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D5.5 Quantifying the increase in energy awareness of students living in private accommodation in academic year #1

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Contents

1 Introduction

The Student Switch Off+ (SSO+) campaign aims to raise awareness amongst students living in private accommodation, in particular focusing on those that rent accommodation, helping them reduce their energy costs. It focuses on making students aware of energy performance certificates (EPC), smart meters and energy efficiency, thus helping reduce their exposure to energy poverty.

The Student Switch Off (SSO) campaign is an inter-dormitory energy-saving campaign that focuses on a predefined set of activities, encouraging students to save energy in their dormitories. The SSO+ and SSO campaigns are both part of the SAVES 2 project (www.saves-project.eu).The focus of this report is on the SSO+ campaign.

SSO+ ran in Cyprus, Greece, Lithuania and the UK for the academic year 2017-18. This was a pilot year for this aspect of the SAVES 2 project, and therefore activities didn't take place in Bulgaria, Ireland, and Romania (countries new to the Student Switch Off campaign). Activities undertaken as part of the Student Switch Off+ campaign involve in-depth information on saving energy at home, Energy Performance Certificates, energy efficiency and smart energy meters. The activities performed in each country are detailed in the country specific reports found on the SAVES 2 webpage. In total, 25,036 students living in private accommodation were emailed with advice on SSO+.

The purpose of the research presented in this report is to evaluate the increase in the energy awareness of students over academic year 2017-18 that could be attributed to the SSO+ campaign.

The methodology followed for the assessment of the increase in energy awareness of students is described in Chapter 2. The main tools for the collection of data were pre- and post-intervention questionnaire surveys. Chapter 3 presents the findings of the analysis performed on the questionnaire surveys. In Chapter 4 the main conclusions of the research are presented.

2 Methodology

The aim of this research is to assess the impact of the Student Switch Off+ (SSO+) information campaign on students living in private accommodation. The impact of the SSO+ campaign is evaluated through the level of increased awareness on the two following areas:

a) Use of smart meters
b) Housing choices that can minimize exposure to fuel poverty

Changes in the awareness levels of students were evaluated through pre- and post-intervention questionnaire surveys. Students were encouraged to complete a baseline survey at the beginning of the academic year (October 2017), before the information campaigns started, in order for existing information and awareness levels to be recorded. All students that completed the baseline were encouraged to complete a follow-up survey at the end of the academic year (May 2018). At the end of the academic year the pre- and post-intervention surveys were analysed to identify changes that could be attributable to the project.

The target response rate of the survey was 5% (40 respondents) of the 800 students that SSO+ aimed to reach in the academic year 2017-18.

Online versions of the questionnaire surveys were created on LimeSurvey in Greek, Lithuanian, and English. The answers were collected online and afterwards they were coded, quantified and analyzed. For the derivation of the results descriptive statistics were used.

Channels used to disseminate the questionnaire surveys were mainly the participating universities' and students' unions mailing lists. Only students that answered the baseline questionnaire survey could be contacted for the follow-up survey through the email they provided in the baseline survey.

The baseline and the follow-up questionnaires were incentivized. For both, two €25 and one €50 prize incentive were provided. Winners were chosen through a draw.

Respondents of the follow-up survey were matched with the respondents of the baseline survey through their email or name in order to be included in the pre- post- comparison evaluation. Questions in the follow-up

questionnaire were identical to those asked in the baseline survey in order to allow for comparison and evaluation of possible change of the same respondents over the academic year.

The questionnaire included multiple-choice, dichotomous and rating scale questions. In the first type of closed ended questions, respondents were offered a set of answers they had to choose from while in the second type respondents could choose between "yes" or "no". The third type of questions was Likert-scale and preference rank order type. In Likert scale questions respondents were asked about the level of agreement with specific statements. Each option was given a score, which was used to analyze the results. The preference rank order questions required sequential ranking from high to low until all factors were ranked.

The total number of students that participated in the baseline survey was 1,798. Out of those respondents, 1,059 provided their email and could therefore be contacted for the follow-up survey (Table 1). Eventually 86 respondents of the follow-up survey were matched to the baseline. Thus, the target of 40 participants was met.

The country with the highest number of matched participants was Lithuania (35 matches), while the country with the lowest number of matched participants was Cyprus (2 matches). The UK had 33 matched participants and Greece had 16 matched participants. The actual number of responses to individual questions per country are tabulated in Annex I. It is noted that for Cyprus, due to the very small number of respondents the changes observed in the analysis appear to be larger and therefore not as representative as they would be if a larger sample was available.

The 2017-18 academic year was a pilot year for the SSO+ campaign. In effect the number of students that it aimed to reach was lower than what it will be for the 2018-19 academic year, when it will be fully implemented across the seven European countries. Therefore, as of 2018-19 the number of survey respondents will be higher.

Table 1 Number of respondents

		Cyprus	Greece	Lithuania	UK	Total
Baseline	**Total**	128	216	1,218	236	1,798
	Provided email	83	115	746	115	1,059
Follow-up (matched participants)		2	16	35	33	86

3 Analysis and Results

3.1 Respondent characteristics

Respondent's demographics are summarised in Table 2. A large number of female, compared to male, respondents participated in the survey. Sixty-three percent of total respondents were female and 37% were male. The biggest proportions of female respondents were found in the UK and in Lithuania (67% and 63%, respectively). In Cyprus one male and one female student participated in the survey.

More than half of the respondents (52%) were between 18-20 years of age. In Cyprus the two respondents were both between 21-24 years of age while in Lithuania the proportion of respondents that were between 21-24 years of age is higher than the proportion of respondents between 18-20. In Greece, the proportion of respondents that were between 18-20 years of age is equal to the proportion of respondents between 21-24 years of age whereas a significant number of respondents is also between 25-29. The UK had the youngest population of respondents with the majority (82%) being between 18-20 years of age.

The majority of respondents (65%) lived in rented accommodation, either in a privately rented house (41%) or in a rented room in a landlord's house (24%), while 35% lived either in a place they own (12%) or lived in their family home (24%). The proportion of those living in a privately rented house in Greece and in the UK, is high, 69% and 72% respectively, while in Lithuania none of the respondents live in a privately rented house. Furthermore, 29% and 28% of those surveyed in the UK and Lithuania respectively, lived in a rented room in their landlord's house while in Greece none of the respondents lived in a rented room in a landlord's house. In Lithuania, the biggest percentage of respondents living in their family home (46%) is recorded. On the other hand, none of the respondents in Cyprus and in the UK, lived in a place they own or in their family home.

Table 2 Respondents' demographics

		Cyprus	Greece	Lithuania	UK		Total
Gender							
	Male	50%	43,8%	37,1%	33,3%		37,2%
	Female	50%	56,2%	62,9%	66,7%		62,8%
Age							
	<18	0%	0%	0%	0%		0%
	18-20	0%	37,5%	34,3%	81,8%		52,3%
	21-24	100%	37,5%	51,4%	15,2%		36%
	25-29	0%	18,8%	5,7%	3%		7%
	>=30	0%	6,3%	8,6%	0%		4,7%
Current accommodation							
	Privately rented house	50%	68,8%	0%	71,9%		41,2%
	Rented room in landlord's house	50%	0%	28,6%	28,1%		23,5%
	Living in a place I own	0%	6,3%	25,7%	0%		11,8%
	Living in my family home	0%	25%	45,7%	0%		23,5%
Subject of studies							
	Architecture / Engineering / Technology	0%	25%	74,3%	6,1%		37,2%
	Arts / Humanities	50%	18,8%	2,9%	27,3%		16,3%
	Life Sciences / Medicine	0%	6,3%	0%	18,2%		8,1%
	Mathematics / Natural Sciences	50%	31,3%	2,9%	24,2%		17,4%
	Social Sciences	0%	18,8%	20%	24,2%		20,9%
Have you heard or come across the Student Switch Off campaign at your university in the past 3 years							
	Yes	50%	6,3%	8,6%	90,9%		40,7%
	No	50%	81,3%	80%	6,1%		51,2%
	Not sure	0%	12,5%	11,4%	3,0%		8,1%

Respondents studied all main subjects of study. Overall, the biggest percentage of respondents (37%) studied architecture, engineering or technology. In Lithuania, the number of respondents studying architecture, engineering or technology was high (74%), not surprisingly as it is a technical university. In the UK this number was rather low (6% of respondents) while in Cyprus none of the respondents studied architecture, engineering or technology. The second most represented subject of study (21% of respondents) was social sciences. Mathematics/Natural Sciences were studied by 17% of respondents; Arts/Humanities by 16% and Life Sciences/Medicine by 8%. In Greece most of the respondents (31%) studied mathematics or natural sciences while in the UK 27% of respondents studied arts or humanities. In Cyprus, respondents studied arts/humanities and mathematics/natural sciences.

Students previously living in dorms may have come across the Student Switch Off (SSO) campaign and been influenced by it. Influences include increased knowledge levels on energy efficiency issues and adoption of energy saving habits. In order to determine the proportion of respondents that may have been influenced in this way before, and therefore have increased levels of energy awareness already from the beginning of the academic year, they were asked whether they had heard of the SSO campaign before. Half of the respondents (51%) had not heard or come across the Student Switch Off (SSO) campaign at their university in the past 3 years. The majority of these respondents came from Greece (81%) and Lithuania (80%). An additional 12% and 11% respectively, were not sure if they had. On the other hand, 91% of the respondents in the UK reported that they have heard of the SSO campaign. In Cyprus, one respondent had heard or come across the SSO campaign while the other has not. This is not surprising since in Lithuania, Greece and Cyprus it is common for students to live in dormitories for the entire duration of their studies. Therefore, students from these countries, now living in private accommodation, and therefore participating in SSO+, are less likely to

have lived in dormitories before and in effect less likely to have heard of SSO. On the other hand, in the UK it is common for students to move out of dormitories into the private rented sector after their first year of studies and it is therefore more likely that they have heard of the SSO campaign.

3.2 Awareness of energy consumption

Respondents were asked to rate how well informed they felt about a number of issues that involved their energy consumption. Results are summarised in Tables 3 – 8 for each country and in Figure 1 for the total number of respondents. Results are on a 1 to 5 scale (1= Very badly informed, 2 = Fairly badly informed, 3 = Neither well or badly informed, 4 = Fairly well informed, 5 = Very well informed).

Overall, the level of information respondents felt they had about their energy consumption was low to moderate and kept almost stable within the period of the two surveys(Figure 1). The changes in mean values between the baseline and the follow up survey for the total sample are not significant. As it is depicted in Table 5 Mean values and standard deviations of perceived level of information on the impact of energy saving measures on energy bills - total sample and per country, "The impact your energy saving measures have on your energy bill" statement has the highest positive change in mean value (0,08 points or 3% increase) while the findings reveal a 5% decrease when it comes to the "The energy you personally consume in your accommodation" statement.

