the energy poverty would enable more people to take part in the energy transition. The agreement with this statement is universal

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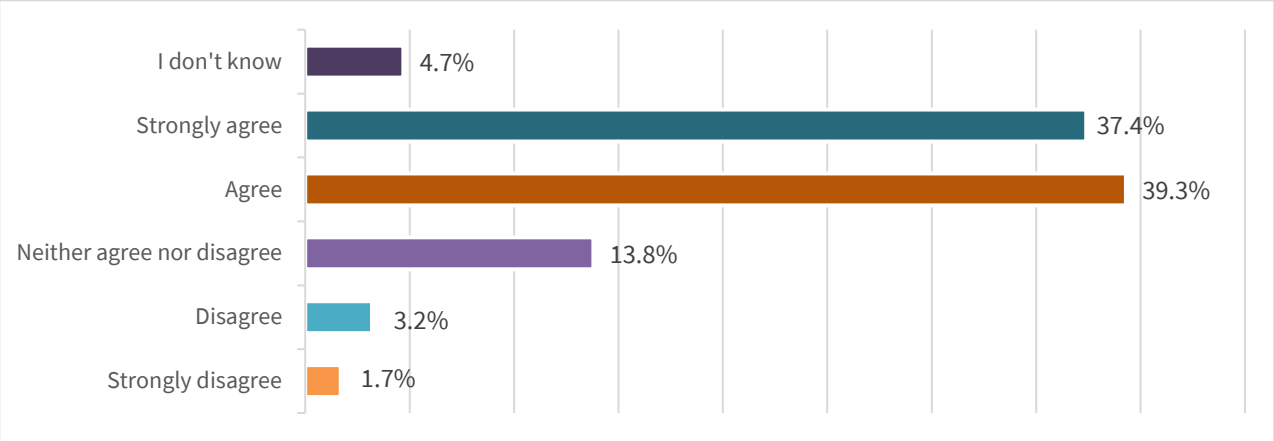
across countries and it is hard to single out any of them, but Hungary does stand out with the fact that for every one respondent who disagrees with this suggestion, there are 34 respondents who agree. The ratio between supporters and opponents is impressively large also in Bulgaria, Ireland and Spain.

Figure 14.5 Specific measures to support vulnerable energy consumers and people in energy poverty (N=10,071)



14.6 Education and information campaigns should be organised to mitigate the concerns about the perceived impacts, benefits and costs of energy transition.

Table 14.6 Education and information campaigns about impacts, benefits and costs of energy transition (per country)

Country	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	I don't know
Belgium	3.0%	4.8%	17.8%	42.1%	25.8%	6.5%
Bulgaria	1.8%	2.3%	16.4%	45.9%	30.2%	3.4%
France	3.8%	3.0%	18.4%	45.0%	23.1%	6.7%
Germany	3.0%	4.1%	17.8%	42.8%	24.1%	8.2%
Hungary	1.4%	3.2%	17.1%	46.2%	26.4%	5.8%
Ireland	1.4%	2.0%	15.9%	47.9%	26.9%	5.9%
Latvia	2.0%	3.2%	17.5%	50.2%	20.8%	6.3%
Spain	1.8%	3.4%	14.8%	44.1%	33.4%	2.5%
The Netherlands	2.4%	4.9%	23.9%	47.0%	14.4%	7.4%
10 other countries	1.8%	4.3%	20.7%	44.4%	20.6%	8.2%
Total	2.2%	3.5%	18.0%	45.6%	24.6%	6.1%

The agreement with the proposal that education and information campaigns about the perceived impacts, benefits and costs of energy transition might convince more people to become energy citizens was somewhat less definite as with the previous two statements, but nevertheless very clear. The answers were also a bit more varied. The Dutch, Belgian and German respondents seem to be less convinced than Bulgarian and Irish ones that education and information campaigns are an effective tool.

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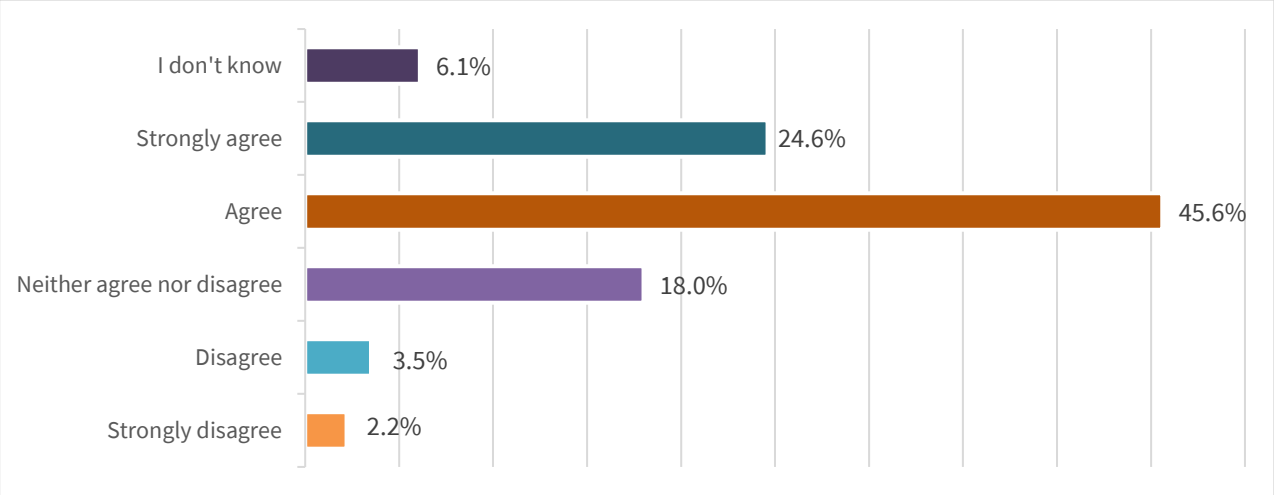
Figure 14.6 Education and information campaigns about impacts, benefits and costs of energy transition (N=10,071)



14.7 Climate change and climatic conditions should become even more extreme and rapid.

Table 14.7 Climate change should become even more extreme and rapid (per country)

Country	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	I don't know
Belgium	13.1%	10.3%	18.7%	27.2%	21.9%	8.8%
Bulgaria	20.1%	22.2%	24.1%	17.8%	7.8%	8.0%
France	4.0%	7.0%	17.8%	38.5%	25.9%	6.8%
Germany	4.5%	5.7%	15.7%	33.2%	32.4%	8.5%
Hungary	30.6%	24.5%	12.1%	15.9%	6.6%	10.3%
Ireland	2.7%	5.4%	17.4%	36.9%	30.8%	6.8%
Latvia	20.2%	23.7%	25.1%	13.3%	5.3%	12.4%
Spain	18.6%	13.2%	21.8%	22.3%	17.6%	6.5%
The Netherlands	17.9%	18.5%	25.6%	18.2%	11.0%	8.8%
10 other countries	3.1%	7.5%	18.0%	35.4%	26.9%	9.1%
Total	13.5%	13.8%	19.6%	25.9%	18.6%	8.6%

No other question has divided the opinions of the respondents as much as this one. Overall, the group of those who agree that an even more extreme and rapid climate change would motivate more people to take action is about 50% more numerous than the group of those who do not think this would make a major difference. People who think that the deepening of the climate change would urge more people to rethink their role in the energy system represent an overwhelming majority in Ireland, Germany and France. The situation is exactly the opposite in Bulgaria, Hungary, Latvia, and to a somewhat smaller extent in The Netherlands. Respondents from the 10 additional countries also overwhelmingly believe that the rapid deterioration of the climatic condition would act as a wakeup call for many people.

