



A report

ON EXISTING ENERGY LITERACY
COMPETENCIES BY YOUNG ADULTS IN THE
FOLLOWING COUNTRIES:
AUSTRIA, CROATIA, GREECE, POLAND AND
SLOVENIA

ENERGY LITERACY-PRACTICAL TRAININGS FOR SUSTAINABLE ENERGY CONSUMPTION VIA PERSONAL BEHAVIOURAL CHANGES



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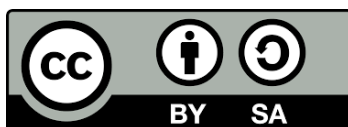
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CONTENT

1	INTRODUCTION	4
2	METHODS	5
3	QUESTIONNAIRE RESULTS: AUSTRIA	6
4	QUESTIONNAIRE RESULTS: CROATIA	25
5	QUESTIONNAIRE RESULTS: GREECE	46
6	QUESTIONNAIRE RESULTS: POLAND	61
7	QUESTIONNAIRE RESULTS: SLOVENIA	81
8	CONCLUSION	99



INTRODUCTION

Energy literacy is an understanding of the nature and role of energy in the world and our daily lives. Being energy literate means possessing the knowledge and concepts that, if understood and applied, will help individuals and communities make informed energy decisions. Within Erasmus+ project EL PRACTICE (Energy Literacy Practice) a competences questionnaire was designed to evaluate the level of energy literacy among young adults (from 29 to 39 years).

With the help of the questionnaire EL Practice aims to identify possible gaps in the knowledge of young adults in relation to energy, their lifestyle, and sustainable choices they make. This report analyses responses gathered from the questionnaire and described each gap identified. Based on this report (as well as national state-of-the-art report) new learning materials will be developed, targeting those gaps, and addressing actual needs of young adults trying to navigate their daily life in a sustainable and energy efficient manner. This questionnaire was performed in 5 countries (Slovenia, Greece, Austria, Poland, and Croatia). The questionnaire was anonymous and consisted of 6 general and 27 topical questions to evaluate the existing state-of-the-art competences. General questions were related to participant's background (age, sex, place of living, education etc.), while topical questions were related to Energy use and Green Deal objectives, Energy related investments, incentives and subventions and Sustainable energy related awareness, behaviour, and habits. Topical questions were designed as a Likert scale questions.

In this report each of the question is presented with a graph and short description. The last chapter summarizes findings and identifies gaps.



METHODS

To better understand the present level of energy literacy among young adults, an online questionnaire was conducted, in May of 2022. The target group of the Energy Literacy Practice project is young adults, identified for this project, as adults between the age of 29 and 39. The questionnaire was set up online, via the survey platform Qualtrics. The method used for reaching the target audience was snowball sampling.

“Snowball sampling is a sampling method used by researchers to generate a pool of participants for a research study through referrals made by individuals who share a particular characteristic of research interest with the target population. It is also referred to as chain sampling or chain referral sampling”.¹

Survey participants within the target group of this research were contacted directly to complete the survey and were then asked to spread the online questionnaire within their group of young adults. This created the so-called “snowball effect”. However, one of the disadvantages of this method is that it removes the researcher from the centre of the sampling process, thus there was no total control of the sampling process. Therefore, some recorded answers were not complete or were not within the target group of the research and were excluded from the analysis. The raw data of the collected answers was then extracted and managed in an Excel document, where the percentages for each question were calculated, and the graphs were made.

¹ <https://methods.sagepub.com/reference/the-sage-encyclopedia-of-educational-research-measurement-and-evaluation/i19094.xml>



QUESTIONNAIRE RESULTS:

Austria

The questionnaire was prepared by the partners MIITR Maribor and KSENNNA. After revision, it was translated into German and the question about the participant's educational background was adapted to the Austrian school system, after consulting with a teacher. Also, the age during the different stages of education was added to ensure clarity among the participants. The questionnaire was then put into the survey program Qualtrics and sent out online via mail, text and social media post. The approach to reach the target group, namely young people between 29 and 39, was a direct approach. The sample size is 40 people, gathered by Levilo.

GENERAL QUESTIONS

These questions should identify the demographic background of the participants as well as ensure that the participants belong to the target group.

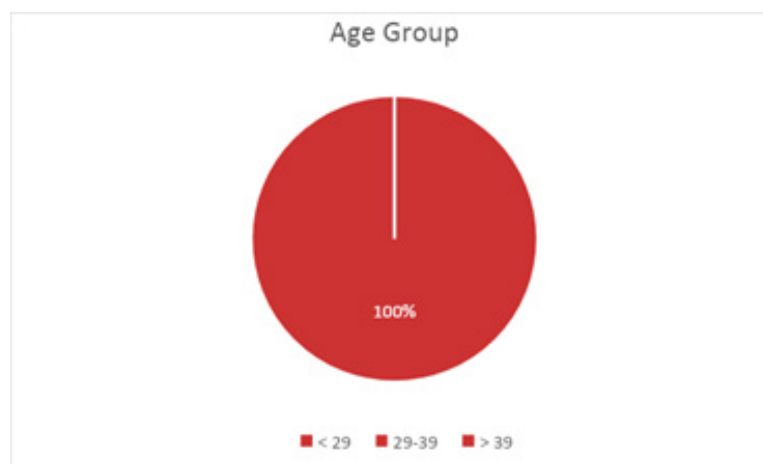


Figure 1: Age group

As seen in the Fig. 1, the target group in this research are young people between the ages of 29 and 39 years. Since some of the participants were targeted directly, it was possible to ensure that the participants fall into the same age group. A few people were younger than 29 but are excluded in the analysis because they are not part of our target group. Therefore, 100 % of the participants are between the age of 29 and 39.

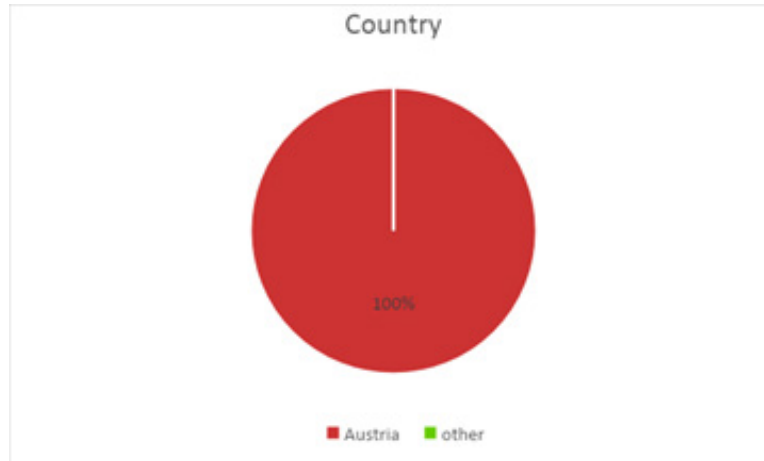


Figure 2: Country

Since this is the competences report for Austria, 100 % of the participants are Austrians as seen in Fig. 2.

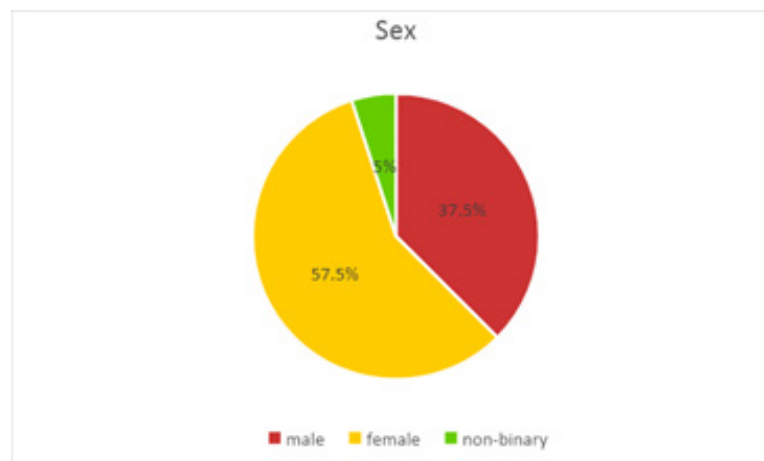


Figure 3: Gender

In the questionnaire, 3 three options of gender were provided as seen in the Fig. 3: male, female, and non-binary. Within the directly targeted participant group, a certain heterogeneity of the sex was tried to be achieved but since the participants were asked to spread the questionnaire, we did not have total control and therefore more females (57,5 %) filled out the questionnaire. 5 % of the participants consider themselves non-binary, which means that they don't feel like they totally belong to any of the sexes. It needs to be noted that in the German language, there is no linguistic differentiation between "sex" and "gender", and both are being translated with the word "Geschlecht". Since the questionnaire was in German, the participants might have interpreted it in either way.

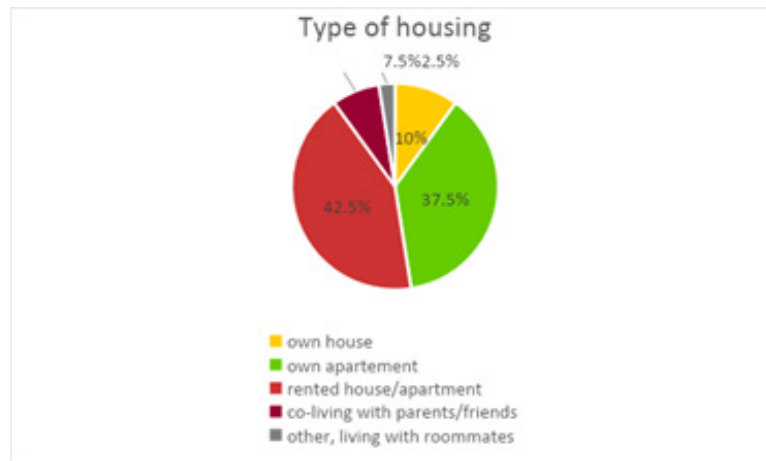


Figure 4: Type of housing

As shown in the Fig. 4, most participants (42,5 %) live in a rented apartment or house. 37,5 % of the participants own an apartment and 10 % own a house. 7,5% co-live with either their parents or friends and 2,5 % live with roommates, which makes them essentially fall into the category of co-living with someone. It comes to no surprise that most people live in a rented apartment or house and even that more than one third of the participants own their own apartment since it is common in Austria to move out of their parent's house at an early age. On average, in Austria, people are moving out of their parent's house at 25,5 years old, which is younger than the EU average. However, most people who are pursuing an educational career, such as studying at university, move out even earlier. Because our target group consists of 29–39-year-olds, it makes sense that they are buying apartments for themselves and their own families because they are in the age group that is already working, even when they attended university.

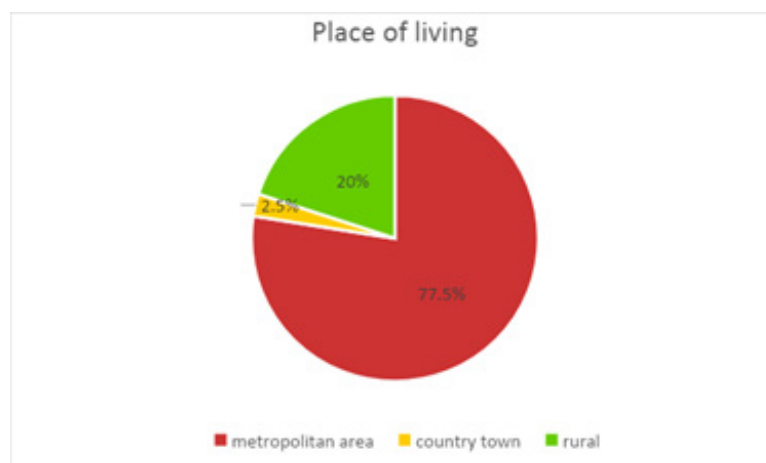


Figure 5: Place of living

Based on the Fig. 5 results show that more than two thirds (77,5 %) of the participants are living in a metropolitan area, while 20 % are from a rural area. Only 2,5 % live in a country town. The high amount of people from a metropolitan area might be explained because the author and his workplace are in the metropolitan area. Therefore the contacts and the people reached through the social media posts by the organization the author is working for will likely be in the metropolitan area as well.

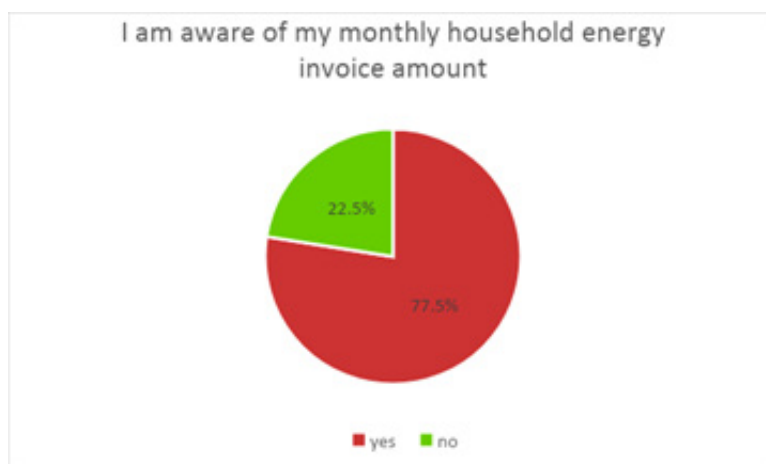


Figure 6: Household energy consumption invoice amount awareness

Over two thirds (77,5 %) of the participants are aware of their monthly household energy invoice amount while 22,5 % are not aware of the amount, as perceived from the Fig. 6.

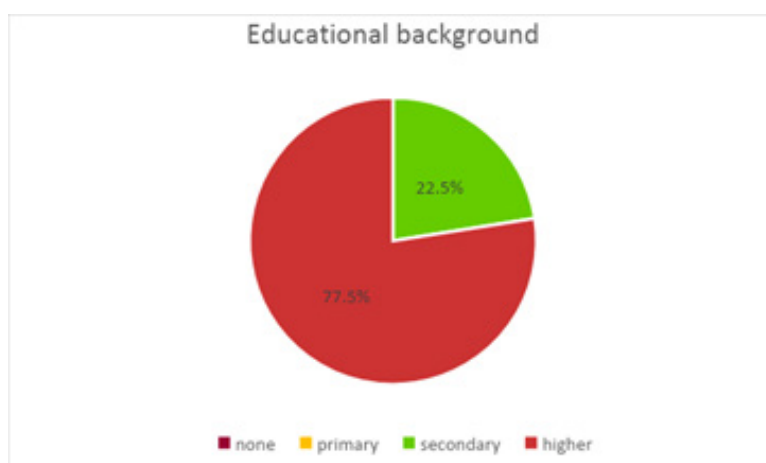


Figure 7: Education background

As from the Fig. 7, it is shown that 77,5 % of participants enjoyed at least some sort of higher education, while 22,5 % had secondary education. None of the participants only had primary or no education which might be explained due to the bias of the locality of the author as well as the tactic of using the snowball sampling method, as people with higher education might be more likely to know other people with higher educational background. Also, people with a higher educational background are usually more likely to participate in surveys and studies.

TOPICAL QUESTIONS

This question block concerned the general awareness of energy literacy and its connection to climate change. A Likert-scale was used, spanning from strongly disagree (1) to strongly agree (5).

TOPIC 0: GENERAL

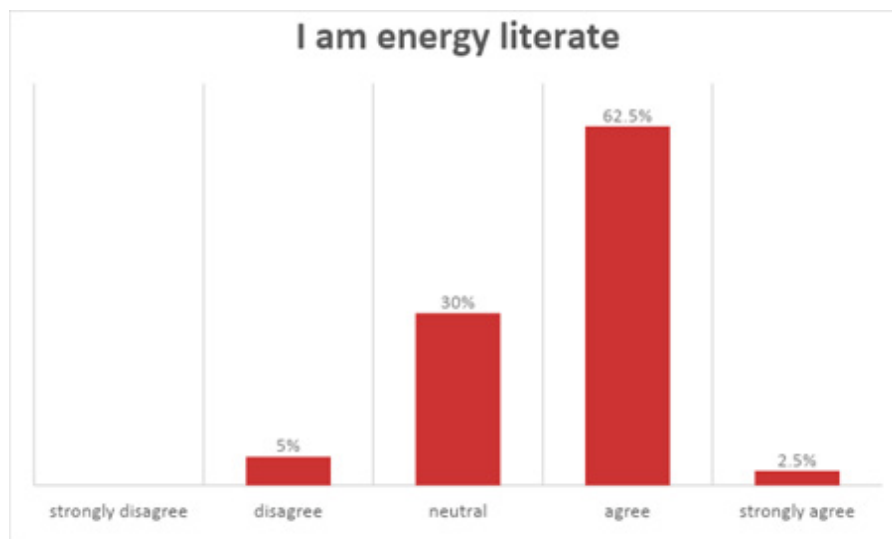


Figure 8: Energy literacy levels among individuals

Almost two thirds agree of the participants agree that they are energy literate (62,5 % agree and 2,5 % strongly agree). 30 % of the participants are neutral to the statement and 5 % disagree while no one strongly disagreed as seen in the Fig. 8 above.

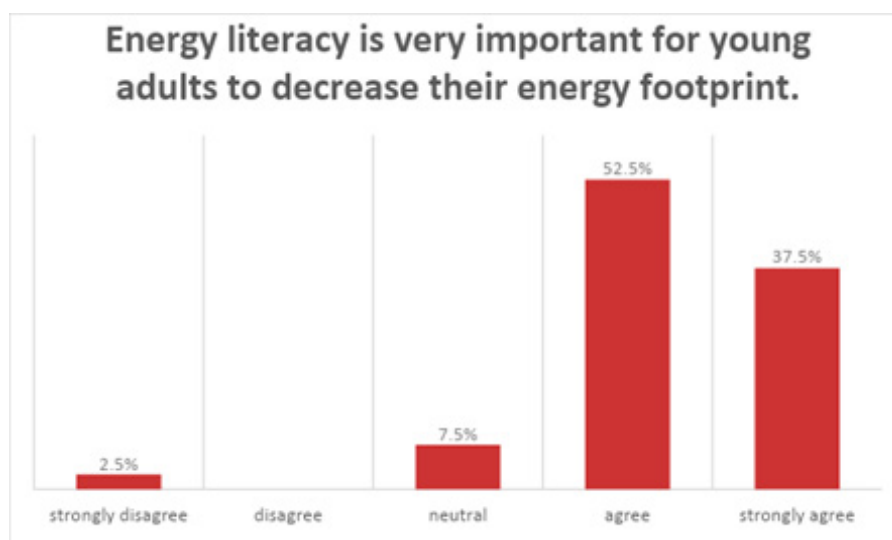


Figure 9: Energy literacy importance

As shown in the Fig. 9, 90 % of the participants agree (52,5 % agree and 37,5 % strongly agree) that energy literacy is very important for young adults to decrease their energy footprint. 7,5 % are neutral to the statement and 2,5 % strongly disagree. This might be explained due to not being confronted with information about energy literacy yet.

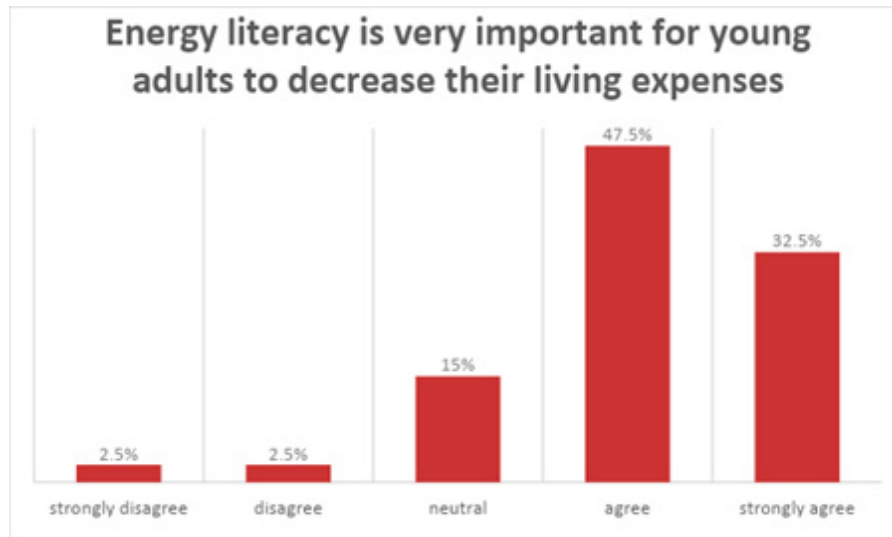


Figure 10: Energy literacy usefulness

Based on the Fig. 10, there 80 % of the participants actively agree (47,5 % agree and 32,5 % strongly agree) that energy literacy is very important for young adults to decrease their living expenses, while 15 % are neutral and 5 % disagree somehow (2,5 % disagree, 2,5 % strongly disagree). It is interesting that fewer people see the economic benefits in energy literacy than the ecological benefits. This might be explainable through a common argument in politics that climate action is costly.

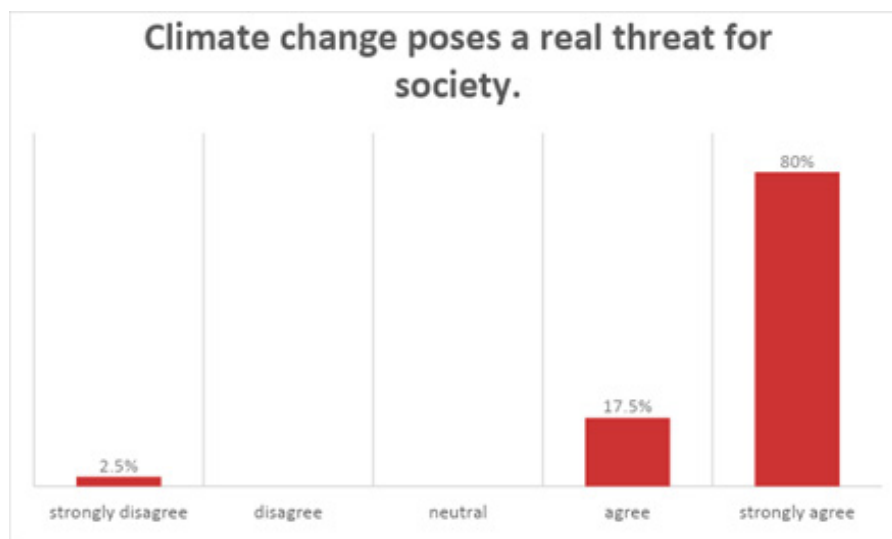


Figure 11: Climate change as a threat

An overwhelming 80% of the participants agree that climate change poses a real threat for society as seen in Fig. 11, while 17,5 % agree and 2,5 % strongly disagree. Since in topic 0,

there are consistent 2,5 % who strongly disagree to questions it might be that a participant misread the scale in this block because it is only in this block, but it cannot be said for certain. Overall it can be said that most Austrian participants are very aware of the threat that is climate change.

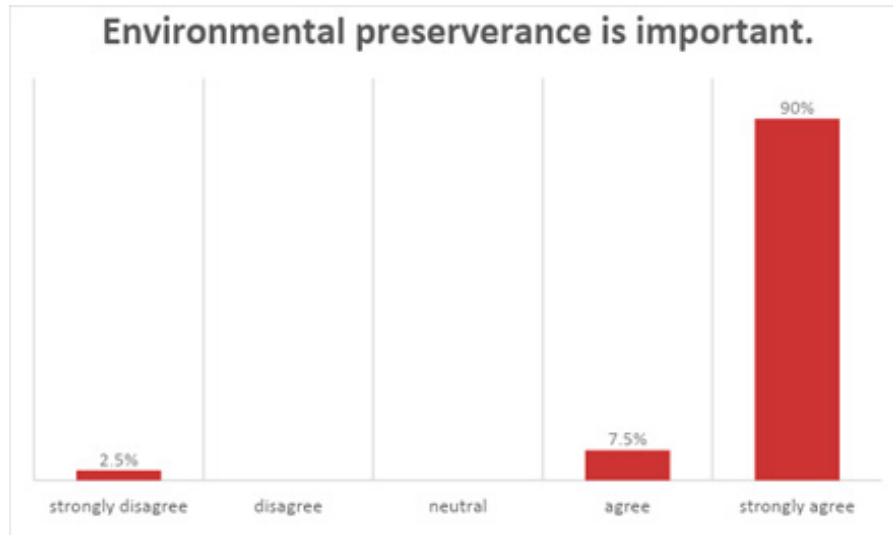


Figure 12: Importance of the environmental preservation

In Fig. 12, even more people (90 %) strongly agree that environmental perseverance is important, while 7,5 % agree to the statement. Again, 2,5 % strongly disagree, while no one is neutral or disagrees.

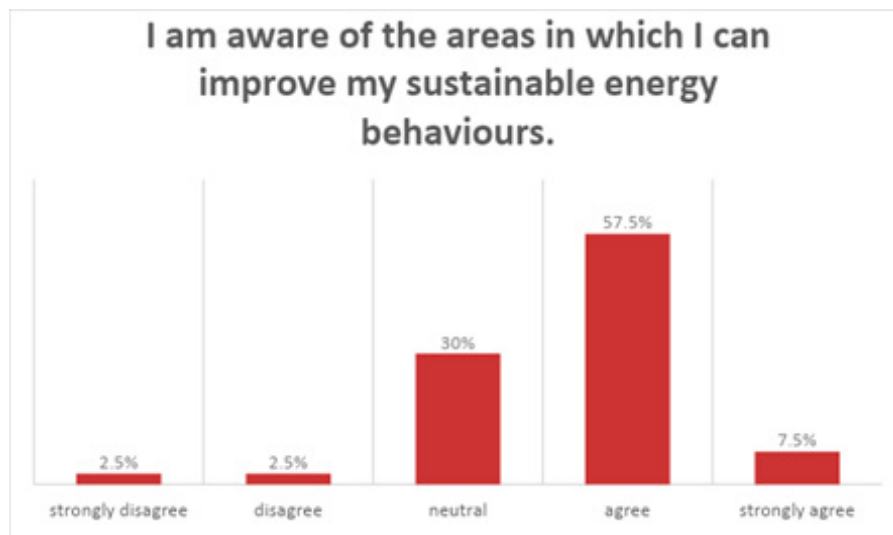


Figure 13: Sustainable energy behaviours improvement

Fig. 13 shows that almost two thirds are aware of areas in which they can improve their sustainable energy behaviours (57,5 % agree and 7,5 % strongly agree). Meanwhile, 30 % are neutral and 5 % disagree somewhat (2,5 % strongly disagree and 2,5 % disagree) which can mean that they either have already improved their sustainable energy behaviour to the best

of their knowledge or are simply not aware of the ways in which they could do that.

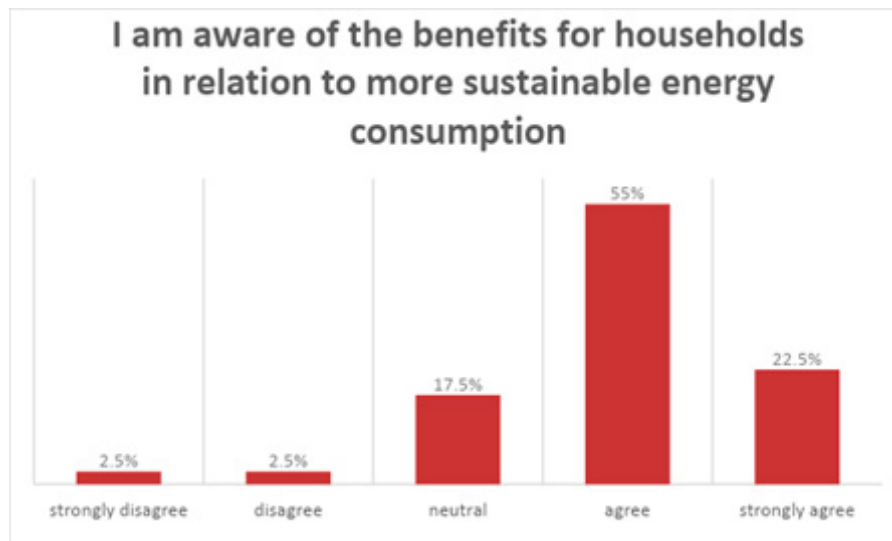


Figure 14: Sustainable energy consumption benefits

As Fig. 14 shows, 77,5 % of the participants are aware of the benefits for households in relation to more sustainable energy consumption, 22,5 % of which strongly agree to the statement. 17,5 % are neutral and 2,5 each disagree and strongly disagree.

TOPIC 1: ENERGY USE AND GREEN DEAL OBJECTIVES

This section of the questionnaire concerns energy use and Green Deal objectives.

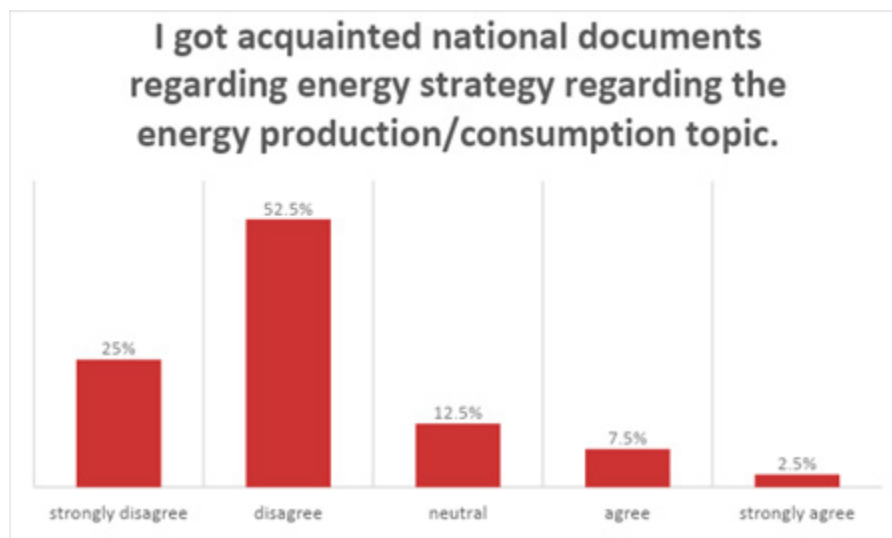


Figure 15: Acquaintance with national documents regarding energy

A majority of the participants as seen in Fig. 15, did not get acquainted with national documents regarding the energy strategy regarding the production or consumption topic

(25 % strongly disagree, 52,5 % disagree). At least 10 % of the participants somehow got acquainted with such documents.

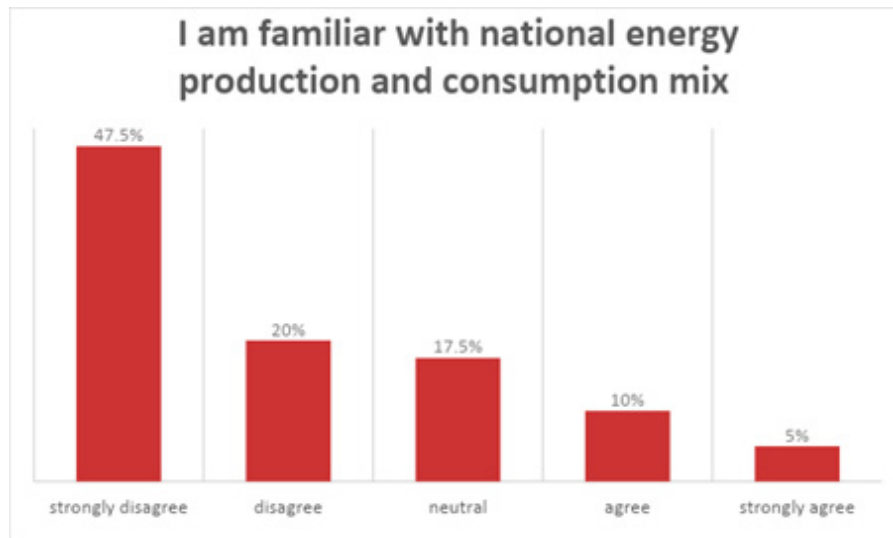


Figure 16: National energy production and consumption mix familiarity

On Fig. 16 it is stated that 47,5 % of the participants strongly disagree to the statement that they are familiar with the national energy production and consumption mix, while 20 % disagree. However, 15 % are at least somehow familiar to it.

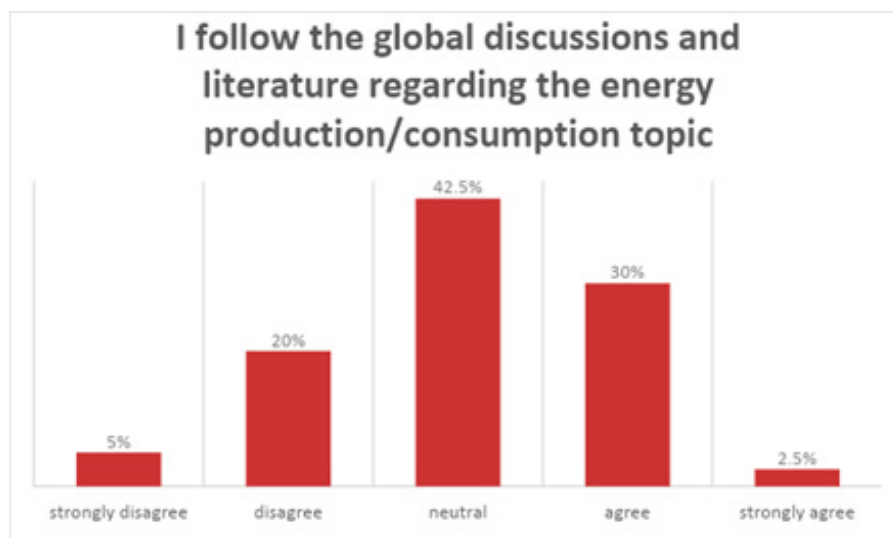


Figure 17: Global energy discussions acquaintance

From the Fig. 17 it could be perceived that a quarter of the participants does not follow the global discussion and literature regarding the energy production or consumption topic, while 32,5 % do. 42,5 % are neutral to the statement.

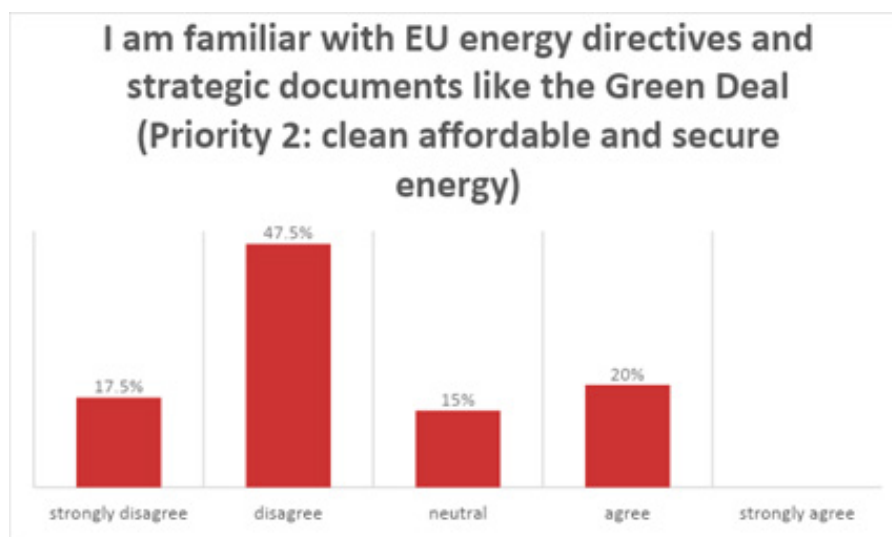


Figure 18: EU energy directives familiarity

As seen in the Fig. 18 above, the participants tend to not be familiar with EU energy directives and strategic documents like the Green Deal with 47,5 % disagreeing and 17,5 % disagreeing strongly. However, 20 % are at least somehow familiar with them.