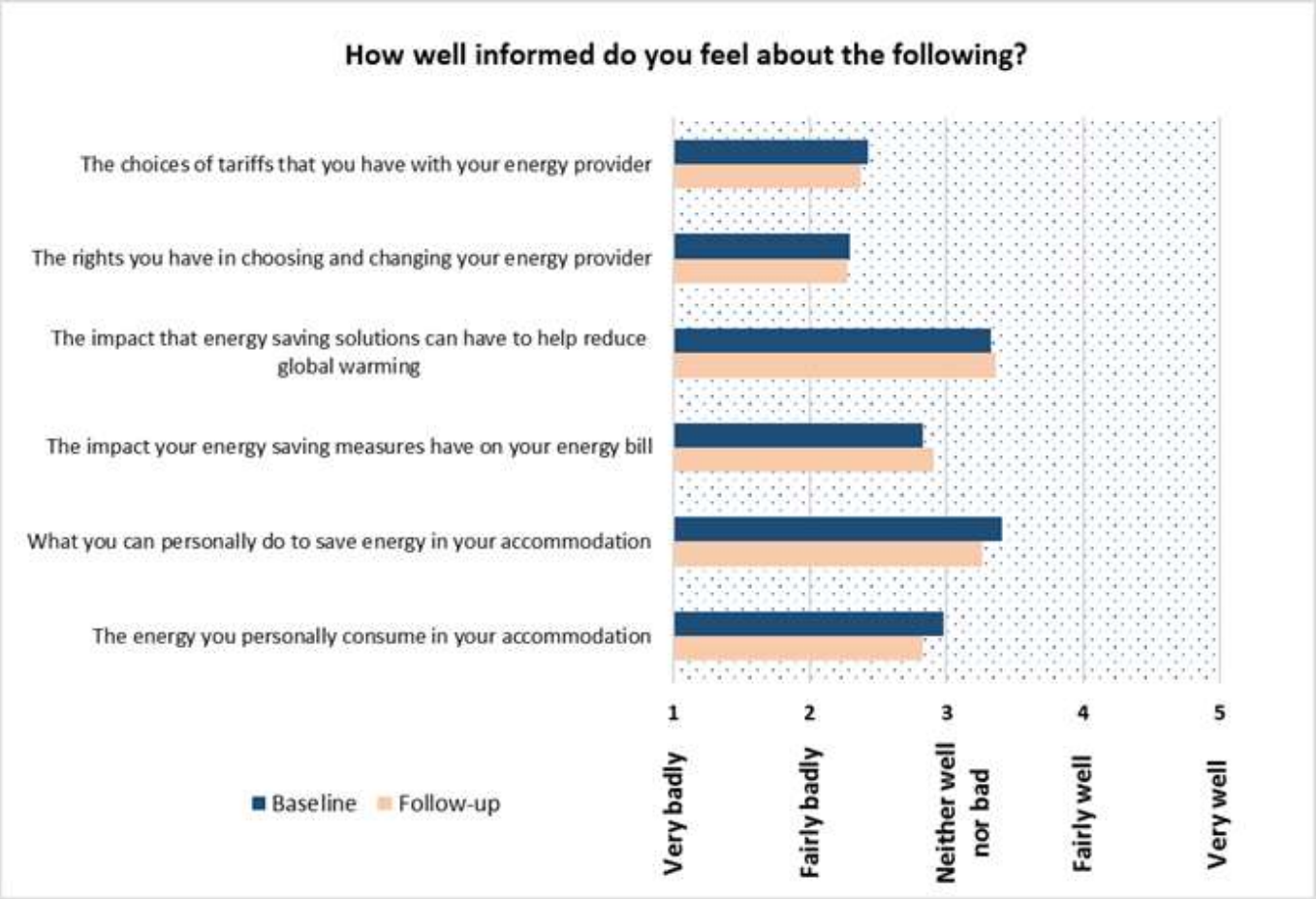

Figure 1 Mean values of perceived level of information on energy consumption - Total sample

Country specific results are presented in Tables 3 – 8. According to the findings, in Cyprus, compared to the beginning of the academic year, respondents felt more informed about what they can personally do to save energy in their accommodation. The mean value increased by 2,50 points and at the end of the academic year was equal to 5,00. Nevertheless, this significant change observed is mainly attributed to the very small sample size rather than a more significant change compared to the other countries. On the other hand, the level of information they felt that they had about the energy they personally consume in their accommodation, the

rights they have in choosing and changing their energy provider and the choices of tariffs they have with their energy provider remained stable (0% change in mean values).

In Greece, the results of the survey show that respondents felt more informed at the end of the academic year about the impact their energy saving measures had on their energy bill (+4% change in mean value). Quite the reverse is seen in the energy they personally consume in their accommodation and what they can personally do to save energy in their accommodation. Respondents felt that they have less awareness (-13% respectively) about these issues compared to the beginning of the academic year.

In Lithuania, in contrast to Greece, respondents reported that they felt slightly more informed about the energy they personally consume in their accommodation (1% increase). On the contrary, the findings have revealed that at the beginning of the academic year, they were feeling more informed about what they can personally do to save energy in their accommodation (-11% decrease).

In the UK, respondents reported that they felt more informed at the end of the academic year about the impact that energy saving solutions can have to help reduce global warming (11% increase). However, the opposite is seen in the energy they personally consume in their accommodation. Like in Greece, participants from the UK stated that they felt less informed on this issue with a recorded change in mean value of -10%.

Table 3 Mean values and standard deviations of perceived level of information on personal energy consumption -total sample and per country

The energy you personally consume in your accommodation						
	Baseline		**Follow-up**		**Change in mean value**	**% change in mean value**
	mean	**SD**	**mean**	**SD**		
Cyprus	2,50	2,12	2,50	2,12	0,00	0%
Greece	3,00	1,03	2,63	1,15	-0,38	-13%
Lithuania	3,40	1,03	3,43	1,17	0,03	1%
UK	2,55	1,30	2,30	1,13	-0,24	-10%
Total	2,98	1,21	2,83	1,26	-0,15	-5%

Table 4 Mean values and standard deviations of perceived level of information on personal actions to save energy - total sample and per country

What you can personally do to save energy in your accommodation						
	Baseline		**Follow-up**		**Change in mean value**	**% change in mean value**
	mean	**SD**	**mean**	**SD**		
Cyprus	2,50	2,12	5,00	0,00	2,50	100%
Greece	3,44	1,03	3,00	0,97	-0,44	-13%
Lithuania	3,77	0,94	3,34	1,00	-0,43	-11%
UK	3,06	1,27	3,21	1,05	0,15	5%
Total	3,41	1,15	3,27	1,03	-0,14	-4%

Table 5 Mean values and standard deviations of perceived level of information on the impact of energy saving measures on energy bills - total sample and per country

The impact your energy saving measures have on your energy bill						
	Baseline		Follow-up		Change in mean value	% change in mean value
	mean	SD	mean	SD		
Cyprus	3,00	2,83	5,00	0,00	2,00	67%
Greece	2,81	1,05	2,94	0,93	0,13	4%
Lithuania	3,11	1,05	3,00	1,11	-0,11	-4%
UK	2,52	1,37	2,67	1,34	0,15	6%
Total	2,83	1,23	2,91	1,20	0,08	3%

Table 6 Mean values and standard deviations of perceived level of information on the impact of energy saving solutions on global warming - total sample and per country

The impact that energy saving solutions can have to help reduce global warming						
	Baseline		Follow-up		Change in mean value	% change in mean value
	mean	SD	mean	SD		
Cyprus	3,00	2,83	3,50	0,71	0,50	17%
Greece	3,31	1,08	3,13	1,15	-0,19	-6%
Lithuania	3,43	1,24	3,26	1,27	-0,17	-5%
UK	3,23	1,36	3,60	1,28	0,37	11%
Total	3,33	1,27	3,36	1,24	0,04	1%

Table 7 Mean values and standard deviations on perceived level of information on the rights in choosing and changing energy provider - total sample and per country

The rights you have in choosing and changing your energy provider						
	Baseline		Follow-up		Change in mean value	% change in mean value
	mean	SD	mean	SD		
Cyprus	2,00	1,41	2,00	1,41	0,00	0%
Greece	2,19	1,11	2,19	1,11	0,00	0%
Lithuania	2,29	1,20	2,23	1,24	-0,06	-3%
UK	2,36	1,25	2,39	1,39	0,03	1%
Total	2,29	1,19	2,28	1,26	-0,01	-1%

Table 8 Mean values and standard deviations on perceived level of information on the choices of tariffs with energy provider - total sample and per country

The choices of tariffs that you have with your energy provider						
	Baseline		Follow-up		Change in mean value	% change in mean value
	mean	SD	mean	SD		
Cyprus	2,00	1,41	2,00	1,41	0,00	0%
Greece	2,31	1,01	2,13	1,15	-0,19	-8%
Lithuania	2,71	1,20	2,74	1,17	0,03	1%
UK	2,21	1,27	2,12	1,08	-0,09	-4%
Total	2,43	1,20	2,37	1,16	-0,06	-2%

3.3 Sources of information / advice about energy-saving

Respondents were asked to select from a list of given sources, where they received information or advice about energy saving, over the last six months.

As shown in Figure 2, compared to the beginning of the academic year, the top two sources of information with the highest positive change in providing information or advice about energy saving to respondents are: "My University" (+9%) and "My students' union" (+4%), i.e. the main organizations that sent information on SSO+. The study also showed that, friends (-6%), local or national authorities (-4%), and family (-3%) are less popular, than they used to be at the beginning of the academic year, as sources of information. The results indicate that for a significant share of respondents, universities, students' unions and the Student Switch Off+ campaign became a more popular source of information at the end of the year. On the contrary, sources of information such as friends, families or the authorities that used to be the main source of information in the beginning of the academic year, are not so popular in the end of the academic year. It must be noted that the baseline questionnaire refers to the Student Switch Off (SSO) campaign, while the follow up questionnaire refers to the SSO+ campaign.

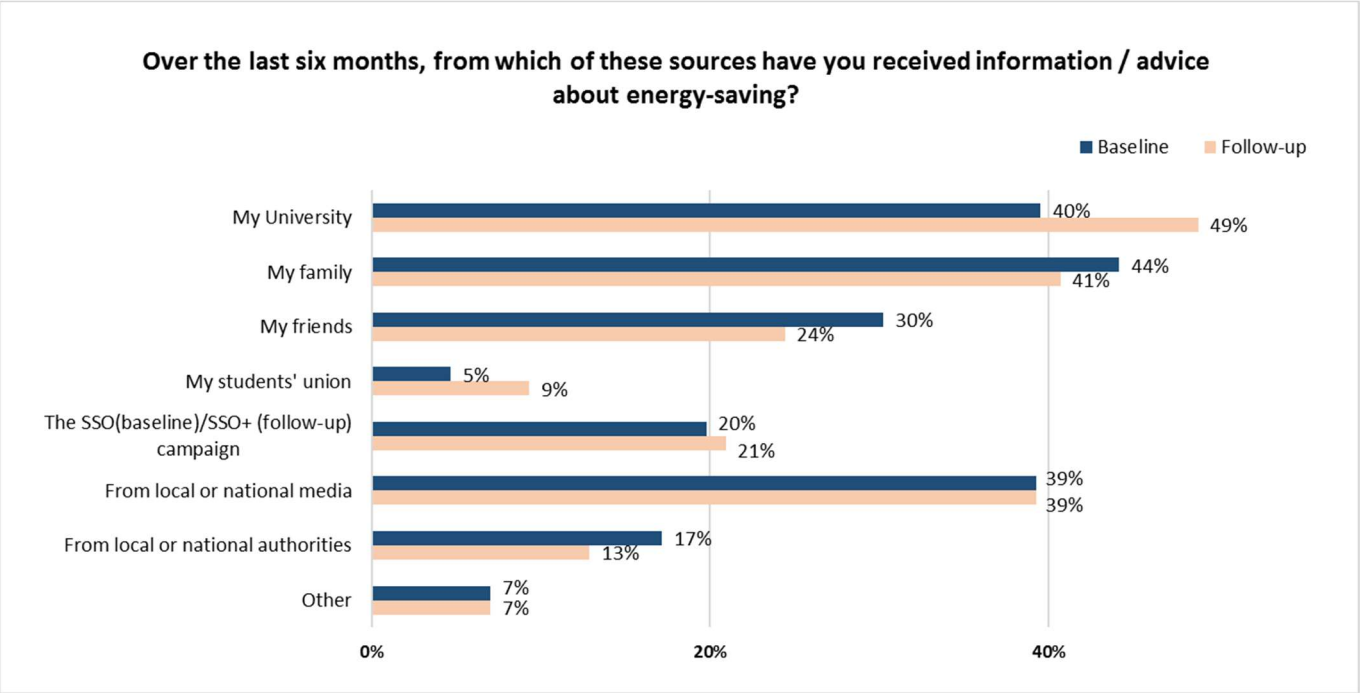

Figure 2 Sources of information or advice about energy saving over the last six months – Total sample

As depicted in Table 9, universities were the source of influence on energy saving with the biggest increase in the number of respondents, at the end of the year in all countries. Nearly half of the respondents (49%) reported that over the last six months, they had received information or advice about energy saving from their university. On the other hand, as it is shown in Figure 2, 7% of respondents stated that they have received information about energy saving from other sources (most popular Other source was the Internet).