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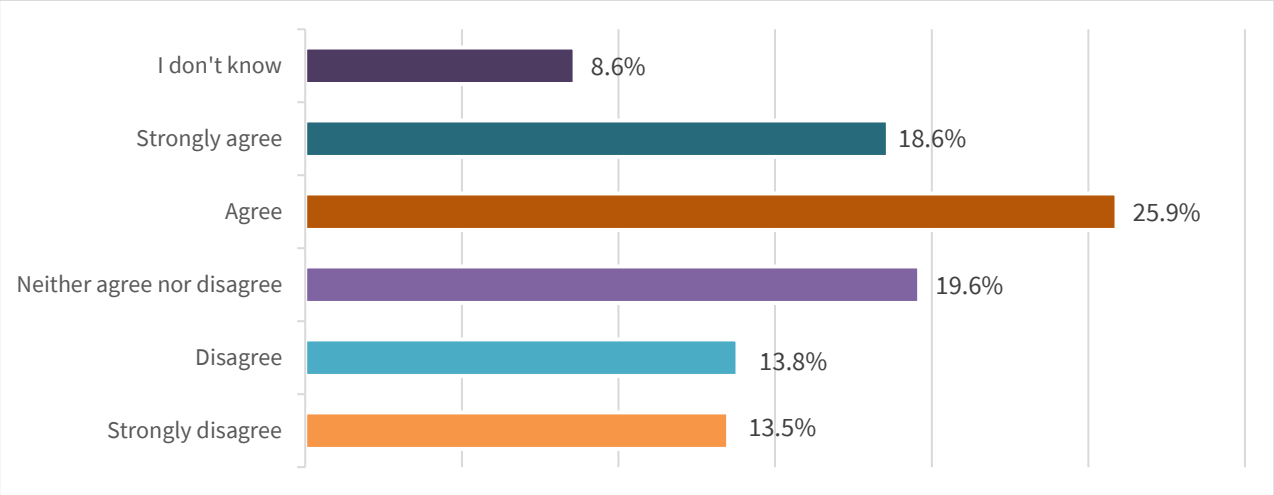
Figure 14.7 Climate change should become even more extreme and rapid (N=10,071)



14.8 All European states should define the legal status of prosumers, energy communities and peer-to-peer trading.

Table 14.8 All European states should define the legal status of prosumers, energy communities and peer-to-peer trading (per country)

Country	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	I don't know
Belgium	2.6%	4.0%	25.7%	33.4%	14.8%	19.6%
Bulgaria	2.0%	3.6%	26.4%	40.8%	15.4%	11.8%
France	2.8%	4.2%	27.4%	32.8%	14.5%	18.3%
Germany	2.7%	3.6%	23.4%	29.9%	13.6%	26.8%
Hungary	2.2%	4.2%	21.4%	42.4%	15.2%	14.7%
Ireland	2.1%	4.0%	24.4%	38.7%	14.7%	16.1%
Latvia	3.0%	4.2%	29.3%	27.6%	6.5%	29.6%
Spain	2.2%	2.9%	23.4%	42.0%	20.3%	9.2%
The Netherlands	2.8%	4.1%	28.7%	31.1%	10.9%	22.4%
10 other countries	1.8%	4.9%	26.6%	36.4%	13.4%	16.9%
Total	2.4%	4.0%	25.7%	35.5%	13.9%	18.5%

For numerous respondents this question was a challenging one – as shown by the very high share of undecided and uncertain answers (almost 45%). Having said that, a very small minority of them believes that such a step would be meaningless. The share of those who disagree is practically the same in all countries. The main difference is in the number of affirmative answers, which is the highest in Spain, Hungary and Bulgaria – three countries where the legal status of prosumers and energy communities has yet to be brought in line with the best EU practices.

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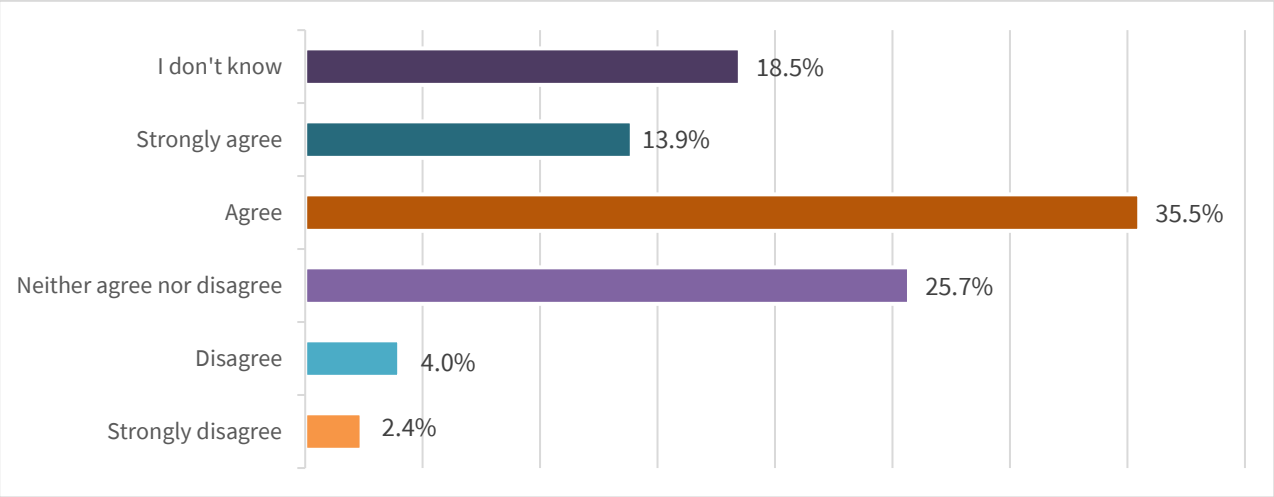
Figure 14.8 All European states should define the legal status of prosumers, energy communities and peer-to-peer trading (N=10,071)



14.9 Administrative procedures for permits for renewable energy projects should be simplified and made more understandable.

Table 14.9 Administrative procedures for renewable energy projects should be simplified (per country)

Country	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	I don't know
Belgium	1.3%	2.1%	12.6%	37.6%	39.3%	7.2%
Bulgaria	2.3%	2.2%	13.3%	42.5%	34.7%	5.1%
France	1.9%	2.7%	12.9%	38.6%	38.0%	5.9%
Germany	2.6%	2.5%	12.7%	35.1%	39.0%	8.1%
Hungary	1.0%	1.8%	8.7%	43.8%	39.5%	5.3%
Ireland	1.1%	2.7%	16.6%	46.7%	26.6%	6.4%
Latvia	1.8%	2.7%	13.1%	51.6%	22.4%	8.4%
Spain	1.3%	1.9%	13.4%	39.3%	40.8%	3.3%
The Netherlands	1.4%	2.6%	15.5%	44.1%	28.8%	7.6%
10 other countries	1.6%	3.6%	19.5%	41.8%	23.5%	10.0%
Total	1.6%	2.5%	13.8%	42.1%	33.2%	6.7%

The suggestion that simplified administrative procedures for RES projects would encourage more people to engage in the energy transition did not bring up any surprises: three quarters of the respondents agree with this statement. At 4.1%, the disagreement rate was minimal, while the approval was overwhelming – particularly in Hungary and Spain.

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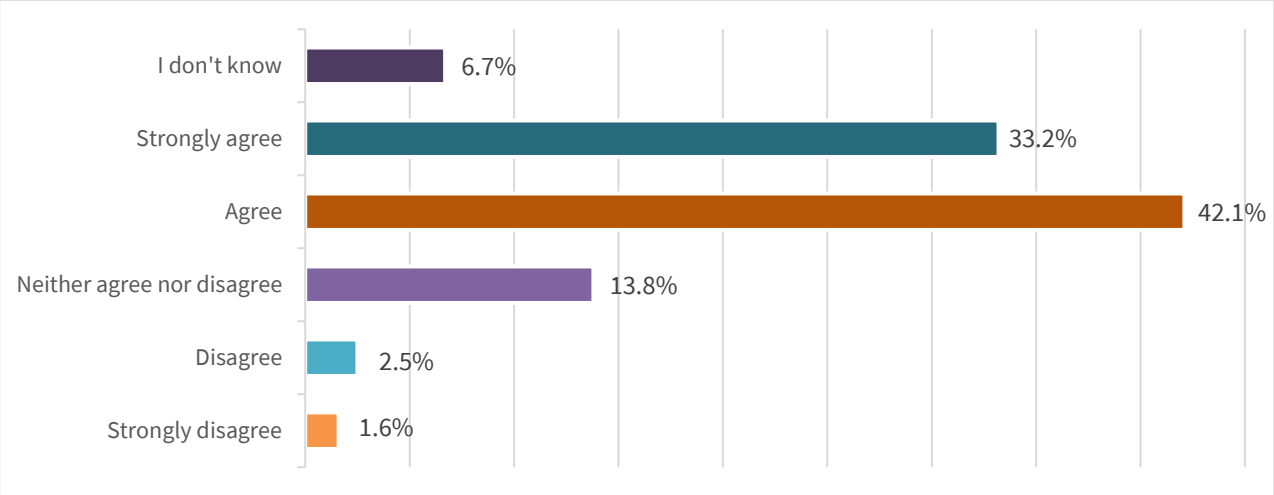
Figure 14.9 Administrative procedures for renewable energy projects should be simplified (N=10,071)