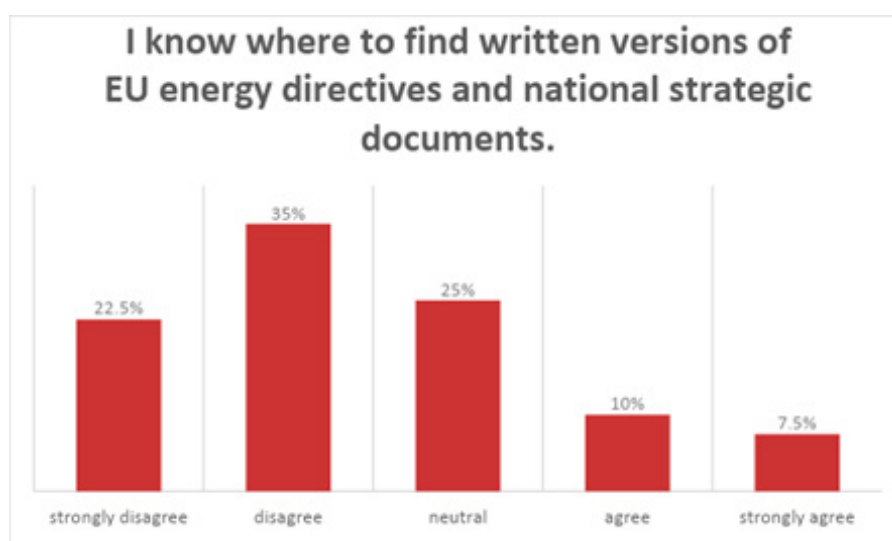


Figure 19: EU energy directives written versions

The knowledge about where to find written versions of EU energy directives and national strategic documents differs among the participants with a trend going towards disagreeing with the statement (22,5 % strongly disagree and 35 % disagree) as shown in the Fig. 19. A quarter is neutral to the statement, while 10 % agree and 7,5 % strongly agree.

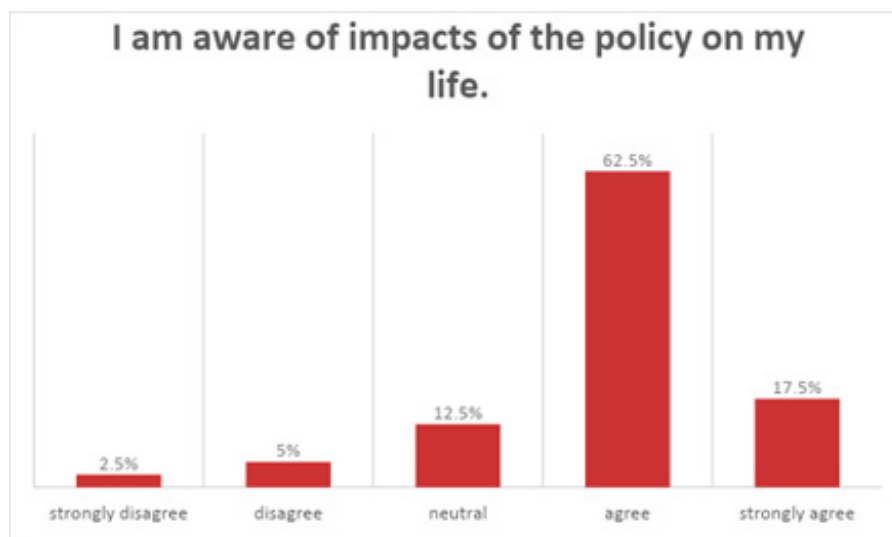


Figure 20: Policy impacts awareness

While there is a tendency amongst the participants in Austria to not know where to find the texts of EU or national strategies concerning energy, they are relatively aware to the impacts that policies have on their life, with 62,5 % agreeing and 17,5 % strongly agreeing. Only 7,5 % disagree (2,5 % of which strongly disagree) as shown in the Fig. 20.

TOPIC 2: ENERGY RELATED INVESTMENTS, INCENTIVES AND SUBVENTIONS

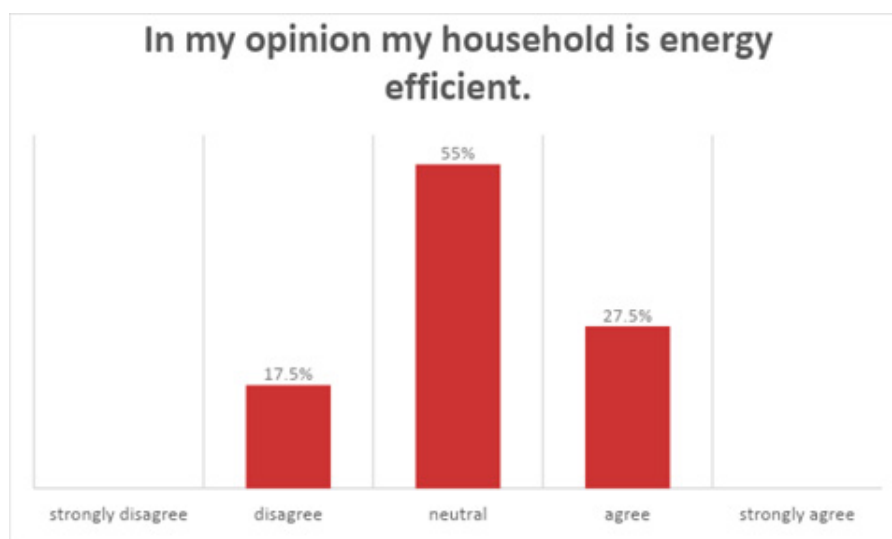


Figure 21: Household energy efficiency

The results in the Fig. 21 show the energy efficiency of the own household are ambivalent, with 55 % being neutral, 27,5 % agreeing and 17,5 % disagreeing. Notable is, that no one chose the extreme options with strong agreeing or disagreeing.

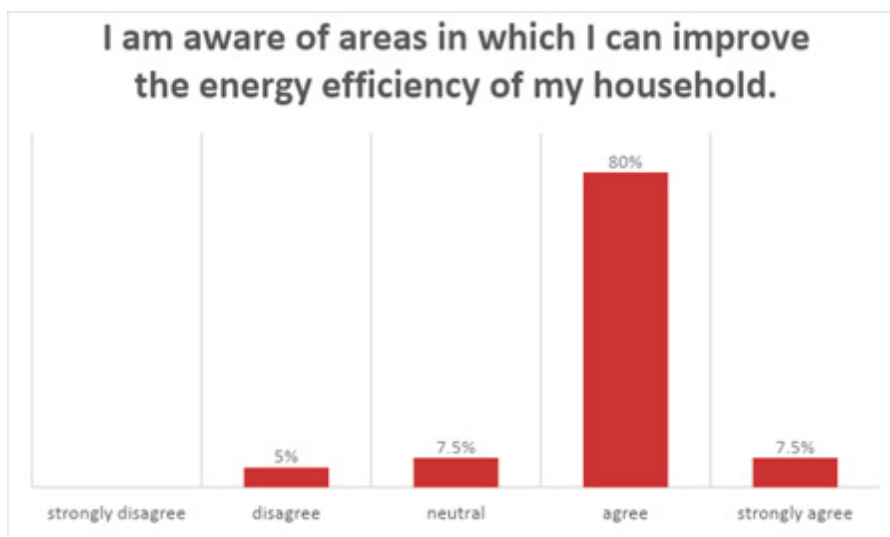


Figure 22: Energy efficiency improvements awareness

As it could be perceived from the Fig. 22, there seems to be a general awareness among the participants. A majority of 87,5 % is aware of areas in which they can improve the energy efficiency of their household (7,5 % of which strongly agree). Only 5 % disagree.

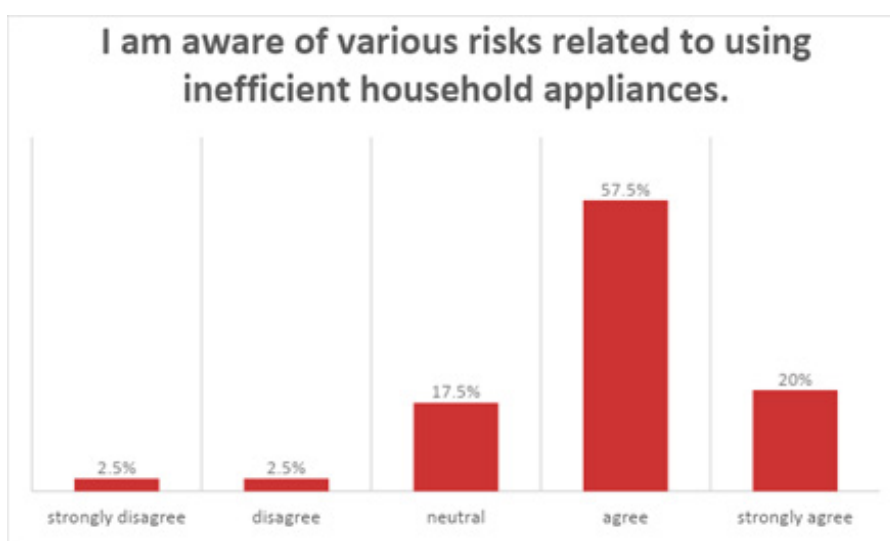


Figure 23: Inefficient household appliances risk awareness

As seen in the Fig. 23, majority agree (57,5 %) or strongly agree (20 %) that they are aware of the various risks related to using inefficient household appliances like high energy consumption, higher bills and technical problems. 17,5 % are neutral to the statement while 5 % disagree (2,5 % strongly).

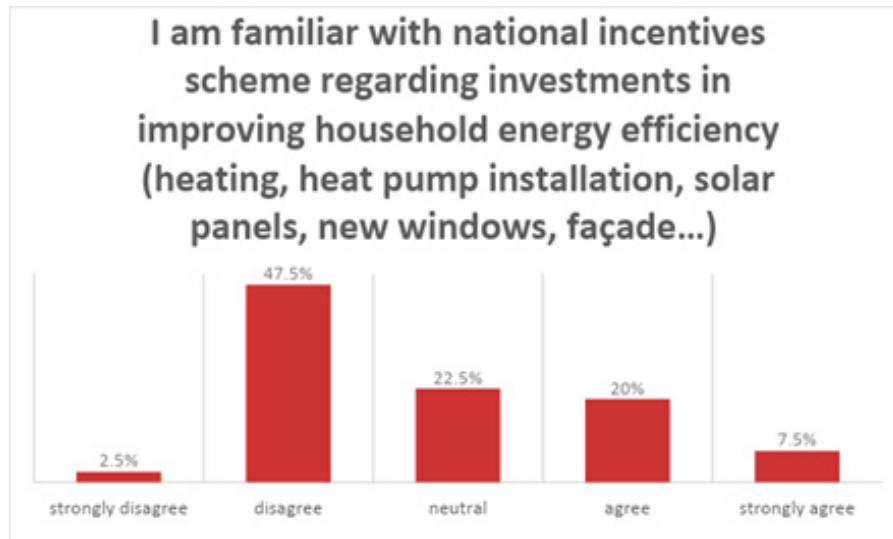


Figure 24: Energy efficiency investments

Half of the participants are not familiar with national incentive schemes regarding investments in improving household energy efficiency as seen from the Fig. 24. A little over a quarter say that they are neutral to the statement (22,5 %).

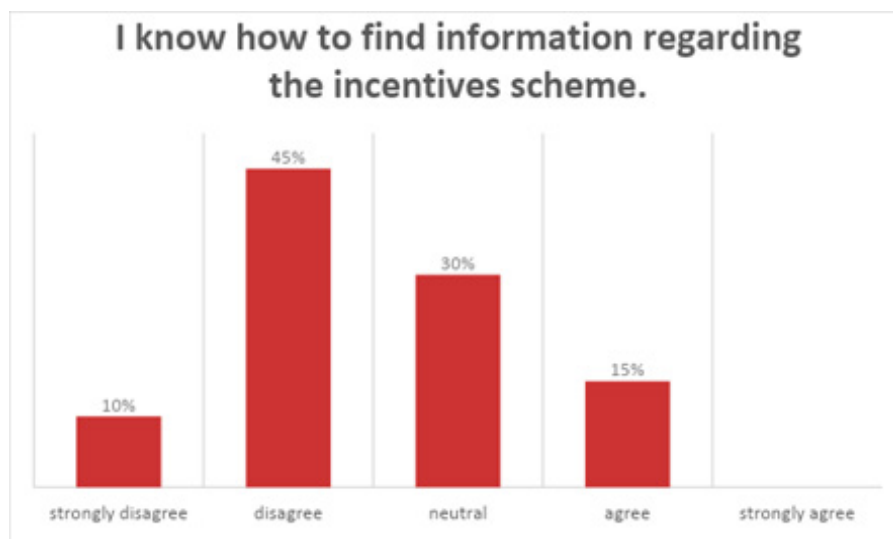


Figure 25: Incentives scheme information

Fig. 25 shows that 10 % of the participants strongly disagree and 45 % disagree that they know how to find information regarding the incentives scheme. Only 15 % agree, while no one strongly agrees. In regard to figure 23, one could assume that the missing knowledge about the national incentive schemes are due to not knowing where to find information regarding it or vice versa.

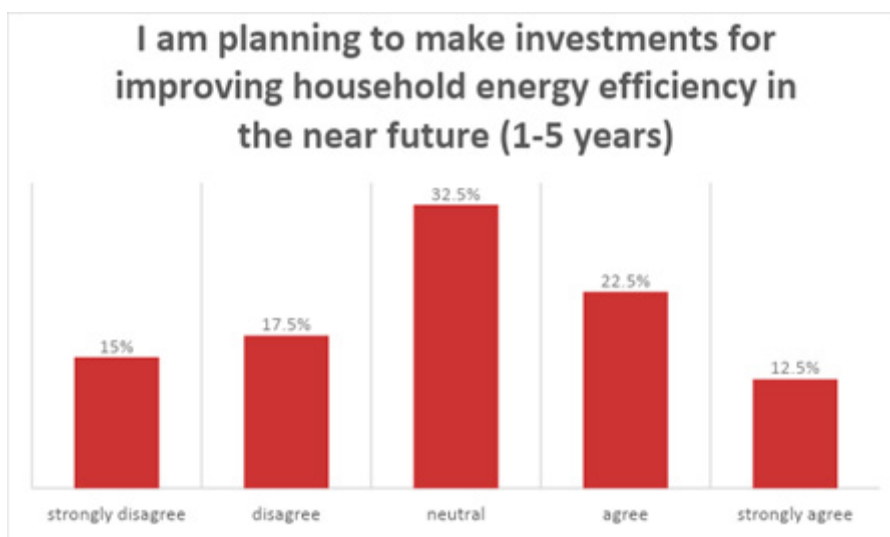


Figure 26: Investments plan for the household energy efficiency

The plans regarding investments for improving household energy efficiency in the near future differ between the participants with a slight majority (35 %) planning to do so, while 32,5 % do not have such plans as seen in the Fig. 26 above. This might have to do with one's living situation. If someone is renting an apartment but have different living plans in the future, they might not plan to invest in improving the energy efficiency. Another reason might be that people are not sure how to improve it.

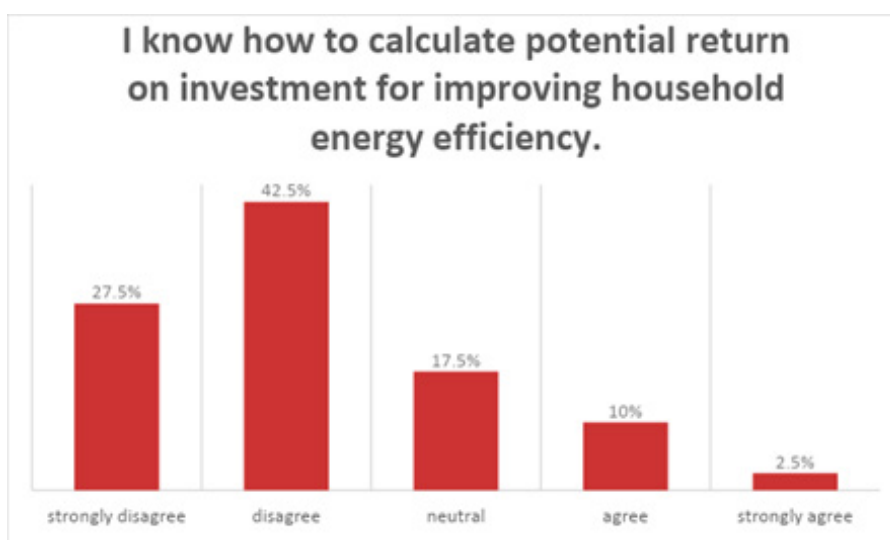


Figure 27: Potential return calculation knowledge

When it comes to calculating potential return on investment for improving household energy efficiency, only 12,5 % of the participants say that they know how to so. Most people disagree with the statement (42,5 % disagree and 27,5 % strongly disagree) as shown in the Fig. 27.

TOPIC 3: SUSTAINABLE ENERGY RELATED AWARENESS, BEHAVIOUR, AND HABITS

This section of the questionnaire concerns sustainable energy related awareness, behaviour, and habits of the participants.

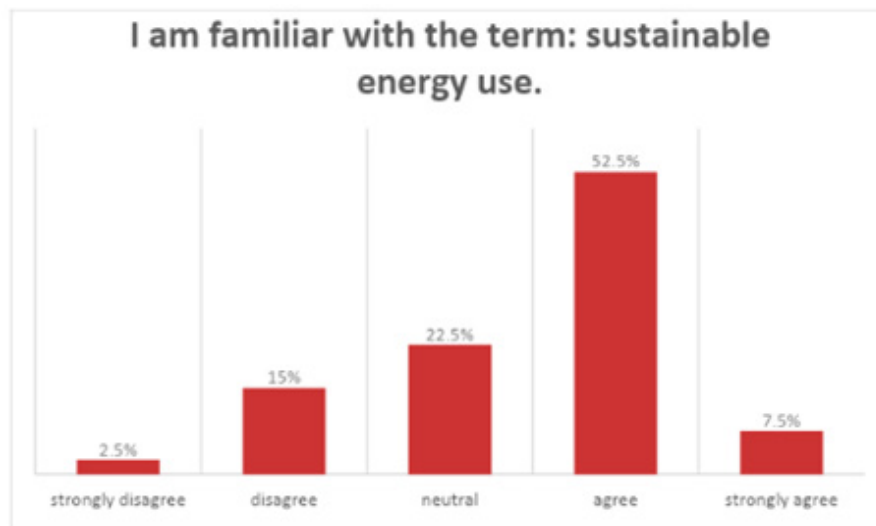


Figure 28: Sustainable energy use term

60% of the participants are somewhat familiar with the term "sustainable energy use" as 52,5 % agree and 7,5 % strongly agree with the statement as seen in the Fig. 28. 2,5 % strongly disagree with the statement and 15 % disagree.

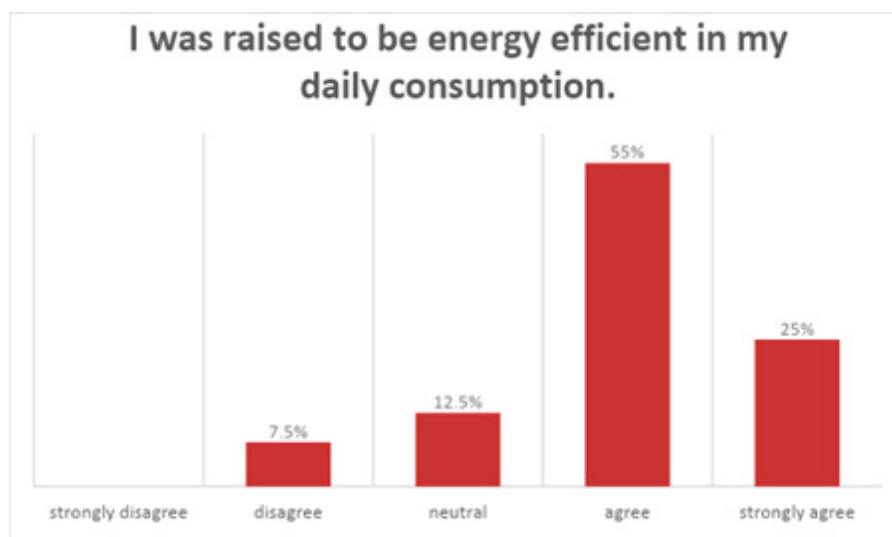


Figure 29: Energy efficiency upbringing

55 % of the participants agree and 25 % strongly agree that they were raised to be energy efficient in their daily consumption. Only 7,5 % disagree. It would be interesting if the motivation behind that were economic or ecological reasons and what the measures were (like for example turning off the lights or taking shorter showers) for the results seen in the

above Fig. 29.

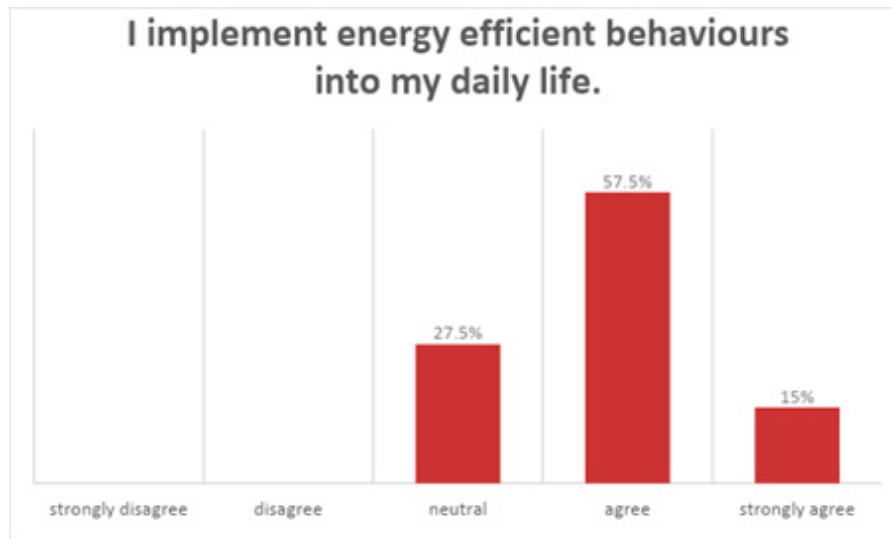


Figure 30: Energy efficient behaviours implementation

Fig. 30 shows that none of the participants disagrees with the statement that they are implementing energy efficient behaviours into their daily life. 57,5 % agree and 15 % strongly agree. However, it is interesting that more people said that they were raised to be energy efficient in their daily life (see figure 28) than are implementing it now in their daily life.

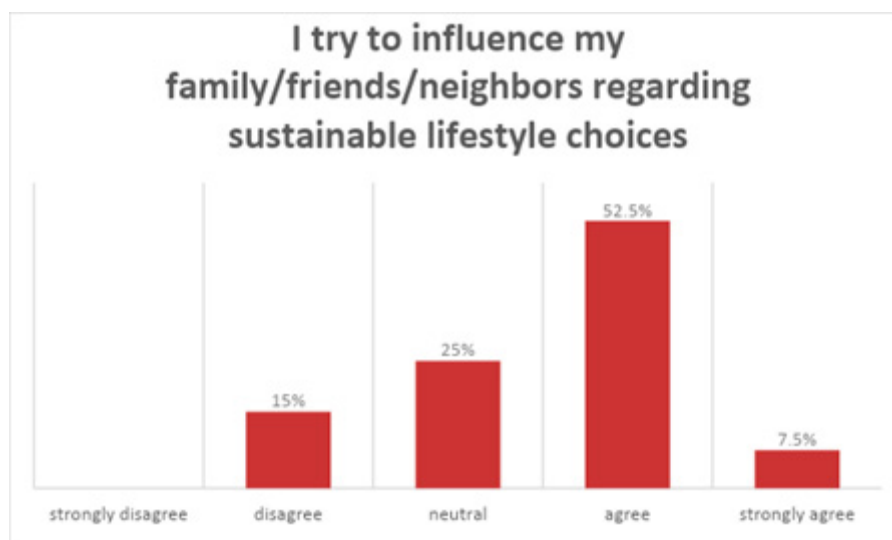


Figure 31: Family/friends/neighbours sustainable influence

Based on the Fig. 31 depiction, 60 % of the participants actively try to influence their social environment regarding sustainable lifestyle choices (52,5 % agree and 7,5 % strongly agree with the statement), while 15 % do not agree. However, it has to be noted that "sustainable lifestyle choices" do not exclusively concern energy choices but can include traveling or one's diet as well.

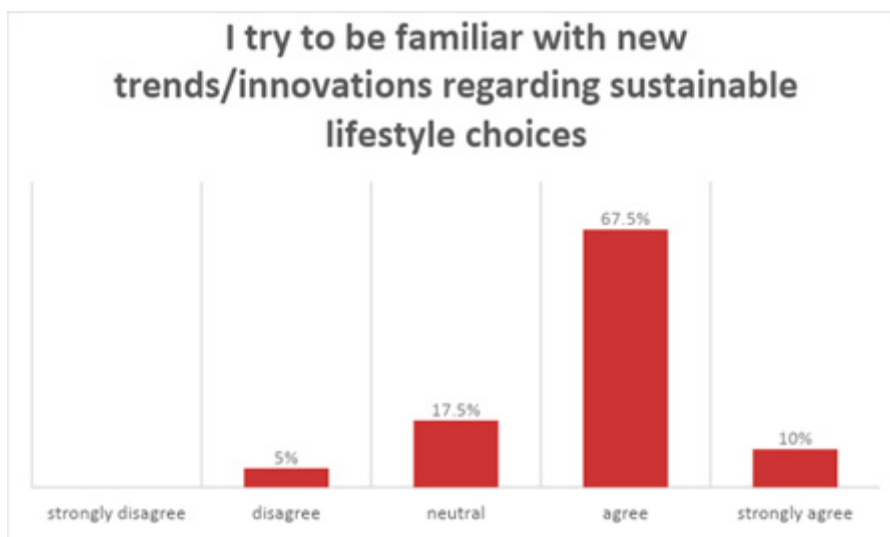


Figure 32: New trends and innovations familiarity

Shown in the Fig. 31, the majority, 67,5 % agree and 10 % strongly agree on trying to familiarize themselves with new trends and innovations regarding sustainable lifestyle choices, while 5 % disagree with the statement.

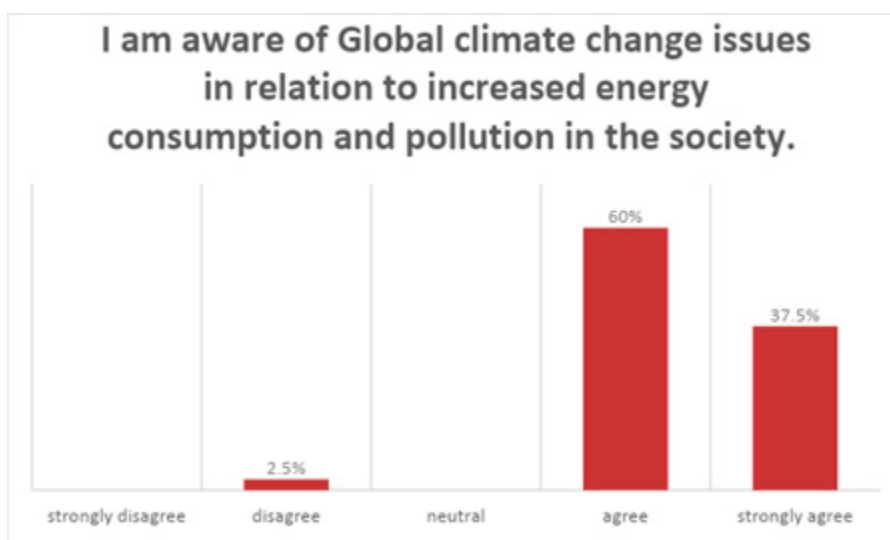


Figure 33: Global climate change issues in relation to energy consumption and pollution awareness

Almost all participants are aware of global climate change issues in relation to increased energy consumption and pollution in the society as seen in the Fig. 33. Only 2,5 % disagree with the statement.

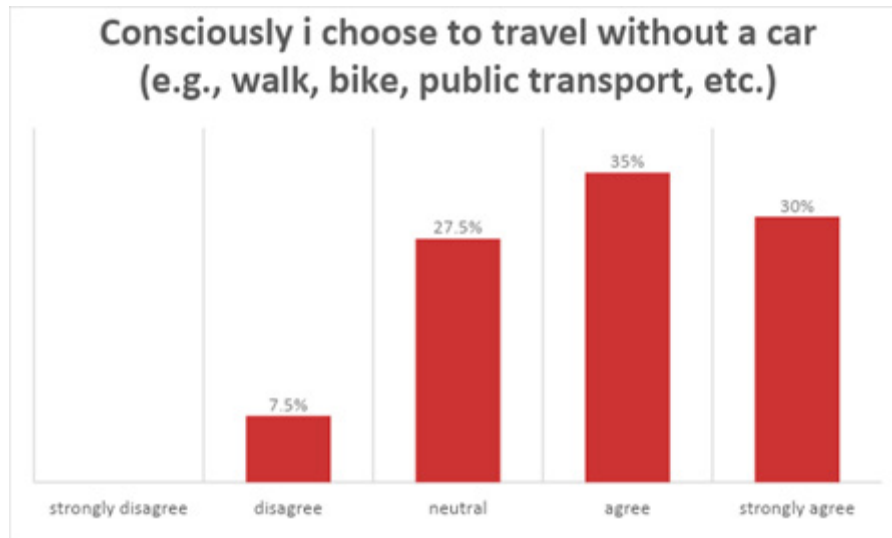


Figure 34: Without-a-car traveling

As it could be perceived from the Fig. 34, majority of the respondents are working towards sustainable mobility implementation. 35 % agree and 30% strongly agree that they consciously choose to travel without a car. However, it is worth noting that a majority of participants (77,5 %) live in the metropolitan area (see figure 5) where it is easier to be without a car.

CONCLUSION

In conclusion, it can be said that the young people in Austria are aware of the importance of fighting climate change and the role that energy use plays in that. The awareness about energy literacy is there, however they are missing the confidence to claim that they themselves are energy literate and energy efficient. The mission by EL-Practice is going to be to use the awareness and interest about the importance of energy literacy and provide concrete and everyday-examples to expand the knowledge of the young adults.

To resume some of the identified gaps in the energy literacy of young adults of Austria:

Most participants are aware of importance of energy efficiency and its role in climate change, but are missing concrete measures and do not know how to actively implement energy literacy into their private and daily lives ~ they are aware of the problems, but sometimes not of the solutions

There seems to be a misconception about the economic benefits of energy efficiency/literacy

There is a knowledge gap concerning incentive schemes and EU and national documents concerning the topic of energy use

Help to self help: many participants do not know where to inform themselves about the topic

Most young adults are aware of the problems concerning climate change and energy use and the importance of energy efficiency. EL-Practice can help to form the awareness into concrete action since most participants seem to be missing the know-how of how to implement energy literacy into their own daily lives. EL-Practice should not only focus on the environmental benefits of energy efficiency but also on the economic benefits and maybe even social benefits since there appear to be some misconceptions. A big chapter in the e-course needs to be about national and EU documents concerning the topic as well as incentive schemes. There seems to be the biggest knowledge gap among the young adults in Austria. EL-Practice should provide an overview over the most important documents and policies as well as links for further information since the participants claimed to not know where to find the information. Since the learning material will be provided online and for free, EL-Practice might also be able to close shrink the inequality-gap when it comes to Austrian adult education because it can reach more people more easily.

QUESTIONNAIRE RESULTS:

Croatia

In May of 2022, a questionnaire was conducted among young adults in Croatia. The analysis of the questionnaire is based on the sample of 54 recorded answers that are within the target group of the Energy Literacy Practice project. First, the questionnaire was set up online, via the survey platform Qualtrics. Then, the raw data of the collected answers was extracted and managed in an Excel document, where the percentages for each question were calculated, and the graphs were made.

The results of the survey provided a clear insight into the current state of energy literacy in Croatia, while the analysis itself was based on 54 responses received from young adults, gathered by REGEA. Firstly, a set of general questions were outlined in the questionnaire, mostly to ensure that the participants are indeed from Croatia, and within the target group of the project.

GENERAL QUESTIONS

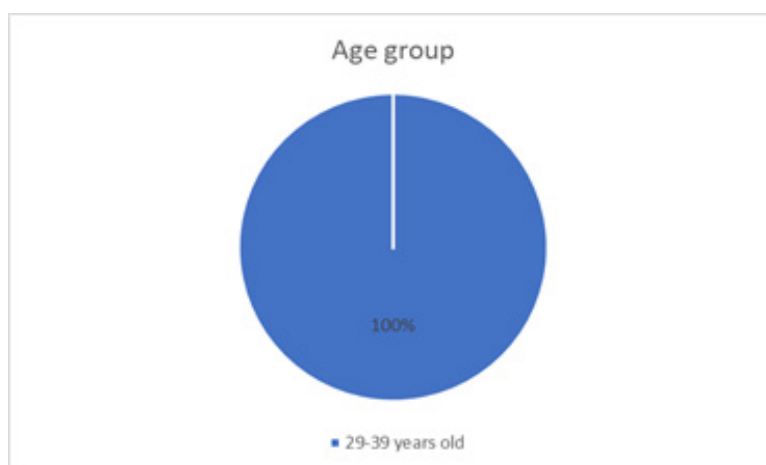


Figure 1: Age group

As seen in the Fig. 1, the target group for this project is 29-39 years old young adults, therefore all the answers from the participants who were not in the target group were excluded from the analysis prior.

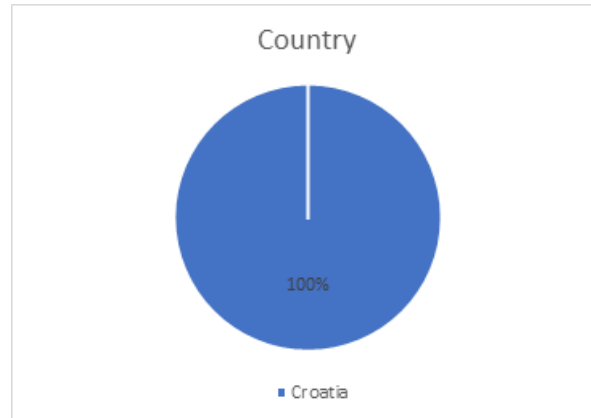


Figure 2: Country

Fig. 2 shows that this report focuses only on assessing the energy literacy among young adults in Croatia, therefore 100 % of the survey's participants were from Croatia.

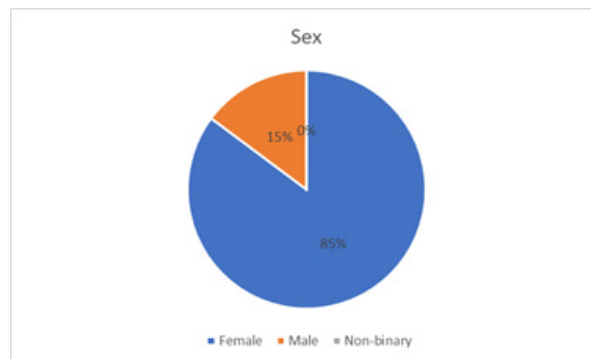


Figure 3: Gender

As shown in the Fig. 3 above, out of 54 participants who were a part of the survey, 85 % of them were female, while 15 % of the participants were male.