Table 9 Sources of information or advice about energy saving - total sample and per country

Sources of information / advice about energy-saving		**Cyprus**	**Greece**	**Lithuania**	**UK**	**Total**
My University	**Follow-up**	100%	25%	34%	73%	49%
	Baseline	50%	12,5%	31%	61%	40%
	difference from baseline	50%	12,5%	3%	12%	9%

Sources of information / advice about energy-saving		Cyprus	Greece	Lithuania	UK	Total
My family	**Follow-up**	50%	25%	54%	33%	41%
	Baseline	50%	44%	54%	33%	44%
	difference from baseline	0%	-19%	0%	0%	-3%
My friends	**Follow-up**	0%	13%	26%	30%	24%
	Baseline	0%	19%	40%	27%	30%
	difference from baseline	0%	-6%	-14%	3%	-6%
My students' union	**Follow-up**	0%	0%	0%	24%	9%
	Baseline	0%	0%	3%	9%	5%
	difference from baseline	0%	0%	-3%	15%	4%
The SSO (baseline) / SSO+ (follow-up) campaign	**Follow-up**	0%	25%	0%	42%	21%
	Baseline	0%	0%	6%	45%	20%
	difference from baseline	0%	25%	-6%	-3%	1%
From local or national media	**Follow-up**	0%	31%	51%	30%	39%
	Baseline	0%	44%	49%	27%	39%
	difference from baseline	0%	-13%	2%	3%	0%
From local or national authorities	**Follow-up**	0%	6%	11%	12%	13%
	Baseline	0%	0%	17%	18%	17%
	difference from baseline	0%	6%	-6%	-6%	-4%

In Cyprus, respondents stated that they received information about energy saving only from their university (+50% difference from baseline) and from their family.

In Greece, compared to the beginning of the academic year, respondents reported two additional sources of advice about energy saving, "The Student Switch Off+ campaign" (25%) and the local or national authorities (6%). Local or national media remained the most influential source of information for respondents in Greece although a thirteen percent decrease (-13%) is observed between the two surveys. "My family" had the most notable reduction between the two periods with a drop of 19% of the respondents not referring to their family as a source of information or advice anymore.

In Lithuania, the most frequently occurring response as a source of information about energy saving was "My family". Fifty-four percent of respondents reported that their family was their main source of advice on this issue and this share didn't change at all through the academic year. "My university" had a 3% increase compared to the baseline survey while "My friends" option has the biggest decrement (-14%).

The vast majority of respondents in the UK referred to their university as the most popular source of information about energy saving. At the end of the academic year, seventy-three percent (73%) of respondents in the UK have received information from their universities, recording a 12% increase from the beginning of the academic year. The findings have also revealed the key role that students' unions played in the UK on informing and advising students about energy saving during the academic year (12% increase). On the other hand, as it is depicted in Table 9, local or national authorities' role became a less influential (-6%) source of information about energy saving.

3.4 Energy habits

Respondents were asked to rate the extent in which they undertook a number of energy saving actions on a 1 to 4 scale (1= Never, 4 = Always). The higher the mean value the higher the frequency that the action is performed. Results for the total sample are illustrated in Figure 3 while results per country as tabulated in Table 10 - Table 25.

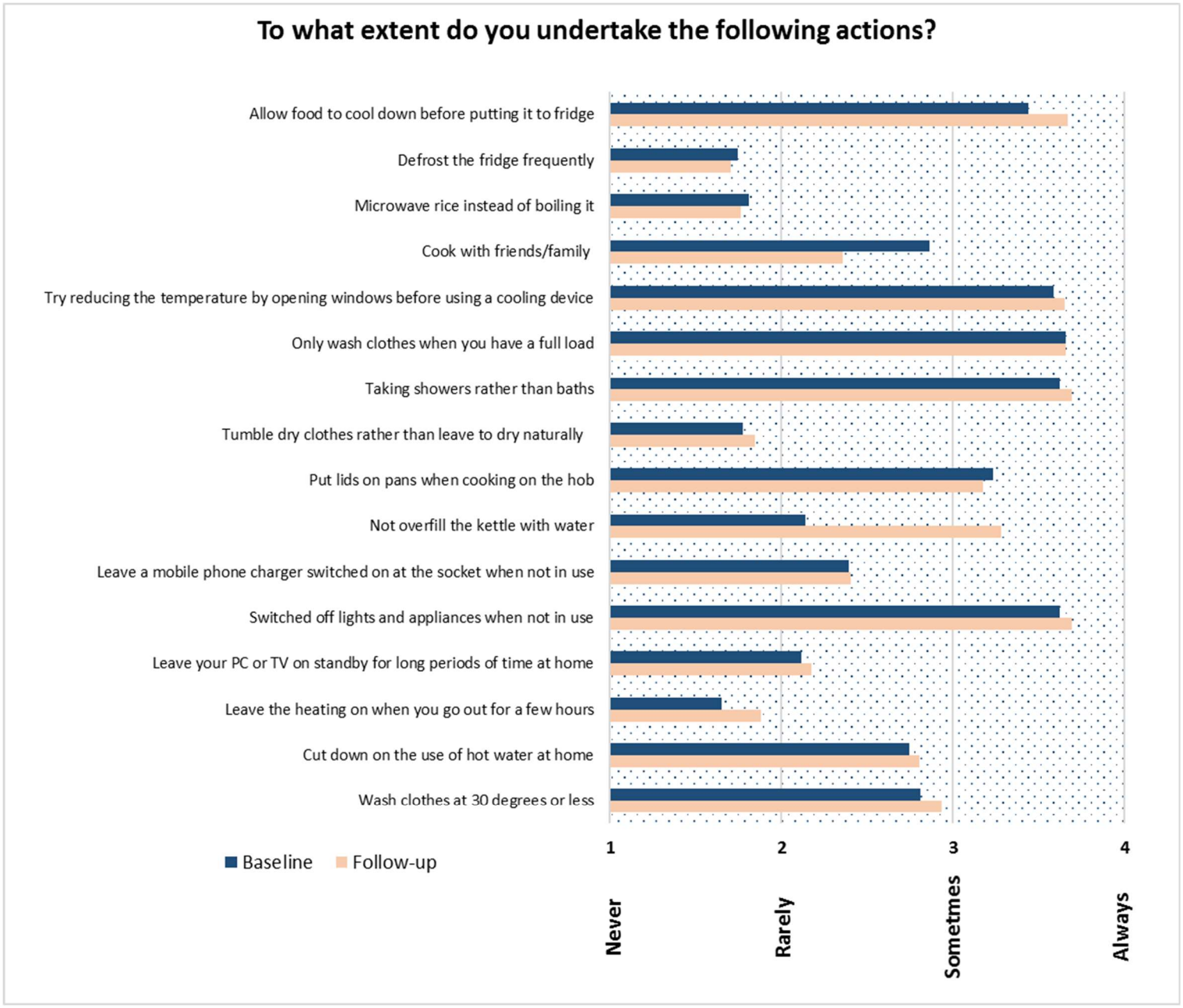

Figure 3 Mean values of the extent respondents undertake targeted energy saving actions - Total sample

The actions respondents had been taking most often in all countries by the end of the academic year were: "Switched off lights and appliances when not in use" (3,70±0,54), "Taking showers rather than baths" (3,70±0,68) and "Allow food to cool down before putting it to fridge" (3,67±0,65). In contrast, the least popular actions were: "Defrost the fridge frequently" (1,70±0,72), "Microwave rice instead of boiling it" (1,76±1,03) and "Tumble dry clothes rather than leave to dry naturally" (1,85±1,11). The highest increments between the baseline and the follow up survey were observed in the following actions: "Not overfill the kettle with water" (+53% change from baseline), "Leave the heating on when you go out for a few hours" (+14% change from baseline) and "Allow food to cool down before putting it to fridge" (+7% change from baseline).

According to the follow up survey, respondents in all four countries, not always though, allow food to cool down before putting it to fridge quite frequently. In addition, respondents from Cyprus, Lithuania and the UK almost always switch off lights and appliances when not in use, take showers rather than baths and try to reduce the inside temperature by opening windows before using a cooling device. Furthermore, respondents from Cyprus, Greece and the UK, quite often, wash their clothes only when they have a full load. On the contrary, respondents from Cyprus and Greece almost never tumble dry clothes rather than leave them to dry naturally, and in addition, they never microwave rice instead of boiling it. Finally, the biggest changes in mean values between the two surveys were observed for all four countries when it came to not overfilling the kettle with water: Cyprus +2,50, Greece +1,33, Lithuania +0,88 and the UK +1,25.

In Cyprus large changes are observed in a number of items. This is mainly attributed to the very small sample size rather than a more significant change compared to the other countries. As it is depicted in the results (Table 10 to Table 25), the action that the respondents from Cyprus stated in the follow up survey that they always undertook (which they didn't use to undertake frequently in the beginning of the academic year), is that they tried to reduce the temperature by opening windows before using a cooling device.

In Greece, the most frequent action respondents took was to wash their clothes only when they had a full load (3,81±0,40, +11% change from baseline) while the least frequently undertaken action was that they never microwave rice rather than boiling it (1,00±0,00, -11% change from baseline).

In Lithuania (3,82±0,58, +3% change from baseline) and in the UK (3,93±0,27, -1% change from baseline), the action that was undertaken the most often by respondents was to try to reduce the temperature by opening windows before using a cooling device. On the other hand, tumble drying clothes rather than leaving them dry naturally, was the least frequently taken action in Lithuania (1,52±0,93, -2% change from baseline) whereas in the UK microwaving rice instead of boiling it (1,50±0,90, +5% change from the baseline) was the least popular action.