14.10 Providing access to affordable sustainable energy to all people should become a political priority.

Table 14.10 Providing access to affordable sustainable energy to all people should become a political priority (per country)

Country	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	I don't know
Belgium	1.6%	2.8%	10.9%	32.0%	47.4%	5.3%
Bulgaria	1.7%	1.8%	11.9%	38.0%	42.7%	4.0%
France	1.8%	2.7%	12.3%	34.1%	44.0%	5.1%
Germany	1.9%	3.0%	11.8%	32.7%	43.6%	7.0%
Hungary	1.8%	3.0%	10.6%	37.1%	42.6%	5.0%
Ireland	1.0%	2.1%	11.9%	41.3%	38.7%	5.1%
Latvia	1.4%	4.2%	19.0%	42.7%	24.7%	8.1%
Spain	1.6%	2.3%	11.1%	34.4%	48.2%	2.4%
The Netherlands	1.4%	3.9%	15.7%	39.6%	34.5%	4.9%
10 other countries	1.9%	4.8%	17.3%	39.3%	28.3%	8.5%
Total	1.6%	3.0%	13.2%	37.1%	39.5%	5.5%

The final suggestion, namely that providing access to affordable sustainable energy to all residents of a country should become a political priority, was similarly to the previous one almost universally approved. The opposition was minimal, and the level of agreement the second highest among all 10 suggested measures for encouraging energy citizenship (almost identical to agreement with support for the vulnerable consumers). Latvia is the only country that stands out, with the agreement rate about 10 points below the average result.

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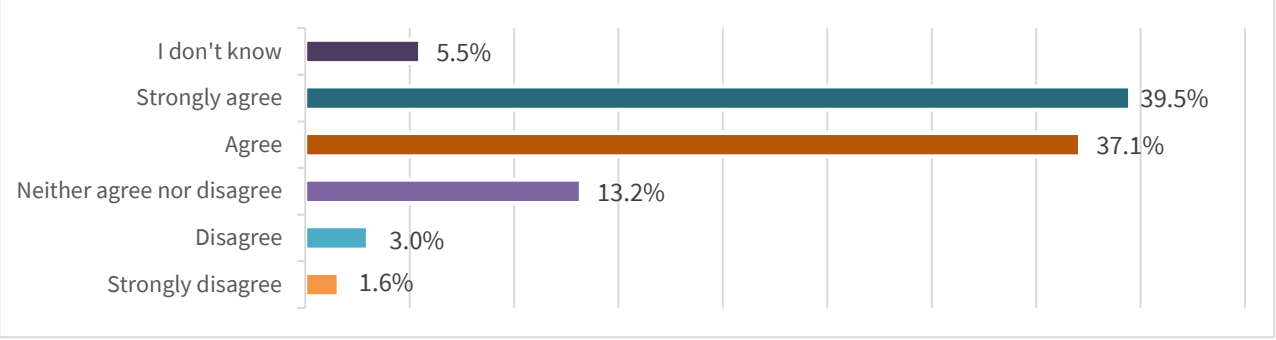
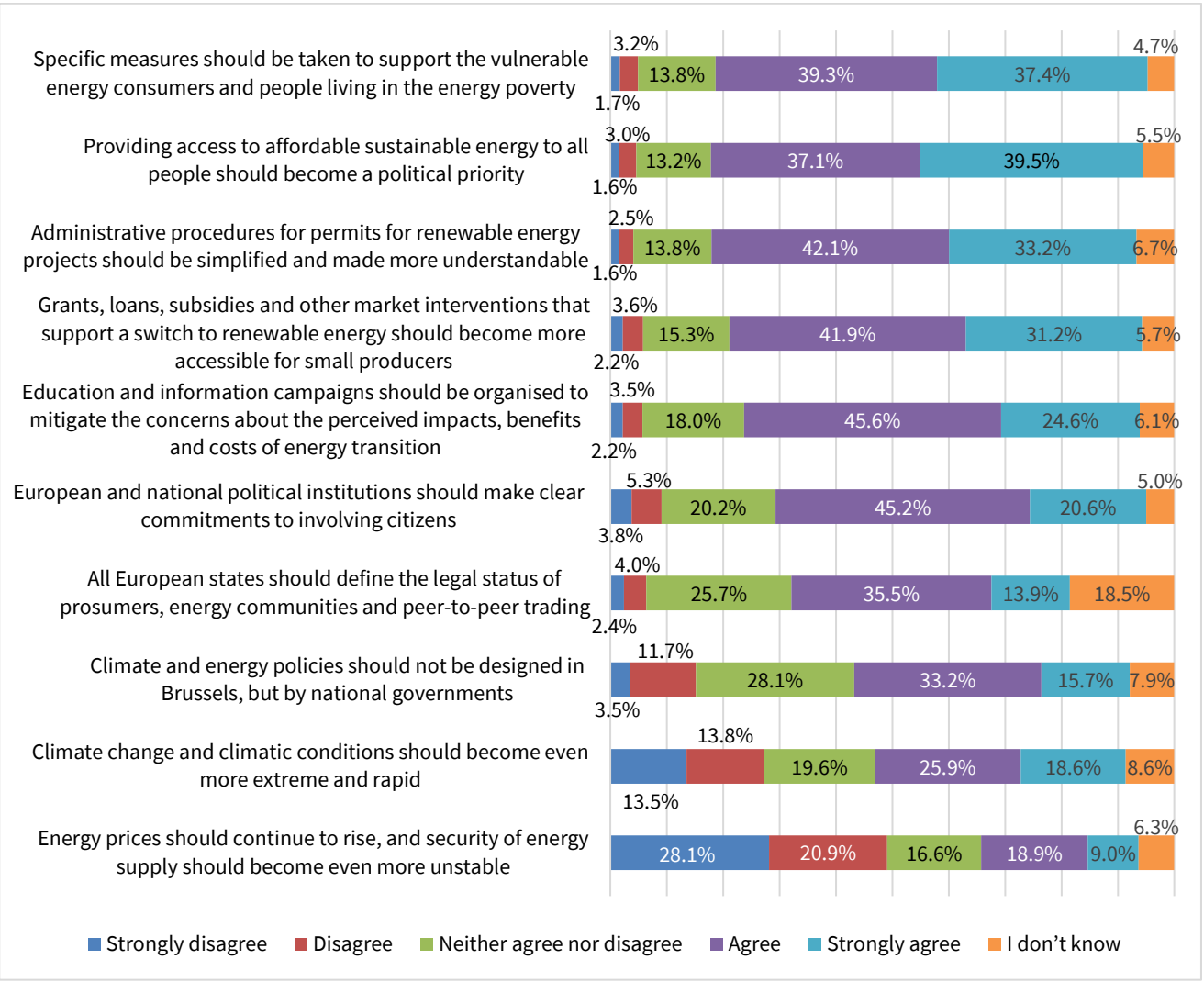
Figure 14.10 Providing access to affordable sustainable energy to all people should become a political priority (N=10,071)



14.11 What needs to happen so that more Europeans would become involved in the energy transition

Figure 14.11 What needs to happen so that more Europeans would become involved in the energy transition? A comparison (N=10,071)



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Part 4: General information about the respondents

Country of residence of respondents

The preliminary target of the survey was to include 1,000 participants from the nine countries included in the EnergyPROSPECTS project, and additional 1,000 participants from 10 other European countries (100 per country). The actual number of people who have completed the survey slightly exceeds the target.