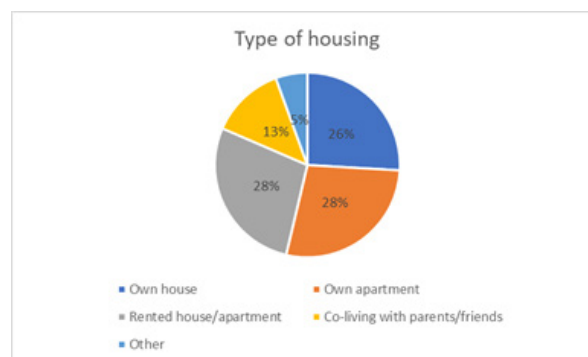


Figure 4: Type of housing

Fig. 4 shows that an equal number of participants live in their own apartment (28 %), and rent a house/apartment (28 %), while 26 % live in their own house and 13 % are co-living with their parents or friends. 13 % of the participants live in other types of housing.

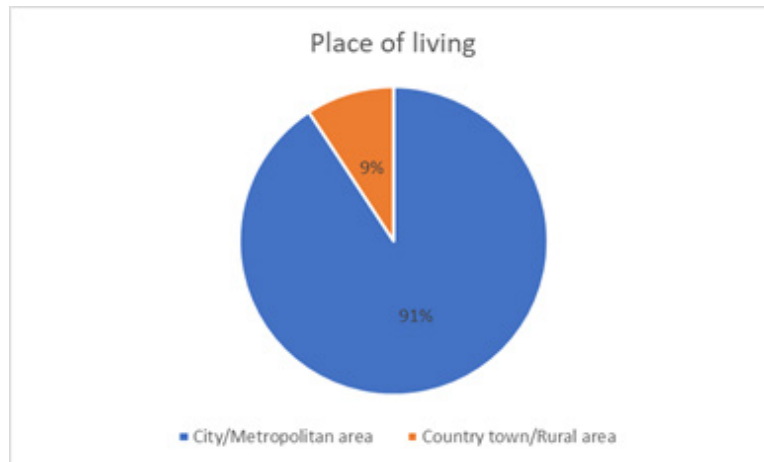


Figure 5: Place of living

The original question from the questionnaire regarding the place of living was adopted a bit, due to Croatian standards and limited definitions of places of living. Therefore, as seen in the Fig. 5, 91 % of the participants included in this survey are living in the city or the metropolitan area, and 9 % are living in a country town or a rural area. The high amount of people from the city/metropolitan area might be explained by the fact that the first sample of directly contacted participants is situated mainly in the capital of Croatia.

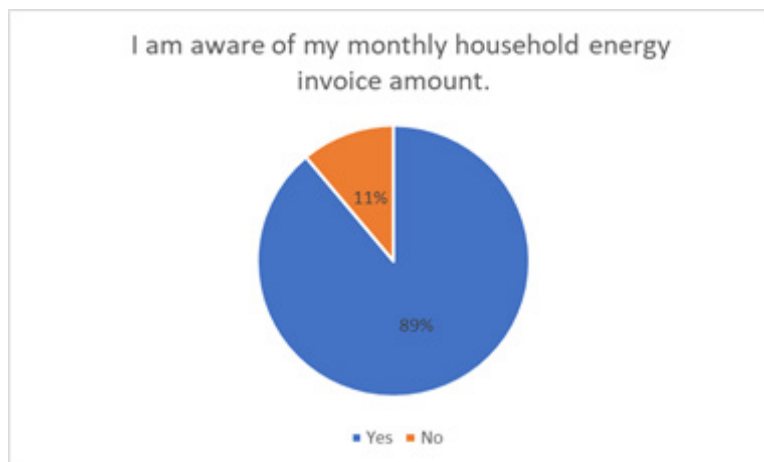


Figure 6: Energy invoice amount awareness

Fig. 6 shows that most of the participants (89 %) are aware of their monthly household energy invoice amount, while only 11 % are not aware.

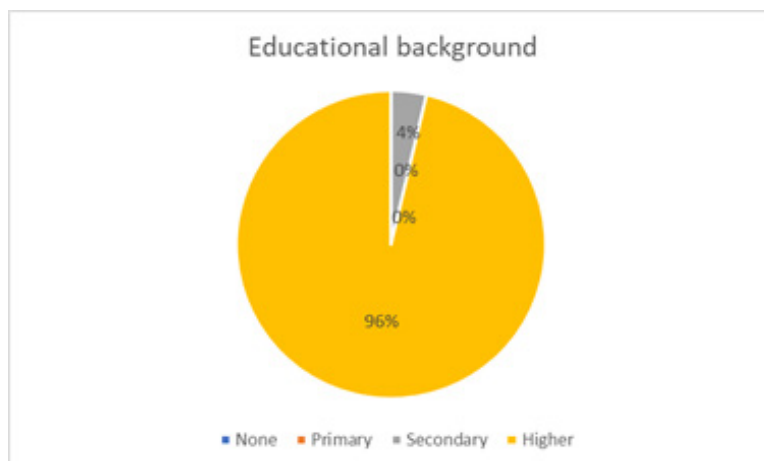


Figure 7: Educational background

The great majority of the participants (96 %) have higher education, while only 4 % have secondary education, and none of the participant have only primary or no education at all as seen in Fig. 7. This result can also be explained because the first sample of directly contacted participants have higher education and are probably surrounded by a social circle of similar education levels.

TOPICAL QUESTIONS

Following the general questions, a set of 27 topical questions was presented in the questionnaire, to provide an in-depth insight into the energy literacy of young adults in Croatia. Participants responded using the Likert scale, choosing one of 5 levels: I completely disagree (1), I disagree (2), I am neutral (3), I agree (4), and I completely agree (5).

TOPIC 0: GENERAL

The questions from this segment were dedicated to general topics and examined the awareness and attitudes of the participants on energy and climate issues.

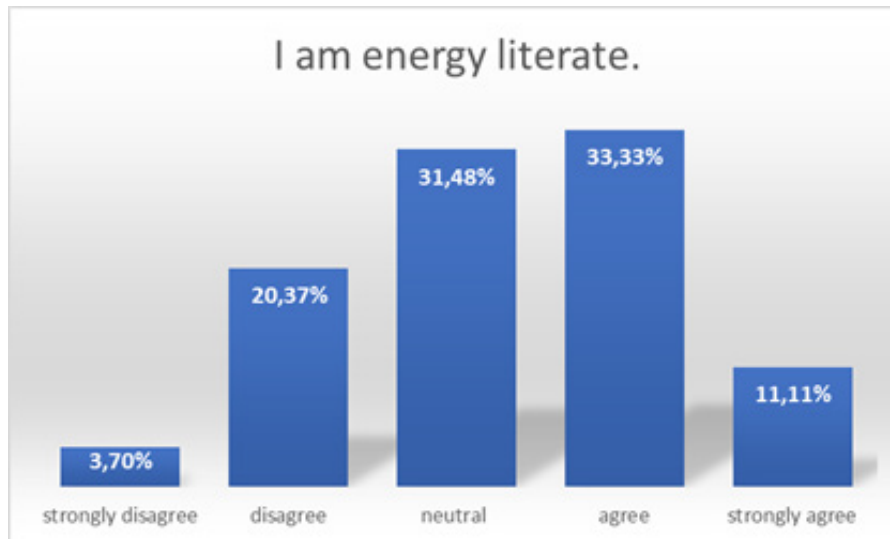


Figure 8: Energy literacy levels among individuals

Only 11 % of the participants strongly agree that they are energy literate, most participants agree that they are energy literate (33 %), while 20 % disagree and around 4 % strongly disagree as seen in the Fig. 8 above.

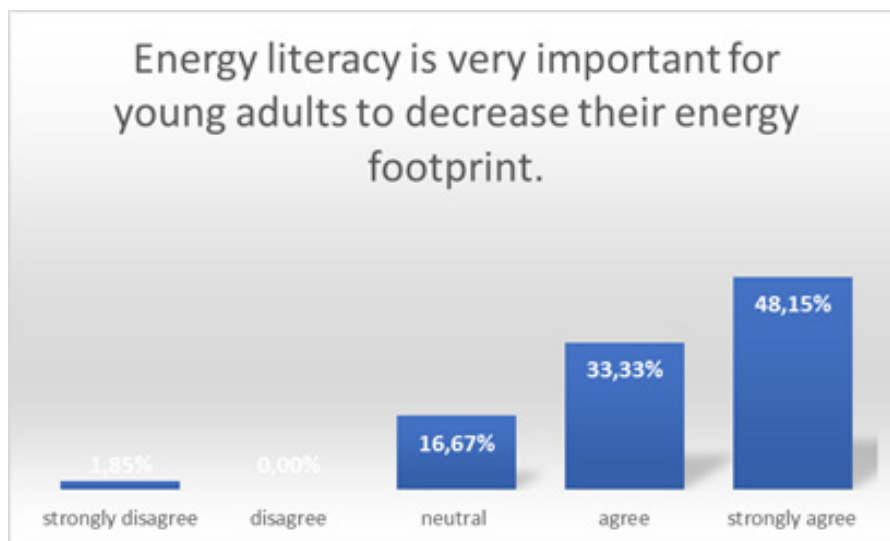


Figure 9: Energy literacy importance

Fig. 9 shows that most of the participants (48,15% strongly agree and 33,33 % agree) believe that energy literacy is very important for young adults to decrease their energy footprint, 16,67 % are neutral, while 1,85 % strongly disagree with that statement.

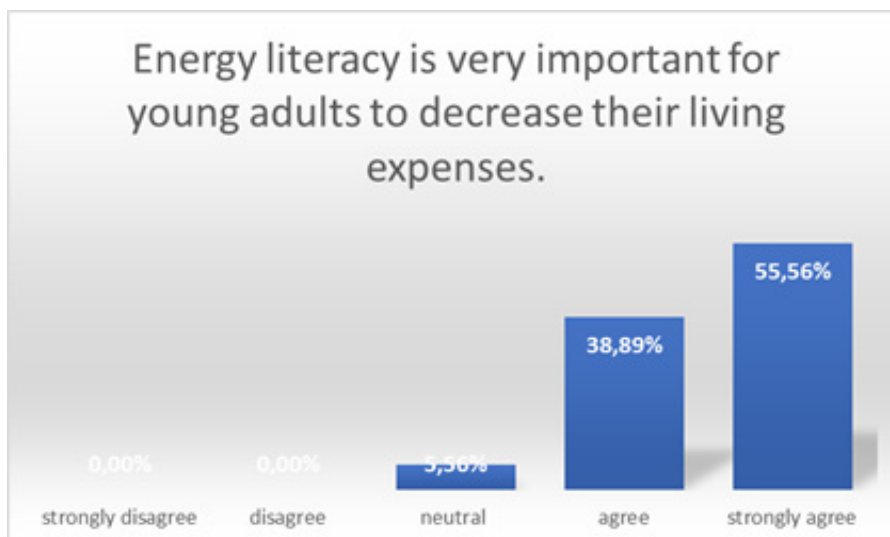


Figure 10: Energy literacy usefulness

From the Fig. 10 we could perceive that the majority of the participants strongly agree (55,56 %) that energy literacy is very important for young adults to decrease their living expenses, 38,89 % agree with that statement, while 5,56 % are neutral. It is valuable to notice that 0 % of participants disagreed with this statement. Thus, Croatian young adults are aware that energy literacy could benefit their financial status. Also, when comparing the last two statements, which both analyzed the perceived importance of energy literacy, it can be noticed that the participants strongly agreed with the financial aspect of it, rather than their ecological footprints.

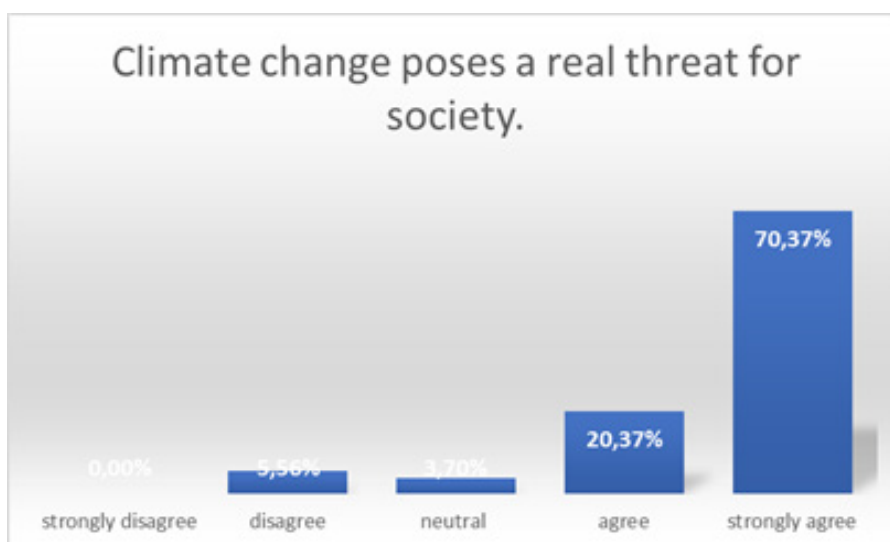


Figure 11: Climate change as a threat

As seen in the Fig. 11 above, the majority of the participants strongly agree (70,37 %) that climate change poses a real threat to society, while 20,37 % agree, 3,70 % are neutral and 5,56 % disagree.

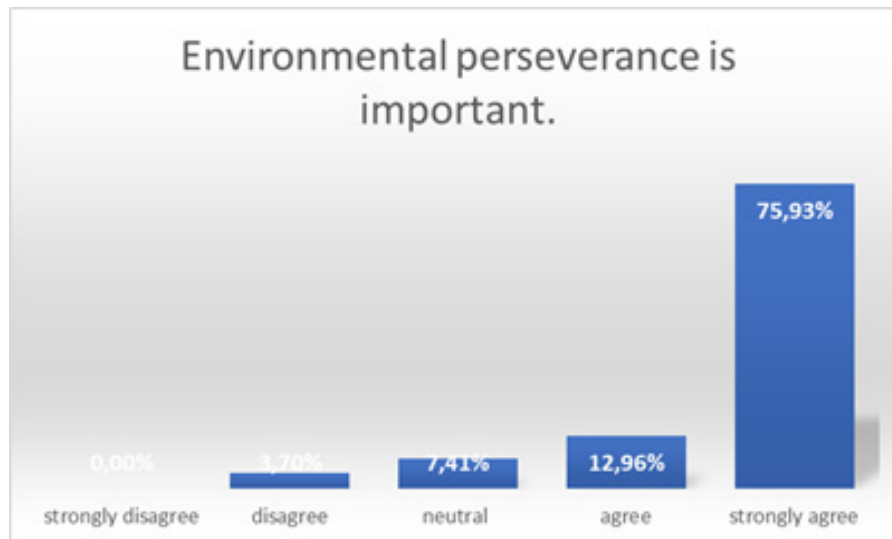


Figure 12: Importance of the environmental preservation

In Fig. 12, even more people strongly agree (75,93 %) that environmental perseverance is important, while 12,96 % agree with the statement, 27,41 % are neutral and 3,70 % disagree. From the last two graphs, it can be presumed that the Croatian young adults are aware of the threats that come with climate change and believe that it is important to persevere when it comes to the environment.

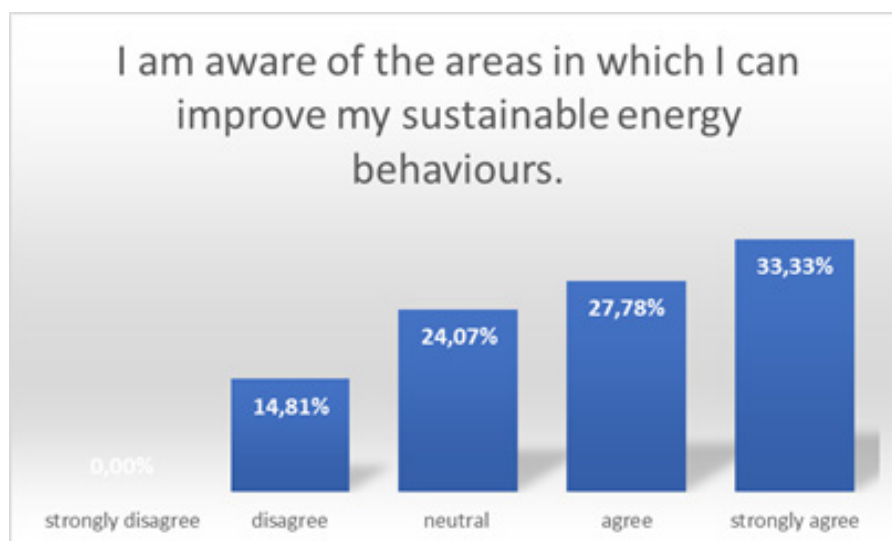


Figure 13: Sustainable energy behaviours improvement

Most participants in Fig. 13 agree (33,33 % strongly and 27,78 % agree) that they are aware of areas in which they can improve their sustainable energy behaviors, while 24,07 % are neutral and 14,81 % disagree. The high number of neutral people can indicate that they do not know how to improve their sustainable energy behaviors, which also means this needs to be addressed in the development of micro-trainings in the future.

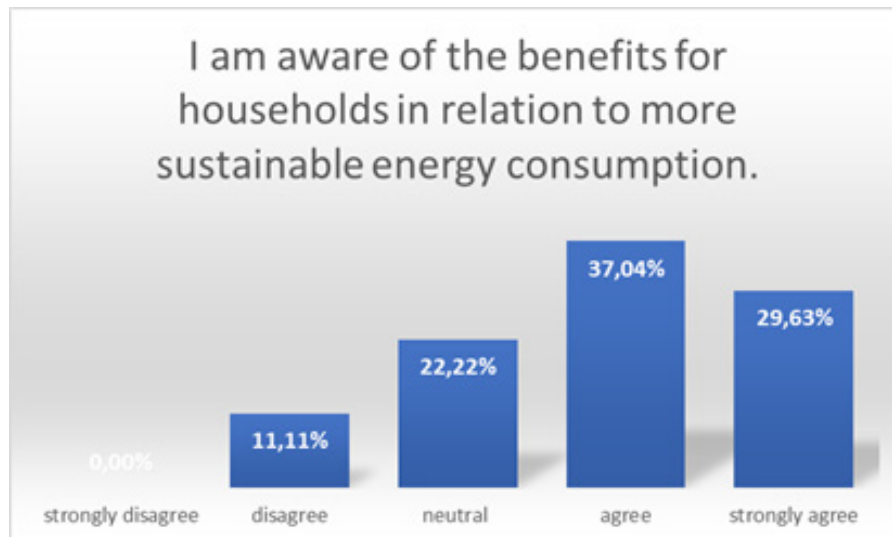


Figure 14: Sustainable energy consumption benefits

Fig. 14 shows that 37,04 % of the participants agree that they are aware of the benefits for households concerning more sustainable energy consumption, 29,63 % strongly agree with the statement, 22,22 % are neutral and 11,11 % disagree and no one strongly disagrees.

TOPIC 1: ENERGY USE AND GREEN DEAL OBJECTIVES

This section of the questionnaire concerns energy use and acquaintance with the national and European strategic documents related to energy and Green Deal objectives.

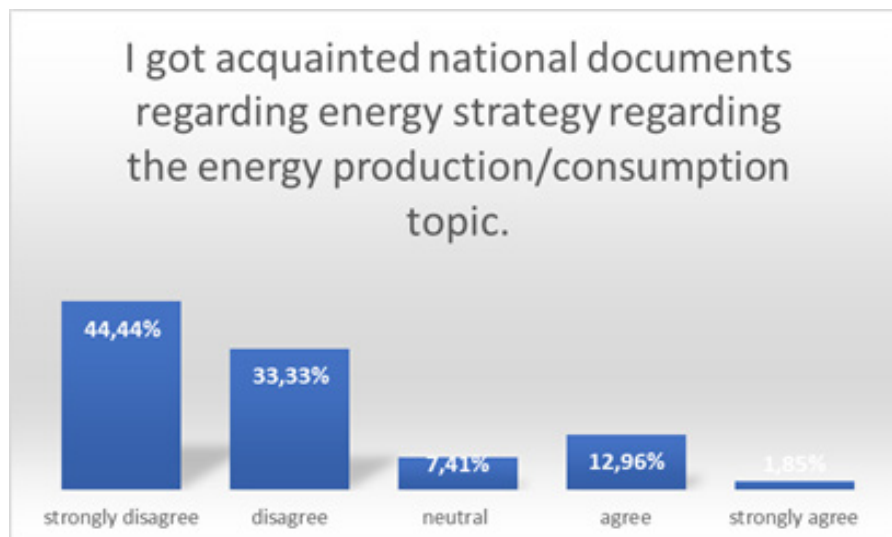


Figure 15: Acquaintance with national documents regarding energy

When it comes to the national documents regarding energy strategy on the topic of energy production and consumption, 44,44 % strongly disagree that they are acquainted with the documents, 33,33 % disagree, 7,41 % are neutral, while 12,96 % agree and 1,85% strongly agree with that statement (see above Fig. 15).

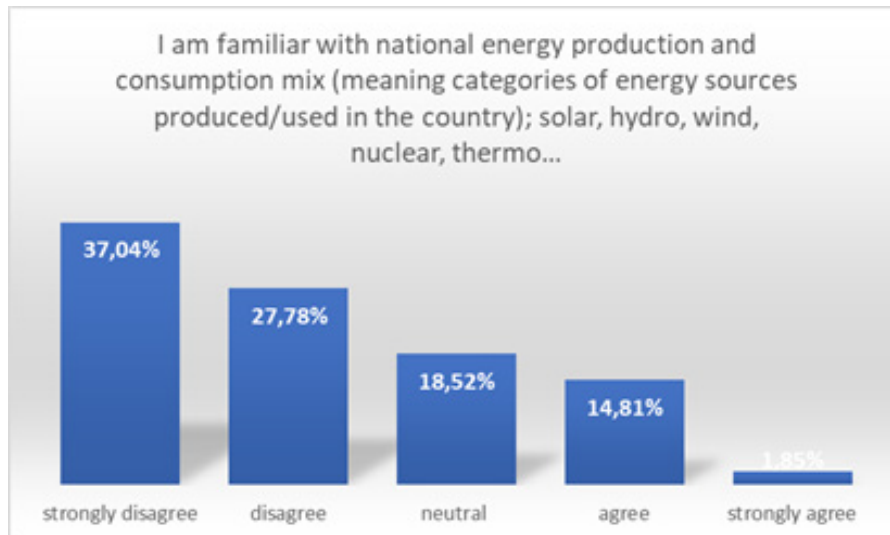


Figure 16: National energy production and consumption mix familiarity

When it comes to the familiarity of the participants with the national energy production and consumption mix as seen in Fig. 16, respondents (in 37,04%) strongly disagree with that statement, 27,78 % agree, 18,52 % are neutral, while 14,81 % and only 1,85 % strongly agree with that statement. Thus, this shows that the Croatian young adults are still unaware of the energy production and consumption mix of their country.

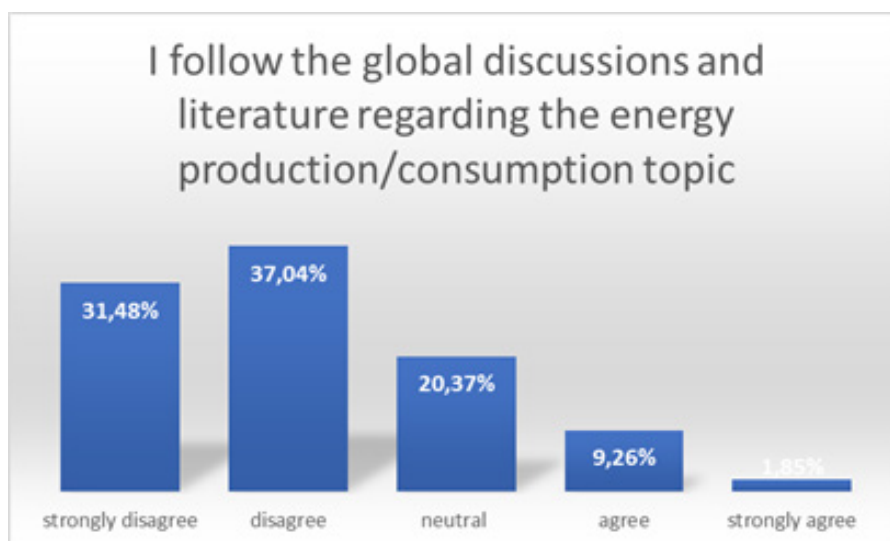


Figure 17: Global energy discussions acquaintance

This statement as seen in Fig. 17 generated similar answers as the previous, but still, it seems that the young adults are more familiar with the energy production/consumption of Croatia. Most participants disagree (37 %) with the statement that they follow the global discussion and literature regarding the energy production or consumption topic, 31,48 % strongly disagree, 20,37 % are neutral and only 1,85 % strongly agree with the statement.

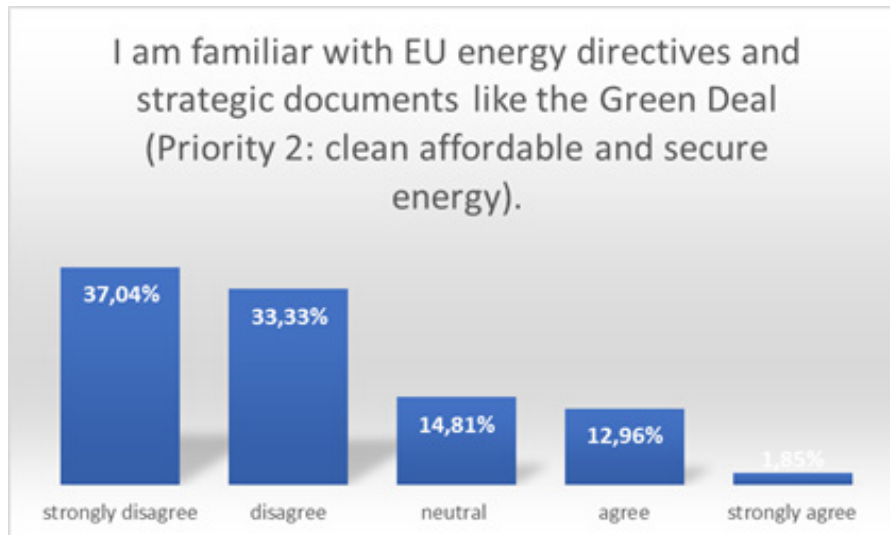


Figure 18: EU energy directives familiarity

Fig. 18 shows that most participants are not familiar with EU energy directives and strategic documents like the Green Deal with 37,04 % disagreeing strongly and 33,33 % disagreeing, while 12,96 % agree and 1,85 % strongly agree with that statement. Thus, the majority of the Croatian young adults are not aware of the EU strategic documents and directives.

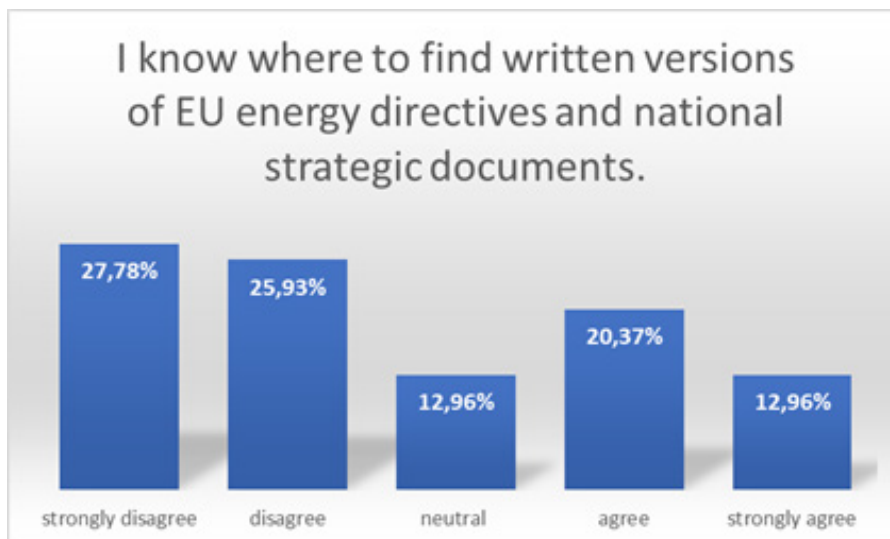


Figure 19: EU energy directives written versions

Contrary to the previous statement, quite a high percentage of Croatian young adults (20,37 % agree and 12,96 % strongly agree) stated that they do know where to find the written EU energy directives and national strategic document, while the majority (53,71 %) does not know where to find them as seen in the Fig. 19.

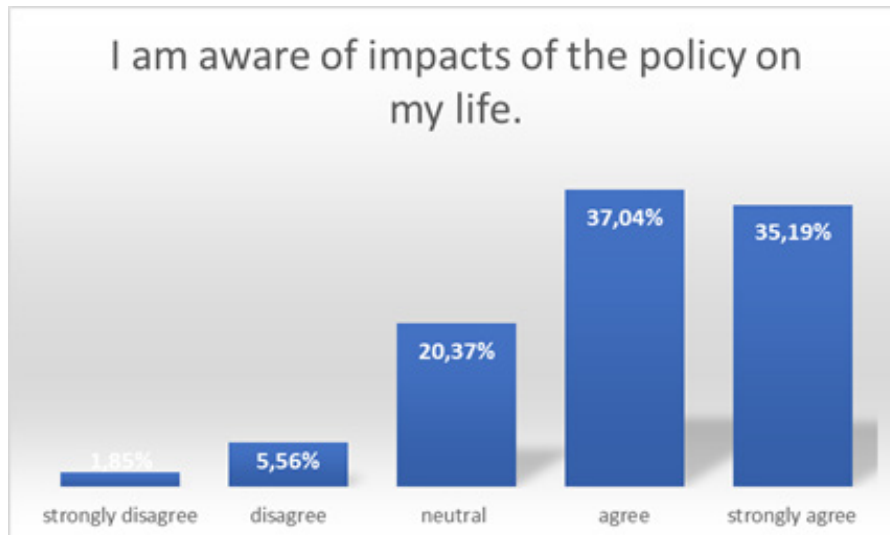


Figure 20: Policy impacts awareness

Most participants as seen in the Fig. 20 agree with the statement that they are aware of the impact of the policy on their life - 35,19 % strongly agree with that statement and 37,04 % agree, while 20,37 % are neutral and 5.56 % disagree as well as 1.85 % strongly disagrees. It can be noted that this result has a small contradiction to the previous statements (even though the type of policy is not specified in the statement) as most participants stated that they do not know where to find national and European strategic energy documents, also that they are not familiar with them, that they do not mostly follow the global discussion on this topic and that most are not aware of the national energy production and consumption. This raises an additional question to the research, how can they be aware of the impact the policy has on their life, when they are not familiar with strategic documents and directives, in this case, related to energy.

TOPIC 2: ENERGY-RELATED INVESTMENTS, INCENTIVES, AND SUBVENTIONS

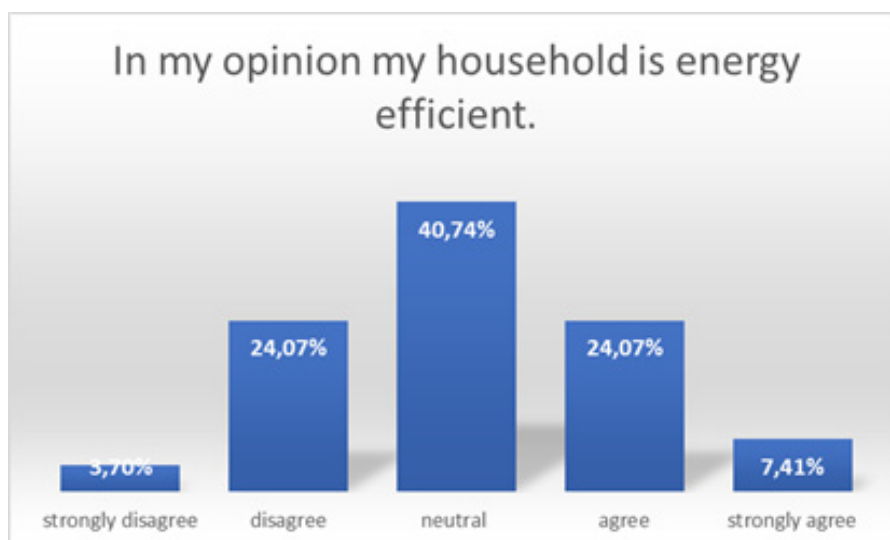


Figure 21: Household energy efficiency

Fig. 21 shows that most participants took a neutral stand (40,74 %) regarding their opinion on their household being energy efficient, while an equal number of participants (24,07 %) both disagree and agree with that statement. It can be presumed that the neutral position participants are not aware of what an energy-efficient household means.

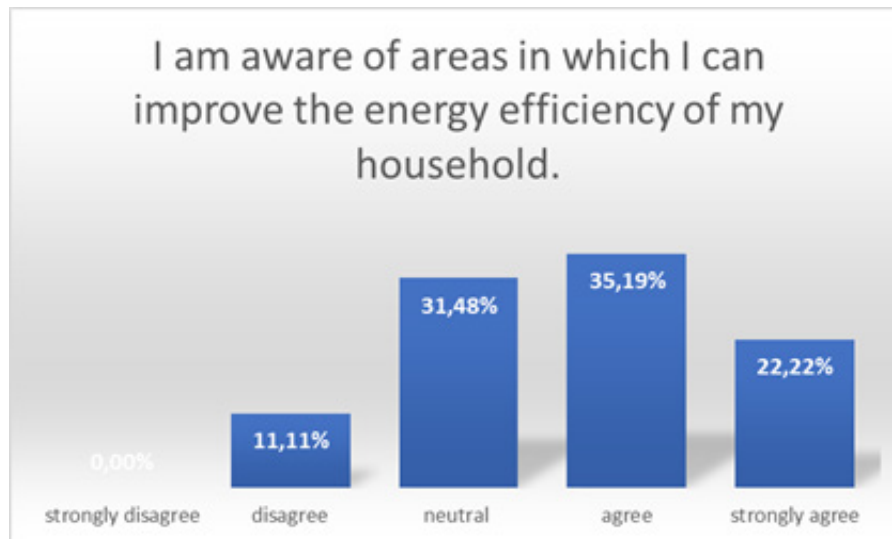


Figure 22: Energy efficiency improvements awareness

As seen in Fig. 22, most participants (35,19 %) agree they are aware that they are aware in which areas they can improve the energy efficiency of their household, which is again in slight contrast to the dominantly neutral position of the previous statement. Only 11,11% disagree with that statement.

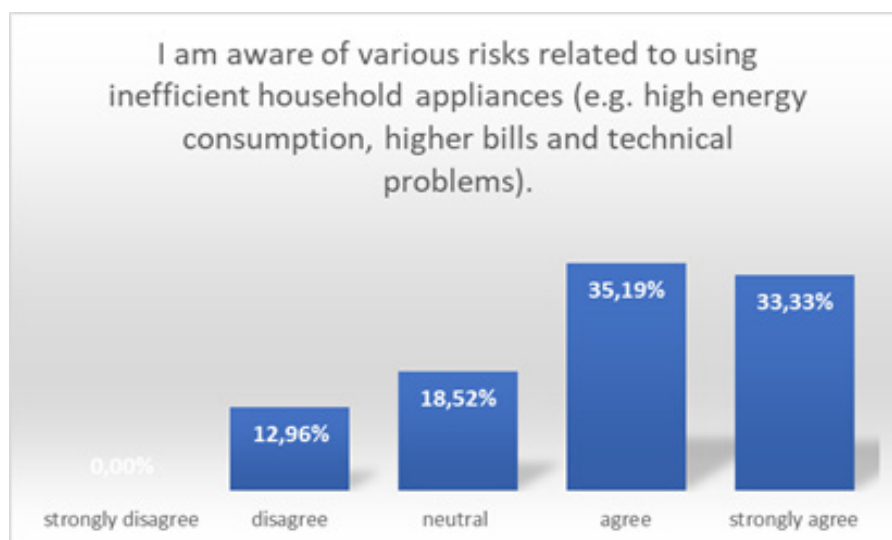


Figure 23: Inefficient household appliances risk awareness

The majority of the participants are aware of the various risks related to using inefficient household appliances, that is 35,19 % agree with that statement, 33,33 % strongly agree, while only 12,96 % disagree with that statement as Fig. 23 shows.