Table 10 Mean values and standard deviations on the extent respondents wash clothes at 30 degrees or less - total sample and per country

Wash clothes at 30 degrees or less						
	Baseline		**Follow-up**		**Change in mean value**	**% change in mean value**
	mean	**SD**	**mean**	**SD**		
Cyprus	1,50	0,71	2,00	1,41	0,50	33%
Greece	2,50	1,10	2,75	0,93	0,25	10%
Lithuania	2,94	0,84	2,88	0,71	-0,06	-2%
UK	2,93	0,77	3,18	0,86	0,25	9%
Total	2,81	0,90	2,94	0,84	0,13	5%

Table 11 Mean values and standard deviations of the extent respondents cut on the use of hot water at home – total sample and per country

Cut on the use of hot water at home						
	Baseline		**Follow-up**		**Change in mean value**	**% change in mean value**
	mean	**SD**	**mean**	**SD**		
Cyprus	2,50	0,71	3,50	0,71	1,00	40%
Greece	2,50	0,63	2,69	0,48	0,19	8%
Lithuania	2,70	0,81	2,70	0,88	0,00	0%
UK	2,94	0,62	2,94	0,62	0,00	0%
Total	2,75	0,71	2,81	0,72	0,06	2%

Table 12 Mean values and standard deviations of the extent respondents leave the heating on when they go out for a few hours– total sample and per country

Leave the heating on when you go out for a few hours						
	Baseline		Follow-up		Change in mean value	% change in mean value
	mean	SD	mean	SD		
Cyprus	1,00	0,00	1,00	0,00	0,00	0%
Greece	1,44	0,81	1,75	0,93	0,31	22%
Lithuania	1,86	1,01	1,86	1,04	0,00	0%
UK	1,61	0,72	2,03	0,75	0,42	26%
Total	1,65	0,85	1,88	0,90	0,23	14%

Table 13 Mean values and standard deviations of the extent respondents leave their PC or TV on standby for long periods of time at home- total sample and per country

Leave your PC or TV on standby for long periods of time at home						
	Baseline		Follow-up		Change in mean value	% change in mean value
	mean	SD	mean	SD		
Cyprus	1,00	0,00	1,50	0,71	0,50	50%
Greece	1,88	0,89	2,38	0,96	0,50	27%
Lithuania	2,21	1,07	2,18	1,00	-0,03	-1%
UK	2,21	0,96	2,12	0,99	-0,09	-4%
Total	2,12	0,99	2,18	0,98	0,06	3%

Table 14 Mean values and standard deviations of the extent respondents switch off lights and appliances when not in use- total sample and per country

Switched off lights and appliances when not in use						
	Baseline		Follow-up		Change in mean value	% change in mean value
	mean	SD	mean	SD		
Cyprus	4,00	0,00	4,00	0,00	0,00	0%
Greece	3,36	0,50	3,43	0,65	0,07	2%
Lithuania	3,70	0,73	3,79	0,42	0,09	2,5%
UK	3,64	0,49	3,70	0,59	0,06	2%
Total	3,62	0,60	3,70	0,54	0,07	2%

Table 15 Mean values and standard deviations of the extent respondents leave a mobile phone charger switched on at the socket when not in use- total sample and per country

Leave a mobile phone charger switched on at the socket when not in use						
	Baseline		Follow-up		Change in mean value	% change in mean value
	mean	SD	mean	SD		
Cyprus	2,50	2,12	1,50	0,71	-1,00	-40%
Greece	2,57	1,16	2,71	0,99	0,14	6%
Lithuania	2,06	1,20	2,06	1,14	0,00	0%
UK	2,64	1,27	2,67	1,19	0,03	1%
Total	2,39	1,24	2,40	1,16	0,01	0,5%

Table 16 Mean values and standard deviations of the extent respondents don't overfill the kettle with water- total sample and per country

Not overfill the kettle with water						
	Baseline		Follow-up		Change in mean value	% change in mean value
	mean	SD	mean	SD		
Cyprus	1,00	0,00	3,50	0,71	2,50	250%
Greece	1,83	0,83	3,17	1,03	1,33	73%
Lithuania	2,39	0,79	3,27	0,67	0,88	37%
UK	2,06	0,80	3,31	0,74	1,25	61%
Total	2,14	0,83	3,28	0,75	1,14	53%

Table 17 Mean values and standard deviations of the extent respondents put lids on pans when cooking on the hob- total sample and per country

Put lids on pans when cooking on the hob						
	Baseline		Follow-up		Change in mean value	% change in mean value
	mean	SD	mean	SD		
Cyprus	4,00	0,00	3,50	0,71	-0,50	-12,5%
Greece	2,69	1,20	2,69	1,30	0,00	0%
Lithuania	3,46	0,70	3,49	0,61	0,03	1%
UK	3,21	0,74	3,06	0,61	-0,15	-5%
Total	3,23	0,86	3,17	0,83	-0,06	-2%

Table 18 Mean values and standard deviations of the extent respondents tumble dry clothes rather than leave to dry naturally- total sample and per country

Tumble dry clothes rather than leave to dry naturally						
	Baseline		Follow-up		Change in mean value	% change in mean value
	mean	SD	mean	SD		
Cyprus	1,00	0,00	1,00	0,00	0,00	0%
Greece	1,20	0,56	1,33	0,72	0,13	11%
Lithuania	1,55	0,93	1,52	0,93	-0,03	-2%
UK	2,32	1,05	2,48	1,18	0,16	7%
Total	1,77	1,01	1,85	1,11	0,08	4%

Table 19 Mean values and standard deviations of the extent respondents take showers rather than baths- total sample and per country

Taking showers rather than baths						
	Baseline		Follow-up		Change in mean value	% change in mean value
	mean	SD	mean	SD		
Cyprus	4,00	0,00	4,00	0,00	0,00	0%
Greece	2,93	1,10	3,13	0,92	0,20	7%
Lithuania	3,59	0,76	3,72	0,68	0,13	3%
UK	3,94	0,24	3,91	0,38	-0,03	-1%
Total	3,62	0,76	3,70	0,68	0,07	2%

Table 20 Mean values and standard deviations of the extent respondents only wash clothes when they have a full load- total sample and per country

Only wash clothes when you have a full load						
	Baseline		Follow-up		Change in mean value	% change in mean value
	mean	SD	mean	SD		
Cyprus	4,00	0,00	4,00	0,00	0,00	0%
Greece	3,44	0,63	3,81	0,40	0,38	11%
Lithuania	3,55	0,67	3,45	0,75	-0,09	-3%
UK	3,85	0,36	3,76	0,44	-0,09	-2%
Total	3,65	0,57	3,65	0,59	0,00	0%

Table 21 Mean values and standard deviations of the extent respondents try reducing the temperature by opening windows before using a cooling device- total sample and per country

Try reducing the temperature by opening windows before using a cooling device						
	Baseline		Follow-up		Change in mean value	% change in mean value
	mean	SD	mean	SD		
Cyprus	3,50	0,71	4,00	0,00	0,50	14%
Greece	2,67	1,23	2,73	1,39	0,07	2,5%
Lithuania	3,70	0,88	3,82	0,58	0,12	3%
UK	3,96	0,19	3,93	0,27	-0,04	-1%
Total	3,58	0,92	3,65	0,85	0,06	2%

Table 22 Mean values and standard deviations of the extent respondents cook with friends / family- total sample and per country

Cook with friends / family						
	Baseline		Follow-up		Change in mean value	% change in mean value
	mean	SD	mean	SD		
Cyprus	2,50	2,12	3,00	1,41	0,50	20%
Greece	2,53	0,83	1,87	0,83	-0,67	-26%
Lithuania	3,19	0,83	2,35	1,11	-0,84	-26%
UK	2,73	0,91	2,55	0,97	-0,18	-7%
Total	2,86	0,92	2,36	1,03	-0,51	-18%

Table 23 Mean values and standard deviations of the extent respondents microwave rice instead of boiling it- total sample and per country

Microwave rice instead of boiling it						
	Baseline		Follow-up		Change in mean value	% change in mean value
	mean	SD	mean	SD		
Cyprus	1,00	0,00	1,00	0,00	0,00	0%
Greece	1,13	0,34	1,00	0,00	-0,13	-11%
Lithuania	2,56	1,08	2,44	1,05	-0,13	-5%
UK	1,43	0,82	1,50	0,90	0,07	5%
Total	1,81	1,06	1,76	1,03	-0,05	-3%

Table 24 Mean values and standard deviations of the extent respondents defrost the fridge frequently- total sample and per country

Defrost the fridge frequently						
	Baseline		Follow-up		Change in mean value	% change in mean value
	mean	SD	mean	SD		
Cyprus	2,50	0,71	2,00	1,41	-0,50	-20%
Greece	1,75	0,46	1,25	0,46	-0,50	-29%
Lithuania	1,88	0,79	1,84	0,72	-0,03	-2%
UK	1,55	0,74	1,66	0,72	0,10	7%
Total	1,75	0,75	1,70	0,72	-0,04	-2%

Table 25 Mean values and standard deviations of the extent respondents allow food to cool down before putting it to fridge- total sample and per country

Allow food to cool down before putting it to fridge						
	Baseline		Follow-up		Change in mean value	% change in mean value
	mean	SD	mean	SD		
Cyprus	4,00	0,00	4,00	0,00	0,00	0%
Greece	3,08	1,16	3,50	0,90	0,42	13,5%
Lithuania	3,49	0,92	3,71	0,71	0,23	7%
UK	3,48	0,67	3,67	0,48	0,18	5%
Total	3,44	0,86	3,67	0,65	0,23	7%

3.5 Actions taken to reduce energy costs

Respondents were asked which of the mentioned targeted actions, if any, were taken whilst in their current accommodation in order to reduce the cost of their energy bills. As illustrated in Figure 4, the most popular response is "Taken actions to reduce my energy usage". The findings depicted that, at the end of the academic year, 57% of those surveyed reported that they took actions to reduce their energy usage. This share, an the beginning of the academic year was 43% so an increase of 14% is observed.

Interestingly, the share of respondents who wore outdoor wear (e.g hat/scarf/coat/gloves), or more clothes to keep warm, in their homes is lower at the end of the academic year (53%) compared to the beginning (55%) and this action records the highest negative change between the two surveys (total sample). On the other hand, as is depicted in the graph, (Figure 4), all the other actions, with the exception of getting a smart meter which remained unchanged, recorded higher shares in the follow up survey than in the baseline survey.

In Cyprus, respondents reported that took actions only to reduce their energy usage and wore outdoor wear in order to reduce the cost of their energy bill. The reported actions did not change over the academic year.

In Lithuania, at the end of the academic year, 46% of the respondents stated that they took actions to reduce their energy usage. This action was also the most frequently occurring response at the beginning of the academic year (51%). However, the most significant change between the two surveys is observed in the share of those who had worn outdoor clothes to stay warm in their home. At the end of the academic year, less respondents (-11%) stated that they had worn outdoor wear to keep warm in their current accommodation.