Table 15: Number of respondents per country

Total	Ireland	Belgium	Bulgaria	Hungary	Latvia	France	Germany	Netherlands	Spain
10,071	1,018	1,016	1,010	1,008	1,005	1,000	1,000	1,000	1,000
UK	**Italy**	**Poland**	**Turkey**	**Austria**	**Portugal**	**Sweden**	**Denmark**	**Finland**	**Greece**
105	102	102	102	101	101	101	100	100	100

Gender of respondents

Table 16: Gender of respondents per country

Country	Male		Female		Other		Prefer not to say	
Belgium	491	48.3%	523	51.5%	1	0.1%	1	0.1%
Bulgaria	447	44.3%	562	55.6%	0	0.0%	1	0.1%
France	488	48.8%	510	51.0%	2	0.2%	0	0.0%
Germany	494	49.4%	504	50.4%	2	0.2%	0	0.0%
Hungary	481	47.7%	525	52.1%	2	0.2%	0	0.0%
Ireland	508	49.9%	506	49.7%	2	0.2%	2	0.2%
Latvia	470	46.8%	532	52.9%	1	0.1%	2	0.2%
Spain	491	49.1%	509	50.9%	0	0.0%	0	0.0%
The Netherlands	489	48.9%	509	50.9%	1	0.1%	1	0.1%
10 other countries	500	49.3%	511	50.4%	0	0.0%	3	0.3%
Total	4859	48.2%	5191	51.5%	11	0.1%	10	0.1%

As can be seen from the table above, the gender balance among survey participants was very good, with a very slight predominance of female respondents. The only exception is Bulgaria, where the difference exceeded 10% in favour of women. Interestingly, Ireland is the only country where male participants outnumbered females, although by the smallest of margins.

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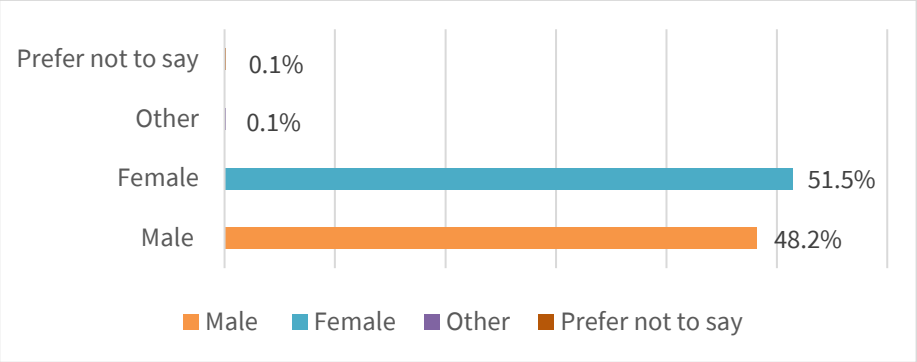
Figure 15: Gender of respondents



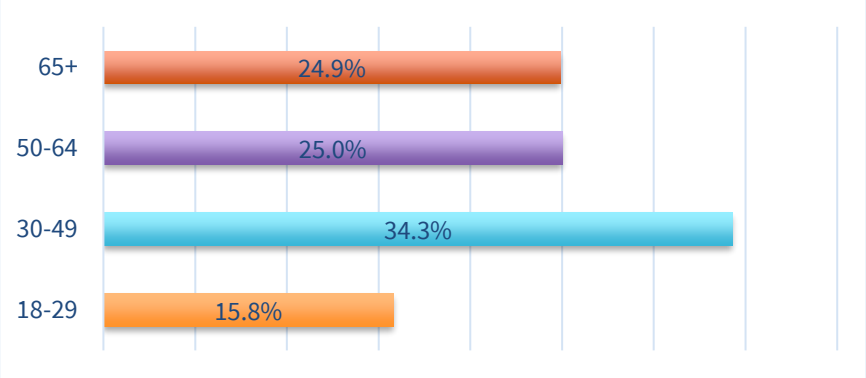
Age group of respondents

Table 17: Age of respondents per country

Country	18-29		30-49		50-64		65+	
Belgium	171	16.8%	331	32.6%	253	24.9%	261	25.7%
Bulgaria	136	13.5%	387	38.3%	258	25.5%	229	22.7%
France	153	15.3%	332	33.2%	237	23.7%	278	27.8%
Germany	143	14.3%	311	31.1%	268	26.8%	278	27.8%
Hungary	152	15.1%	369	36.6%	222	22.0%	265	26.3%
Ireland	182	17.9%	392	38.5%	231	22.7%	213	20.9%
Latvia	140	13.9%	378	37.6%	267	26.6%	220	21.9%
Spain	139	13.9%	352	35.2%	260	26.0%	249	24.9%
The Netherlands	173	17.3%	264	26.4%	254	25.4%	309	30.9%
10 other countries	202	19.9%	337	33.2%	266	26.2%	209	20.6%
Total	1591	15.8%	3453	34.3%	2516	25.0%	2511	24.9%

Despite the effort to ensure a balanced representation of all age groups, the respondents aged 30-49 are somewhat overrepresented, while those younger than 30 are underrepresented.

Figure 16: Age of respondents



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Education of respondents

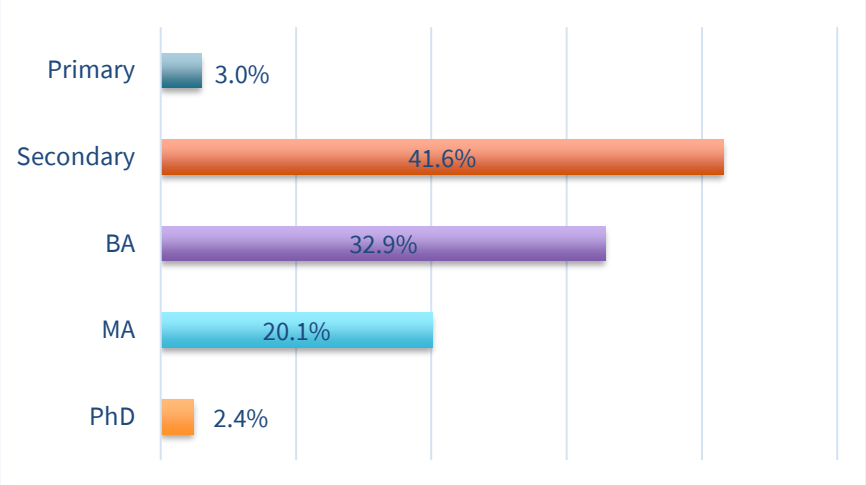
Table 18: Education of respondents per country

Country	Primary		Secondary		Bachelor's or equivalent level		Master's or equivalent level		Doctoral or equivalent level)	
Belgium	56	5.5%	413	40.6%	332	32.7%	193	19.0%	22	2.2%
Bulgaria	2	0.2%	330	32.7%	246	24.4%	408	40.4%	24	2.4%
France	24	2.4%	423	42.3%	349	34.9%	172	17.2%	32	3.2%
Germany	43	4.3%	575	57.5%	201	20.1%	162	16.2%	19	1.9%
Hungary	44	4.4%	621	61.6%	229	22.7%	98	9.7%	16	1.6%
Ireland	16	1.6%	359	35.3%	459	45.1%	162	15.9%	22	2.2%
Latvia	13	1.3%	356	35.4%	361	35.9%	255	25.4%	20	2.0%
Spain*	21	2.1%	89	8.9%	196	19.6%	112	11.2%	22	2.2%
The Netherlands	24	2.4%	449	44.9%	381	38.1%	123	12.3%	23	2.3%
10 other countries	47	4.6%	340	33.5%	376	37.1%	222	21.9%	29	2.9%
Total	290	3.0%	3955	41.6%	3130	32.9%	1907	20.1%	229	2.4%

Note: Spanish questionnaire included two additional education categories: University degree or equivalent level (380 respondents, or 38.0%) and vocational training (180 respondents, or 18.0%).

The largest disproportions have occurred regarding the education of respondents. Only a tiny share of survey participants come from the edges of the educational ladder – only 3% are with the primary education and 2.4 have a doctoral degree or equivalent. The largest group of respondents are those with the secondary education.