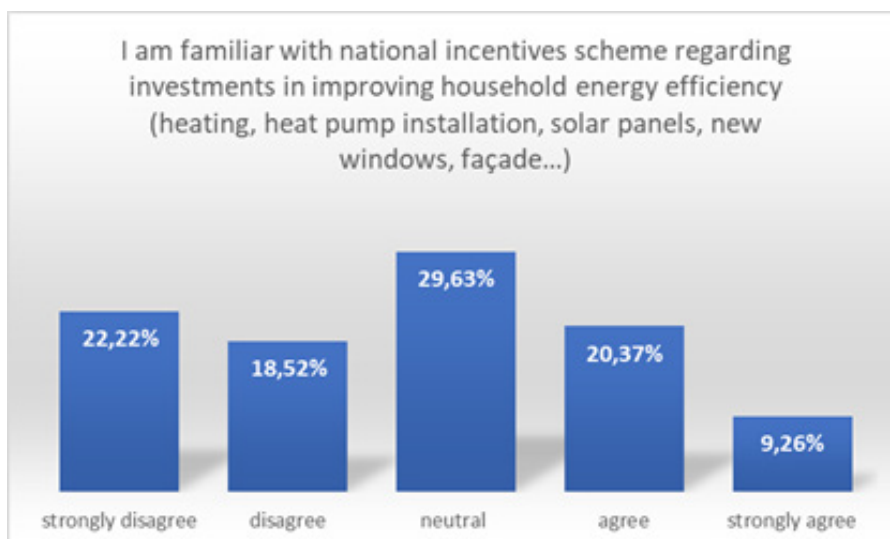


Figure 24: Energy efficiency investments

When it comes to the familiarity with the national incentives scheme regarding investments in improving household energy efficiency as shown in the Fig. 24, again the majority of the participants took a neutral position (29,63 %), while 22,22 % strongly disagrees with that statement, meaning they are not familiar with the national incentive schemes. On the other hand, 20,37 % agree and 9,26 % strongly agree they are familiar with incentive schemes regarding investments and improving household energy efficiency. A strong neutral position of the participants can indicate that they are not aware of the national incentives schemes regarding investments in improving household energy efficiency.

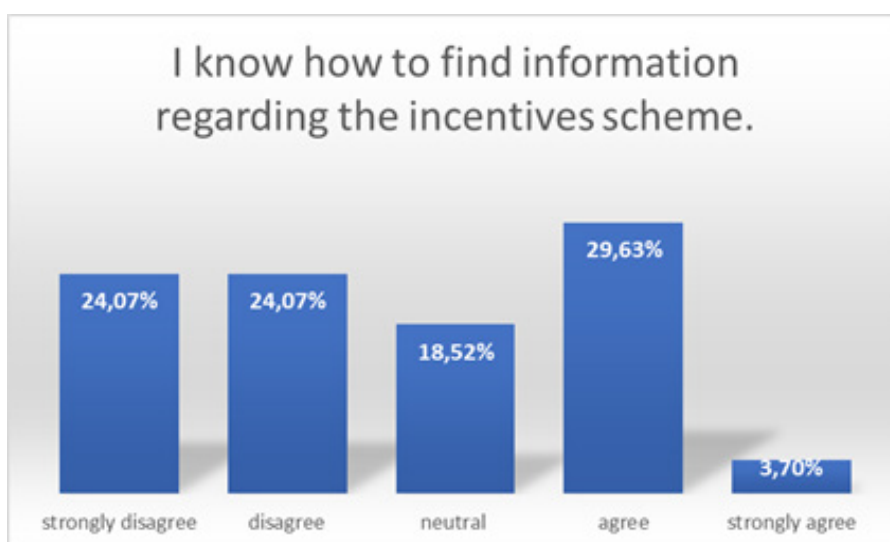


Figure 25: Incentives scheme information

29,63 % of the participants stated they know how to find the information regarding the incentive schemes, but most of the participants disagree and strongly disagree (in total 48,14 %) with that statement as seen in the Fig. 25 above. Therefore, it can be presumed that the majority of the participants do not know how to find information regarding the incentive schemes.

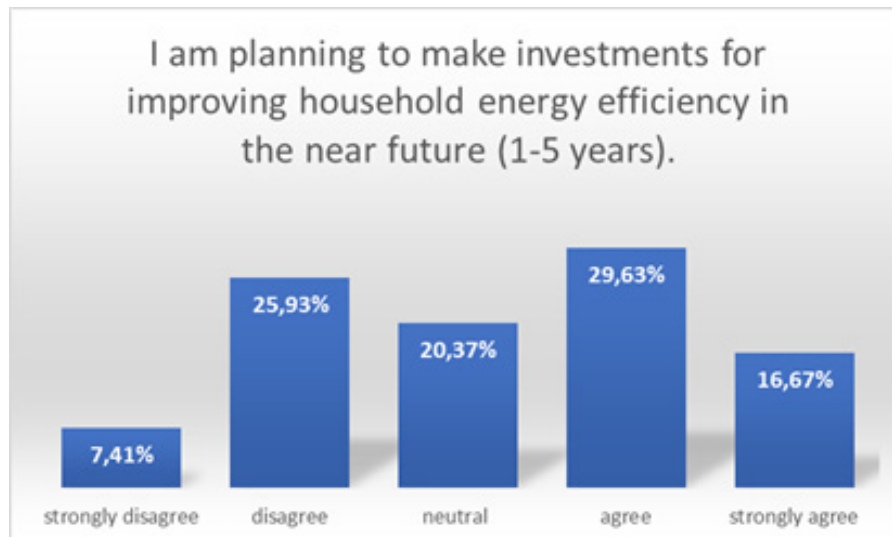


Figure 26: Investments plan for the household energy efficiency

As shown in the Fig. 26, most of the participants (in total 46,3 %) agree or strongly agree that they are planning to make certain investments in improving household energy efficiency soon (in one to five years). Again, there is a strong neutral position (20,37 %) on this statement, indicating that the participants are not sure how to make the household more energy-efficient, and 25,93 % of the participants disagree with the original statement.

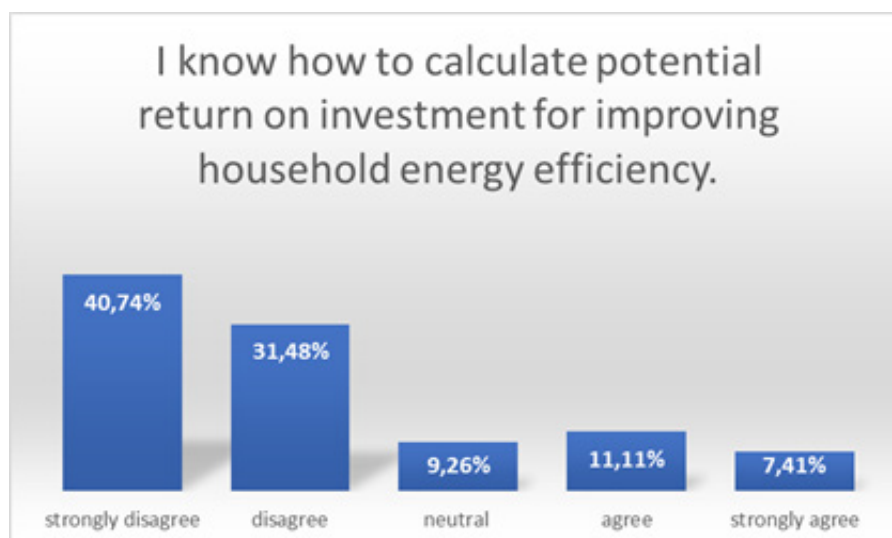


Figure 27: Potential return calculation knowledge

When it comes to knowing how to calculate the potential return on investment for improving household energy efficiency, there is a clear disagreeing position of the majority of participants (in total 72.22 %) with this statement. Only 7,41 % of the participants strongly agree that they know how to calculate the potential return on investments for improving household energy efficiency, seen in Fig. 27.

TOPIC 3: SUSTAINABLE ENERGY-RELATED AWARENESS, BEHAVIOR, AND HABITS

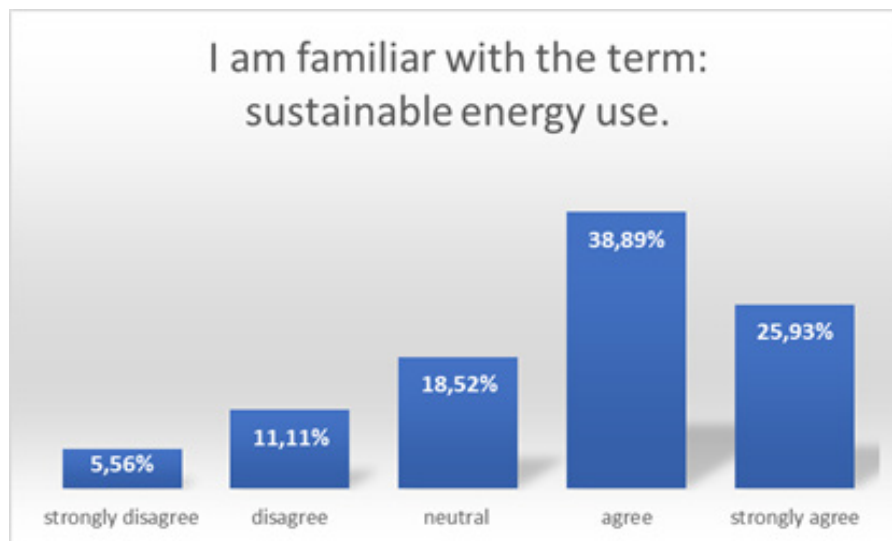


Figure 28: Sustainable energy use term

Fig. 28 shows that most of the participants (in total 64,82 %) stated they are familiar with the term sustainable energy use, while 18,52 % took a neutral position on this statement. Again, this can indicate that the neutral position participants are not aware of what sustainable energy use means and this should be taken into consideration when developing educational materials.

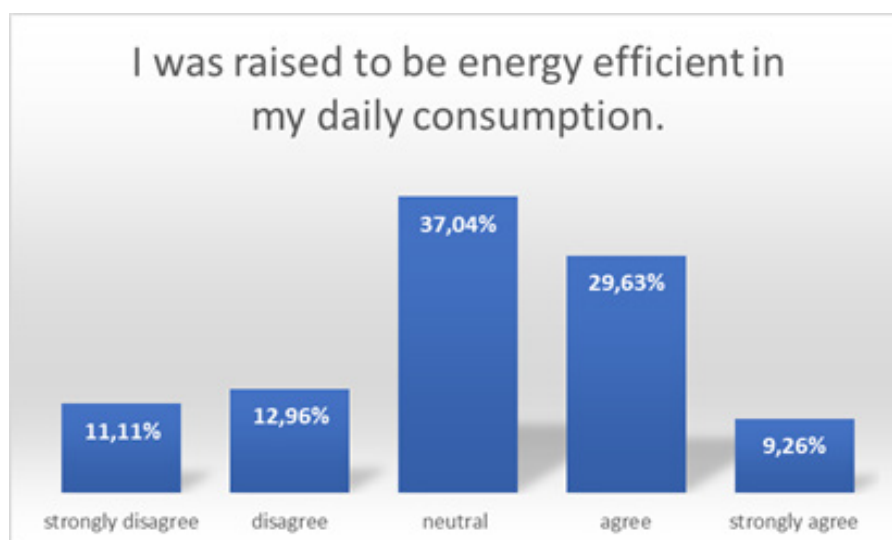


Figure 29: Energy efficiency upbringing

Similarly, to the question regarding the energy efficiency of the household, when asked if they were raised to be energy efficient in their daily consumption, the majority of the participants again took a strong neutral position, that is 37,04 % of them. There is 29,63 % that agree with that statement. Still, there is a clear need to explain what energy efficiency means in a household and everyday behaviour as it can be inspected in the Fig. 29 in detail.

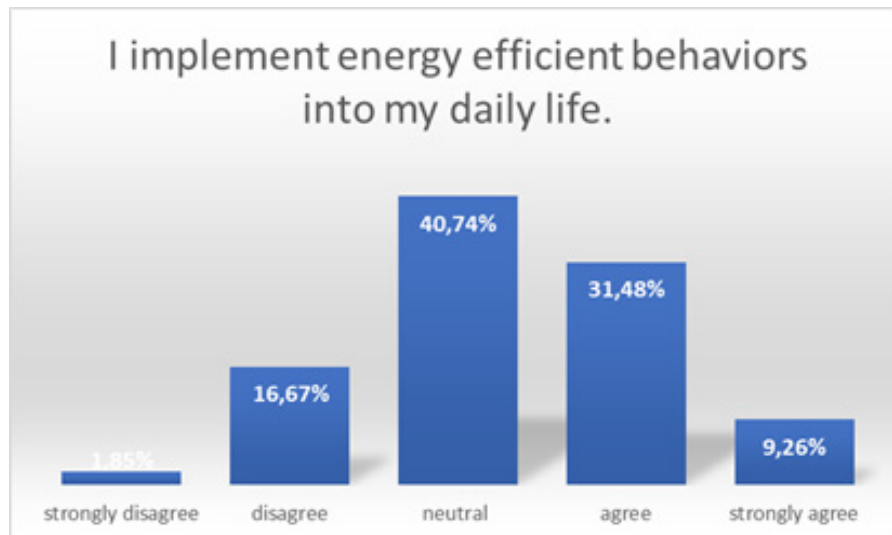


Figure 30: Energy efficient behaviours implementation

Again, most of the participants took a neutral position (40.74 %) when asked if they implement energy-efficient behaviours in their daily lives, while 31,48 % agreed that they do implement energy-efficient behaviours in their daily life and only 16.67 % disagreed with this statement in Fig. 30 above.

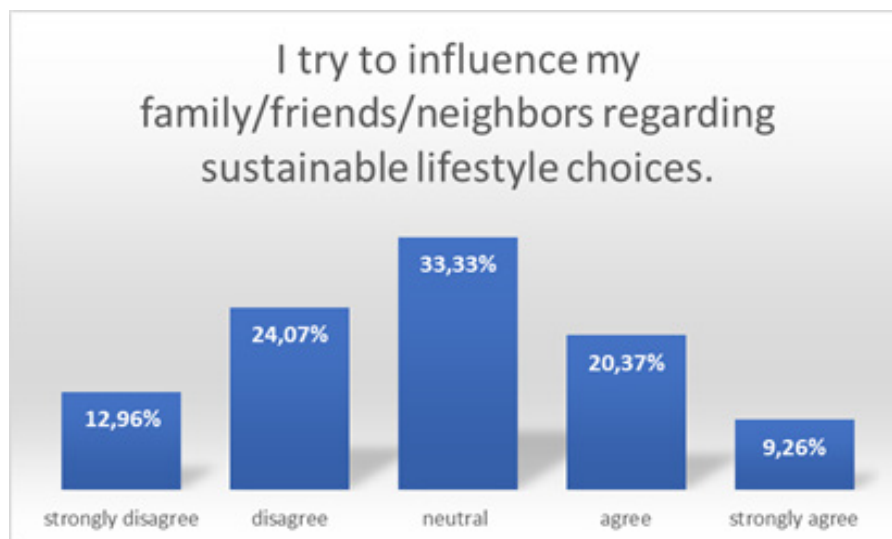


Figure 31: Family/friends/neighbours sustainable influence

As Fig. 31 shows, most of the participants took a neutral position (33,33 %) when it comes to trying to influence family/friends/neighbors regarding sustainable lifestyle choices. On the other hand, 24,07 % of participants disagreed with that statement, meaning they're not influencing sustainable lifestyle choices, while 20,37 % of participants agreed with the statement. But most of the participants (in total 37,03 %) are still not trying to influence their family/friends/neighbors regarding sustainable lifestyle choices.

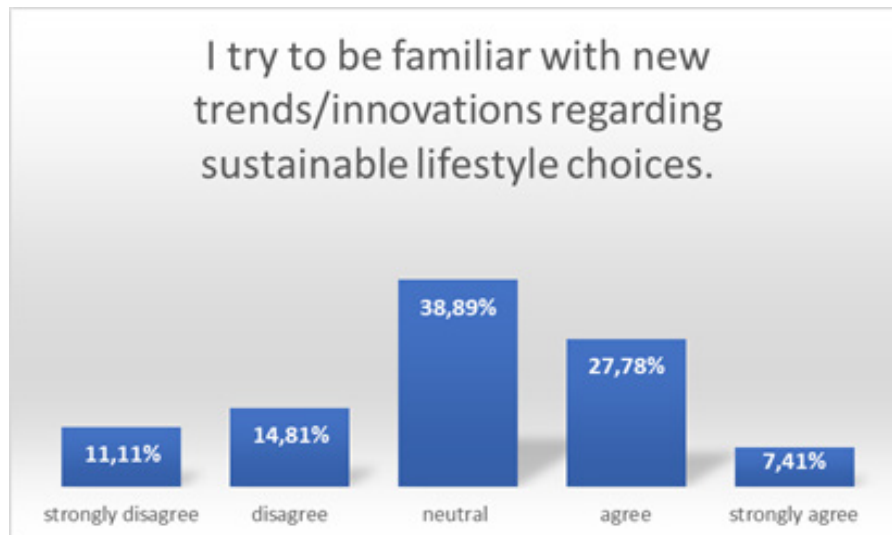


Figure 32: New trends and innovations familiarity

Fig. 32 shows that almost 39 % of the participants stated that they are neutral when it comes to being familiar with new trends/innovations regarding sustainable lifestyle choices. This is also confirmed by the neutral set of the previous statement regarding sustainable lifestyle choices. However, there is still an agreement (in total 35,19 %) among the participants that they are trying to be familiar with trends/innovations, while only 11,11 % strongly disagree with this statement.

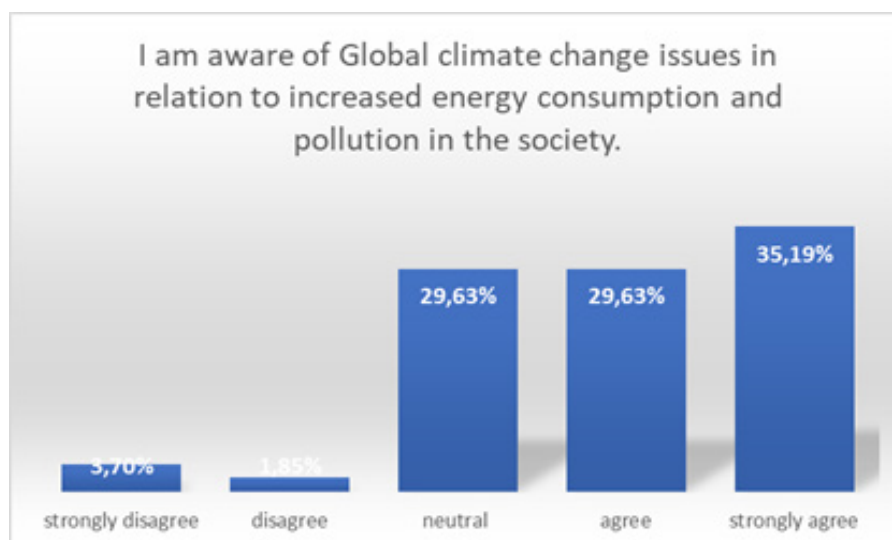


Figure 33: Global climate change issues in relation to energy consumption and pollution awareness

Most of the participants strongly agree (35,19 %) and agree (29,63 %) with the statement that they are aware of global climate change issues in relation to increased energy consumption and pollution in society. There is again a strong neutral position for this statement, that is 29,63 % of the participants are neutral. Only 3,70 % of participants strongly disagree with this statement which Fig. 33 depicts.

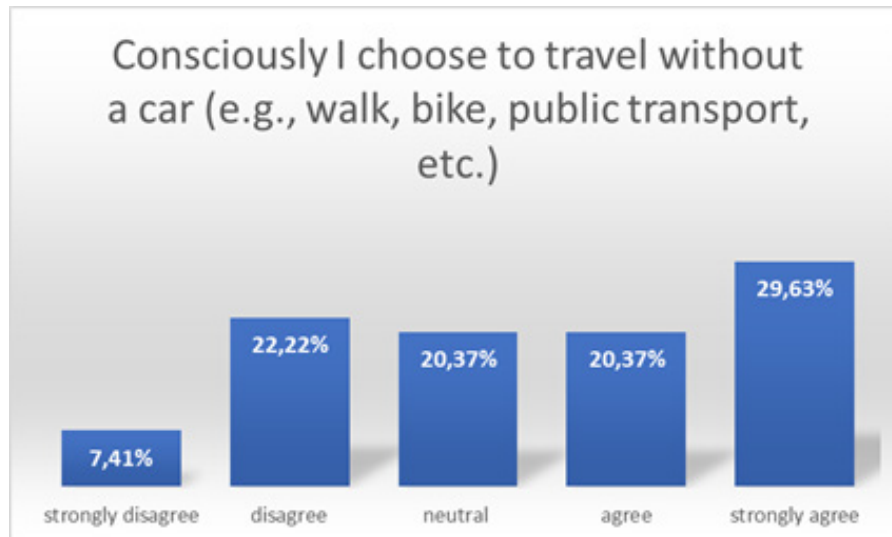


Figure 34: Without-a-car traveling

The majority of the participants agree (20,37 %) and strongly agree (29,63 %) that they consciously choose to travel without the car, for example, walk, use public transport, etc. However, there is also a strong 22.22 % of participants who are disagreeing and 20.37 % are again neutral from the Fig. 34.

CONCLUSION

To conclude, the EI-Practice questionnaire assessed the status of energy literacy among young adults in Croatia. There is an identified awareness of the climate change effects and the importance of environmental perseverance, but the target group is not completely aware of what some concepts related to energy imply and what actions they should take to become energy efficient. Without that knowledge, they will not be able to make a positive shift in their environmental footprints and energy-related decisions for their household. Furthermore, there is a visible lack of knowledge about energy production and consumption, strategic plans, and procedures at the Croatian and European levels.

Lack of knowledge of the basic energy-related concepts – energy efficiency, sustainable energy behaviour

Lack of knowledge of which actions to take to contribute to the energy-efficient behavior and household

Raise awareness not only of the financial benefits of an energy-efficient household but shed light on the environmental footprint and how one can contribute

Lack of knowledge of the national and European energy strategic documents and procedures

Lack of knowledge of the Croatian energy production and consumption mix

Lack of knowledge of the national support schemes and their possibilities

Lack of knowledge of how to calculate the potential return of the investment when improving the energy efficiency of a household

Having these gaps identified, Energy Literacy Practice should address them and develop a specific set of micro pieces of training addressing each of the gaps. This will be done via a user-friendly platform where all the pieces of training and additional information will be available. Another important goal of the EI-Practice will be to spread the word about the platform and engage young adults as much as possible. This will bring great value to the Croatian and European young adults and put them in a position of an energy literate citizens which in the long run can have a positive impact towards climate neutrality.

QUESTIONNAIRE RESULTS:

Greece

The survey was conducted in May 2022 in Greece, where Innovation Hive collected answers from 42 participants. The questionnaire was communicated through project's social media channels, Innovation Hive's organisation media channels, and through the connection with the members of the Chamber of Larissa.

The results of the survey provided a clear insight into the current state of energy literacy in Greece, while the analysis itself was based on 42 responses received from young adults. Firstly, a set of general questions were outlined in the questionnaire, mostly to ensure that participants are indeed from Greece, and within the target group of the project.

GENERAL QUESTIONS

These questions should identify the demographic background of the participants as well as ensure that the participants belong to the target group.

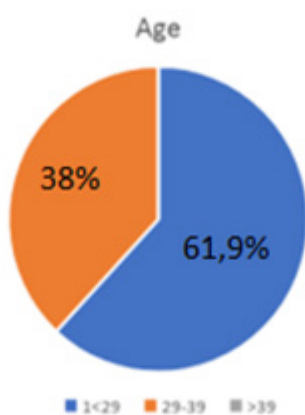


Figure 1: Age group

In Fig. 1, it is shown that the questionnaire distributed among 42 people in total. From these people, 61,9% were up until 29 years of age and 38% between 29 and 39 years old.

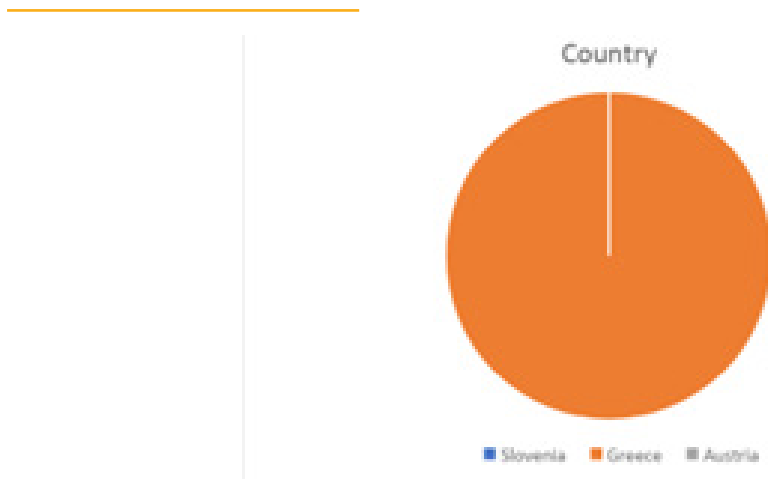


Figure 2: Country

Since this is the competences report for Austria, 100 % of the participants are Austrians as seen in Fig. 2.

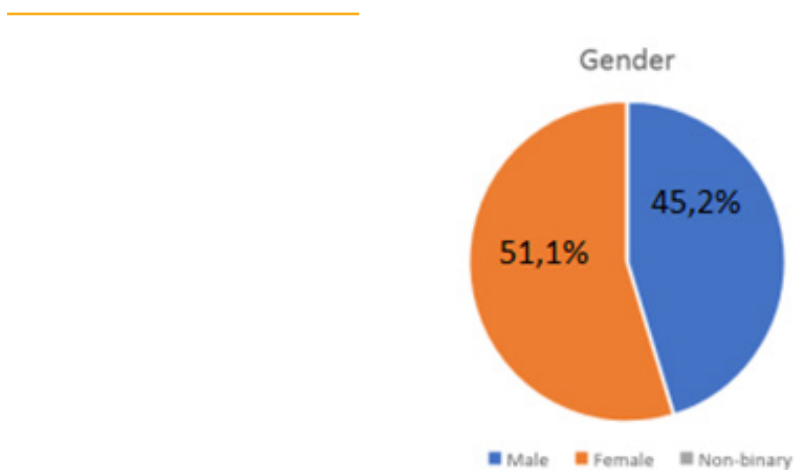


Figure 3: Gender

This pie chart indicates that from the total of 42 people answering the questionnaire, 19 of them, 45,2% were male and 23 of them, 51,1% were female.

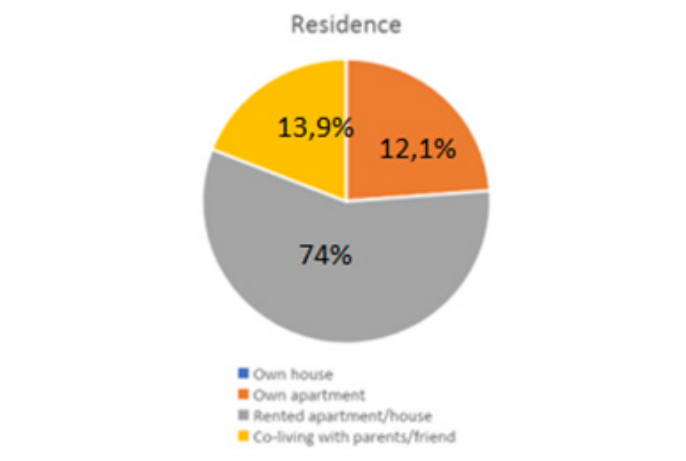


Figure 4: Residence

In Fig.4, it is shown that from 42 respondents, 74% rent an apartment/house, 12,1% own an apartment and 13,9% co-living with parents/friends. A remarkable outcome that occurs is that none of them owns a house.

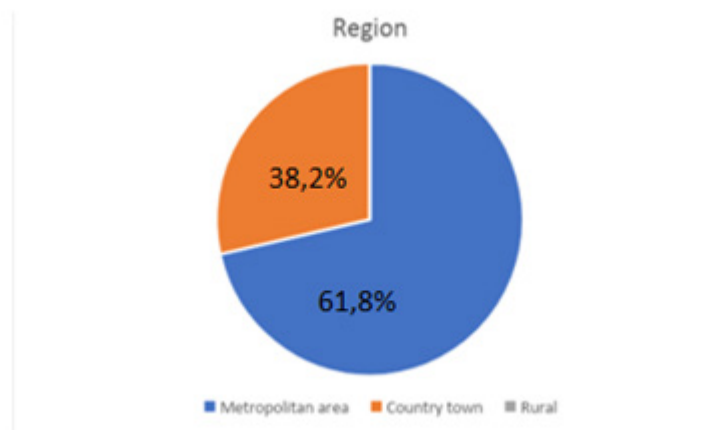


Figure 5: Region of living

A percentage of 38,2% of the respondents live in a country town and the remaining 61,8% in a metropolitan area. None of the respondents stated that live in rural areas.

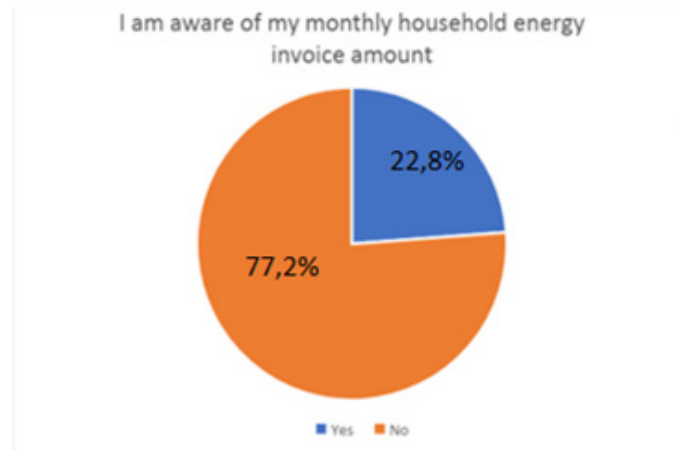


Figure 6: Monthly household energy invoice amount awareness

A large proportion, 77,2% of the people who responded in the survey is aware of the monthly household energy invoice amount in comparison to a smaller percentage of 22,8% that lacks awareness.

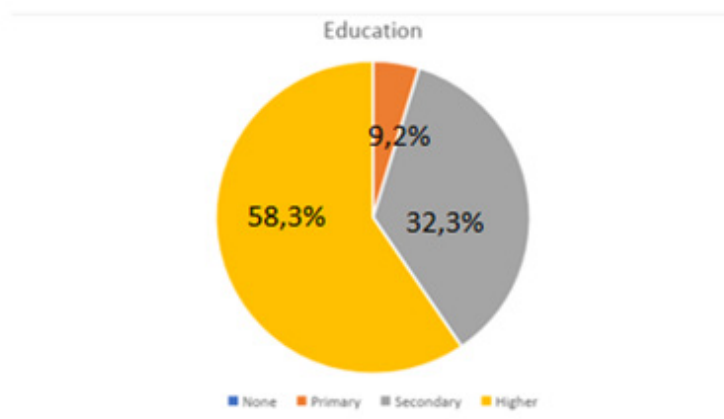


Figure 7: Education background

Most of the people who answered the questionnaire had a higher education level, representing 58,3%, a percentage of 32,3% had a secondary education level and the remaining 9,2% had only a primary education.

TOPICAL QUESTIONS

Following the general questions, a set of 27 topical questions was presented in the questionnaire, to provide an in-depth insight into the energy literacy of young adults in Greece.

TOPIC 0: GENERAL

The questions from this segment were dedicated to general topics and examined the awareness and attitudes of the participants on energy and climate issues. Participants responded using the Likert scale, choosing one of 5 levels: I strongly disagree (1), I disagree (2), I am neutral (3), I agree (4), and I strongly agree (5).

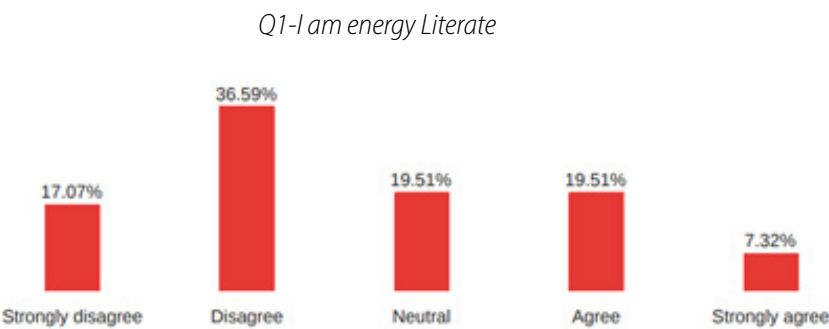


Figure 8: Energy literacy levels among individuals

The results of the first question in this section are quite discouraging since the larger number of respondents stated that are not energy literate which makes the need of implementation of this project more important.

Q2-I think energy literacy is very important for young adults to decrease their energy footprint

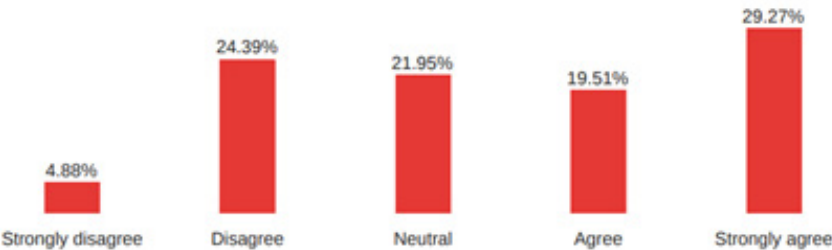


Figure 8: Energy literacy levels among individuals

Nevertheless, the encouraging part is the fact that a percentage of 48,78% (19,51% agreed and 29,27% Strongly agreed) answered that energy literacy is important in order to reduce

the footprint of each individual, even though it should be noted that still a relatively big percentage stated the opposite.

Q3- I think energy literacy is very important for young adults to decrease the living expenses

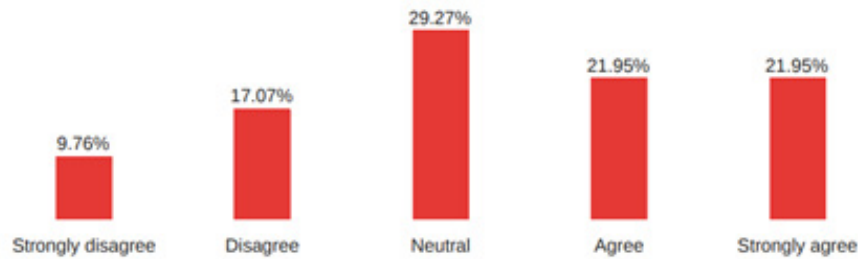


Figure 10: Energy literacy usefulness

In continuation to the previous questions, the larger number of the respondents believe that energy literacy is an important aspect to decrease living expenses. However, there is an inconsiderable percentage that states that strongly disagree with that (9,76%) and that simply disagree (17,07%). A notable result is that a percentage of 29,27%, stayed neutral.