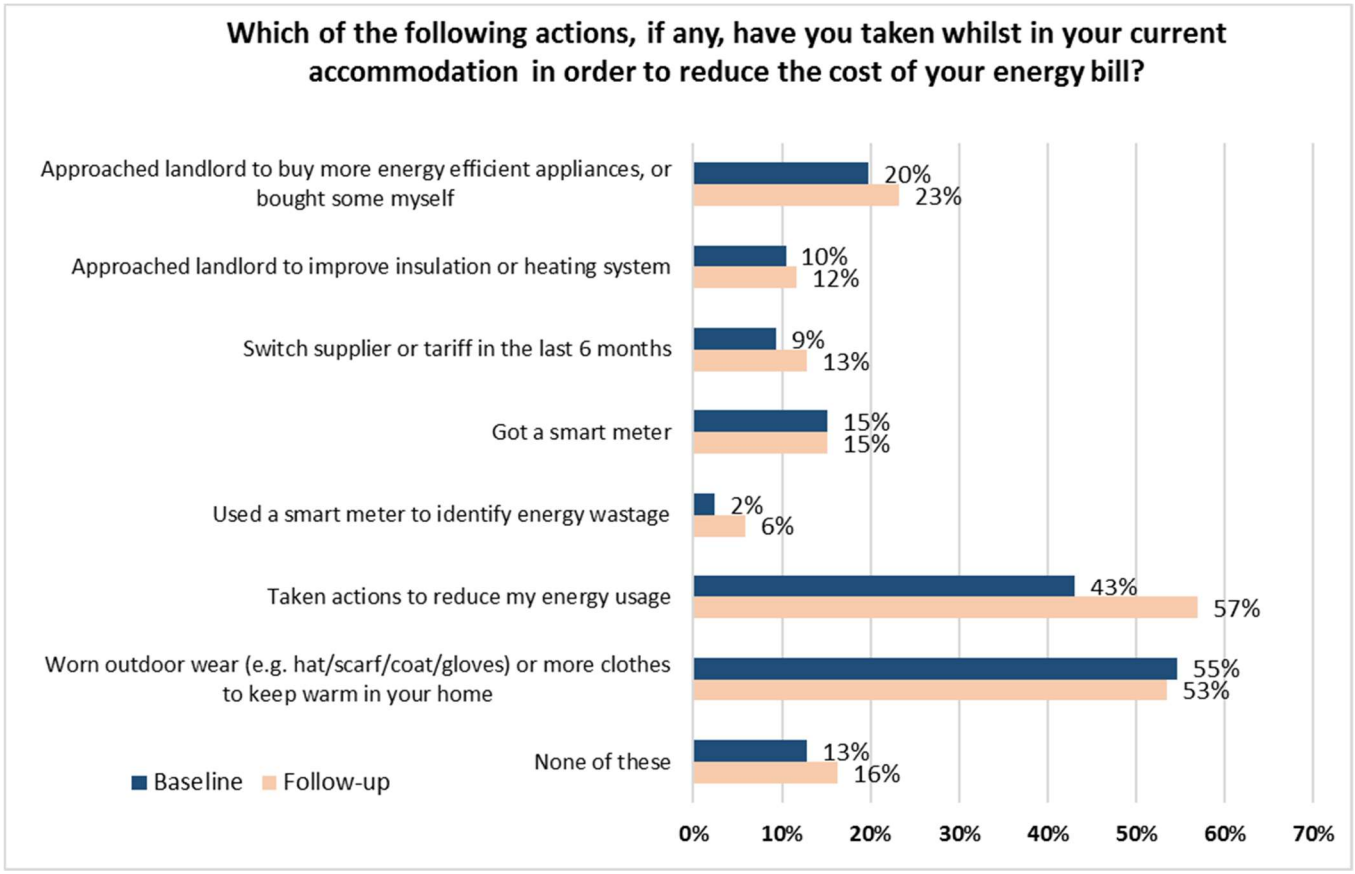

Figure 4 Actions taken by respondents to reduce their energy costs whilst in their current accommodation– Total sample

In Greece and the UK, the vast majority of the respondents, 75% and 76% respectively, stated in the follow up survey that they had worn outdoor clothes whilst in their current accommodation in order to reduce their energy bills. Although this action is also found to be the most preferred one in Greece (81%) and the UK (64%) in the baseline survey, it is important to note that between the two surveys, while in Greece the share of those who wore extra clothes decreased by -6 percentage points, in the UK, this share increased by +10 percentage points.

Nevertheless, the biggest difference between the two surveys is found in Greece. Fifty percent of the respondents in the follow up survey stated that they had approached their landlord to buy more energy efficient appliances or bought some themselves in contrast to 13% of those reporting to have done so in the baseline survey. This is a 38 percentage points of increase.

In addition, in Greece and Cyprus none of the respondents got a smart meter during the academic year while in the UK and in Lithuania, by the end of the academic year, 6% and 6% of the respondents, respectively, used a smart meter to identify their energy wastage. This share increased by 6% in the UK, while for Lithuania it has increased by 3%.

Table 26 Actions taken by respondents to reduce their energy costs whilst in their current accommodation- total sample and per country

Actions taken to reduce energy costs		Cyprus	Greece	Lithuania	UK	Total
Approached landlord to buy more energy efficient appliances, or bought some myself.	**Follow-up**	0,0%	50,0%	25,7%	9,1%	23,3%
	Baseline	50,0%	12,5%	28,6%	12,1%	19,8%
	difference from baseline	-50%	37,5%	-2,9%	-3,0%	3,5%

Actions taken to reduce energy costs		Cyprus	Greece	Lithuania	UK	Total
Approached landlord to improve insulation or heating system.	**Follow-up**	0,0%	12,5%	11,4%	12,1%	11,6%
	Baseline	0,0%	6,3%	8,6%	15,2%	10,5%
	difference from baseline	0,0%	6,2%	2,8%	-3,1%	1,1%
Switch supplier or tariff in the last 6 months.	**Follow-up**	0,0%	18,8%	11,4%	12,1%	12,8%
	Baseline	0,0%	12,5%	2,9%	15,2%	9,3%
	difference from baseline	0,0%	6,3%	8,5%	-3,1%	3,5%
Got a smart meter.	**Follow-up**	0,0%	0,0%	22,9%	15,2%	15,1%
	Baseline	0,0%	0,0%	20,0%	18,2%	15,1%
	difference from baseline	0,0%	0,0%	2,9%	-3,0%	0,0%
Used a smart meter to identify energy wastage.	**Follow-up**	0,0%	6,3%	5,7%	6,1%	5,8%
	Baseline	0,0%	6,3%	2,9%	0,0%	2,3%
	difference from baseline	0,0%	0,0%	2,8%	6,1%	3,5%
Taken actions to reduce my energy usage.	**Follow-up**	100,0%	43,8%	45,7%	72,7%	57,0%
	Baseline	100,0%	25,0%	51,4%	39,4%	43,0%
	difference from baseline	0,0%	18,8%	-5,7%	33,3%	14%
Worn outdoor wear (e.g. hat/ scarf /coat/ gloves) or more clothes to keep warm in your home.	**Follow-up**	100,0%	75,0%	20,0%	75,8%	53,5%
	Baseline	100,0%	81,3%	31,4%	63,6%	54,7%
	difference from baseline	0,0%	-6,3%	-11,4%	12,2%	-1,2%
None of these.	**Follow-up**	0,0%	6,3%	31,4%	6,1%	16,3%
	Baseline	0,0%	6,3%	20,0%	9,1%	12,8%
	difference from baseline	0,0%	0%	11,4%	-3,0%	3,5%

3.6 Feelings about saving energy

Respondents were asked to describe from a targeted list of words their feelings about saving energy (Figure 5). As found in the follow up survey, the majority of respondents (28% of total) felt optimistic while at the beginning of the academic year this share was 20%. Moreover, at the end of the academic year less participants (-8%) stated that they felt guilty about saving energy in contrast to the beginning (22%). The results have also revealed that the overall response to this question was quite positive. In the follow up survey, 60% of the total sample selected words with positive meaning (Optimistic to Relaxed) while 40% selected words with a negative meaning (Guilty to Frustrated). On the other hand, in the baseline survey, 58% of the total sample had positive feelings and 42% had negative feelings.

At the end of the academic year, 56% of those surveyed in Greece, as well as 69% and 55% of those questioned in Lithuania and in the UK respectively, described their feelings about saving energy in a positive manner [Optimistic, Proud, Content, Relaxed]. Furthermore, in Greece (31%), Lithuania (29%) and in the UK (27%), the majority of respondents stated that they felt optimistic about saving energy. It is worth noting that in Lithuania this share at the beginning of the academic year was only 3%. The most popular response describing respondents' feelings at the beginning of the academic year, in Greece (31%) was "Content", in the UK, (33%) was "Optimistic" while in Lithuania 46% of those surveyed, chose the word "Guilty".

On the other hand, the follow-up results reveal that the word "Proud" was the least preferred in Greece (6%), Lithuania (6%) and in the UK (6%) to describe the feelings of the respondents about saving energy. Interestingly, none of the respondents in the UK had previously used this word. In Cyprus, at the end of the academic year, respondents felt either anxious (50%) or relaxed (50%) about saving energy whereas in the beginning they either felt optimistic (50%) or content (50%).

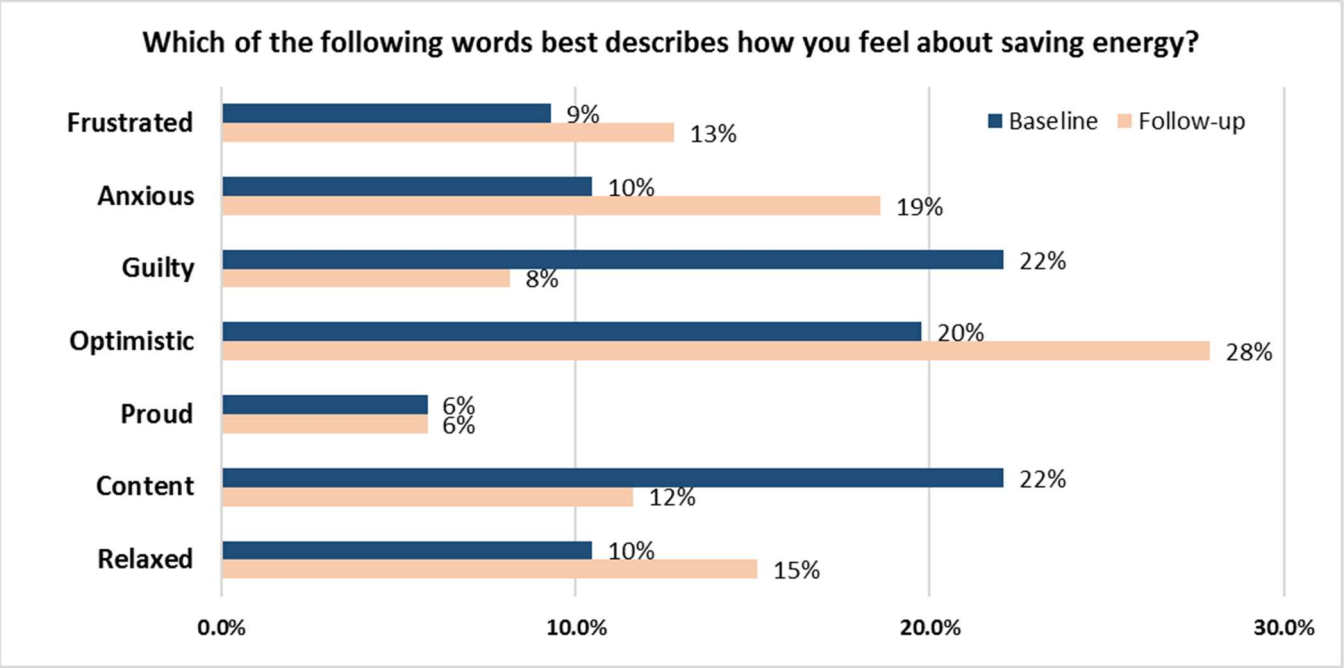

Figure 5 Feelings about saving energy - Total sample

Table 27 Feelings about saving energy - total sample and per country

Feelings about saving energy		Cyprus	Greece	Lithuania	UK	Total
Frustrated	**Follow-up**	0,0%	6,3%	8,6%	21,2%	12,8%
	Baseline	0,0%	6,3%	8,6%	12,1%	9,3%
	difference from baseline	0,0%	0,0%	0,0%	9,1%	3,5%
Anxious	**Follow-up**	50,0%	31,3%	17,1%	12,1%	18,6%
	Baseline	0,0%	6,3%	2,9%	21,2%	10,5%
	difference from baseline	50,0%	25%	14,2%	-9,1%	8,1%
Guilty	**Follow-up**	0,0%	6,3%	5,7%	12,1%	8,1%
	Baseline	0,0%	6,3%	45,7%	6,1%	22,1%
	difference from baseline	0,0%	0,0%	-40,0%	6,0%	-14,0%
Optimistic	**Follow-up**	0,0%	31,3%	28,6%	27,3%	27,9%
	Baseline	50,0%	25,0%	2,9%	33,3%	19,8%
	difference from baseline	-50,0%	6,3%	25,7%	-6,0%	8,1%
Proud	**Follow-up**	0,0%	6,3%	5,7%	6,1%	5,8%
	Baseline	0,0%	6,3%	11,4%	0,0%	5,8%
	difference from	0,0%	0,0%	-5,7%	6,1%	0,0%

Feelings about saving energy		Cyprus	Greece	Lithuania	UK	Total
	baseline					
Content	**Follow-up**	0,0%	12,5%	14,3%	9,1%	11,6%
	Baseline	50,0%	31,3%	28,6%	9,1%	22,1%
	difference from baseline	-50,0%	-18,8%	-14,3%	0,0%	-10,5%
Relaxed	**Follow-up**	50,0%	6,3%	20,0%	12,1%	15,1%
	Baseline	0,0%	18,8%	0,0%	18,2%	10,5%
	difference from baseline	50,0%	-12,5%	20,0%	-6,1%	4,6%

3.7 Behavioral antecedents

Respondents were asked about the level of agreement, if at all, with given statements with respect to energy saving and energy usage. Results are presented in Tables 28 – 37 for each country and in Figure 6 for the total number of respondents. Results are on a 1 to 5 scale (1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly agree). Mean values over 3.5 indicate agreement with the statement.