Figure 17: Education of respondents



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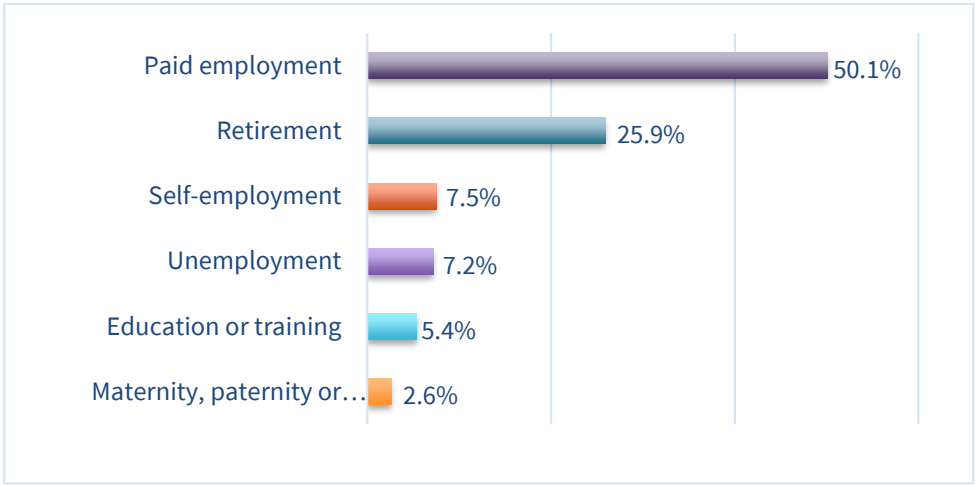
Employment status of respondents

Table 19: Employment status of respondents per country

Country	Education or training		Paid employment		Self-employment		Unemploy-ment		Unpaid employment		Maternity, paternity or childcare leave		Retirement	
Belgium	76	7.5%	464	45.7%	35	3.4%	62	6.1%	23	2.3%	26	2.6%	330	32.5%
Bulgaria	46	4.6%	515	51.0%	121	12.0%	63	6.2%	6	0.6%	35	3.5%	224	22.2%
France	51	5.1%	508	50.8%	47	4.7%	54	5.4%	10	1.0%	14	1.4%	316	31.6%
Germany	59	5.9%	473	47.3%	71	7.1%	60	6.0%	12	1.2%	24	2.4%	301	30.1%
Hungary	34	3.4%	498	49.4%	65	6.4%	62	6.2%	5	0.5%	50	5.0%	294	29.2%
Ireland	55	5.4%	562	55.2%	68	6.7%	93	9.1%	10	1.0%	28	2.8%	202	19.8%
Latvia	53	5.3%	548	54.5%	112	11.1%	68	6.8%	11	1.1%	33	3.3%	180	17.9%
Spain	53	5.3%	507	50.7%	75	7.5%	103	10.3%	16	1.6%	14	1.4%	232	23.2%
Netherlands	41	4.1%	493	49.3%	58	5.8%	71	7.1%	28	2.8%	17	1.7%	292	29.2%
10 other countries	78	7.7%	475	46.8%	104	10.3%	86	8.5%	9	0.9%	24	2.4%	238	23.5%
Total	546	5.4%	5043	50.1%	756	7.5%	722	7.2%	130	1.3%	265	2.6%	2609	25.9%

Exactly one half of respondents are regularly employed, and one quarter are retired persons. The remaining 25% are comprised by self-employed and unemployed respondents, students, and a small share of persons on childcare leave or engaged in unpaid employment.

Figure 18: Employment of respondents



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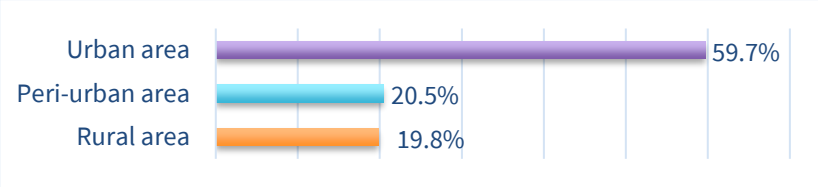
Type of area in which respondents live

Table 20: Type of area in which respondents live per country

Country	Urban area		Peri-urban area		Rural area	
Belgium	421	41.4%	333	32.8%	262	25.8%
Bulgaria	923	91.4%	39	3.9%	48	4.8%
France	477	47.7%	248	24.8%	275	27.5%
Germany	478	47.8%	266	26.6%	256	25.6%
Hungary	635	63.0%	158	15.7%	215	21.3%
Ireland	536	52.7%	186	18.3%	296	29.1%
Latvia	701	69.8%	158	15.7%	146	14.5%
Spain	762	76.2%	126	12.6%	112	11.2%
The Netherlands	442	44.2%	314	31.4%	244	24.4%
10 other countries	637	62.8%	236	23.3%	141	13.9%
Total	6012	59.7%	2064	20.5%	1995	19.8%

By far the largest share of respondents resides in cities and towns. The overall proportion is somewhat distorted on the account of exceptionally large share of urban residents in Bulgaria, but also Latvia and Spain (although on a smaller scale). The most balanced distribution of areas of residence is observed in Belgium and The Netherlands. Ireland, France, Belgium, Germany and The Netherlands have the largest shares of rural residents.

Figure 19: Area of residence of respondents



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Region in which the residents live

Table 21a: Belgium

Région de Bruxelles-Capitale/ Brussels Hoofdstedelijk Gewest	13.2%
Prov. Antwerpen	10.1%
Prov. Limburg (BE)	5.4%
Prov. Oost-Vlaanderen	6.9%
Prov. Vlaams-Brabant	9.6%
Prov. West-Vlaanderen	6.9%
Prov. Brabant wallon	5.5%
Prov. Hainaut	17.5%
Prov. Liège	14.2%
Total	100%

Table 21c: Bulgaria

Severozapaden	11.9%
Severen tsentralen	13.5%
Severoiztochen	15.4%
Yugozapaden	23.0%
Yuzhen tsentralen	16.0%
Yugoiztochen	20.2%
Total	100%

Table 21e: Hungary

Budapest	18.2%
Dél-Alföld	12.9%
Dél-Dunántúl	9.0%
Észak-Alföld	14.5%
Észak-Magyarország	12.6%
Közép-Dunántúl	9.4%
Nyugat-Dunántúl	10.6%
Pest	12.8%
Total	100%

Table 21f: Latvia

Pieriga	13.2%
Latgale	10.3%
Kurzeme	15.3%
Riga	37.0%
Zemgale	11.2%
Vidzeme	12.8%
Total	100%

Table 21b: France

Auvergne-Rhône-Alpes	12.5%
Bourgogne-Franche-Comté	4.7%
Bretagne	5.3%
Centre-Val de Loire	3.9%
Corse	0.3%
Grand Est	8.5%
Hauts-de-France	9.7%
Île-de-France	19.2%
Normandie	4.6%
Nouvelle-Aquitaine	9.5%
Occitanie	8.8%
Pays de la Loire	5.4%
Provence-Alpes-Côte d'Azur	7.6%
Total	100%

Table 21d: Germany

Baden-Württemberg	13.6%
Bayern	15.7%
Berlin	4.5%
Brandenburg	3.1%
Bremen	1.0%
Hamburg	2.2%
Hessen	7.6%
Mecklenburg-Vorpommern	1.7%
Niedersachsen	9.7%
Nordrhein-Westfalen	21.5%
Rheinland-Pfalz	4.9%
Saarland	1.2%
Sachsen	4.9%
Sachsen-Anhalt	2.6%
Schleswig-Holstein	3.3%
Thüringen	2.5%
Total	100%

Table 21g: Ireland

Connacht	12.2%
Leinster	60.6%
Munster	27.2%
Total	100%

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Table 21h: The Netherlands

Groningen	3.4%
Friesland (NL)	3.9%
Drenthe	2.8%
Overijssel	6.7%
Gelderland	12.6%
Flevoland	2.7%
Utrecht	7.7%
Noord-Holland	15.5%
Zuid-Holland	21.4%
Zeeland	2.3%
Noord-Brabant	14.3%
Limburg (NL)	6.7%
Total	100%

Table 21i: Spain

Andalucía	18.0%
Aragón	2.8%
Canarias	4.8%
Cantabria	1.3%
Castilla y León	5.3%
Castilla-la Mancha	4.4%
Cataluña	16.3%
Comunidad de Madrid	14.4%
Comunidad Foral de Navarra	1.4%
Comunitat Valenciana	11.0%
Extremadura	2.2%
Galicia	5.8%
Illes Balears	1.8%
La Rioja	0.7%
País Vasco	4.5%
Principado de Asturias	2.1%
Región de Murcia	3.2%
Total	100%

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5. CONCLUSION

The online survey included 10,071 participants from 19 European countries. The survey aimed to capture the **views, opinions and expectations of European citizens about the energy transition, and obtain information about their practices and roles in this process**. The survey collected information about how citizens perceive and practice energy citizenship, and assessed the choices, opportunities and barriers they face. It was subsequently used by the EnergyPROSPECTS team to develop recommendations for strengthening the role of citizens in the transition of the energy system in Europe.

The overall findings are not particularly encouraging. To begin, well over half of all respondents consider that **the role of individual citizens in the energy transition is limited to actions concerning their private lives**. However, even such engagement is often impeded by (limited) financial resources. Moreover, about half of the respondents believe that the energy transition is something that national and EU institutions should be responsible for, and do not see it as a process that should be (co)shaped by ordinary people.