Q4-Climate change poses a real threat for society

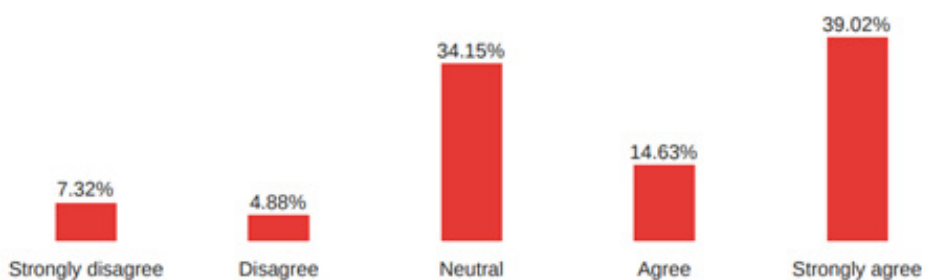


Figure 11: Climate change as a threat

According to the findings of the question about Climate change, the larger part of participants (39,02% that strongly agreed) stated that they consider climate change as a threat to society and only a small part (7,32% that strongly disagreed) believes that it does not create significant implications.

Q5-Environmental perseverance is important

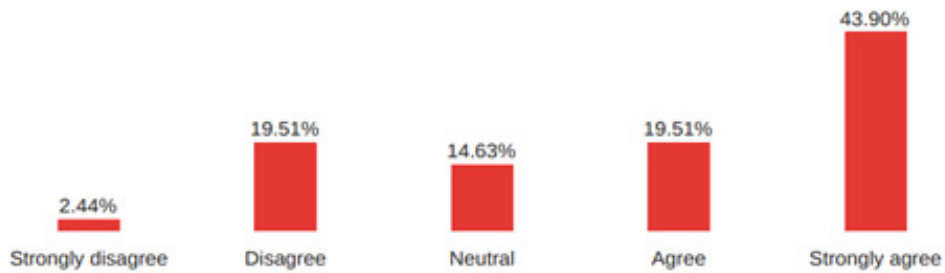


Figure 12: Importance of the environmental preservation

In continuation to the previous question the biggest part of the respondents (43,90% strongly agreed) recognise the importance of environmental protection.

Q6-I am aware of the areas in which I can improve my sustainable energy behaviours.

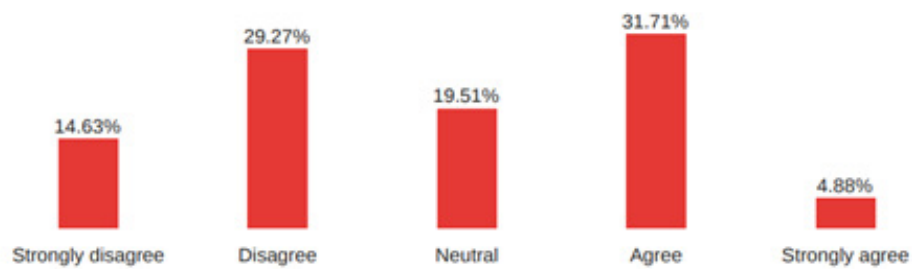


Figure 13: Sustainable energy behaviours improvement

In Fig.13 is noted that there are still many (29,27%) that lack the knowledge regarding the areas of improvement of their sustainable energy behaviours and this result is quite alarming.

Q7-I am aware of benefits for households in relation to more sustainable energy consumption.

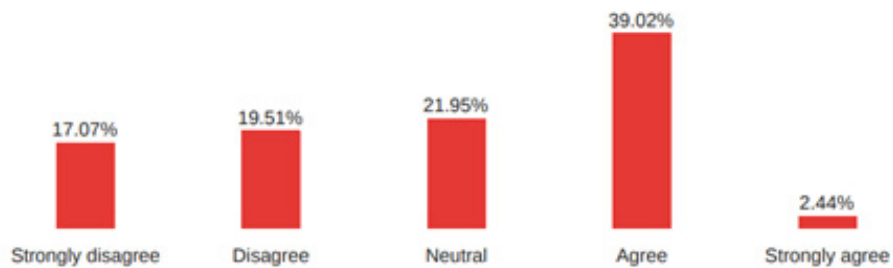


Figure 14: Sustainable energy consumption benefits

The larger proportion of participants of the survey stated that they are mindful of the benefits for the households in relation to more sustainable energy consumption.

TOPIC 1: ENERGY USE AND GREEN DEAL OBJECTIVES

This section of the questionnaire concerns energy use and acquaintance with the national and European strategic documents related to energy and Green Deal objectives.

Q8-I got acquainted national document regarding energy strategy regarding energy production/consumption topic.

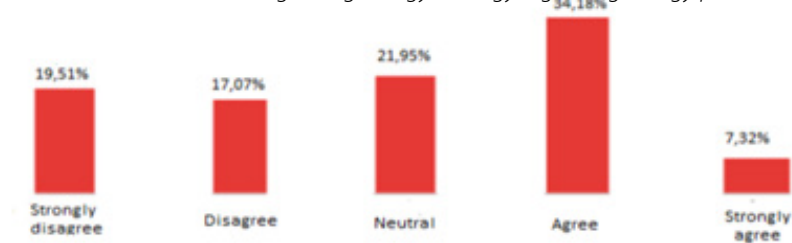


Figure 15: Acquaintance with national documents regarding energy

The answers in the question about acquaintance with national documents regarding energy showed that most of the participants, the 34,18%, are acquainted about the national documents. However, the percentage of them who are not, is high as 19,51% strongly disagreed and 17,07% disagreed.

Q9-I am familiar with national energy production and consumption mix.

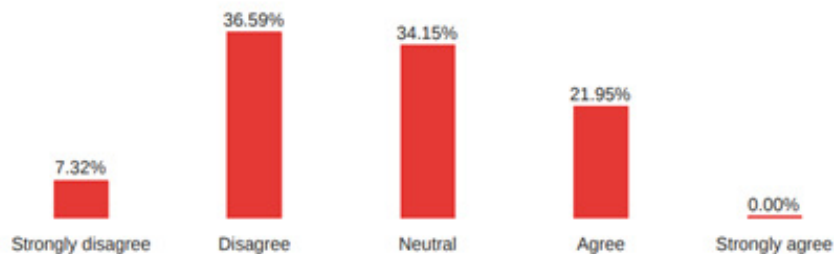


Figure 16: National energy production and consumption mix familiarity

Based on the results above, most of them are not familiar with the national energy production and consumption mix. So, it is necessary to provide material that focus on this topic.

Q10-I follow the global discussions and literature regarding the energy production/consumption topic.

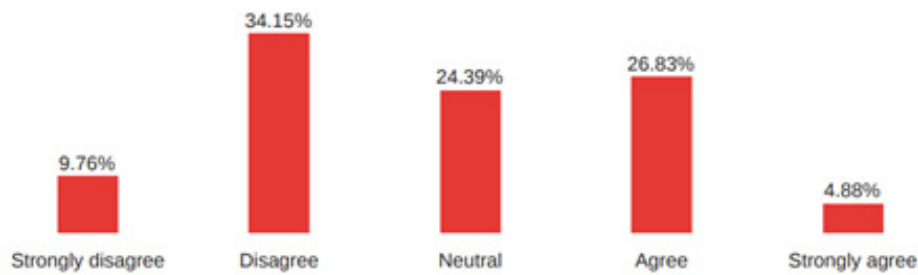


Figure 17: Global energy discussions acquaintance

It is also obvious from Fig.17 that the biggest percentage (34,15%) doesn't read any national document or they are neutral (24,39%). Apparently there is a part that follows the global discussions but the percentage is relatively smaller.

Q11-I am familiar with EU energy directives and strategic documents like Green Deal (Priority 2: Clean Affordable and Secure Energy).

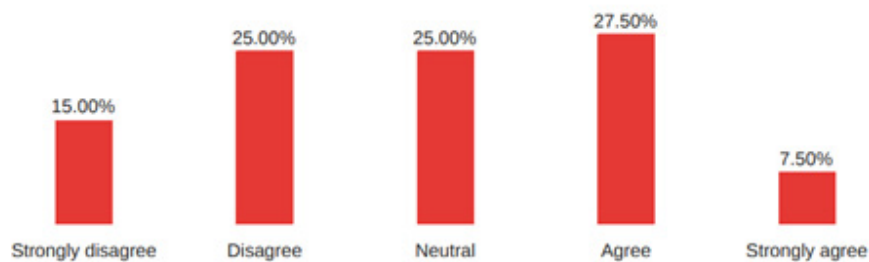


Figure 18: EU energy directives familiarity

Fig 18 shows that the same percentage of respondents, 25%, which represent the people that are not familiar is the same with them that stay neutral. But the optimistic fact in these answers is that the percentage of them who are familiar is bigger 27,50%.

Q12-I know where to find written versions of EU energy directives and national strategic documents.

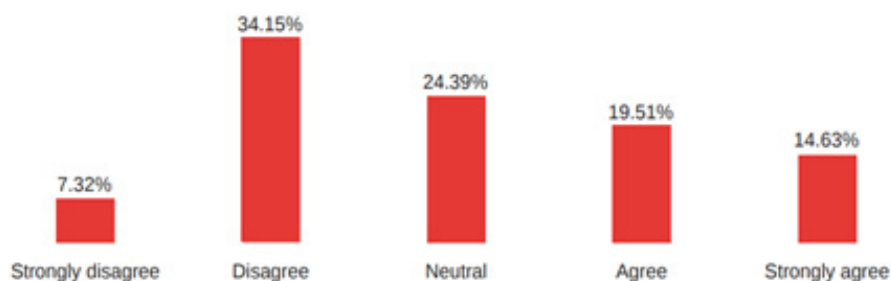


Figure 19: EU energy directives written versions

In Fig.19 is obvious that the larger proportion lack knowledge on where to find relative materials on energy aspects. The part of the participants that answered negatively was 34,15%, higher than the percentage of the positive answers.

Q13-I am aware of impacts of the policy on my life.

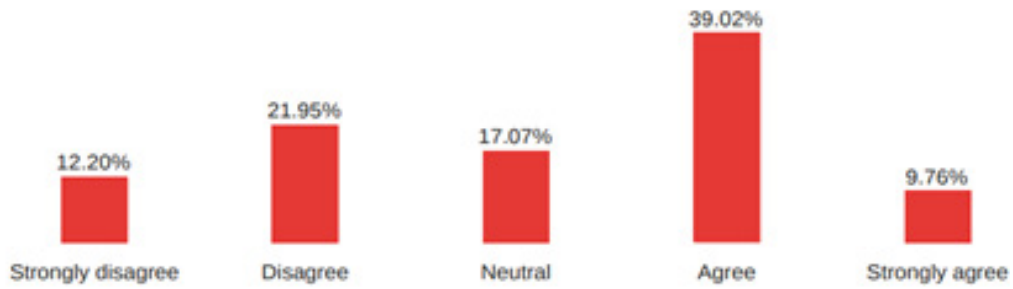


Figure 20: Policy impacts awareness

Most of the respondents are aware of the impact of energy use policy in their lives (39,02%) compared to a smaller but significant amount that lack this knowledge.

Q14-In my opinion my household is energy efficient.

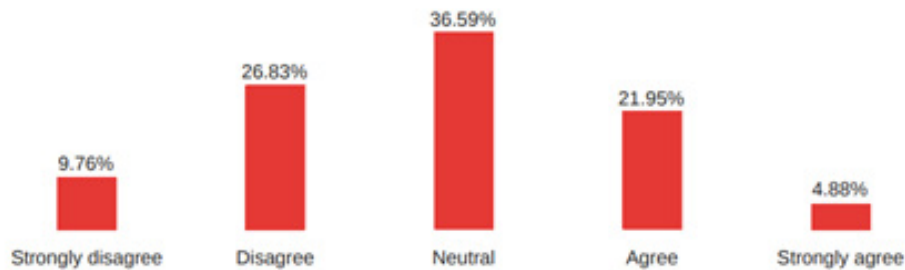


Figure 21: Household energy efficiency

An important finding on this case is that the higher percentage stays neutral on this question, showing a possible lack of knowledge on how to recognise if a household is energy efficient.

TOPIC 2: ENERGY RELATED INVESTMENTS, INCENTIVES, AND SUBVENTIONS

Q15-I know the areas in which I can improve the energy efficiency of my household.

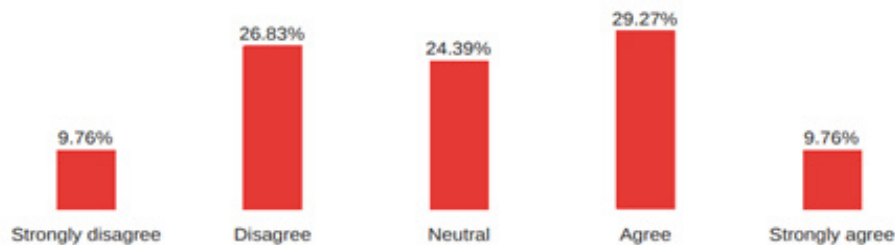


Figure 22: Energy efficiency improvements awareness

Although most of them believe that their household is energy efficient, the percentage of them who are aware of the areas where they can improve the energy efficiency of their household is lower.

Q16-I am aware of various risks associated with using inefficient household appliances (e.g. high energy consumption, higher bills and technical problems).

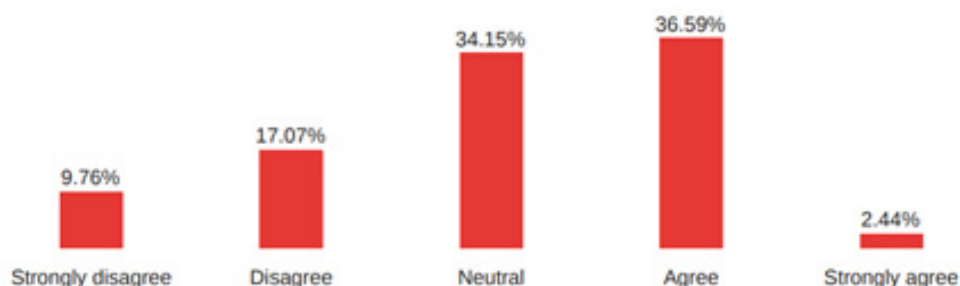


Figure 23: Inefficient household appliances risk awareness

An important finding from Fig23. is that most of the respondents are aware of the inefficient household appliances and compared to the negative answers the percentage of the positive answers prevailed as 36,59% agreed and 2,44% strongly agreed.

Q17-I am familiar with national incentives scheme regarding investments in improving household energy efficiency (heating, heat pump installation, solar panels, new windows, façade..).

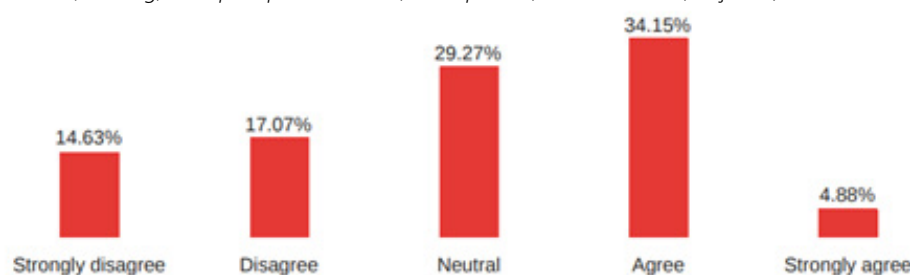


Figure 24: Energy efficiency investments

The outcome of this question was expected since in Greece, many programmes exist which are financed by the government, that is why a big part of the respondents 34,15% agreed and 4,88% strongly agreed.

Q18-I know how to find information regarding the incentives scheme.



Figure 25: Incentives scheme information

Fig. 25 shows that the same percentage of respondents are either familiar or not on how to search for information regarding incentive schemes.

Q19-I am planning to make investments in improving household energy efficiency in the near future (1-5 years).

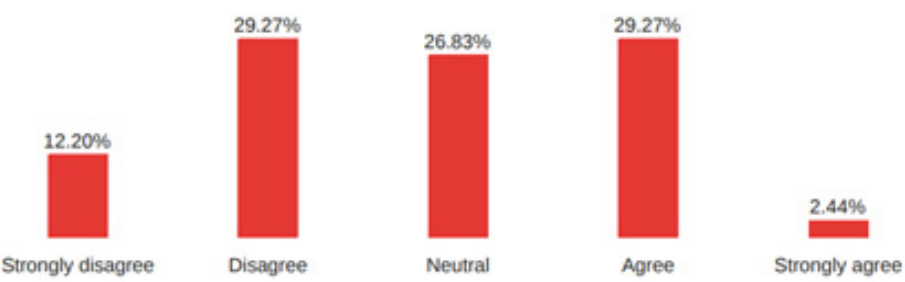


Figure 26: Investments plan for the household energy efficiency

The percentage of young adults who answered that they plan to invest in the future are exactly the same as the percentage of them who are not planning to. But there is a difference in the percentage that strongly agreed (2,44%) in comparison to the percentage that strongly disagree (12,20%) which is much higher.

Q20-I know how to calculate potential return on investment when investing in improving household energy efficiency.

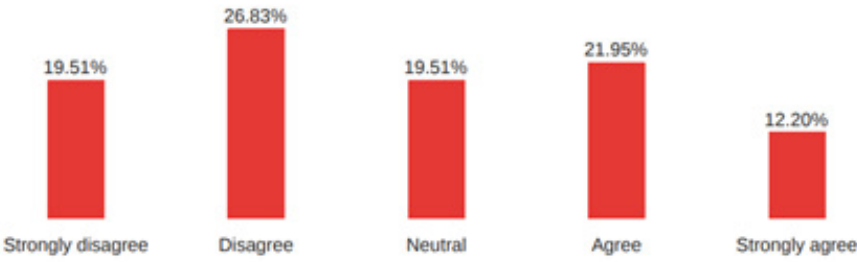


Figure 27: Potential return calculation knowledge

The answers to the above question, show that most of the participants disagreed (26,83% disagreed and 19,51% strongly disagreed) when asked if they knew how to calculate potential return when investing in improving household energy efficiency.

Q21-I am familiar with the term: sustainable energy use.



Figure 28: Sustainable energy use term

As other Figures before, Fig.28 indicates the same level of respondents than are familiar with the term sustainable energy use and those who are not.

TOPIC 3: SUSTAINABLE ENERGY RELATED AWARENESS, BEHAVIOUR, AND HABITS

Q22-I am aware of the areas in which I can improve my sustainable energy behaviours

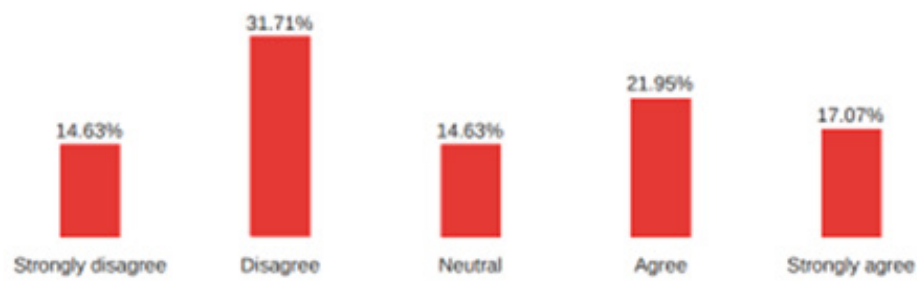


Figure 29: Energy efficiency upbringing

The answers to the graph above are surprising for Greece, as most of the participants (31,71% disagreed and 14,63% strongly disagreed). Since the survey was conducted among young adults it is very worrying that there still many of them that they do not even know the areas in which they can improve their sustainable energy behaviours.

Q23-I implement energy efficient behaviours in my daily routine.

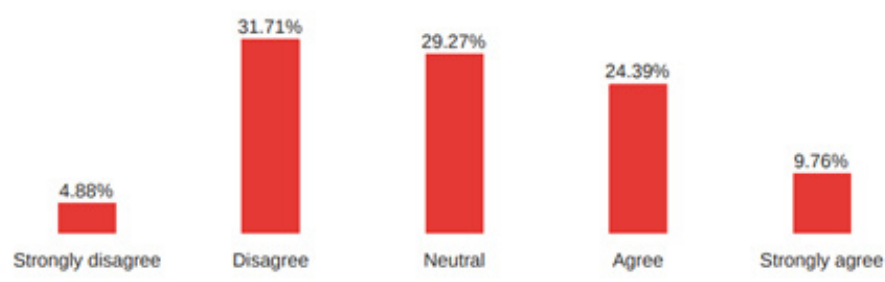


Figure 30: Energy efficient behaviours implementation

Despite all the answers about the awareness of energy efficiency use, the biggest part of the participants answered that they do not apply behaviours like these in their daily life.

Q24- I try to influence my family/friends/ neighbours regarding energy sustainable lifestyle choices

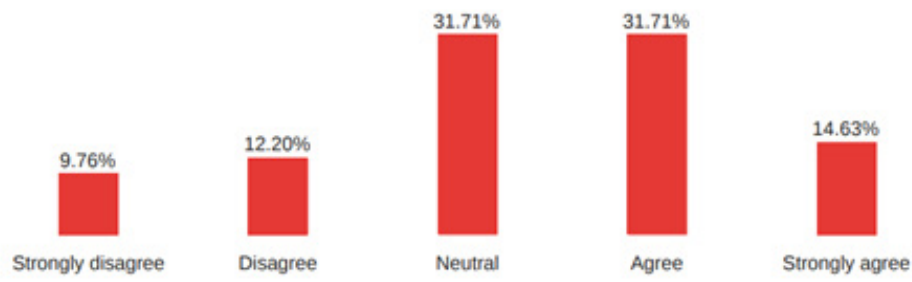


Figure 31: Family/friends/neighbours sustainable influence

Optimistic it is the percentage (31,71% agreed and 14,63% strongly agreed) of the people

who answered that they try to influence in comparison with the percentage (9,76 strongly disagreed and 12,20% agreed) of them who answered that they do not.

Q25- I try to be familiar with new trends/innovations regarding energy sustainable lifestyle choices

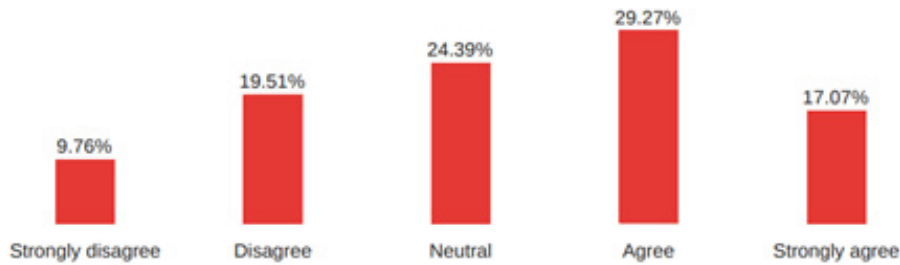


Figure 32: New trends and innovations familiarity

As the survey was conducted among young adults it was expected the participants to be familiar with new trends/innovations regarding energy sustainable lifestyle choices. But the percentage of them who were not aware is also high as it appears in the graph above.

Q26- I am aware of Global climate changes issues in relation to increases energy consumption and pollution in the society



Figure 33: Global climate change issues in relation to energy consumption and pollution awareness

A percentage of 36,59% agreed that they are aware of Global climate change issues in relation to increased energy consumption and pollution in society and there is also a percentage that they strongly agree (9,76%).

Q27- Consciously I choose to travel without a car (e.g. walk, bike, public transport)

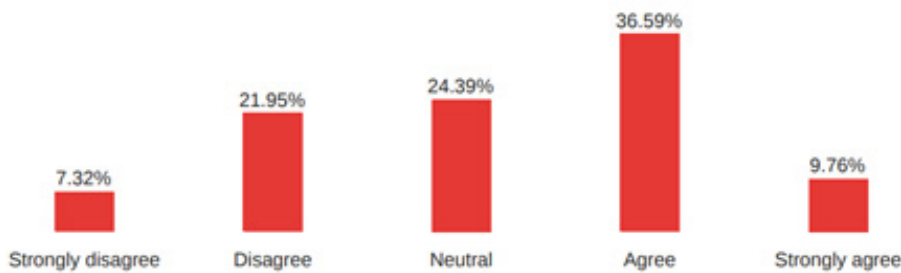


Figure 34: Without-a-car travelling

Impressive is also the percentage (36,59%) of them who answered that they choose to travel without a car, as it is not so common nowadays.

CONCLUSION

In conclusion, it is safe to say that people are not as familiar as they should be about energy. Out of the people that were asked a notable remark is that the younger respondents were the ones that were better informed about energy literacy. It is rather significant that younger generation takes an interest in learning and adjusting their habits in order to decrease the living expenses and exploit all the benefits that occur.

Regarding energy knowledge, most of the respondents are familiar with the basic knowledge and terms of energy, for example they were familiar with the disastrous effects on the environment but when asked if they were energy literate the vast amount of them were not. A considerable effort is noted though to alter the usual habits to a more sustainable way of living, understanding the threat energy mis usage impose on climate change. The general conclusion that people are aware of the environmental impact, even though not in depth and are to change everyday habits and inspire others as well.

Lack of knowledge of which actions to take to contribute to the energy-efficient behaviour and household.

Lack of practical knowledge about how to calculate return investments.

Lack of knowledge of the basic energy-related concepts.

Lack of opportunities for someone to be energy literate.

Lack of knowledge about national initiatives for energy literacy renovations.

Energy literacy project will contribute and will try to cover all these gaps in energy literacy knowledge in order to achieve all the young adults to apply the proposed methods and concepts firstly on their daily routine and next to their actions for energy efficient use. It will provide a full educational material which will aim exactly to the gaps that through the survey identified. Additionally, it will offer easy access to everyone that is interested in it.

QUESTIONNAIRE RESULTS:

Poland

The questionnaire was prepared by the partners MIITR Maribor and KSENNA. After revision, it was translated into Polish language and distributed among young adults. The sample size consisted of 41 people, gathered by PNEC.

GENERAL QUESTIONS

The general variables in the first part of the survey show the diversity of the group, however all 41 respondents are of Polish nationality, between 29 and 39 years old, so they fit the young adults group.

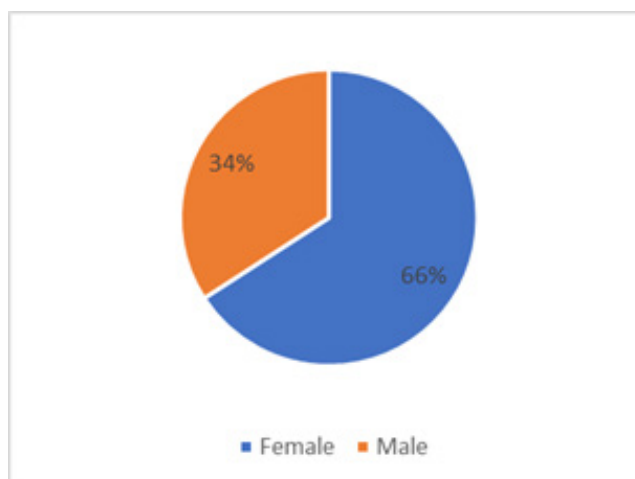


Figure 1: Gender

As seen in Fig. 1, there is a small disproportion between women (66 %) and men (34 %), as more female completed the questionnaire.

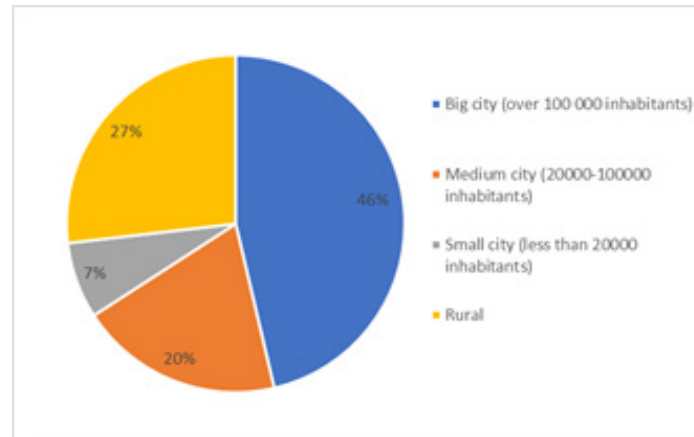


Figure 2: Place of living

Nearly half of the respondents live in metropolitan area (46 %) with more than 100 thousands of citizens, while 27 % of them live in rural areas, as well as in country towns (27 %) as seen in Fig. 2.

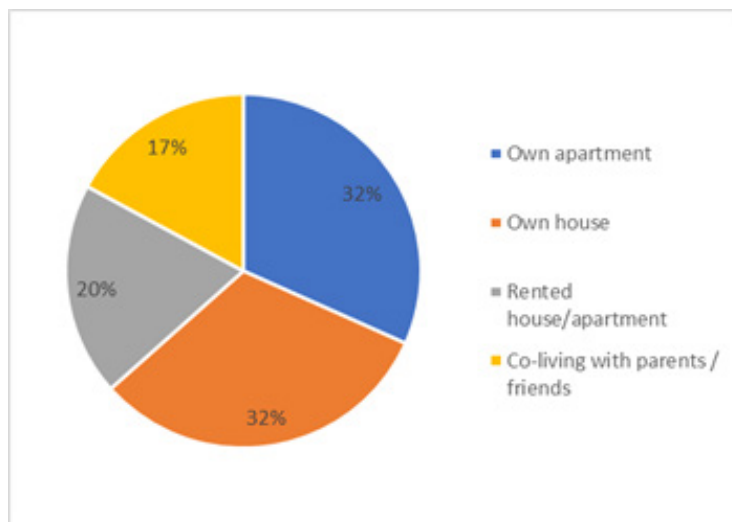


Figure 3: Type of housing

In Fig. 3, there is representation of people living in various type of housing: 32 % lives in their own apartment, 32 % have their own house, 20 % rent house/apartment and 17 % share the household with someone. More than 60 % of respondents have their own place for living. Distribution between the different places of residence is not significant.

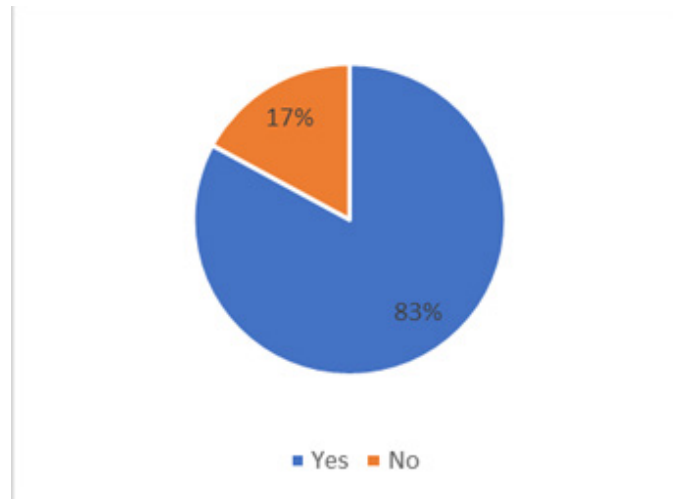


Figure 4: Monthly household energy consumption invoice amount awareness

Based on the results, shown in Fig. 4, of all respondents, 83 % reported that they are aware of their monthly household energy invoice amount.

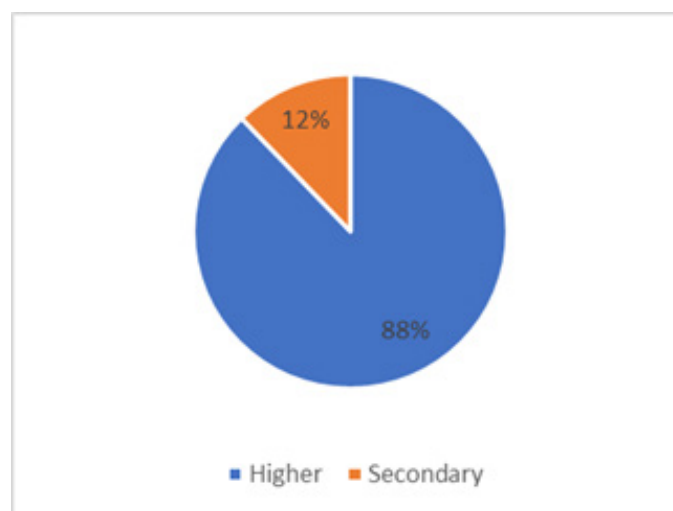


Figure 5: Educational background

In Fig. 5 it is shown that majority of the respondents have higher education (88 %), others have finished secondary schools (12 %). There is no one with primary and non-educational background.

TOPICAL QUESTIONS

The questionnaire contains 27 questions on the topic of energy literacy divided into 4 topics. The respondents answered using a Liker scale, from 1 to 5 where individual digits meaning: strongly disagree (1), disagree (2), neutral (3), agree (4), strongly agree (5).

TOPIC 0: GENERAL

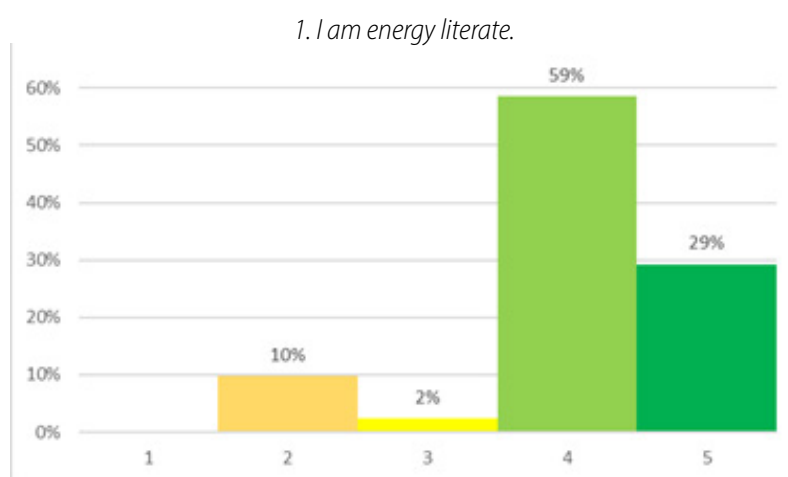


Figure 6: Energy literacy levels among individuals

As seen in Fig. 6 most of respondents agree (59 %) and strongly agree (29 %) with the statement, that they are energy literate. Only 10 % disagree on that, and 2 % are neutral.

2. Energy literacy is very important for young adults to decrease their energy footprint.

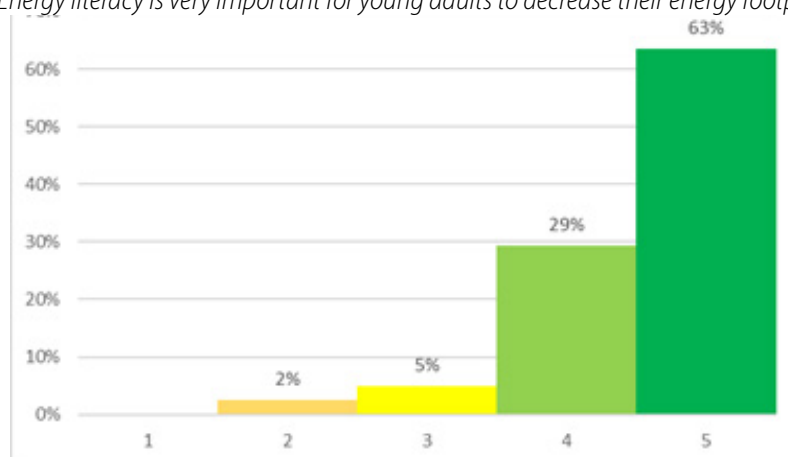


Figure 7: Energy literacy importance

In Fig. 7, it can be seen that energy literacy is very important for young adults, as 63 % strongly agree with the importance of decreasing the energy footprint, while 2 % disagree.