In all countries, respondents in both surveys agreed with four out of the ten statements. They agreed on a) energy conservation contributes to a reduction of climate change impacts, b) everyone including their self is responsible for climate change, c) they intend to try harder to reduce their energy use the next academic year compared to this academic year and d) they feel morally obliged to save energy, regardless of what others do.

Furthermore, in all countries respondents disagreed more rather than agreed with the statement that "saving energy is too much of a hassle".

As the results from the follow up survey show, respondents from Cyprus agreed (4,00 ±0,00) that they can reduce their energy use quite easily and that everyone including themselves is responsible for climate change. A reduction of 0,50 in mean values is observed compared to the baseline survey. In contrast, they neither agreed nor disagreed with the statements "I feel jointly responsible for the exhaustion of energy sources" and "Saving energy is too much of a hassle" (2,50 ±0,71 respectively). A 0,50 increase in mean value is recorded for the last statement.

In Greece, according to the follow up survey, respondents agreed the most (4,50± 0,52) that energy conservation contributes to a reduction of climate change impact. The change in mean value, between the baseline (4,56± 0,51) and the follow up survey is almost negligible (-0,06). On the contrary, respondents from Greece disagreed (2,06± 0,44) that saving energy is too much of a hassle. In this case, the change in mean value is zero (0,0).

By the end of the academic year, participants from Lithuania agreed the most (4,69±0,76) with the statement "I feel jointly responsible for the exhaustion of energy sources". A 0,09 change in mean value is recorded compared to the baseline survey (4,60±0,91). Like in Greece and Cyprus, in Lithuania (2,40±0,77) and in the UK (2,33±0,96) the statement "saving energy is too much of a hassle" has the lowest levels of agreement. The recorded changes in mean values compared to the baseline survey are +0,14 and +0,09 for Lithuania and the UK respectively.

In the UK, respondents mostly agreed that "everyone including myself is responsible for climate change" (4,48±0,62). A 0,03 decrease in mean value compared to the baseline survey is observed. The findings also reveal that, in the UK and Greece, agreement with the statements with the highest and lowest mean values have not changed through the academic year.

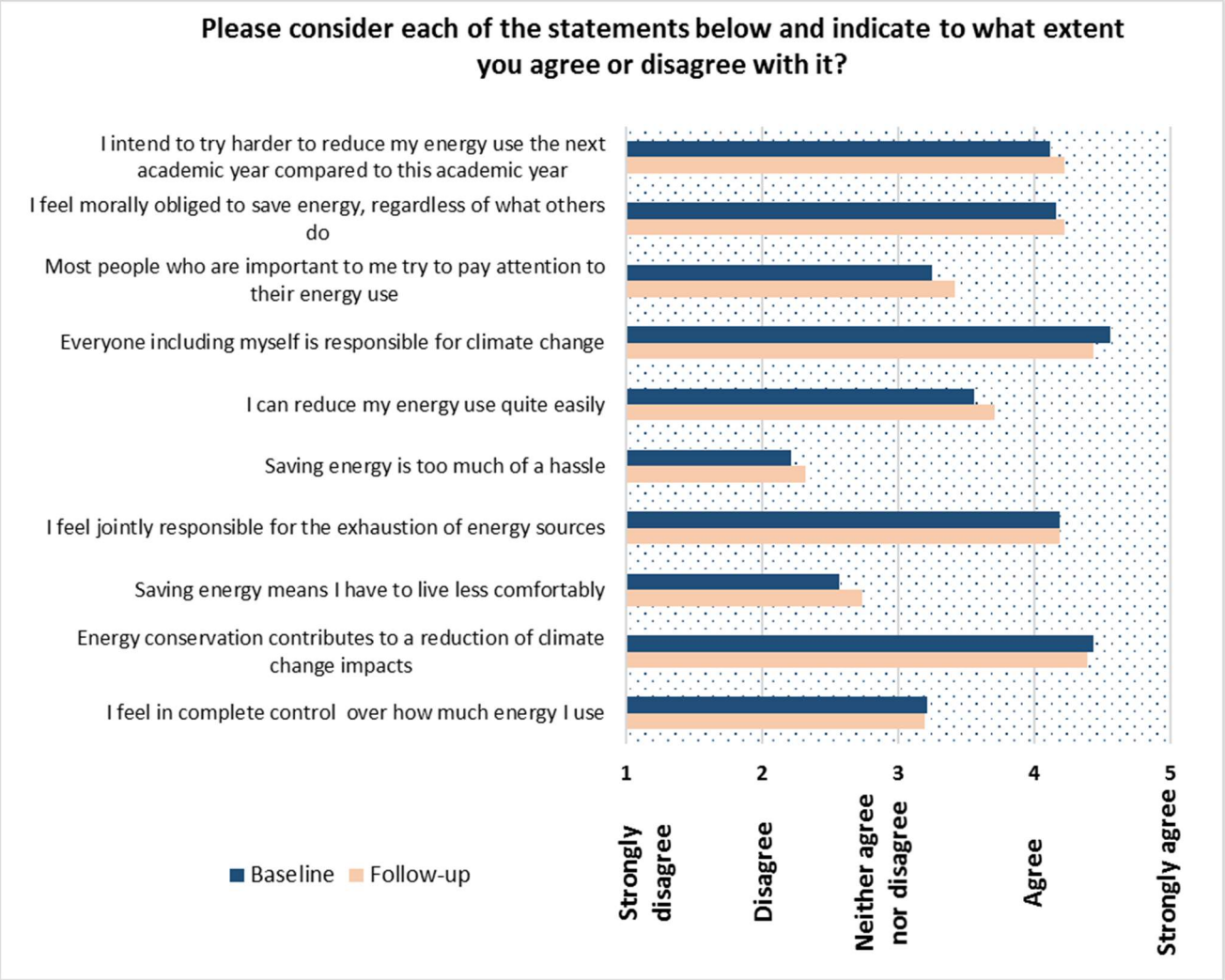

Figure 6 Shared opinions on energy use - Total sample

Table 28 Mean values and standard deviations on "I feel in complete control over how much energy I use" statement - total sample and per country

I feel in complete control over how much energy I use						
	Baseline		Follow-up		Change in mean value	% change in mean value
	mean	SD	mean	SD		
Cyprus	4,00	0,00	3,00	1,41	-1,00	-25%
Greece	3,19	1,05	2,69	0,87	-0,50	-16%
Lithuania	3,40	0,81	3,49	0,85	0,09	3%
UK	2,97	1,16	3,15	0,87	0,18	6%
Total	3,21	1,01	3,20	0,91	-0,01	-0,4%

Table 29 Mean values and standard deviations on "Energy conservation contributes to a reduction of climate change impacts" statement - total sample and per country

Energy conservation contributes to a reduction of climate change impacts						
	Baseline		Follow-up		Change in mean value	% change in mean value
	mean	SD	mean	SD		
Cyprus	4,50	0,71	3,50	0,71	-1,00	-22%
Greece	4,56	0,51	4,50	0,52	-0,06	-1%
Lithuania	4,46	0,74	4,46	0,66	0,00	0%
UK	4,34	0,70	4,31	0,82	-0,03	-1%
Total	4,44	0,68	4,39	0,71	-0,05	-1%

Table 30 Mean values and standard deviations on "Saving energy means I have to live less comfortably" statement - total sample and per country

Saving energy means I have to live less comfortably						
	Baseline		Follow-up		Change in mean value	% change in mean value
	mean	SD	mean	SD		
Cyprus	2,50	2,12	3,00	1,41	0,50	20%
Greece	2,31	0,79	2,19	0,66	-0,13	-5%
Lithuania	2,59	0,99	2,82	1,09	0,24	9%
UK	2,67	0,92	2,88	1,05	0,21	8%
Total	2,56	0,94	2,73	1,03	0,16	6%

Table 31 Mean values and standard deviations on "I feel jointly responsible for the exhaustion of energy sources" statement - total sample and per country

I feel jointly responsible for the exhaustion of energy sources						
	Baseline		Follow-up		Change in mean value	% change in mean value
	mean	SD	mean	SD		
Cyprus	2,50	2,12	2,50	0,71	0,00	0%
Greece	3,88	0,89	3,75	0,86	-0,13	-3%
Lithuania	4,60	0,91	4,69	0,76	0,09	2%
UK	4,00	0,61	3,97	0,88	-0,03	-1%
Total	4,19	0,91	4,19	0,94	0,00	0%

Table 32 Mean values and standard deviations on "Saving energy is too much of a hassle" statement - total sample and per country

Saving energy is too much of a hassle						
	Baseline		Follow-up		Change in mean value	% change in mean value
	mean	SD	mean	SD		
Cyprus	2,00	1,41	2,50	0,71	0,50	25%
Greece	2,06	0,68	2,06	0,44	0,00	0%
Lithuania	2,26	0,61	2,40	0,77	0,14	6%
UK	2,24	0,71	2,33	0,96	0,09	4%
Total	2,21	0,67	2,31	0,80	0,10	5%

Table 33 Mean values and standard deviations on "I can reduce my energy use quite easily" statement - total sample and per country

I can reduce my energy use quite easily						
	Baseline		Follow-up		Change in mean value	% change in mean value
	mean	SD	mean	SD		
Cyprus	4,50	0,71	4,00	0,00	-0,50	-11%
Greece	3,38	0,72	3,25	0,77	-0,13	-4%
Lithuania	3,66	1,00	3,91	0,89	0,26	7%
UK	3,48	0,83	3,70	0,81	0,21	6%
Total	3,56	0,89	3,71	0,85	0,15	4%

Table 34 Mean values and standard deviations on "Everyone including myself is responsible for climate change" statement - total sample and per country

Everyone including myself is responsible for climate change						
	Baseline		Follow-up		Change in mean value	% change in mean value
	mean	SD	mean	SD		
Cyprus	4,50	0,71	4,00	0,00	-0,50	-11%
Greece	4,31	0,60	4,19	0,66	-0,13	-3%
Lithuania	4,71	0,52	4,51	0,78	-0,20	-4%
UK	4,52	0,76	4,48	0,62	-0,03	-1%
Total	4,56	0,64	4,43	0,70	-0,13	-3%