Expectations of survey participants about the near future are rather pessimistic. Most (57%) expect that in 2030 they will pay more for energy than they do today. Only **a small minority (14%) think that the process of energy transition is on the right track**, while others believe either that the process is headed in the wrong direction (31%), or that although its course is correct, the progress has been way too slow (43%).

The opinions about the performance of institutions and organisations involved in the energy transition correspond with respondents' evaluation of the process. **None of the actors listed in the survey received a positive assessment**. The role of the academic and research institutions in the energy transition is evaluated somewhat less harshly, but even in this case most respondents are of the opinion that they should be doing more. The approval rating for the roles of EU Parliament, the European Commission, national and local authorities, energy providers, and actors from industry and business is remarkably low (between 8 and 12%).

In noting this deep dissatisfaction with the energy transition process and the performance of actors involved, a question arises – **what are the citizens themselves willing and able to do to help the EU achieve its climate neutrality goals**?

For a majority of European citizens who participated in the survey, the main, if not the only, option to fulfil their energy citizenship potential relates to private actions – something they (can) do in their households, or in their daily routines. Only one quarter of the respondents are engaged (or consider the possibility to be engaged) in different aspects of public action, interaction or commitment. This is further accentuated by the fact that the main driver for most (actual or potential) actions is the desire, but in many cases also the necessity, **to reduce energy costs and save money**. The availability of grants, subsidies or other financial stimuli is the second most common reason why respondents take action. Environmental concerns and personal contribution to mitigating the climate change are important motivations for many people, but overall their ability to inspire citizens to engage in the energy transition cannot match (possible) financial advantages.

On positive note, there is **a solid agreement that all members of society should do whatever they can to support the energy transition**. However, in combination with replies to a number of other questions, it appears that "whatever they can" is often limited to different ways to consume less energy (and save money). For example, the most common responses to the rise of the energy prices during the energy crisis are decrease of indoor temperature, reduced or limited use of various home appliances, conscious use of lights, washing at lower temperatures, and reduced use of air-conditioning. Also mentioned is the

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increased use of off-peak electricity as another measure for reducing the costs.

About two thirds of the respondents turned to more walking, riding bicycles or using public transport instead of driving their cars. However these actions are not as widespread as measures to reduce the energy consumption at home, i.e. measures that do not involve alternative or new practices but only changes in the existing ones.

Given that heating costs represent a considerable part of the household budget, respondents found a variety of **ways to deal with the lower indoor temperatures**: dressing warm at home; using blankets, hot water bottles or heating plates; spending more time outside the home, staying longer in bed, or heating only certain rooms or only at certain hours. Switching to a cheaper heating source, especially firewood or pellets, is also a fairly common measure.

As is evident from the answers to the open question about actions undertaken in response to the energy crisis (about one third of respondents answered this question), a combination of high prices and low incomes has obliged quite a few respondents (5-6%) to cut expenses in other ways as well. They have started to spend less on clothing and leisure, but often also on food – buying less than before and keeping an eye on possible discounts.

Regardless of the motivation, these cost-cutting measures inevitably result in the reduction of energy use. Asked to evaluate the results of their actions, **more than 60% of respondents reported that they have decreased their energy consumption**.

Where do the survey results leave us in terms of the current state of energy citizenship and the perspectives for its future evolution? One of the main problems remains **the divide between the good intentions and their concretisation into actual forms of engagement**. Asked how they see their role in the energy system in 2030, only one fifth of respondents expressed confidence that their role will change. A quarter of survey participants noted that they have no interest in actively participating in the energy transition – additional 30% were in doubt whether to agree or disagree with this view. This position is contrasted by the opinion that energy transition is a joint task of everyone in society, that it has now become "everyone's business" and therefore all citizens should become more active (70% of respondents agree with this opinion). When we add the general and very strongly expressed dissatisfaction with the performance of all major actors involved in the energy transition, we can conclude from the results that the majority of citizens are expecting everyone else to do more, but only a minority are willing to do their share, unless they can do it within their comfort zone (private realm).

What can and should be done, in the opinion of survey participants, to **encourage and support the involvement of European citizens in the energy transition**? Almost three quarters of respondents believe that energy citizenship in Europe would be given a strong push by **tailored financial support measures** that acknowledge the core role of citizens in the energy transition. Furthermore, the corresponding funding programmes, grants, low interest loans, guarantees, subsidies, green bonds, etc. should be easily accessible through **simplified administrative procedures**. It is also important that targeted measures are taken to **support vulnerable energy consumers** and people living in energy poverty to enable and ease their access to these programmes as well.

Furthermore, **education and information campaigns** are very important to mitigate any concerns about the perceived impacts, benefits and costs of energy transition. They also inform citizens about the existing opportunities for their involvement. The relevant EU and national authorities and agencies should do more to involve the traditional media (print and electronic) in these efforts, considering that these information resources are at the same time the most used and most trusted, according to the majority of respondents. Much more should be done also to take advantage of the ICT technologies. Paradoxically, citizens perceive **websites of EU institutions and national governments** as some of the most credible information

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sources. However, only a minority of them actually follows them to obtain information about the energy and climate topics. In relation to **social media**, there is a concern that the EU and national government actors cannot keep up with climate change deniers and fossil fuel advocates. More effort and attention should be given to utilising these information channels that a substantial share of European citizens uses to get informed.

The survey participants clearly showed their expectations for certain **crucial legislative developments**. To begin, the legal status of individual and collective prosumers of energy from renewable sources needs to be defined in all European states and harmonised across the EU. The same goes for peer-to-peer trading and energy sharing regulation. European and national political institutions must undertake concrete measures to implement in practice their commitments to involve citizens in the energy transition. This might include legislative steps that do not only enable, but in certain aspects oblige citizens to modify their usual energy-consumption routines.

Finally, in order to truly fulfil the vision enshrined in the Energy Union and the "Clean Energy for all Europeans" package and place citizens at the core of the Energy Union, more needs to be done to include citizens in the design of the policymaking processes. The survey results highlighted **a considerable divide between policymakers and citizens.** The latter feel disempowered, unrepresented and disappointed. They believe that politicians do not consider the views and ideas of ordinary citizens when designing policies pertaining to development of the energy system. **The road to inclusive, accessible, just and socially fair energy transition must be paved with a more efficient, clear and supportive policy framework developed through active engagement and in agreement with needs and opinions of European citizens.**

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6. ANNEX – EnergyPROSPECTS CITIZEN SURVEY

Part 1: Energy-related activities

1. **In 2021-2022, energy prices had risen sharply in many countries in Europe, which some labelled 'an energy crisis'. Please indicate if you took any of the following actions in response to this situation.**

   1.1 I lowered the standard temperature in my house by more than 2°C. (Yes, No)

   A pop-up question in case that a "Yes" *answer is given*: Have you maintained this change in temperature until today? (Yes, No)

   1.2 I have reduced the use of air-conditioning in my home. (Yes, No, I do not have AC)

   A pop-up question in case that a "Yes" *answer is given*: Do you still use air-conditioning less than before the crisis? (Yes, No)

   1.3 I reduced the use of my car. (Yes, No, I do not have a car)

   A pop-up question in case that a "Yes" *answer is given*: Do you still use your car less than before the crisis? (Yes, No)

   1.4 I used public transportation more, walked and/or biked more. (Yes, No)

   A pop-up question in case that a "Yes" *answer is given*: Do you still use public transportation, walk and/or bike more than before the crisis? (Yes, No)

   1.5 I invested in renewable energy generation (for instance, solar panels). (Yes, No)

   1.6 I changed my electricity and/or gas supplier. (Yes, No)

   1.7 I undertook energy retrofitting of my home (e.g. insulation, installed a heat pump). (Yes, No)

   1.8 Did you take any other actions to deal with the situation? (Yes, No)

   If answer is "Yes": Which?

2. **Has your overall energy consumption decreased due to the measures you have taken since the onset of the energy crisis (since 2021)?** (Yes, No, I don't know)

   NOTE: *This question should only pop up if* 'Yes' *answer was given at least once in question 1*.