3. *Energy literacy is very important for young adults to decrease their living expenses.*

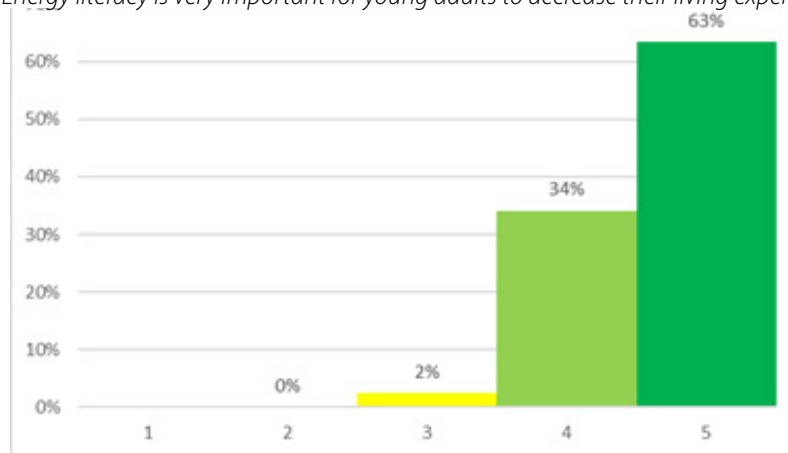


Figure 8: Energy literacy usefulness

All respondents think that decreasing their living expenses is very important in sense of energy literacy, as 34 % agree and 63 % strongly agree with that statement. Only one person in neutral about that as seen in Fig. 8.

4. *Climate change poses a real threat for society.*

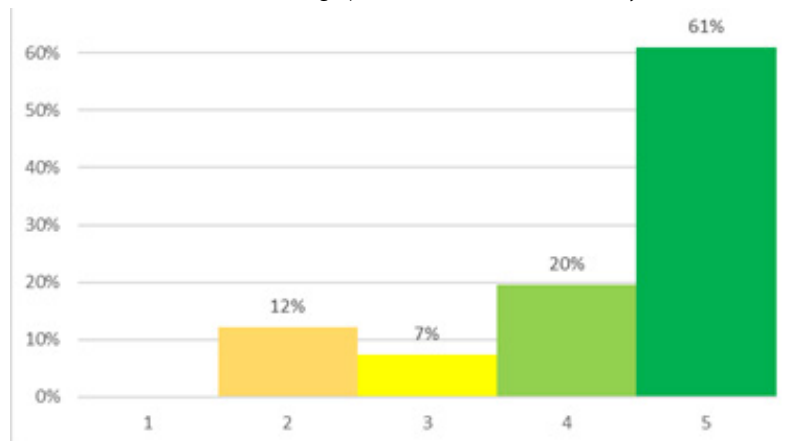


Figure 9: Climate change as a threat

As seen in the Fig. 9, as many as 81% of young adults agree and strongly agree on the fact, that climate change poses a real threat for society, while 12 % disagree.

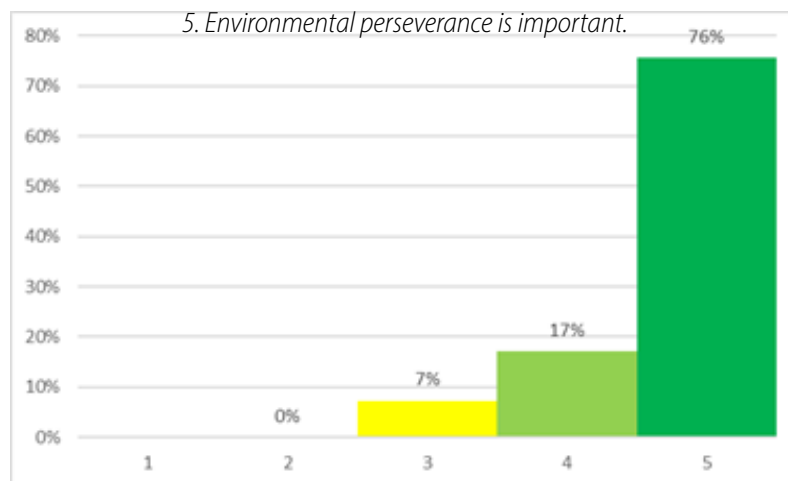


Figure 10: Importance of the environmental preservation

Fig. 10 shows that nearly all respondents agree that environmental perseverance is important (76 % strongly agree and 17 % agree), while 7 % are neutral.

6. *I am aware of the areas in which I can improve my sustainable energy behaviours.*

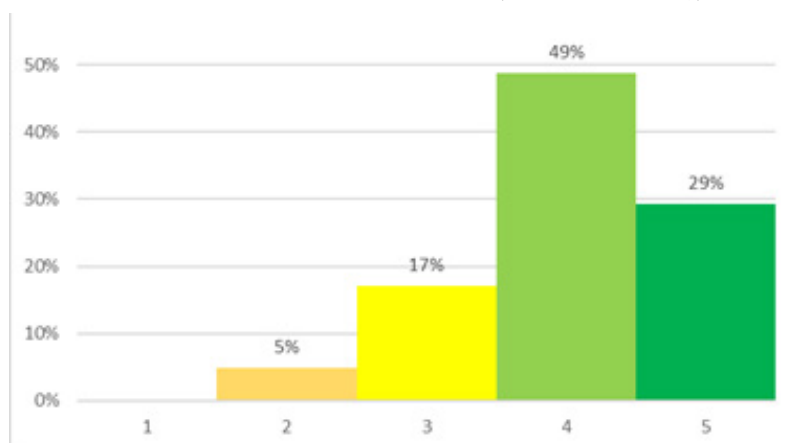


Figure 11: Sustainable energy behaviours improvement

People are generally aware of the areas in which they can improve their sustainable energy behaviours (see Fig. 11), as most of them agree (49 %) and strongly agree (29 %) with that statement.

7. I am aware of the benefits for households in relation to more sustainable energy consumption.

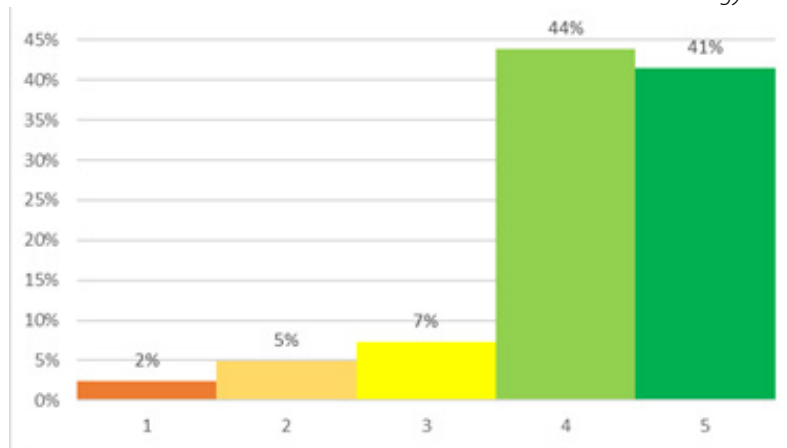


Figure 12: Sustainable energy consumption benefits

Fig. 12 shows that 81 % of households agree or strongly agree that the more sustainable energy consumption brings benefits. But there are also voices that disagree (5 %) and strongly disagree (2 %) with the statement.

TOPIC 1: ENERGY USE AND GREEN DEAL OBJECTIVES

8. I got acquainted national documents regarding energy strategy regarding the energy production/consumption topic.

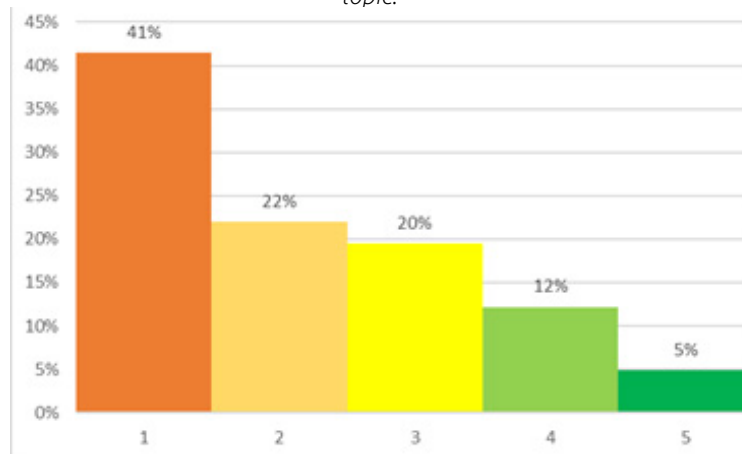


Figure 13: Acquaintance with national documents regarding energy

Knowledge about the national documents regarding energy strategy on the energy production/consumption topic is low as seen in the Fig. 13 above. 41 % of respondents strongly disagree with the statement, 22 % disagree, 20 % has no opinion, and only 17 % in total agree and strongly agree with the statement.

9. I am familiar with national energy production and consumption mix (meaning categories of energy sources produced/used in the country); solar, hydro, wind, nuclear, thermo. . .

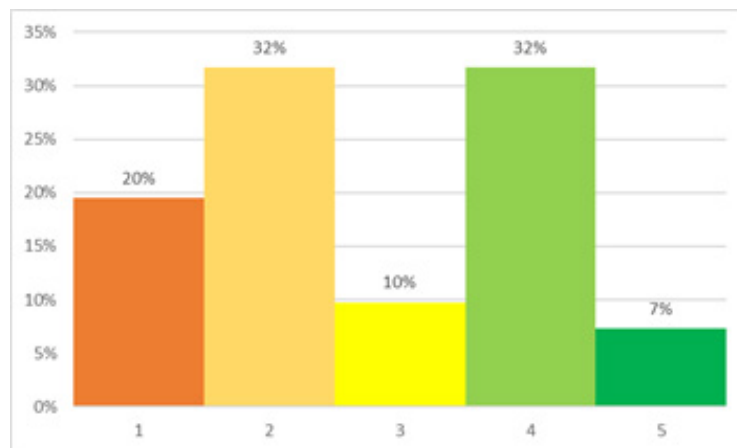


Figure 14: National energy production and consumption mix familiarity

The opinions on the acquaintance about national energy production and consumption mix are divided as shown in the Fig. 14 as 32 % disagree and 20 % strongly disagree, while 32 % agree and 7 % strongly agree, and 10 % are neutral about that.

10. I follow the global discussions and literature regarding the energy production/consumption topic

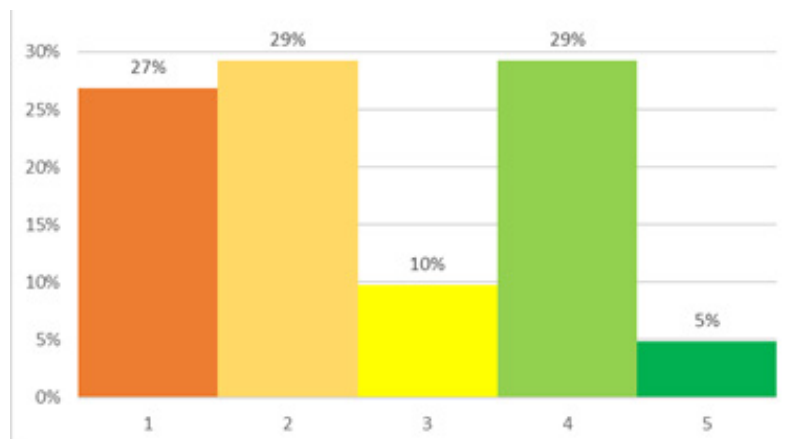


Figure 14: National energy production and consumption mix familiarity

Majority of respondents do not follow global discussions and literature regarding the energy production topic as Fig. 15 shows. 27 % strongly disagree with the statement, 29 % disagree, while another 29 % agree, but only 5 % strongly agree and 10 % does not have an opinion.

11. I am familiar with EU energy directives and strategic documents like the Green Deal
(Priority 2: clean affordable and secure energy)

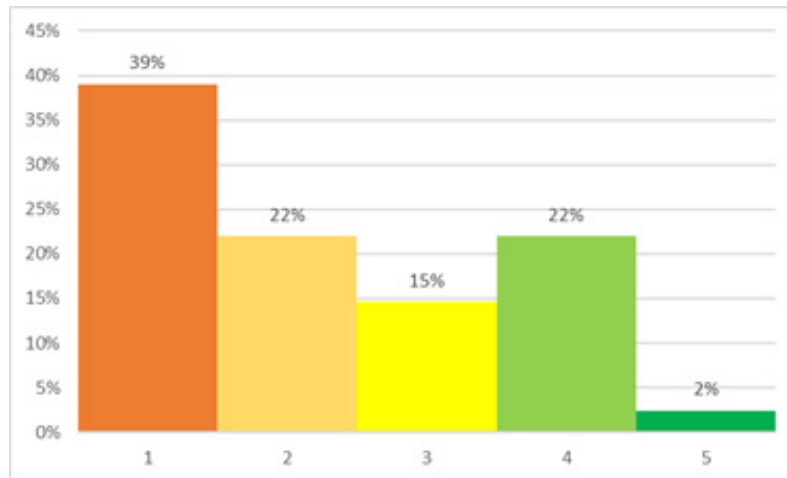


Figure 16: EU energy directives familiarity

Fig. 16 shows that the EU Energy directives and strategic documents like Green Deal are not well known. More than half of respondents are not familiar with them as 39 % strongly disagree and 22 % disagree.

12. I know where to find written versions of EU energy directives and national strategic documents.

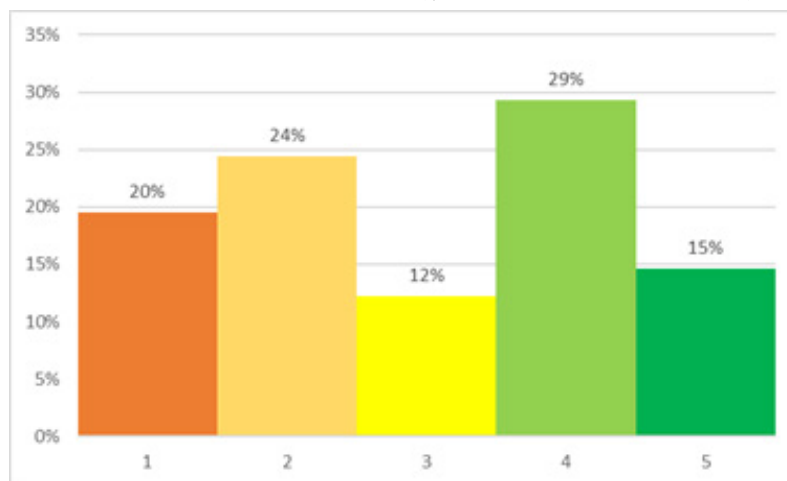


Figure 17: EU energy directives written versions

20 % of young adults definitely do not know where to find written version of EU energy directives and 15 % is very sure of that knowledge. In general as seen in Fig. 17, there are more people who agree than those who disagree with the statement.

13. I am aware of impacts of the policy on my life.

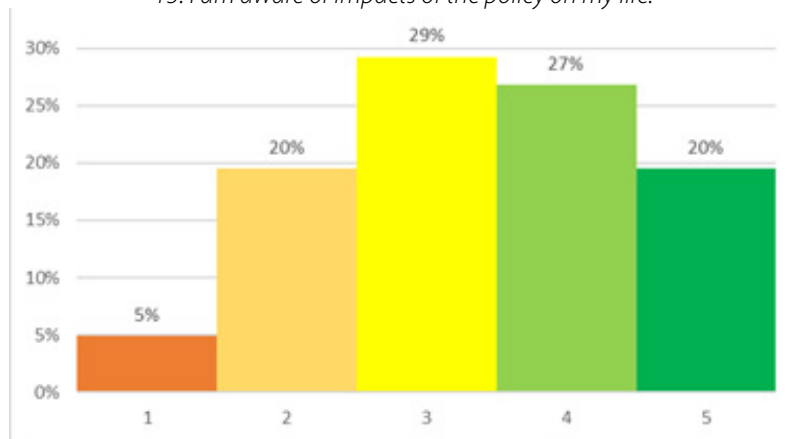


Figure 18: Policy impacts awareness

Nearly one third of respondents do not know if policy has real impact on their life (29 %) as they remain neutral. 27 % are aware of that fact, 20 % are strongly aware as 5% disagree on the potential impact as Fig. 18 shows.

TOPIC 2: ENERGY RELATED INVESTMENTS, INCENTIVES AND SUBVENTIONS

14. In my opinion my household is energy efficient.

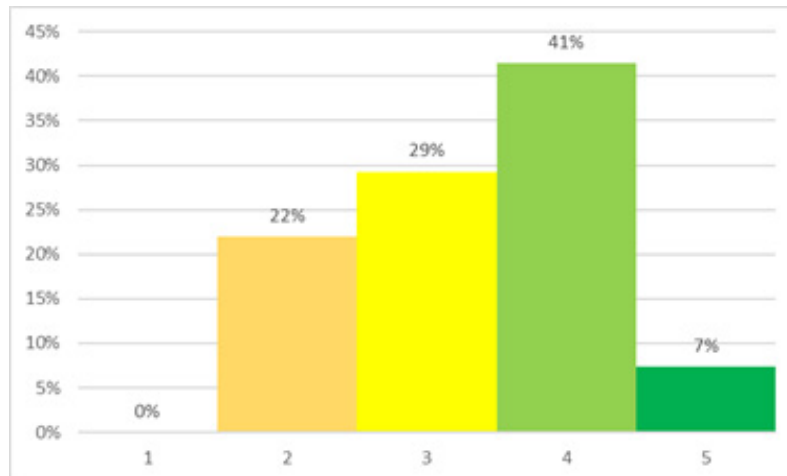


Figure 19: Household energy efficiency

As Fig. 19 shows, only 22 % of young adults think that their household is not energy efficient. 29 % are not sure about that (neutral), as 48 % are sure about that statement (41 % agree and 7 % strongly agree).

15. I am aware of areas in which I can improve the energy efficiency of my household.

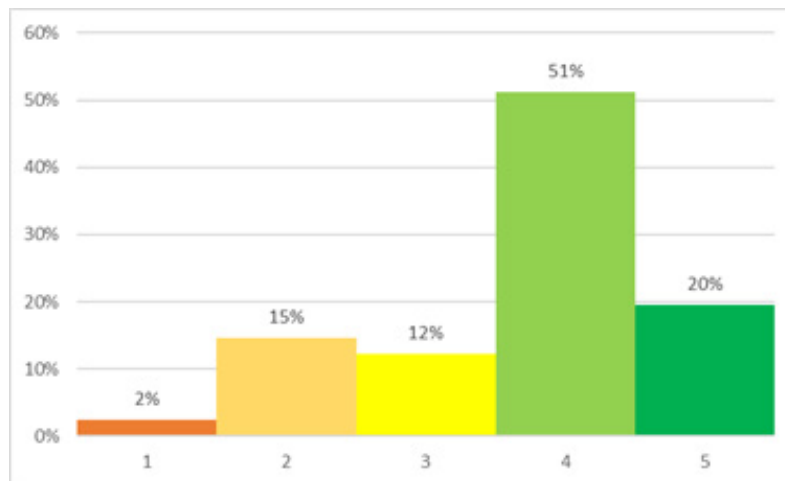


Figure 20: Energy efficiency improvements awareness

As seen in the Fig. 20 above, 71 % of respondents in total are aware of the areas where they can improve the energy efficiency of their households. Only 2 % of respondents definitely disagree with the statement.

16. I am aware of various risks related to using inefficient household appliances (e.g. high energy consumption, higher bills and technical problems).

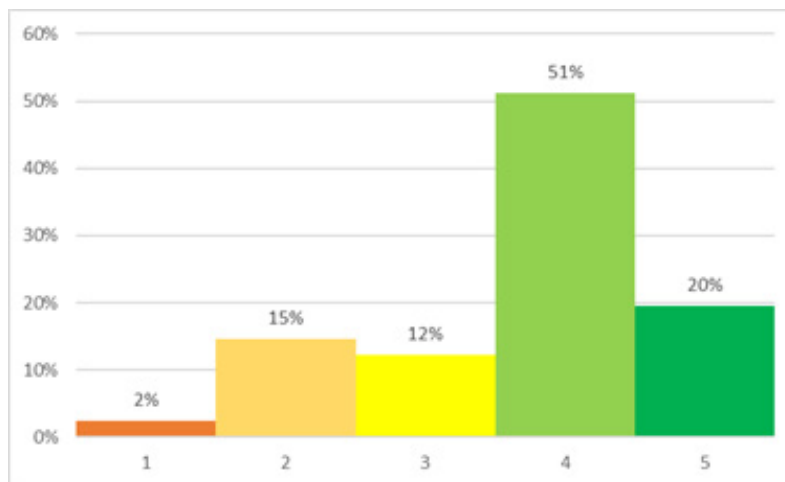


Figure 21: Inefficient household appliances risk awareness

Fig. 21 shows that nearly all respondents are aware of various risks related to using inefficient household appliances, as 56 % of young adults agree with that statement, as well as 34 % strongly agree.

17. I am familiar with national incentives scheme regarding investments in improving household energy efficiency (heating, heat pump installation, solar panels, new windows, façade...)

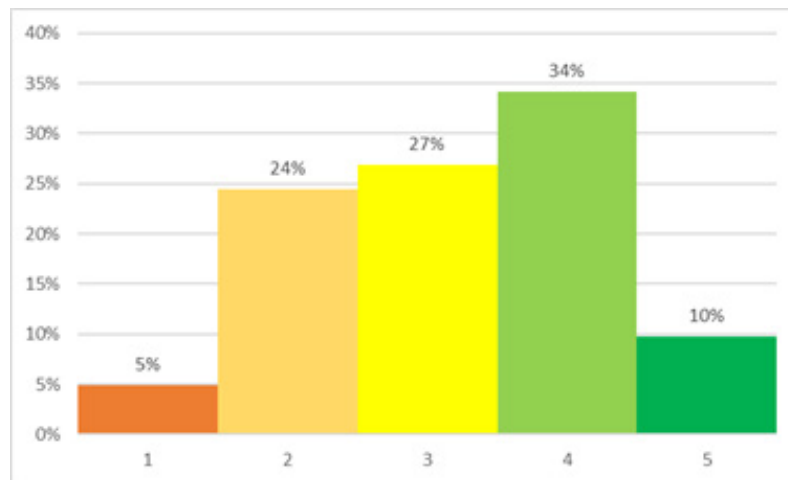


Figure 22: Energy efficiency investments

27 % of respondents have no opinion about investment schemes. As Fig. 22 shows, there are more people who agree with that statement (44 % in total), than those who disagree (29 % in total).

18. I know how to find information regarding the incentives scheme.

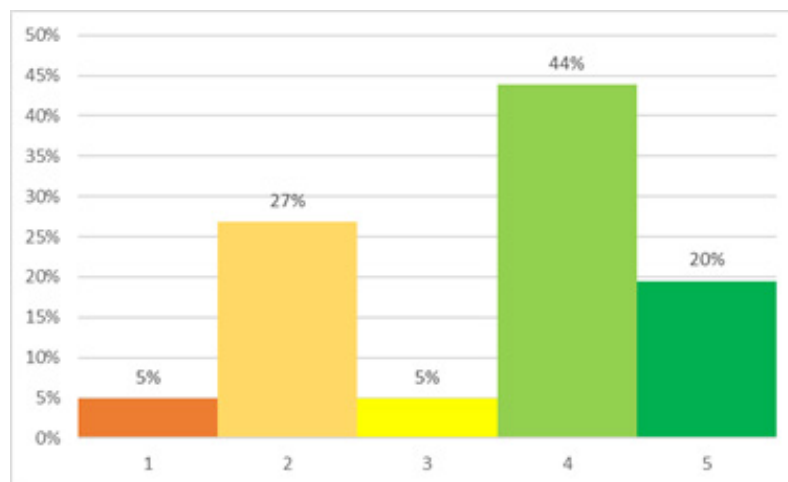


Figure 23: Incentives scheme information

As it could be perceived from the Fig. 23, the information about incentives schemes is known, as 64 % of young adults in total know where to find it (44 % agree and 20 % strongly agree).

19. I am planning to make investments for improving household energy efficiency in the near future (1-5 years).

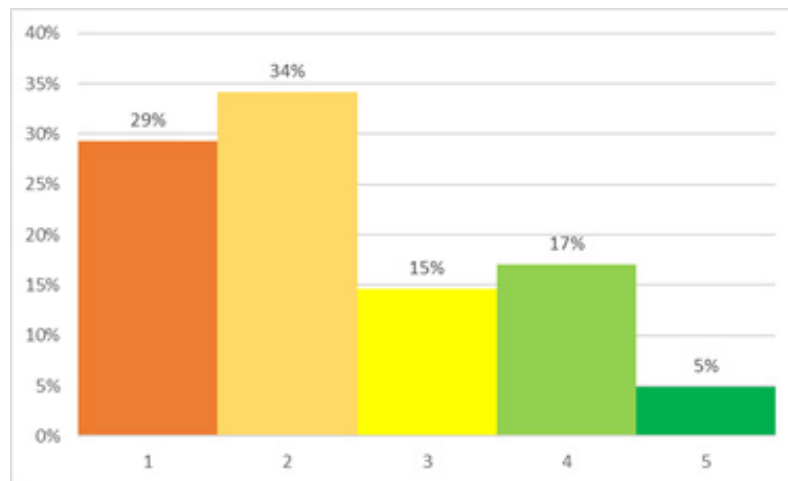


Figure 24: Investments plan for the household energy efficiency

Only 23 % of people in total are planning to make investments for improving household energy efficiency in the near future as Fig. 24 show.

20. I know how to calculate potential return on investment for improving household energy efficiency.

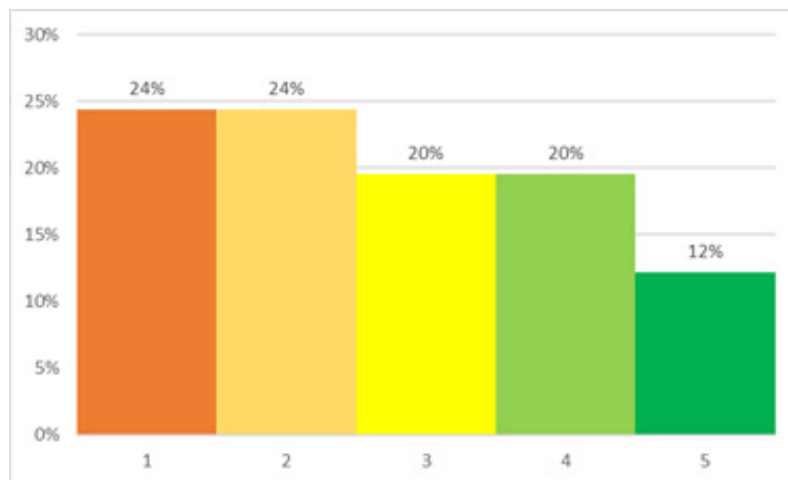


Figure 25: Potential return calculation knowledge

Nearly half of respondents (48 %) does not know how to calculate potential return on investment for improving household energy efficiency as 24 % disagree and another 24 % strongly disagree in Fig. 25.

TOPIC 3: SUSTAINABLE ENERGY RELATED AWARENESS, BEHAVIOURS AND HABITS

21. I am familiar with the term: sustainable energy use.

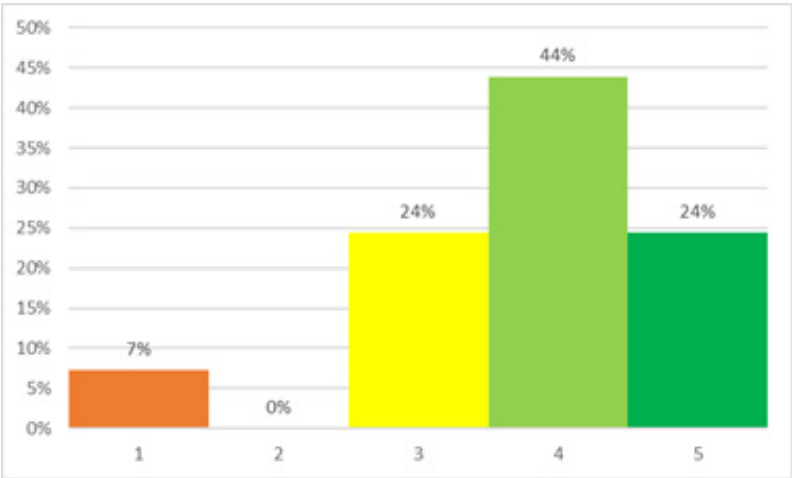


Figure 26: Sustainable energy use term

The term 'sustainable energy use' is generally known as 44 % agree and 24 % strongly agree with the statement as it could be perceived from the Fig. 26.

22. I was raised to be energy efficient in my daily consumption.

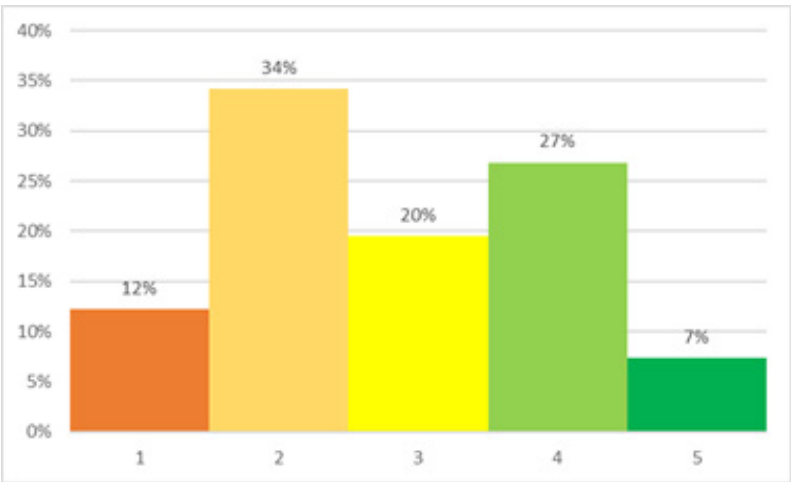


Figure 27: Energy efficiency upbringing

Less than a half of respondents were raised to be energy efficient (34 % in total as 27 % agree and 7 % strongly agree), 20% are neutral about that statement, and 46% disagree with that as Fig. 27 depicts.

23. I implement energy efficient behaviours into my daily life.

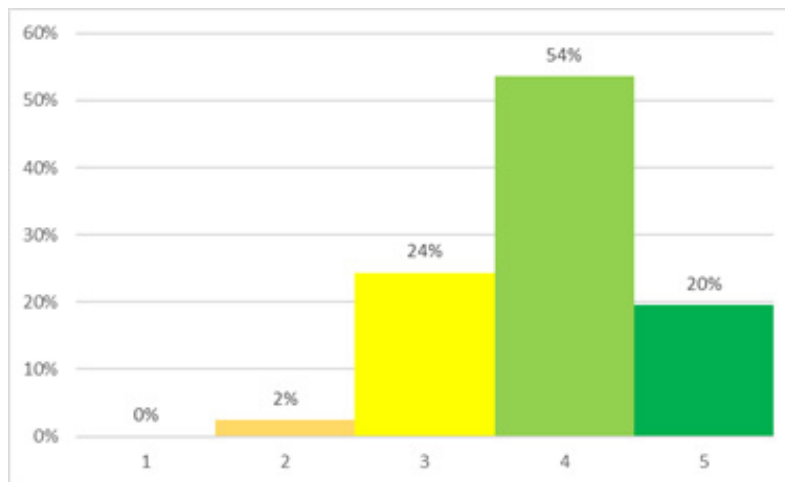


Figure 28: Energy efficient behaviours implementation

Nearly all of young adults who took part in survey implement energy efficient behaviours into daily life as seen in Fig. 28, where 54 % of the respondents agree and 20 % strongly agree. 24 % are neutral about this topic.

24. I try to influence my family/friends/neighbours regarding sustainable lifestyle choices.

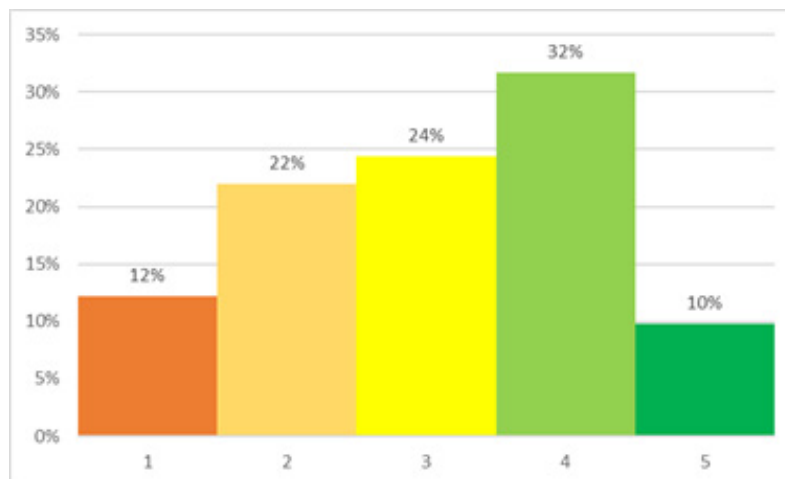


Figure 29: Family/friends/neighbours sustainable influence

Young adults have influence on family/friends/neighbours in 42% cases as 32 % agree and 10 % strongly agree in Fig. 29 seen above.

25. I try to be familiar with new trends/innovations regarding sustainable lifestyle choices.

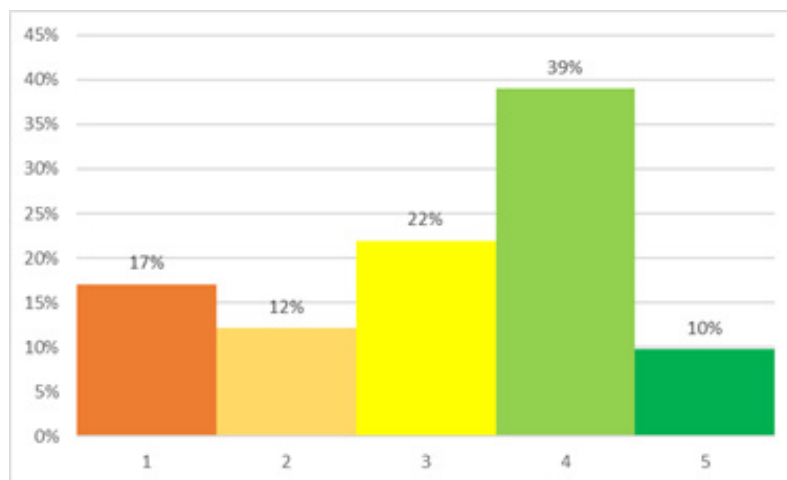


Figure 30: New trends and innovations familiarity

As shown in the Fig. 30, new trends/innovations regarding sustainable lifestyle choices are known by 49 % of respondents as 39 % of them agree and 10 % of them strongly agree with the statement.

26. I am aware of Global climate change issues in relation to increased energy consumption and pollution in the society.

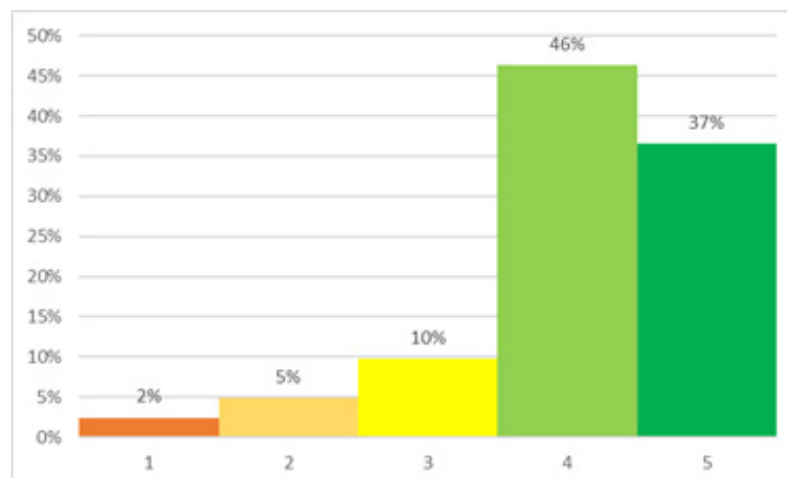


Figure 31: Global climate change issues in relation to energy consumption and pollution awareness

83 % of respondents in total are aware of Global climate change issues in relation to increased energy consumption and pollution in the society as seen in the Fig. 31, while 2 % strongly disagree with the statement given.