Table 35 Mean values and standard deviations on "Most people who are important to me try to pay attention to their energy use" statement - total sample and per country

Most people who are important to me try to pay attention to their energy use						
	Baseline		Follow-up		Change in mean value	% change in mean value
	mean	SD	mean	SD		
Cyprus	3,00	1,41	3,00	1,41	0,00	0%
Greece	3,06	0,77	3,00	0,73	-0,06	-2%
Lithuania	3,20	0,93	3,26	0,98	0,06	2%
UK	3,39	0,97	3,82	0,81	0,42	13%
Total	3,24	0,92	3,42	0,93	0,17	5%

Table 36 Mean values and standard deviations on "I feel morally obliged to save energy, regardless of what others do" statement - total sample and per country

I feel morally obliged to save energy, regardless of what others do						
	Baseline		Follow-up		Change in mean value	% change in mean value
	mean	SD	mean	SD		
Cyprus	5,00	0,00	3,50	0,71	-1,50	-30%
Greece	4,38	0,72	4,31	0,60	-0,06	-1%
Lithuania	3,91	1,04	4,00	0,97	0,09	2%
UK	4,27	0,67	4,45	0,51	0,18	4%
Total	4,16	0,87	4,22	0,77	0,06	1%

Table 37 Mean values and standard deviations on "I intend to try harder to reduce my energy use the next academic year compared to this academic year" statement - total sample and per country

I intend to try harder to reduce my energy use the next academic year compared to this academic year						
	Baseline		Follow-up		Change in mean value	% change in mean value
	mean	SD	mean	SD		
Cyprus	4,00	1,41	3,50	0,71	-0,50	-13%
Greece	4,25	0,58	4,31	0,60	0,06	1%
Lithuania	4,06	0,73	4,14	0,81	0,09	2%
UK	4,12	0,74	4,30	0,64	0,18	4%
Total	4,12	0,71	4,22	0,71	0,10	3%

3.8 Importance of criteria when choosing home appliances

Respondents were asked to select the three most important criteria when choosing home appliances from a list provided to them. Findings are summarized in Figure 7 and presented in more detail in Table 38 - Table 40.

At the beginning of the academic year, according to the baseline survey, 82% of those surveyed stated that "Cost of appliance" was their most important criterion when choosing home appliances followed by "Functionality of the appliance" (78%) and "Energy efficiency and /or energy certification score of the appliance" (78%). In Cyprus and Greece, "Cost of appliance" was the most important criterion when choosing home appliances while in the UK "Design of the appliance" and "Functionality of the appliance" were the top criteria. In Lithuania, "Energy efficiency and /or energy certification score of the appliance" was reported by the respondents as the most important criterion.

The end of year results show that almost all (92%) of the respondents placed "Cost of the appliance" first in the rank. Seventy-seven percent of the respondents placed "Functionality of the appliance" second in the rank while "Energy efficiency and /or energy certification score of the appliance" (63%) remains third. In Cyprus, Greece and Lithuania, "Cost of appliance" was the most important criterion when choosing home appliances. In the UK, the top position is equally shared between the "Cost of appliance" and the "Functionality of the appliance" criteria.

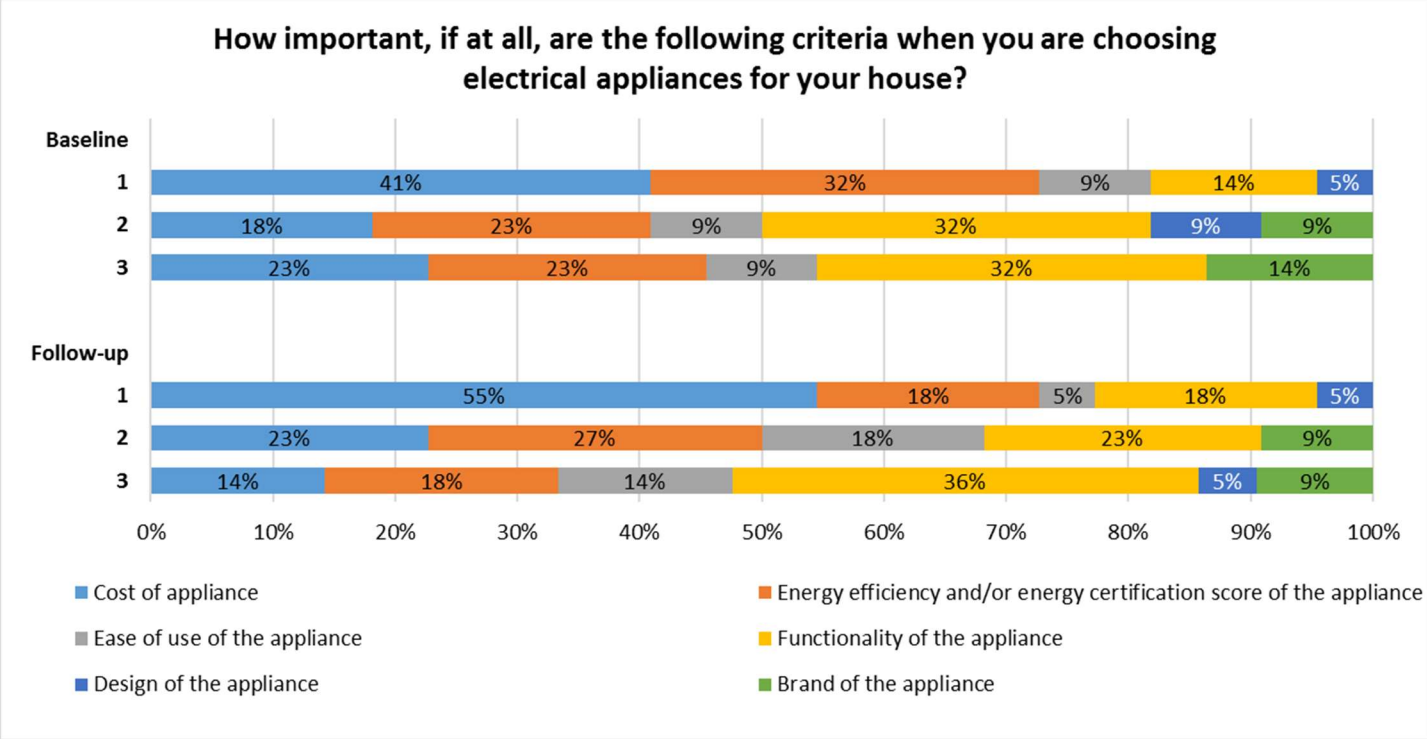

Figure 7 Importance of criteria when choosing home appliances - Total sample

Table 38 Most important criterion when choosing home appliances – total sample and per country

RANK 1		Cyprus	Greece	Lithuania	UK	Total
Cost of appliance	**Follow-up**	100,0%	50,0%	53,3%	50,0%	54,5%
	Baseline	100,0%	75,0%	33,3%	0,0%	40,9%
	difference from baseline	0,0%	-25,0%	20,0%	50,0%	13,6%
Energy efficiency and/or	**Follow-up**	0,0%	25,0%	20,0%	0,0%	18,2%

RANK 1		Cyprus	Greece	Lithuania	UK	Total
energy certification score of the appliance	**Baseline**	0,0%	0,0%	46,7%	0,0%	31,8%
	difference from baseline	0,0%	25,0%	-26,7%	0,0%	-13,6%
Ease of use of the appliance	**Follow-up**	0,0%	0,0%	6,7%	0,0%	4,5%
	Baseline	0,0%	25,0%	6,7%	0,0%	9,1%
	difference from baseline	0,0%	-25,0%	0,0%	0,0%	-4,5%
Functionality of the appliance	**Follow-up**	0,0%	25,0%	13,3%	50,0%	18,2%
	Baseline	0,0%	0,0%	13,3%	50,0%	13,6%
	difference from baseline	0,0%	25,0%	0,0%	0,0%	4,5%
Design of the appliance	**Follow-up**	0,0%	0,0%	6,7%	0,0%	4,5%
	Baseline	0,0%	0,0%	0,0%	50,0%	4,5%
	difference from baseline	0,0%	0,0%	6,7%	-50,0%	0,0%
Brand of the appliance	**Follow-up**	0,0%	0,0%	0,0%	0,0%	0,0%
	Baseline	0,0%	0,0%	0,0%	0,0%	0,0%
	difference from baseline	0,0%	0,0%	0,0%	0,0%	0,0%

Table 39 Second most important criterion when choosing home appliances - total sample and per country

RANK 2		Cyprus	Greece	Lithuania	UK	Total
Cost of appliance	**Follow-up**	0,0%	0,0%	26,7%	50,0%	22,7%
	Baseline	0,0%	0,0%	26,7%	0,0%	18,2%
	difference from baseline	0,0%	0,0%	0,0%	50,0%	4,5%
Energy efficiency and/or energy certification score of the appliance	**Follow-up**	0,0%	25,0%	33,3%	0,0%	27,3%
	Baseline	0,0%	50,0%	20,0%	0,0%	22,7%
	difference from baseline	0,0%	-25,0%	13,3%	0,0%	4,5%
Ease of use of the appliance	**Follow-up**	100,0%	25,0%	6,7%	50,0%	18,2%
	Baseline	0,0%	25,0%	6,7%	0,0%	9,1%
	difference from baseline	100,0%	0,0%	0,0%	50,0%	9,1%
Functionality of the appliance	**Follow-up**	0,0%	50,0%	20,0%	0,0%	22,7%
	Baseline	100,0%	25,0%	33,3%	0,0%	31,8%
	difference from baseline	-100,0%	25,0%	-13,3%	0,0%	-9,1%
Design of the appliance	**Follow-up**	0,0%	0,0%	0,0%	0,0%	0,0%
	Baseline	0,0%	0,0%	6,7%	50,0%	9,1%
	difference from baseline	0,0%	0,0%	-6,7%	-50,0%	-9,1%
Brand of the appliance	**Follow-up**	0,0%	0,0%	13,3%	0,0%	9,1%
	Baseline	0,0%	0,0%	6,7%	50,0%	9,1%
	difference from baseline	0,0%	0,0%	6,7%	-50,0%	0,0%

Table 40 Third most important criterion when choosing home appliances - total sample and per country

RANK 3		Cyprus	Greece	Lithuania	UK	Total
Cost of appliance	**Follow-up**	0,0%	50,0%	6,7%	0,0%	13,6%
	Baseline	0,0%	25,0%	20,0%	50,0%	22,7%
	difference from baseline	0,0%	25,0%	-13,3%	-50,0%	-9,1%
Energy efficiency and/or energy certification score of the appliance	**Follow-up**	100,0%	25,0%	13,3%	0,0%	18,2%
	Baseline	100,0%	25,0%	20,0%	0,0%	22,7%
	difference from baseline	0,0%	0,0%	-6,7%	0,0%	-4,5%
Ease of use of the appliance	**Follow-up**	0,0%	25,0%	13,3%	0,0%	13,6%
	Baseline	0,0%	0,0%	13,3%	0,0%	9,1%
	difference from baseline	0,0%	25,0%	0,0%	0,0%	4,5%
Functionality of the appliance	**Follow-up**	0,0%	0,0%	46,7%	50,0%	36,4%
	Baseline	0,0%	25,0%	40,0%	0,0%	31,8%
	difference from baseline	0,0%	-25,0%	6,7%	50,0%	4,5%
Design of the appliance	**Follow-up**	0,0%	0,0%	6,7%	0,0%	4,5%
	Baseline	0,0%	0,0%	0,0%	0,0%	0,0%
	difference from baseline	0,0%	0,0%	6,7%	0,0%	4,5%
Brand of the appliance	**Follow-up**	0,0%	0,0%	6,7%	50,0%	9,1%
	Baseline	0,0%	25,0%	6,7%	50,0%	13,6%
	difference from baseline	0,0%	-25,0%	0,0%	0,0%	-4,5%

3.9 Awareness on smart meters

Respondents were asked if they had heard of smart meters before. The results are shown in Figure 8. At the beginning of the academic year, less than half of the respondents (49% of the total sample) had heard of smart meters before. At the end of the academic year this share was higher by 11 percentage points (60% of respondents).