3. **Please look at the actions listed below - are you currently doing any of these, have you done any in the past, can you envisage doing any in the future?**

   3.1 I try to save energy in most of my activities at home (e.g. by switching off the lights, lowering room temperature, putting a lid on pans while cooking, etc.). (1 = No, and I have no plans to do it in the future, 2 = No, but I may do it in the future, 3 = No, but I will certainly do it in the future, 4 = I have done it before, but not anymore, 5= Yes, I am doing it, 6 = I don't know)

   3.2 I use different smart devices and digital apps to follow and measure my energy consumption. (1 = No, and I have no plans to do it in the future, 2 = No, but I may do it in the future, 3 = No, but I will certainly do it in the future, 4 = I have done it before, but not anymore, 5= Yes, I am doing it, 6 = I don't know)

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3.3 I am a member of a renewable energy cooperative (a local community or citizens' initiative to produce and consume renewable energy). (1 = No, and I have no plans to do it in the future, 2 = No, but I may do it in the future, 3 = No, but I will certainly do it in the future, 4 = I have done it before, but not anymore, 5= Yes, I am doing it, 6 = I don't know)

3.4 I usually use green mobility options (walking, biking, e-car or e-bike sharing service, electric scooters, public transport). (1 = No, and I have no plans to do it in the future, 2 = No, but I may do it in the future, 3 = No, but I will certainly do it in the future, 4 = I have done it before, but not anymore, 5= Yes, I am doing it, 6 = I don't know)

3.5 I get my electricity from an electricity supplier with a green electricity plan. (1 = No, and I have no plans to do it in the future, 2 = No, but I may do it in the future, 3 = No, but I will certainly do it in the future, 4 = I have done it before, but not anymore, 5= Yes, I am doing it, 6 = I don't know)

3.6 I often try to mobilise the people I know to be more responsible in the way they consume energy. (1 = No, and I have no plans to do it in the future, 2 = No, but I may do it in the future, 3 = No, but I will certainly do it in the future, 4 = I have done it before, but not anymore, 5= Yes, I am doing it, 6 = I don't know)

3.7 I comment on energy-related issues on online social media (e.g., Facebook, Twitter/X, online forums). (1 = No, and I have no plans to do it in the future, 2 = No, but I may do it in the future, 3 = No, but I will certainly do it in the future, 4 = I have done it before, but not anymore, 5= Yes, I am doing it, 6 = I don't know)

3.8 I am active in an organisation that seeks social, political or societal change related to the energy system (a social movement). (1 = No, and I have no plans to do it in the future, 2 = No, but I may do it in the future, 3 = No, but I will certainly do it in the future, 4 = I have done it before, but not anymore, 5= Yes, I am doing it, 6 = I don't know)

3.9 I participate in protests against certain types of energy production (wind/nuclear/coal). (1 = No, and I have no plans to do it in the future, 2 = No, but I may do it in the future, 3 = No, but I will certainly do it in the future, 4 = I have done it before, but not anymore, 5= Yes, I am doing it, 6 = I don't know)

3.10 I cover part of my household's energy needs by producing my own electricity (via solar panels or other means). (1 = No, and I have no plans to do it in the future, 2 = No, but I may do it in the future, 3 = No, but I will certainly do it in the future, 4 = I have done it before, but not anymore, 5= Yes, I am doing it, 6 = I don't know)

A pop-up question in case that a "Yes, I am doing it" *answer is given*: Please reply to the following statements about energy self-generation, storage and trading:

a) I sell the surplus of my self-generated electricity (the part I do not consume on-site) back to the grid. (1 = No, and I have no plans to do it in the future, 2 = No, but I may do it in the future, 3 = No, but I will certainly do it in the future, 4 = I have done it before, but not anymore, 5= Yes, I am doing it, 6 = I don't know)

b) I store the surplus of self-generated electricity using an individual or community storage (battery). (1 = No, and I have no plans to do it in the future, 2 = No, but I may do it in the future, 3 = No, but I will certainly do it in the future, 4 = I have done it before, but not anymore, 5= Yes, I am doing it, 6 = I don't know)

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3.11 I have (partially or fully) changed my home appliances and/or lighting with more energy efficient ones. (1 = No, and I have no plans to do it in the future, 2 = No, but I may do it in the future, 3 = No, but I will certainly do it in the future, 4 = Yes, I have done it, 5 = I don't know)

3.12 I have done (partial or full) energy retrofitting of my home (e.g., insulation of walls, installation of a heat pump, replacement of windows, etc.). (1 = No, and I have no plans to do it in the future, 2 = No, but I may do it in the future, 3 = No, but I will certainly do it in the future, 4 = Yes, I have done it, 5 = I don't know)

3.13 I (my household) bought an electric car. (1 = No, and I have no plans to do it in the future, 2 = No, but I may do it in the future, 3 = No, but I will certainly do it in the future, 4 = Yes, I have done it, 5 = I don't know)

3.14 I bought a share of a renewable energy plant operated by an energy provider. (1 = No, and I have no plans to do it in the future, 2 = No, but I may do it in the future, 3 = No, but I will certainly do it in the future, 4 = Yes, I have done it, 5 = I don't know)

3.15 When I choose a political party or a candidate, their positions on energy topics are a crucial issue for me. (1 = No, and this will not change in the future, 2 = No, but they may be in the future, 3 = No, but they will certainly be in the future, 4 = It has been like this before, but not anymore, 5= Yes, they are, 6 = I don't know)

4. In your opinion, how important are the following motivations for your energy-related activities?

4.1 Recognition of my own responsibility for the climate change. (1 = Not important at all, 2 = Slightly important, 3 = Moderately important, 4 = Important, 5 = Very important)

4.2 Desire to contribute to the common good. (1 = Not important at all, 2 = Slightly important, 3 = Moderately important, 4 = Important, 5 = Very important)

4.3 Inspiration by practices of somebody I trust. (1 = Not important at all, 2 = Slightly important, 3 = Moderately important, 4 = Important, 5 = Very important)

4.4 Desire to increase self-sufficiency or to become energy independent. (1 = Not important at all, 2 = Slightly important, 3 = Moderately important, 4 = Important, 5 = Very important)

4.5 Frustration due to inadequate action by decision-makers. (1 = Not important at all, 2 = Slightly important, 3 = Moderately important, 4 = Important, 5 = Very important)

4.6 Availability of financial subsidies (e.g. funding for renovation, funding for campaign, etc.). (1 = Not important at all, 2 = Slightly important, 3 = Moderately important, 4 = Important, 5 = Very important)

4.7 Ambition to reduce my carbon footprint (individual and of my household). (1 = Not important at all, 2 = Slightly important, 3 = Moderately important, 4 = Important, 5 = Very important)

4.8 Possibility to earn or save money. (1 = Not important at all, 2 = Slightly important, 3 = Moderately important, 4 = Important, 5 = Very important)

4.9 Did any other reason than those already mentioned prompted you to act? (Yes, No).

If answer is "Yes": Which?

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5. Now please think about one or more of your energy-related actions. Who has organised it?

5.1 The activity is (has been) my own (my household's) independent action. (Yes, No)

5.2 The activity is (has been) something we do (have done) together with the local community in my neighbourhood. (Yes, No)

5.3 The activity is (has been) a part of a larger initiative, project or event organised by a non-governmental or civil society organisation. (Yes, No)

5.4 The activity is (has been) a part of a larger initiative, project, event, or procedure organised by the national authorities, or other public bodies on the national level. (Yes, No)

5.5 The activity is (has been) a part of a larger initiative, project, event, or procedure organised by the local authorities, or other public bodies on the local level. (Yes, No)

5.6 The activity is (has been) a part of a larger initiative, project or event organised by a private company. (Yes, No)

5.7 Did anyone else not yet mentioned organise the action? (Yes, No).

If answer is "Yes": Who?

Part 2: Views about the role of individuals in the energy system

6. Do you agree/disagree with the following statements about the role of individuals in the energy transition in your country?