27. *Consciously I choose to travel without a car (e.g., walk, bike, public transport, etc.)*

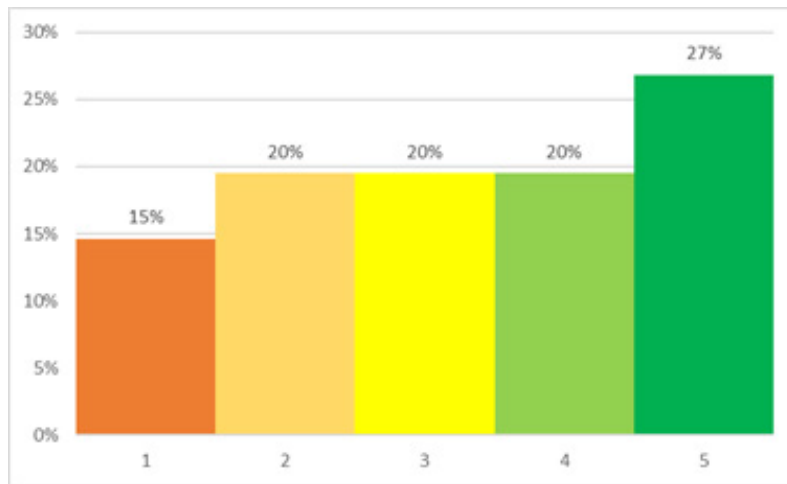


Figure 32: Without-a-car traveling

15 % of respondents strongly disagree with choosing to travel without a car, while 27 % strongly agree with that statement as Fig. 32 depicts. 20 % does not have an opinion about that aspect or wishes to answer.

SUMMARY & CONCLUSION

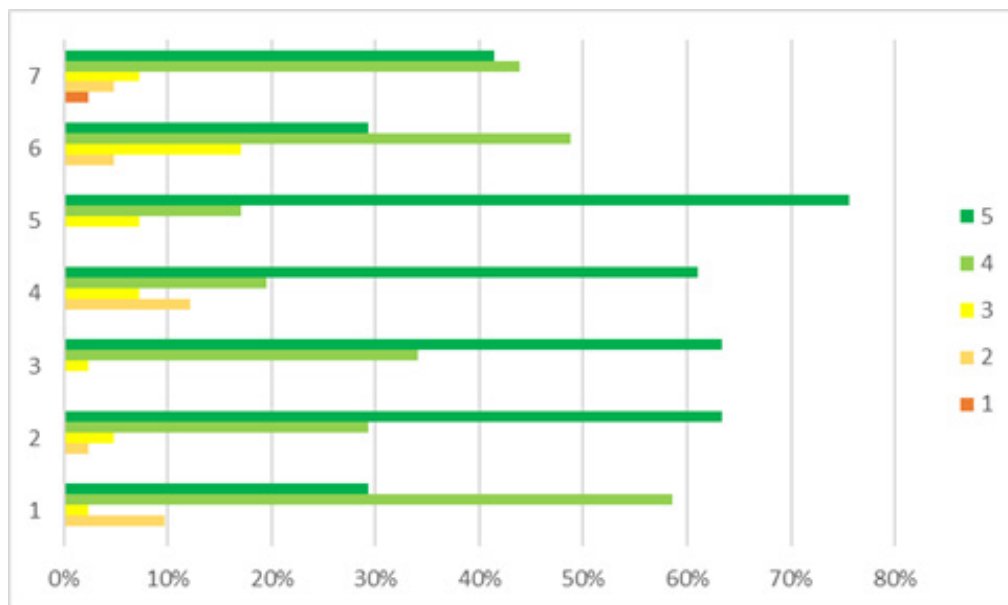


Figure 35: Summary of Questions on General Knowledge about Energy Literacy (Topic 0)

As it is summarized in the Fig. 35, there is a difference between knowledge on the topics presented in the individual parts of the survey. It is clearly seen that in general young adults think that energy literacy plays important role in their life, and they want to decrease their energy footprints as well as their living expenses. They know that climate change poses a real treat for society and brings benefits for their lives. Less than 20 % of respondents does not perceive themselves as energy literate.

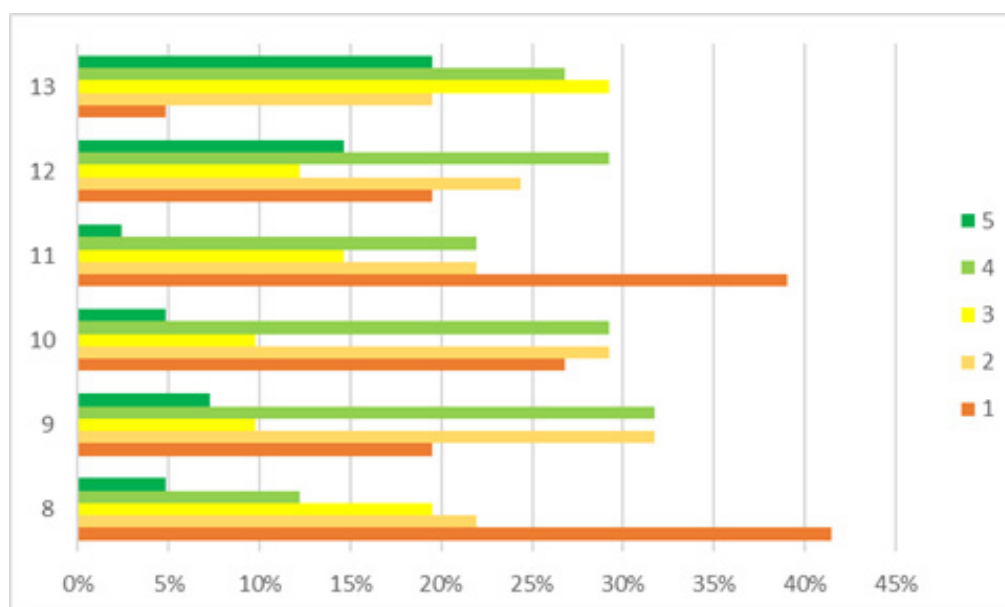


Figure 36: Summary of Questions about Energy use and Green Deal objectives (Topic 1)

Based on the Fig. 36 summary, the topic of energy use and Green Deal objectives is not as popular among the respondents. Most of them are not acquainted with national documents about energy strategies, consumption and production, as well as with EU directives and strategic documents as Green Deal. No more than 50% of respondents know where to find national and European directives. Even though they are not really familiar with the knowledge on that topic, they are aware of impacts of the policy on their lives. It can be seen that there is a great field for the transfer of knowledge to young adults.

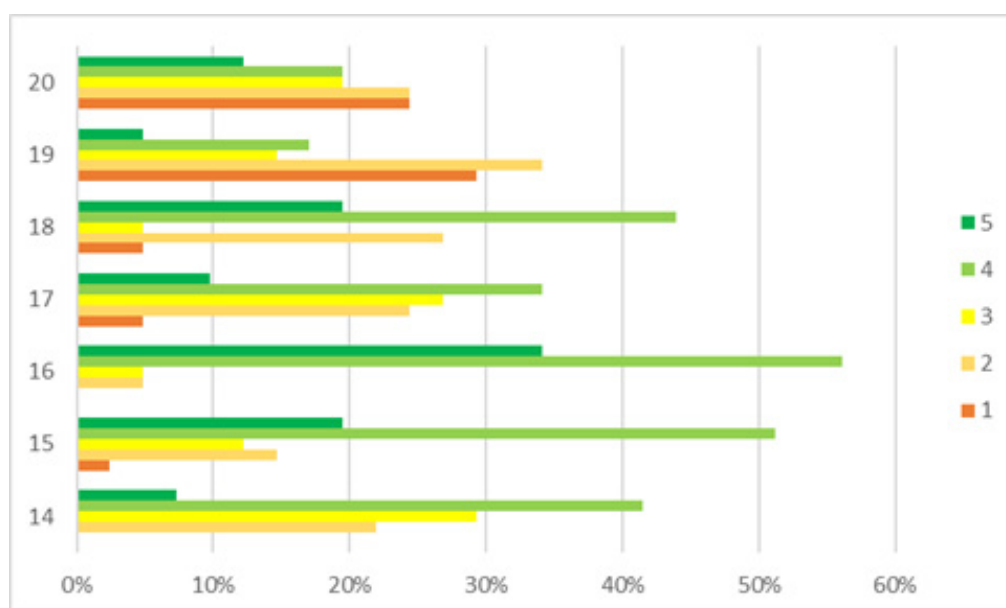


Figure 37: Summary of Questions about Energy related investments, incentives and subventions (Topic 2)

As perceived from the Fig 37 summary, most of young adults have already had their own household, the opinions about energy related investments, incentives and subventions are really important. Even though not all half of respondents think that their household is energy efficient, there is no one who strongly disagree with that. The awareness of areas in which they can improve the energy efficiency is quite good, especially that nearly all of them know the risks related to inefficient household appliances. The percentage of people who plan to make investment on household efficiency is really small, although more than 64 % know how to find information regarding on incentives schemes and they are familiar with national incentives. It can be connected with the lack of information and calculation about potential returns on investment while improving household energy efficiency (more that 60% don't know how to do that or has no opinion about such possibility).

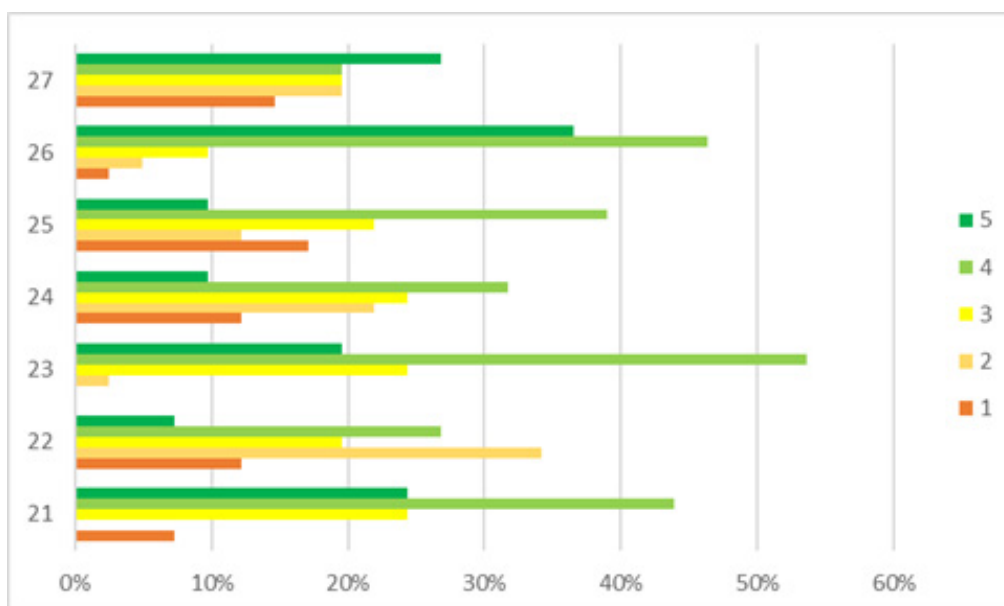


Figure 38: Summary of Questions about Sustainable energy related awareness, behaviour and habits (Topic 3)

Fig. 38 shows that in the aspects of awareness, behaviours and habits related with sustainable energy, the best sign is a visible change in the perception of the topic. "Sustainable energy use" is a known term and there is the awareness of global climate change issue. The group of young adults were not so often raised to be energy efficient in their daily life (34%), while more than 70 % claim that they implement this type of behaviours in their current lifestyles. In addition, some of them try to influence their relatives and friends on right choices, but bigger impact in that field is the crucial point of development, as well as changes in behaviours connected with transportation habits.

CONCLUSION

In conclusion, EL-practice is able to improve many issues identified in Poland. It can be a great tool for young adults to find information about the interesting aspects who have impact on the life of target group and their relatives. By sharing the knowledge about policies and its solutions, it can raise the awareness of its importance. Creation of calculator of cost and returns of investments can cause increased interest in subsidies and investments in households, thus improving their efficiency. The aspect of positive and visible effects of actions is an important part of building energy literacy of young adults.

Gaps identified were:

Lack of knowledge about the strategic documents (Green Deal, National directives)

Small interest on discussions related to energy use and production

Necessity to raise awareness about impacts, costs and returns on investments in the field of energy in households, by showing ways of calculations

Trends and innovation regarding sustainable lifestyle should be more affordable for young adults

QUESTIONNAIRE RESULTS: Slovenia

The survey was conducted in May 2022 in Slovenia, where MIITR collected answers from 42 participants. The questionnaire was communicated through the MIITR's organisation media channels, and through the connections with KSSENA. The results of the survey provided a clear insight into the current state of energy literacy in Slovenia, with 6 general questions and 27 topical questions to evaluate the knowledge of young adults.

GENERAL QUESTIONS

These questions should identify the demographic background of the participants as well as ensure that the participants belong to the target group.

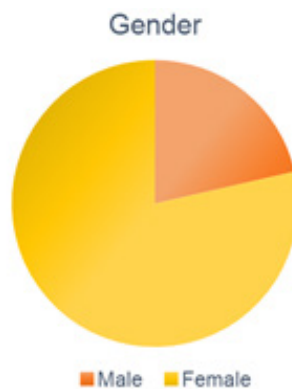


Figure 1: Gender

Fig. 1 shows that the female participants in the survey presented 79 %, as it turns out several incomplete answers were provided by male participants, reducing their final participation to 21 %.

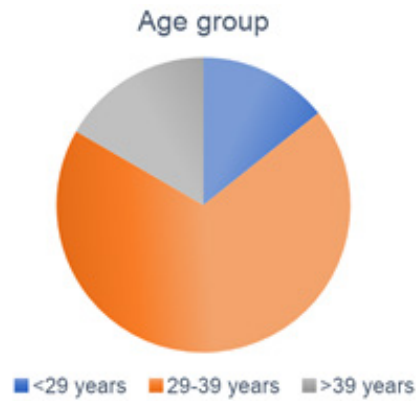


Figure 2: Age group

As seen in Fig. 2, most participants were aged 29-39 years. This group represents 69 % of all participants in the survey. Group with <29 years of age represents 14% and group >39 years old represents 17 % of the total respondents.

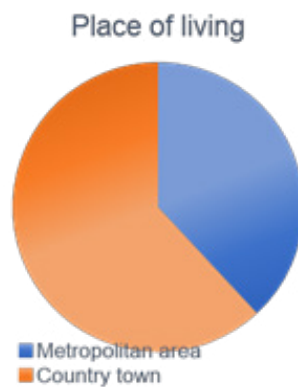


Figure 3: Place of living

Majority of the respondents live in the country town as seen in the Fig. 3.

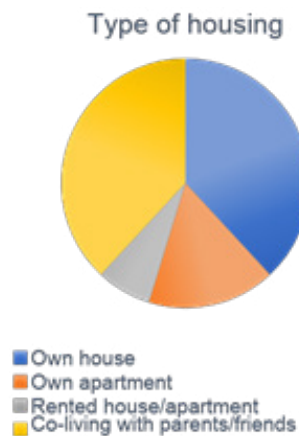


Figure 4: Type of housing

Based on the Fig. 4 depiction, most of the participants of the survey reside in either own house or co-living with parents, presumably in a house, (both 38 %). In Slovenia it is common for young adults to reside a house with their parents as it reduces living costs. This somewhat coincides with majority of respondents living in a country town (62 %) and not metropolitan area (38 %). Only 3 participants of the survey (7%) are living in a rented house/apartment, since renting a house/apartment at this age and in this economy proves to be almost impossible in Slovenia. Moreover only 17 % live in their own apartment, as it is known that housing policy is not particularly kind to young adults in Slovenia.



Figure 5: Monthly household energy invoice amount

Fig. 5 shows that most of the participants are aware of just how much of their monthly budget is meant for energy costs as 88 % of participants are familiar with their monthly household energy invoice amount.

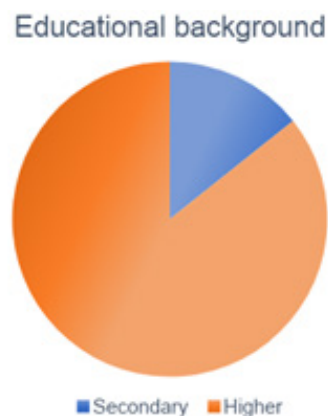


Figure 6: Educational background

Majority of participants have higher education (86 %), while only 14 % have secondary education as seen in Fig. 6. None of the participants of the survey had only primary or no education, which could be reflection of the method in which the survey was distributed, keeping the survey within similar circle of educated individuals.

TOPICAL QUESTIONS

The following topical questions were answered based on the Likert scale from 1 to 5: strongly disagree (1), disagree (2), neutral (3), agree (4), strongly agree (5). Below each question's answers are presented with a graph.

TOPIC 0: GENERAL

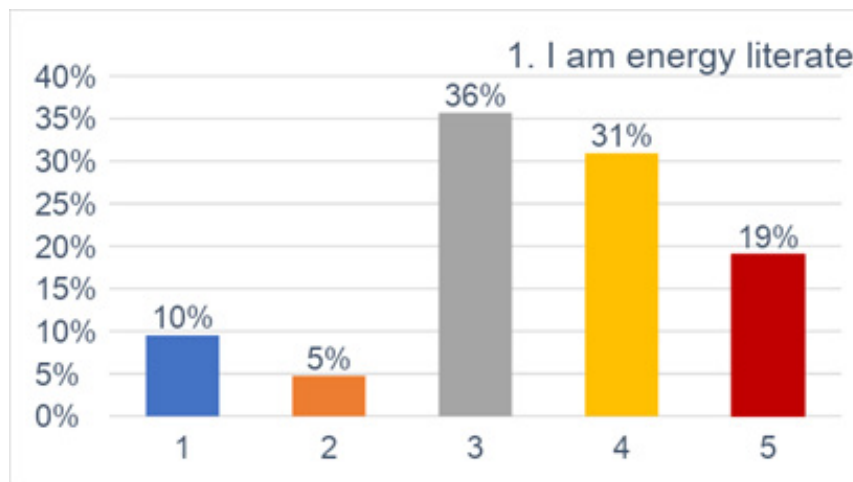


Figure 7: Energy literacy levels among individuals

As perceived from the Fig. 7, most of the participants believe themselves to be somewhat energy literate. 36% of participants positioned themselves in the middle (neutral), which shows they possess certain degree of energy awareness but probably believe their knowledge on energy can be improved upon, while 19% feel they are very literate, and only 4 people (10 %) feel they are completely lacking knowledge in this area.

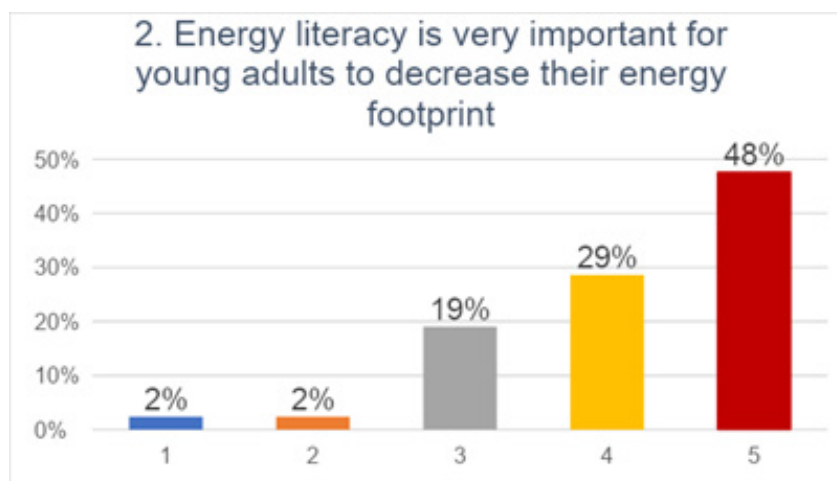


Figure 8: Energy literacy importance

Fig. 8 shows that 48 % of participants answered with strongly agree and are therefore very aware just how important it is for this generation of young adults to decrease their energy footprint. Only a small portion of participants do not possess the same opinion as 2% of the participants answered either with option 1 – strongly disagree or 2 - disagree.

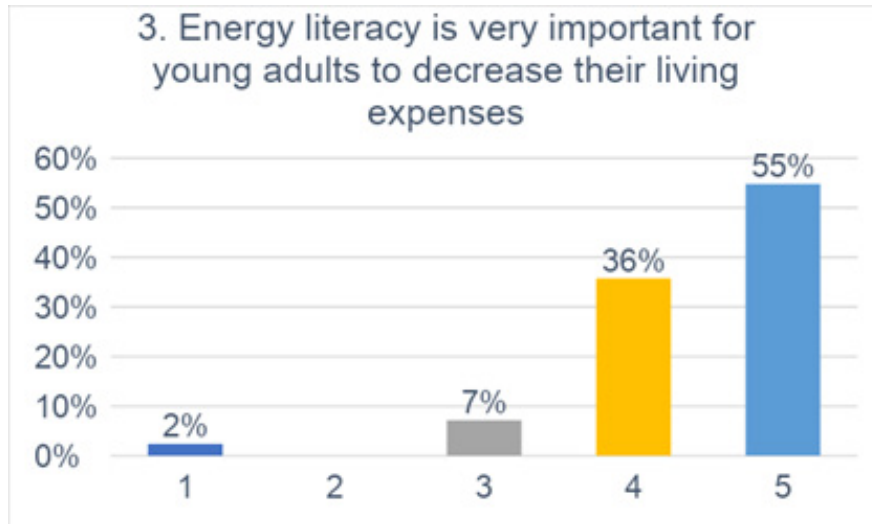


Figure 9: Energy literacy usefulness

The following graph (Fig. 9) shows that participants are aware their knowledge on energy can lead to reducing energy costs. 55 % of participants answered with strongly agree, acknowledging that understanding of energy behaviours or lack thereof can bear a significance on their living expenses. Only 2 % answered with 1 (strongly disagree), not acknowledging the correlation.

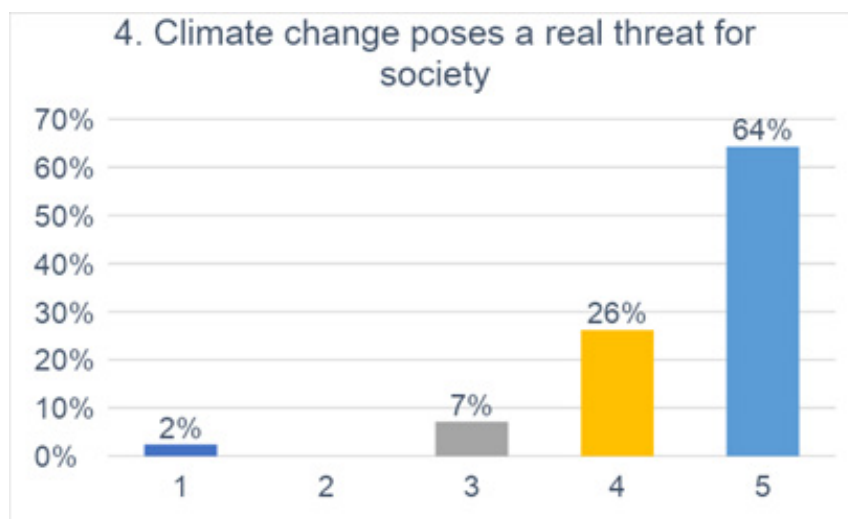


Figure 10: Climate change as a threat

64 %, which represents the majority of respondents, are aware of the threat that climate change poses for our society, which is to be expected, considering climate change threats are a common topic in the media and in the global discussions and as seen in Fig. 10.

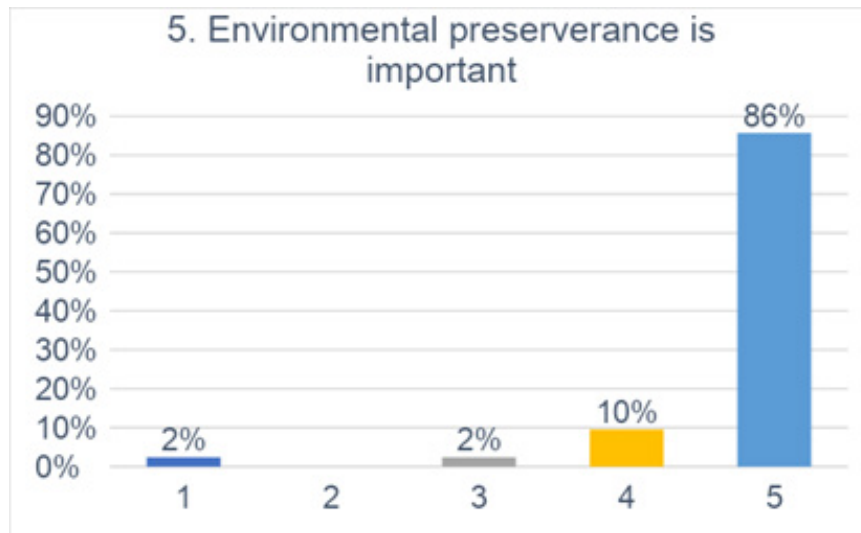


Figure 11: Importance of the environmental preservation

Even more participants (86 % strongly agree), believe that the perseverance of our environment is very important, with a very small percentage of participants strongly disagreeing to this statement (2 %) as shown in the Fig. 11 above.

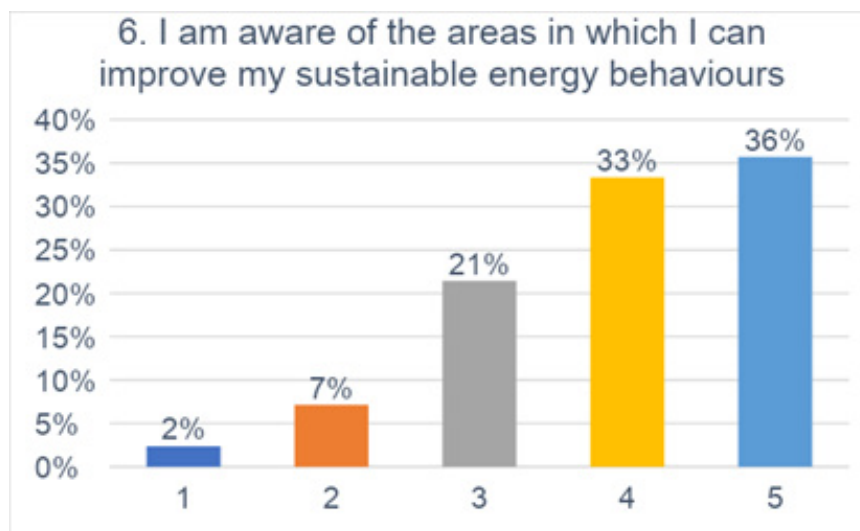


Figure 12: Sustainable energy behaviours improvement

As Fig. 12 shows, most participants are aware of the ways to improve their sustainable behaviours, answering either agree (33 %) or strongly agree (36 %). And although this awareness could be higher and shows more can be done educating and informing young adults. Only 2 % strongly disagree and 7 % disagree of the areas in which they can improve their energy habits.

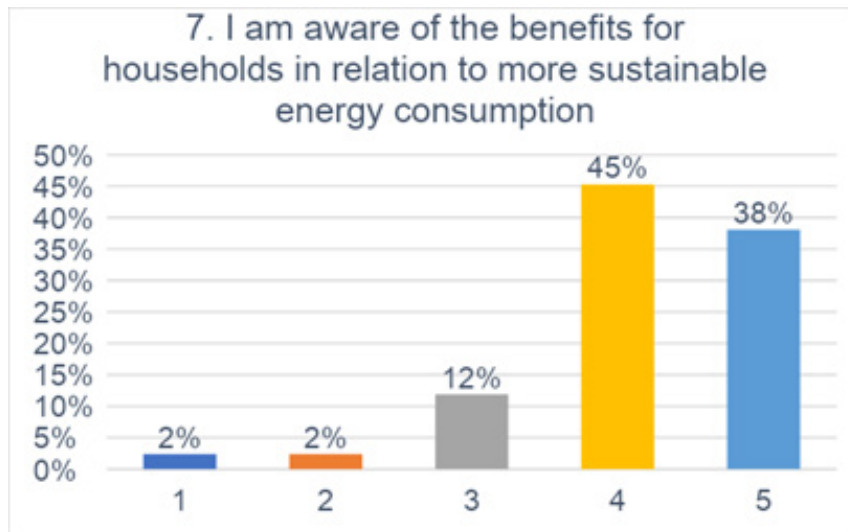


Figure 13: Sustainable energy consumption benefits

Even if participants are not necessarily completely aware of the ways to improve their sustainable behaviours, this graph (Fig. 13) shows they do know improving their habits can bring benefits to their household. 83 % answered with either agree or strongly agree, while only 4 % disagreed and 12 % remained neutral.

TOPIC1: ENERGY USE AND GREEN DEAL OBJECTIVES

The answers within this topic show different picture compared to the general questions, with majority of the answers in the lower half of the Likert scale. While participants showed to have some general awareness about the importance of energy sustainability, this topic, related to energy strategies, policies, and directives, show certain lack of in-depth knowledge.

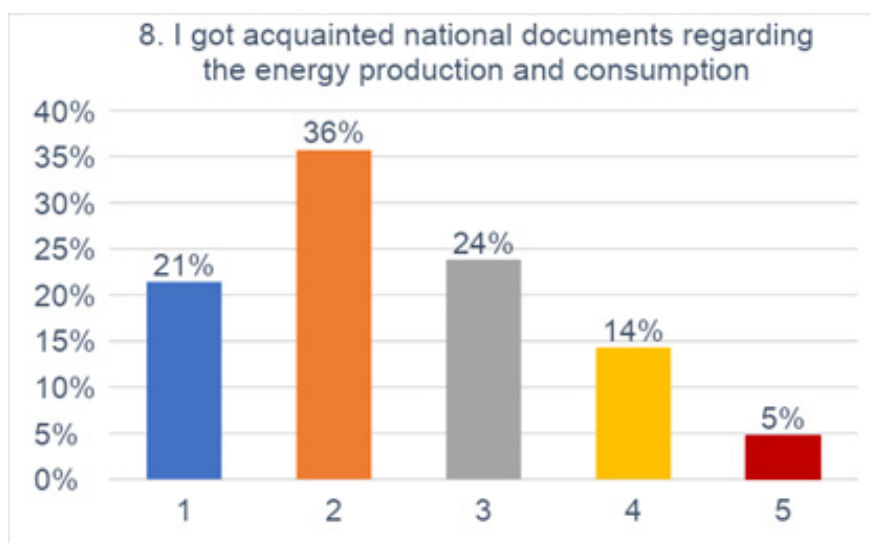


Figure 14: Acquaintance with national documents regarding energy

Fig. 14 shows that most participants are not particularly acquainted with national documents regarding the energy production and consumption, with only 5 % answering that they

strongly agree. Majority of people answered either with strongly disagree (21 %) or disagree (36 %).

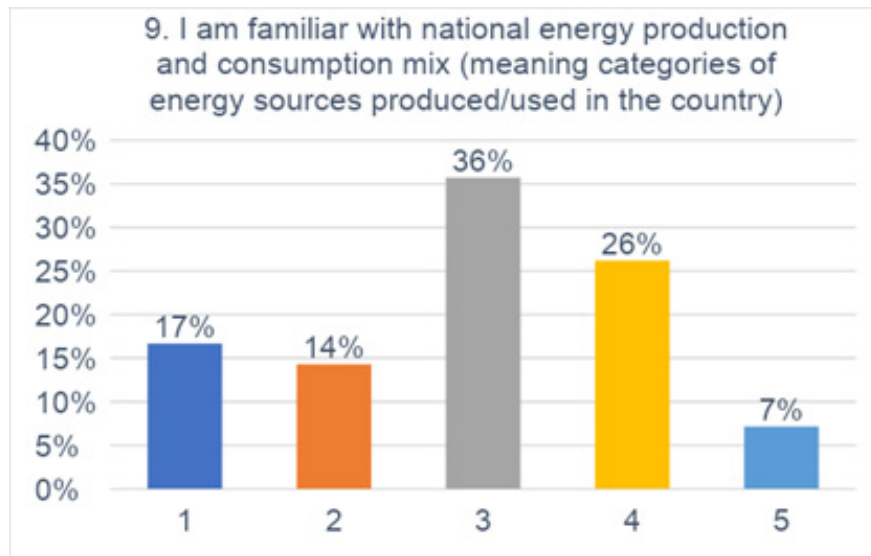


Figure 15: National energy production and consumption mix familiarity

As seen in Fig. 15, knowledge about national energy production and consumption mix was positively answered by 33 % of the respondents (26 % agree and 7 % strongly agree), while 36 % remained neutral.

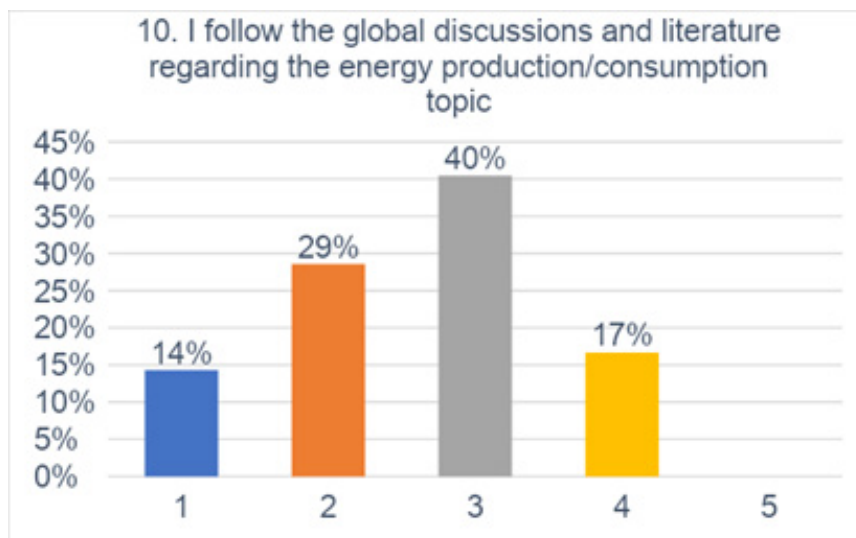


Figure 16: Global energy discussions acquaintance

As it can be perceived from the Fig. 16, the majority of the participants (40 %) remained neutral to the statement about following global energy discussions, which would mean they are not completely indifferent to them and are aware of such discussion to at least some degree. Almost none of the participants are following such discussions actively (0 % strongly agree), but 17 % agree with the statement.

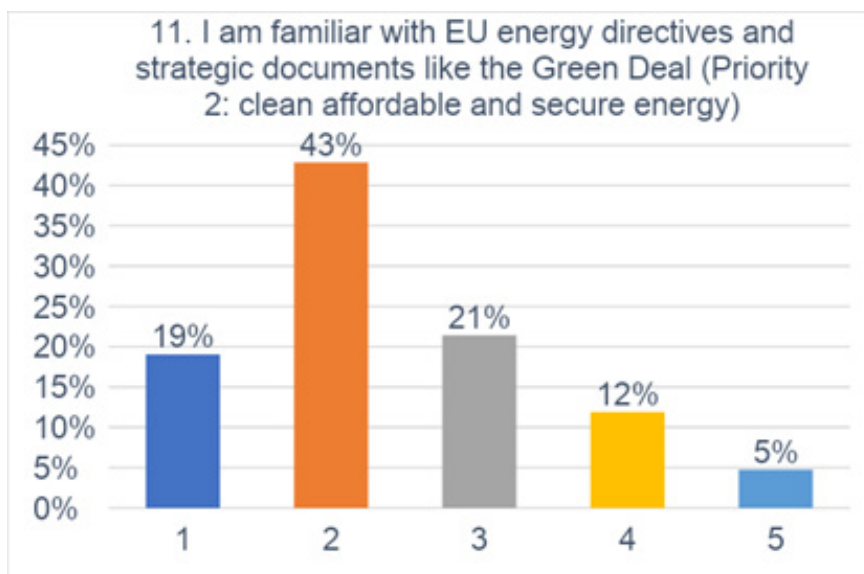


Figure 17: EU energy directives familiarity

As seen in Fig. 17, most participants are not particularly familiar with EU directives, as majority answered with disagree (43 %), while 21 % answered with neutral and only 5% answered strongly agree.

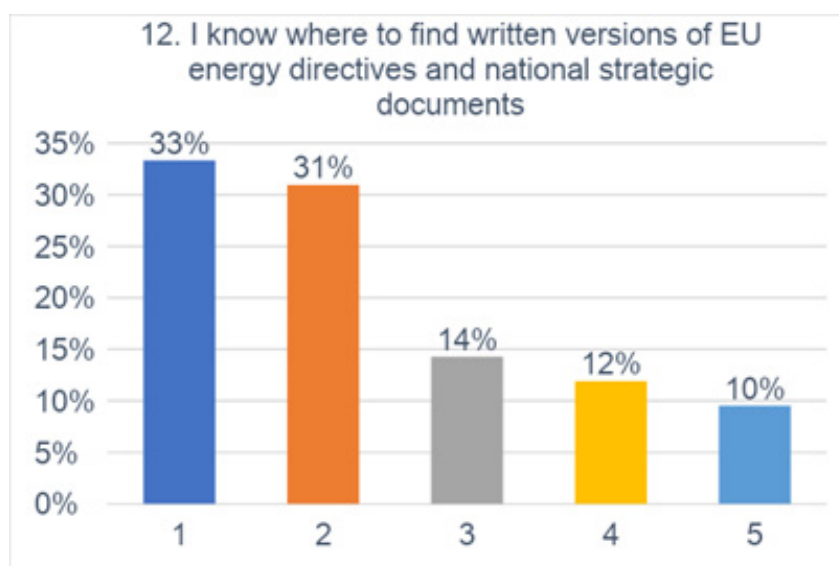


Figure 18: EU energy directives written versions

Participants generally do not know where to search for EU energy directives and national strategic documents, as majority answered with strongly disagree (33 %) or disagree (31%). Only 10 % of the respondents answered with strongly agree (10 %) as seen in the Fig. 18.

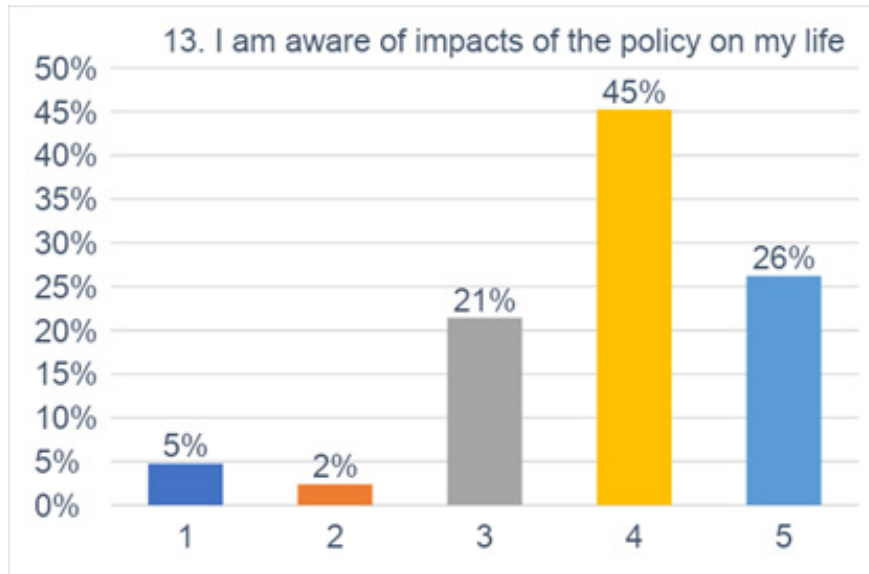


Figure 19: Policy impacts awareness

However, as Fig. 19 shows, participants are aware of the impact that policy can have on their life, as majority (45 %) answered with agree. Only 7 % in total answered with either strongly disagree or disagree. As it was already apparent in the first set of questions (Topic 0: General), young adults are aware and understand how certain trends and decisions can impact their life, despite not having the knowledge of the policies and strategies behind it.

TOPIC 2: ENERGY RELATED INVESTMENTS, INCENTIVES, AND SUBVENTIONS

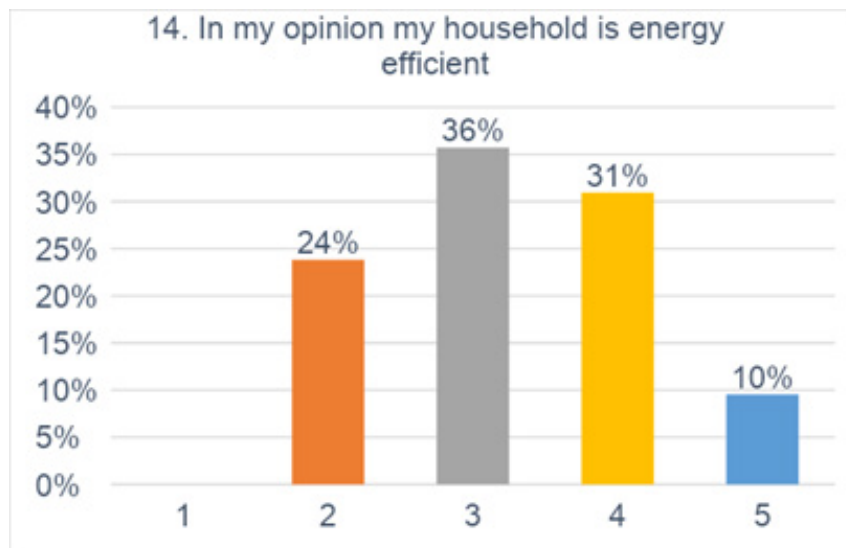


Figure 20: Household energy efficiency

How people believe that their household is energy efficient shows a very telling picture (Fig. 20). On one side only 10 % believe their household is truly efficient, answering with strongly agree. Remaining participants concentrated their answers somewhere in the middle as neutral (36 %). Additional 24 % answered with disagree, recognizing they do not run particularly efficient household.

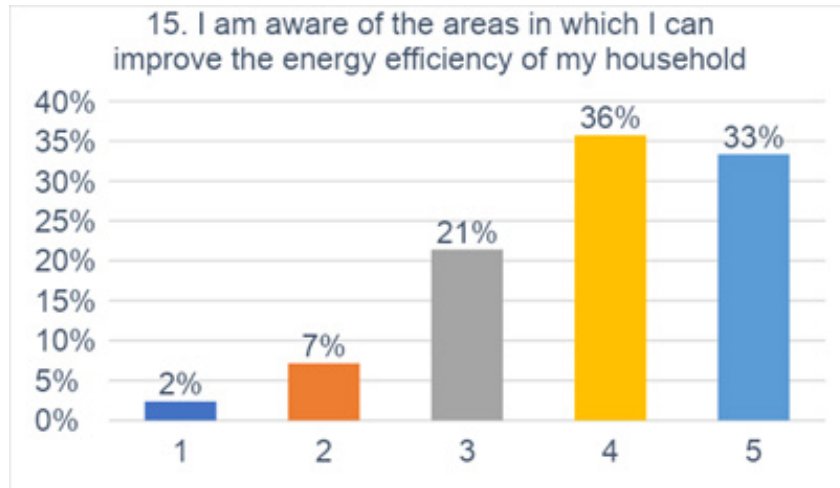


Figure 21: Energy efficiency improvements awareness

As depicted in the Fig. 21, fortunately, participants are aware on how and in what areas they can improve energy efficiency of their household, as majority was answering with agree (36 %) or strongly agree (33 %).

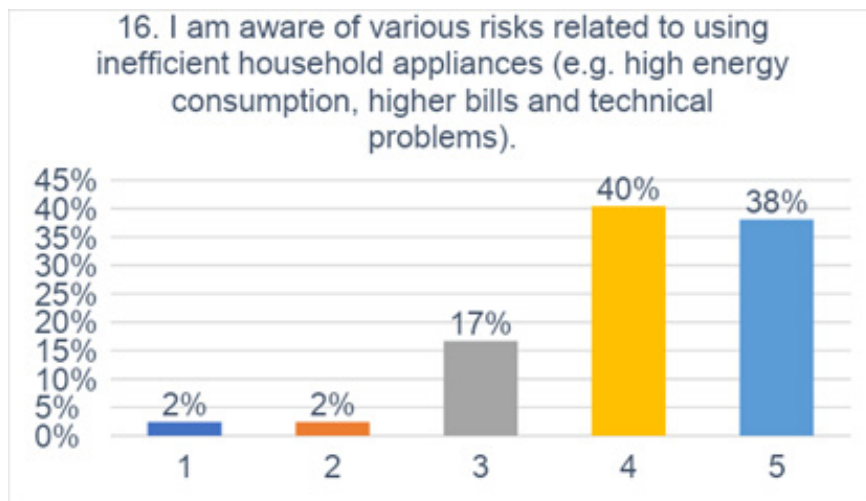


Figure 22: Inefficient household appliances risk awareness

Similarly, participants are aware that there are risks related in using inefficient household appliances, with 40 % participants answering they agree and 38 % answering with strongly agree as seen in the Fig. 22 above. Only small portion of participants (2 %) disagree or strongly disagree with the statement and are presumably not aware of the risks.

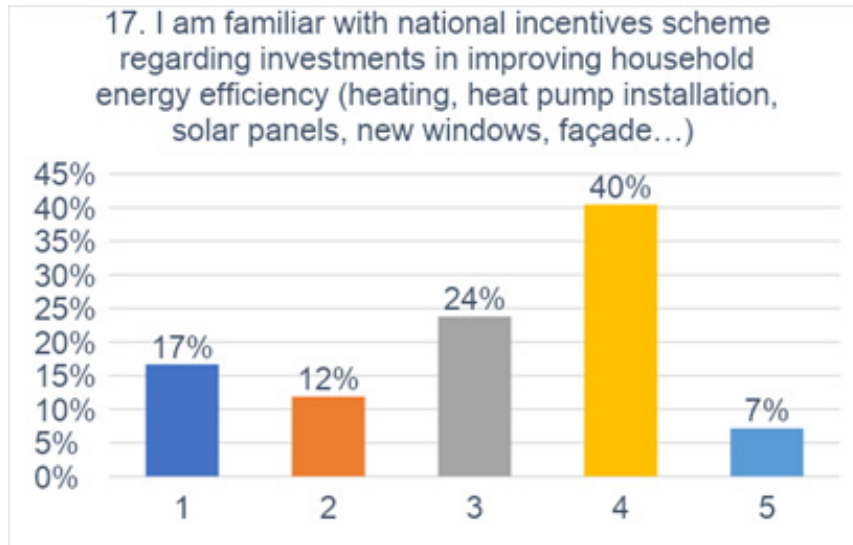


Figure 23: Energy efficiency investments

Fig. 23 shows that 17 % of all participants are not familiar whatsoever with national incentives for energy efficient investments, while 40 % participants answered with agree and another 7 % strongly agreed.

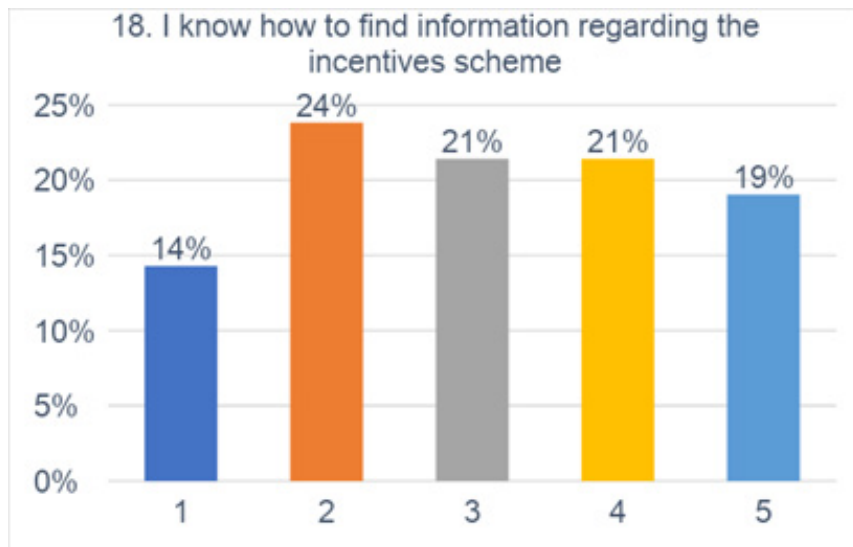


Figure 24: Incentives scheme information

Surprisingly it seems that as in Fig. 24, participants do not have a particular idea of where to find incentives scheme. It seems that while many participants are aware that such incentives exist, they did not yet have an experience or a need to find such information. Nevertheless, 40 % of the total participants answered either agree or strongly agree.

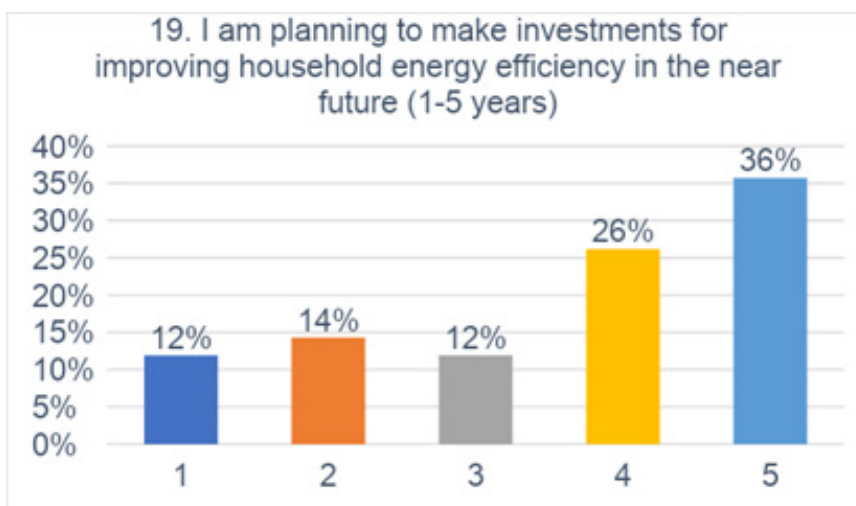


Figure 25: Investments plan for the household energy efficiency

It is encouraging to know that 62 % of participants are planning energy efficient investments in the near future as 26 % agree and 36 % strongly agree as seen in the Fig. 25 above. The participants answers are probably correlated to the majority of participants living in houses as well as to state of the buildings in Slovenia, with most of the individual household houses built before 1990 and are now in need of a renovation.

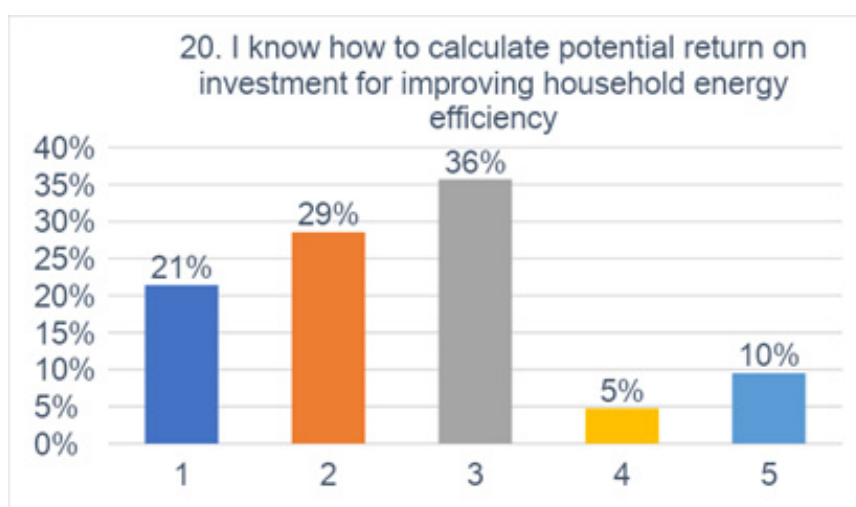


Figure 26: Potential return calculation knowledge

Having a knowledge and understanding of how to calculate potential return on investments in understandably seems to still be a tough task for a regular consumer based on the Fig. 26 results, as only 5 % of the participants answered with agree and 10 % with strongly agree.

TOPIC 3: SUSTAINABLE ENERGY RELATED AWARENESS, BEHAVIOUR, AND HABITS

This set of questions once again proved that participants have high awareness regarding energy and sustainable habits, as majority of the answers were concentrated on the upper side of the Likert scale. It is also apparent participants are aiming at translating their awareness in their everyday household habits as much as possible.

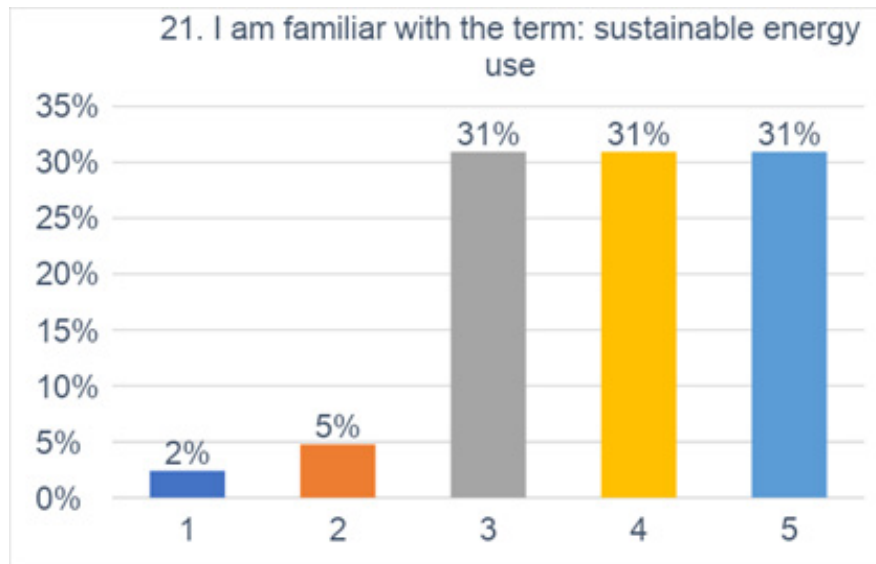


Figure 27: Sustainable energy use term

Most of the participants are somewhat familiar with the term sustainable energy use as 31 % of participants answered with strongly agree and 31 % as agree. Only 7 % of the respondents were almost completely unaware of the term, answering with either strongly disagree or disagree as seen in the Fig. 27 above.

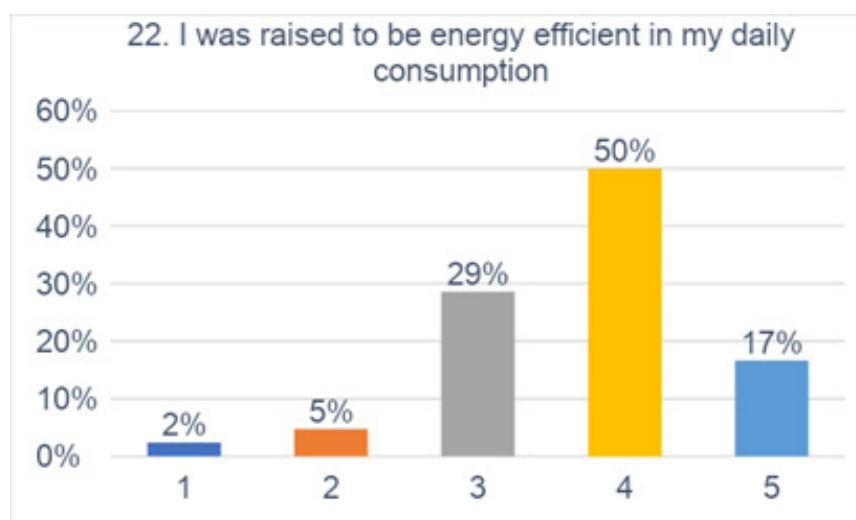


Figure 28: Energy efficiency upbringing

Surprisingly (Fig. 28), 50 % of participants agreed with the statement they were raised to be energy efficient in their daily consumption and another 17 % strongly agreed. This is an

encouraging information, as it shows energy efficiency awareness is something that has been present for at least 30 years in the households in Slovenia.

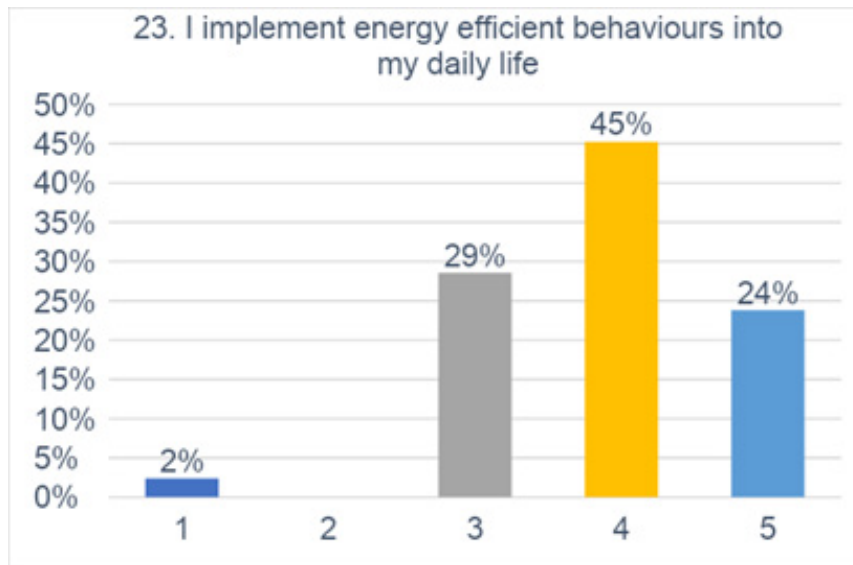


Figure 29: Energy efficient behaviours implementation

This graph (Fig. 29) paints a similar picture as the previous ones, and shows that participants, who were raised to be energy efficient are now implementing these habits in their adult daily lives. What is even more telling is, that some of the answers from the previous graph have now concentrated on strongly agree (24 %), which would mean, that even participants, who were not necessarily raised to be energy efficient are now trying to lead a sustainable household and were influenced by something other than upbringing.

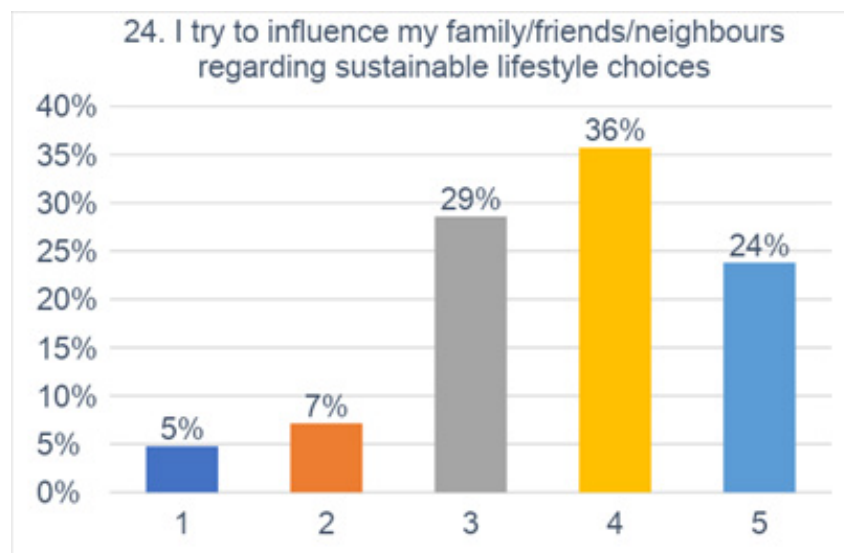


Figure 30: Family/friends/neighbours sustainable influence

Moreover, as seen in Fig. 30, 60 % of the respondents are actively trying to influence family, friends or/and neighbours as 36 % agree and 24 % strongly agree with the statement. Sustainable lifestyle is presumably becoming a norm for young families to the extent, that people care how others are contributing to it.

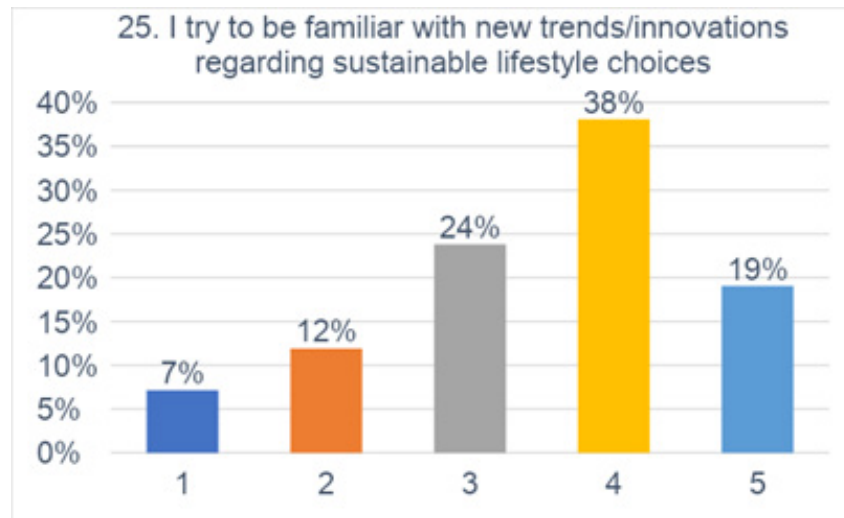


Figure 31: New trends and innovations familiarity

That sustainable lifestyle is becoming a goal to young families is also proved by this graph (Fig. 31), that shows generally participants are trying to stay familiar with new trends and innovations as 38 % of participants answered with agree and 19 % answered with strongly agree.

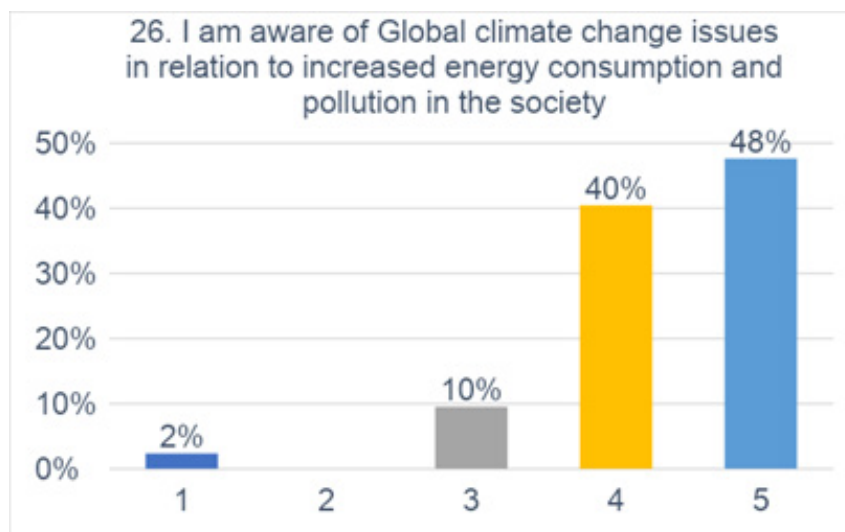


Figure 32: Global climate change issues in relation to energy consumption and pollution awareness

Almost all participants are very aware of the consequences of global climate change on society and pollution, which is something to be expected, considering global pollution as a topic is taking a lot of space in media and global discussions. Majority of the participants answered they either with agree (40 %) or strongly agree (48 %).

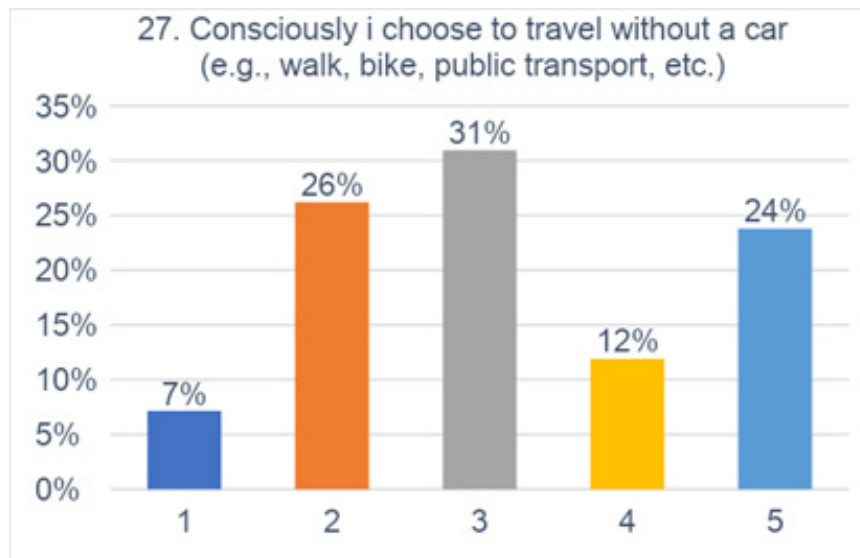


Figure 33: Without-a-car traveling

Unfortunately, awareness is not necessarily translated in to one particular habit of participants – transport or better, (un)sustainable mobility. While it may look as people consciously decide to travel with a car, the reality is probably different and strongly connected to participants living mostly in country towns, where public transport connections are mostly non-existent or not particularly adapted to actual needs of people and their daily activities. If majority of participants would live in metropolitan area, this graph (Fig. 33) would show a different picture. As for now, 7 % answered they strongly disagree and 26 % disagree, while 31 % remain neutral. Still 24 % are actively trying to reduce car travels as they strongly agree and additional 12 % of the respondents agree with the statement.

CONCLUSION

In conclusion, this survey has shown the general awareness among young adults about energy sustainability to be high. It is safe to say young adults have a very good understanding of issues related to energy, understand consequences of our actions and are conscious of ways we should evolve our daily energy habits, which stems partially from their upbringing and partially from media and other information consumed daily through various channels. Establishing their own households, creating families, and positioning themselves in current socio-economic climate is understandably not an easy task, so it is safe to say young people are not particularly involved in following global discussion, researching literature, and are not aiming at being familiarized with EU directives and policies. Therefore, it is important these topics are brought closer to them in a manner of efficacy and clarity, providing them information that is relevant and bears an influence on their lives.

On the other hand, knowledge about national incentives for energy efficient renovations is something that should be a common knowledge in every household. Information on where to find it should already be possessed by every young person even before establishing their own household. Oftentimes people are not aware such incentives exist when in reality this should be the first thing influencing their decision on energy efficient investments and renovations. EL-Practice should focus on closing this gap with influencing young adults to

decide on energy efficient investments because they are encouraged and supported by national incentives.

The same can be said about practical knowledge on how to calculate financial and energy aspect of energy efficient investments. It is somewhat expected but concerning at the same time that so many people do not know how to evaluate their investments and put into perspective how energy efficient investments influence their consumption and monthly budget. EL Practice should put special focus on providing this special set of skills with micro sessions and practical tasks, because that in the end of the day means being energy literate.

Lack of knowledge about EU and national directives, policies and strategies that are influencing our lives as an energy consumer.

Lack of interest and awareness about global discussions and trends regarding energy production and consumption.

Lack of knowledge about national incentives for energy efficient renovations.

Lack of practical knowledge about how to calculate return investment as well as financial and energy savings that can be achieved by energy efficient investments.

Generally, young adults are aware of the ways they can improve their sustainable behaviours, but more can be done, providing awareness, ideas, and solutions to some of the missing pieces in their daily lives and energy sustainable choices.

CONCLUSION

At the beginning of the implementation of the Energy literacy project, a survey was conducted in order to identify the levels of knowledge as well as the gaps of young adults on energy literacy. The target group demonstrated high interest in the completion of the developed questionnaire, and from the exported answers, it is safe to say that we can deduct some general, at first, conclusions.

In general, it can be said that there is quite an awareness among the participants from all the countries and surveys regarding the importance of environmental perseverance and the dangers of climate change. The fact that climate change poses a real threat to society is also something participants agree to. Most participants are generally aware of the ways they can improve their sustainable behaviours, for example in Austria, even consciously do without their car. However, they are not so aware of how to specifically implement energy literacy into their lives.

In Austria, “only” 65 % consider themselves energy literate (see figure 8) and only 27,5 % think that their household is energy efficient. In Greece, the results show just the opposite. It seems that the participants are aware of topics concerning climate change and energy use but are not confident that they are actively implementing energy knowledge in their own lives. On the other hand, in Slovenia majority of participants answered they were raised to be energy efficient in their daily consumption, and more so are now trying to implement these habits in their own daily lives.

What all countries have in common, is having the biggest lack of knowledge regarding the policies, deliverables of governance and their impact on the life of young adults. It is interesting to see that while the general awareness around the topic of climate change and energy literacy is high, many participants are not aware of national or EU documents or policies concerning those topics. Importantly, they are not even aware where to find information about it – that was strongly emphasized in Croatia’s report. EL-Practice could provide a help to self-help by showing the students how to inform themselves and providing an overview about national and EU documents on the topic. EL-Practice could also act upon the possible misconception by including the topic of economic benefits of energy efficiency into their learning materials.

In some countries (eg., Austria, Slovenia), people are highly educated and know this topic well. On the contrary, in Greece almost half of the participants answered that they are not energy literate. EL-Practice should therefore think how to reach that demography as well as providing basic knowledge about the topic of energy literacy so that no educational background is necessary.

THE IMPORTANT FINDINGS

the biggest lack of knowledge of participants in the area of knowing policies, deliverables of governance and their impact on the life of young adults – Croatia, Slovenia, Austria, Poland;

not knowing how to find/implement the national documents, EU directives and strategic documents as Green Deal, and other policies – ALL COUNTRIES;

being well-aware of the importance of this topic and energy literacy – ALL COUNTRIES;

there are not many people, who consider themselves as fully “energy literate”.

WHAT IS NEEDED?

Providing basic knowledge about the topic of energy literacy so that no educational background is necessary (people with different level of education).

Act upon the possible misconception by including the topic of economic benefits of energy efficiency into their learning materials.

Showing the students how to inform themselves and providing an overview about national and EU documents on the topic.

Plan on how to implement these habits and specifically “energy literacy” principles in their own daily lives.

ENERGY LITERACY-PRACTICAL TRAININGS FOR SUSTAINABLE ENERGY CONSUMPTION VIA PERSONAL BEHAVIOURAL CHANGES

The Association of Municipalities Polish Network „Energie Cités”, *Kraków, Poland*

INNOVATION HIVE, *Larissa, Greece*

International Institute for the Implementation of Sustainable Development, *Maribor, Slovenia*

North-West Croatia Regional Energy Agency, *Zagreb, Croatia*

LEVILO - Association for ecological and social sustainability, *Graz, Austria*

The Energy Agency of Savinjska, Šaleška and Koroška region, *Velenje, Slovenia*