6.1 I believe that most people are well informed about what they can do to contribute to the energy transition. (1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly agree, 6 = I don't know)

6.2 In the country I reside in, it is possible to save or earn money by producing your own electricity and/or heat from renewable energy sources. (1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly agree, 6 = I don't know)

6.3 Individuals cannot do anything for the energy transition because they are constrained by limited financial resources. (1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly agree, 6 = I don't know)

6.4 In my opinion, the views and ideas of ordinary citizens are not taken seriously enough by politicians when it comes to the development of the energy system. (1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly agree, 6 = I don't know)

6.5 I believe that it is a civic duty to protest against developments in the energy system that people perceive as unfair, unjust or harmful. (1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly agree, 6 = I don't know)

6.6 The energy transition is the responsibility of the national government and the European institutions, not of ordinary people. (1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly agree, 6 = I don't know)

6.7 The options individuals have to contribute to developments in the energy system are limited to their private lives. (1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly agree, 6 = I don't know)

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6.8 The energy transition is a joint task of everyone in the society, therefore it is a responsibility of all citizens to become more active. (1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly agree, 6 = I don't know)

7. Do you agree/disagree with the following statements on the role of personal energy consumption?

7.1 Technological developments are enough for a successful energy transition. I do not personally need to make lifestyle changes to reduce my energy consumption. (1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly agree, 6 = I don't know)

7.2 I have often consumed energy and resources that I could have easily done without. (1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly agree, 6 = I don't know)

7.3 Without changes in policy, people will continue to consume as much energy as they have before. (1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly agree, 6 = I don't know)

7.4 To achieve a successful energy transition, it is more important to reduce energy consumption than to focus on technological solutions for increasing efficiency. (1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly agree, 6 = I don't know)

7.5 A successful energy transition requires from me to forego or strongly reduce certain forms of energy intensive consumption (e.g. flying). (1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly agree, 6 = I don't know)

7.6 A successful energy transition requires everyone to make sacrifices regardless of their income. (1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly agree, 6 = I don't know)

8. How do you foresee/imagine your role in the energy system in 2030?

8.1 I can see myself substantially changing my energy consumption practices. (1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly agree, 6 = I don't know)

8.2 I can see myself substituting my household equipment with energy efficient and/or smart devices. (1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly agree, 6 = I don't know)

8.3 I can see myself participating in public debates and consultations, deliberative processes, and referendums focused on energy. (1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly agree, 6 = I don't know)

8.4 I can see myself joining a citizen-based organisation or other collective form of citizen engagement. (1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly agree, 6 = I don't know)

8.5 I can see myself participating in social movements such as demonstrations and protests linked to various aspects of the energy/climate transition. (1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly agree, 6 = I don't know)

8.6 I can see myself voting for a political party or candidate that puts the energy transition in centre. (1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly agree, 6

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= I don't know)

8.7 I can imagine that my role in the energy system will not significantly change. (1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly agree, 6 = I don't know)

8.8 I have no interest in actively participating in the energy transition. (1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly agree, 6 = I don't know)

8.9 I can see myself contributing to the change of energy consumption practices at my work/school/university. (1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly agree, 6 = I don't know, 7 = I am not working/studying)

Part 3: General views about the energy system and the underlying values

9. From which of the following sources do you get information about energy-related topics? Please tick all options that apply:

9.1 Family or friends

9.2 Web pages of the EU institutions (including documents available on these websites)

9.3 Web pages of the national institutions (including documents available on these websites)

9.4 Online social media

9.5 Conventional media (TV, radio, newspapers, etc.), including online appearance

9.6 Scholarly articles / journals

9.7 Books

9.8 Industry and business websites

9.9 Non-governmental and civic organisations

9.10 Blogs, forums, podcasts

10. Please look at the sources of information listed below. Select three that you find to be most credible on energy-related issues (select 3 answers).

10.1 Family or friends

10.2 Web pages of the EU institutions (including documents available on these websites)

10.3 Web pages of the national institutions (including documents available on these websites)

10.4 Online social media

10.5 Conventional media (TV, radio, newspapers, etc.), including online appearance

10.6 Scholarly articles / journals

10.7 Books

10.8 Industry and business websites

10.9 Non-governmental and civic organisations

10.10 Blogs, forums, podcasts

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11. What are your expectations about future energy prices? (select 1 answer)

11.1 I expect that in 2030 I will pay more for energy than I do today.

11.2 I expect that in 2030 I will pay less for energy than I do today.

11.3 I expect that in 2030 I will pay for energy about the same as I do today.

11.4 I do not know.

12. What is your opinion about how the energy system is developing? (select 1 answer)

12.1 I believe it is headed in the wrong direction.

12.2 I believe it is headed in the right direction at the appropriate pace.

12.3 I believe it is headed in the right direction but at a slow pace.

12.4 I do not know.

13. The energy transition is a complex process in which numerous institutions and organisations are involved. What is your opinion about the performance of these actors?

13.1 EU parliament / European Commission (1 = Their performance is good, 2 = They should be doing more, 3 = This is not their task, 4 = I don't know)

13.2 National authorities (government, parliament, etc.) (1 = Their performance is good, 2 = They should be doing more, 3 = This is not their task, 4 = I don't know)

13.3 Local authorities (city council, mayor, etc.) (1 = Their performance is good, 2 = They should be doing more, 3 = This is not their task, 4 = I don't know)

13.4 Relevant government agencies (e.g. energy regulatory commission or council, energy office, energy markets inspectorate, consumer protection agency, etc.) (1 = Their performance is good, 2 = They should be doing more, 3 = This is not their task, 4 = I don't know)

13.5 Public media (TV, radio, newspapers, etc.) (1 = Their performance is good, 2 = They should be doing more, 3 = This is not their task, 4 = I don't know)

13.6 Academic and research institutions (1 = Their performance is good, 2 = They should be doing more, 3 = This is not their task, 4 = I don't know)

13.7 Industry and business (1 = Their performance is good, 2 = They should be doing more, 3 = This is not their task, 4 = I don't know)

13.8 Energy providers (1 = Their performance is good, 2 = They should be doing more, 3 = This is not their task, 4 = I don't know)

13.9 Schools and universities (1 = Their performance is good, 2 = They should be doing more, 3 = This is not their task, 4 = I don't know)

13.10 Social media influencers (1 = Their performance is good, 2 = They should be doing more, 3 = This is not their task, 4 = I don't know)

13.11 NGOs and civil society organisations (1 = Their performance is good, 2 = They should be doing more, 3 = This is not their task, 4 = I don't know)

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14. We are interested in your opinion about what needs to happen so that more Europeans would become involved in the energy transition. Do you agree/disagree with the following statements about how this could be achieved?

14.1 European and national political institutions should make clear commitments to involving citizens in preparation of the energy and climate policies. (1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly agree, 6 = I don't know)

14.2 Climate and energy policies should not be designed in Brussels, but by national governments.

14.3 Energy prices should continue to rise, and security of energy supply should become even more unstable. (1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly agree, 6 = I don't know)

14.4 Grants, loans, subsidies and other market interventions that support a switch to renewable energy should become more accessible for small producers. (1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly agree, 6 = I don't know)

14.5 Specific measures should be taken to support the vulnerable energy consumers and people living in the energy poverty. (1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly agree, 6 = I don't know)

14.6 Education and information campaigns should be organised to mitigate the concerns about the perceived impacts, benefits and costs of energy transition. (1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly agree, 6 = I don't know)

14.7 Climate change and climatic conditions should become even more extreme and rapid. (1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly agree, 6 = I don't know)

14.8 All European states should define the legal status of prosumers, energy communities and peer-to-peer trading. (1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly agree, 6 = I don't know)

14.9 Administrative procedures for permits for renewable energy projects should be simplified and made more understandable. (1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly agree, 6 = I don't know)

14.10 Providing access to affordable sustainable energy to all people should become a political priority. (1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly agree, 6 = I don't know)

Part 4: General information about the participants

15. Which is your country of residence? (select 1 answer)

DROP-DOWN LIST (19 countries)

16. Which is your gender? (select 1 answer)

16.1 Male

16.2 Female

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16.3 Other

16.4 Prefer not to say

17. Which is your age group? (select 1 answer)

17.1 18-29

17.2 30-49

17.3 50-64

17.4 65+

18. Which is your highest educational qualification? (select 1 answer)

18.1 Primary

18.2 Secondary

18.3 Bachelor's or equivalent level

18.4 Master's or equivalent level

18.5 Doctoral or equivalent level)

19. Which situation describes you most accurately? (select 1 answer)

19.1 Education or training

19.2 Paid employment

19.3 Self-employment

19.4 Unemployment

19.5 Unpaid employment

19.6 Maternity, paternity or childcare leave

19.7 Retirement

20. Where do you live? (select 1 answer)

20.1 Urban area

20.2 Peri-urban area

20.3 Rural area, including remote communities, islands, etc.)

21. What is the average total income per month (after taxes) in your household?

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