In all countries, except for Cyprus, respondents stated in both surveys that they had heard of smart meters before. It is expected though for respondents from Cyprus to not be so familiar with smart because they have not been rolled out in the country yet. The follow up shares in Greece, Lithuania and the UK are higher than in baseline suggesting an increase in the awareness of students about smart meters. The highest share of respondents who had heard of smart meters before was recorded in the UK. According to the baseline survey, 67% of the UK respondents reported that they had heard of smart meters before while by the end of the academic year this share reached 82%.

In Lithuania, more than half (57%) of the respondents had not heard of smart meters at the beginning of the academic year. However, by the end of the academic year, more than half of the respondents had heard of smart meters (51%) which is positive.

In Greece, a 13-percentage point increase from the baseline survey is recorded. At the end of the academic year, 44% of the respondents stated that they had heard of smart meters before. On the other hand, none of the respondents in Cyprus had heard of smart meters before either in the baseline or in the follow up survey probably because smart meters have not been rolled out in Cyprus yet and therefore people are not familiar with them.

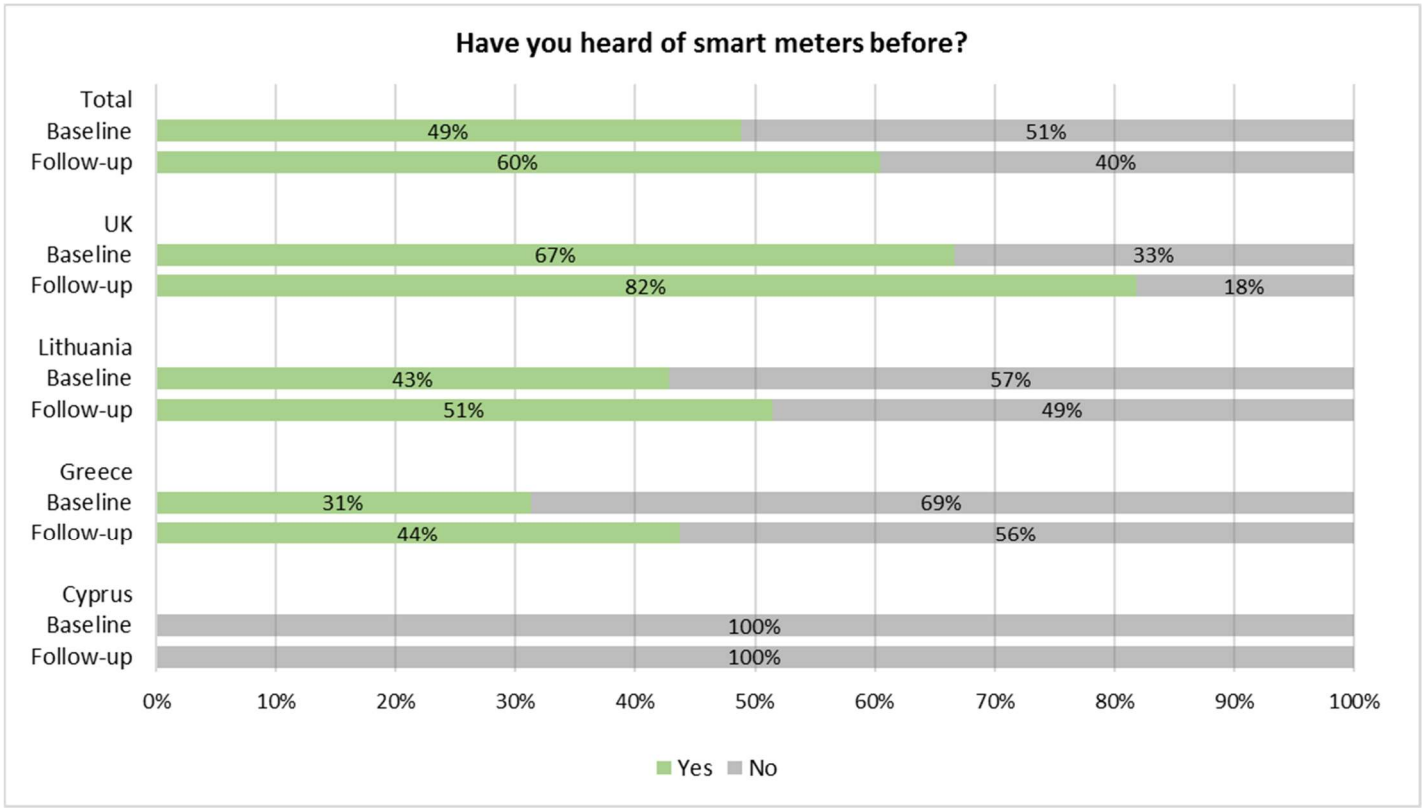

Figure 8 Awareness of smart meters - Total sample and per country

Table 41 Awareness of smart meters - total sample and per country

Have you heard of smart meters before?		Cyprus	Greece	Lithuania	UK	Total
Yes	**Follow-up**	0,0%	43,8%	51,4%	81,8%	60,5%
	Baseline	0,0%	31,3%	42,9%	66,7%	48,8%
	difference from baseline	0,0%	12,5%	8,5%	15,1%	11,7%
No	**Follow-up**	100,0%	56,3%	48,6%	18,2%	39,5%
	Baseline	100,0%	68,8%	57,1%	33,3%	51,2%
	difference from baseline	0,0%	-12,5%	-8,5%	-15,1%	-11,7%

3.10 Penetration of smart meters

Respondents were asked if they had a smart meter in their current accommodation. This question was not applicable to participants who replied negatively in the question "Have you heard of smart meters before". The results are illustrated in Figure 9.

At the beginning of the academic year, almost one third of the respondents (32%) who stated that they had heard of smart meters before, had a smart meter in their accommodation at that time. Fifty one percent of the respondents reported that they did not have a smart meter, however, 40% of all respondents stated that they would like to have one. Furthermore, 17% didn't know if they had a smart meter installed in their house.

At the end of the academic year the share of those surveyed that had a smart meter in their accommodation is higher (40%) than at the beginning of the academic year. On the other hand, 54% of the participants in the follow up survey, reported that they don't have a smart meter but 34% of those surveyed would like to have one. Eventually, the share of those who don't know if they have a smart meter in their current accommodation (6%) is lower than in the baseline survey.

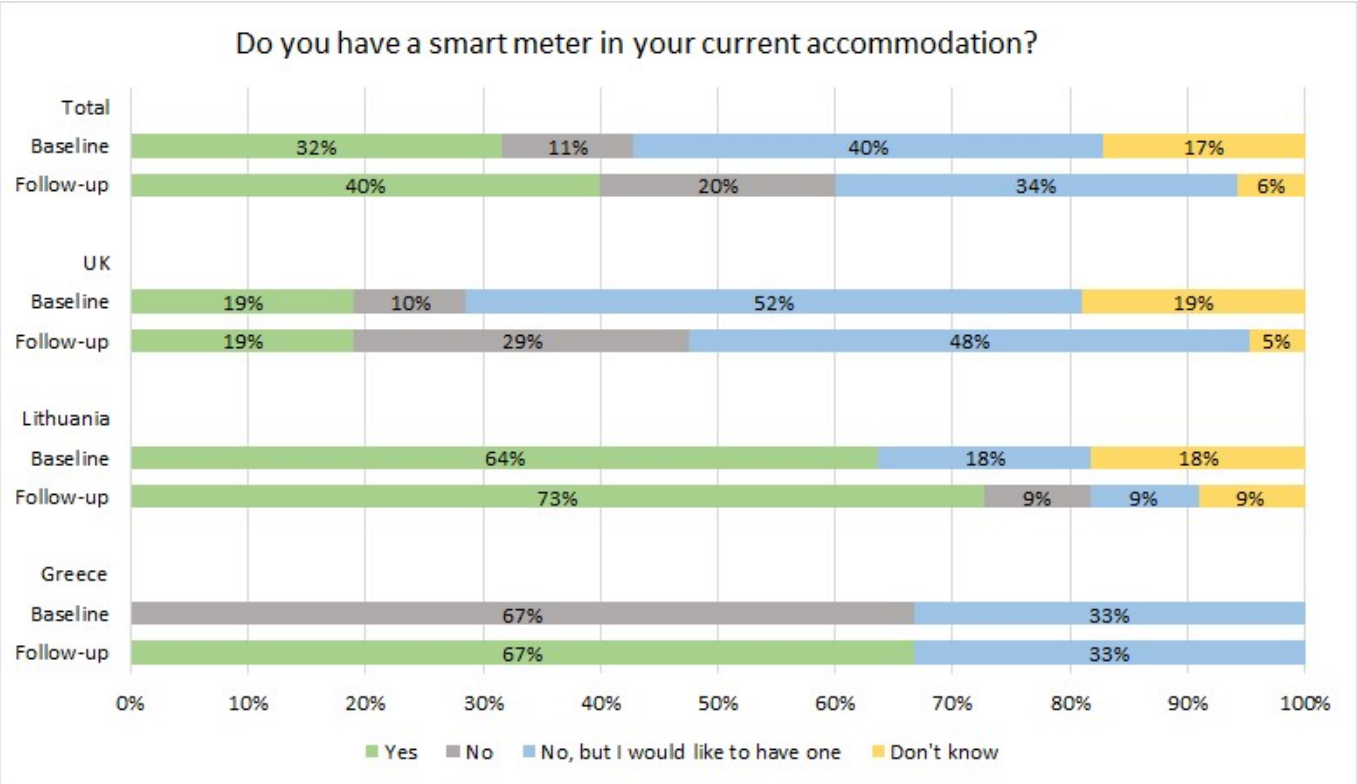

Figure 9 Presence of smart meters in respondents' accommodation - Total sample and per country

According to the results of the follow up survey, in Greece two of the respondents stated that they had a smart meter while a third reported that they would like to have one. At the beginning of the academic year, none of those questioned stated that they had a smart meter. Two respondents stated that they did not have one, and one stated that he would like to have one.

In Lithuania, most of the respondents who had heard of smart meters before also had a smart meter installed in their accommodation (73%). There is a change of 9% observed between the two surveys on the respondents who answered positively to this question. However, in the follow up survey, more respondents (9%) than in the baseline survey (0%) stated that they don't have a smart meter. Moreover, in the follow up survey, less respondents reported that they would like to have one (9%).

For the UK, in both surveys, less than half of those who had heard of smart meters before had a smart meter in their house. However, at the end of the academic year, more respondents than at the beginning (40% instead of 31%) stated that they didn't have a smart meter in their accommodation. At the end of the academic year, 34% of the respondents stated that they would like to have a smart meter in their homes while at the beginning of the academic year this share was equal to 40%. Finally, a reduction of those who stated "Don't know" in the baseline survey (17%) is observed in the follow up survey (6%).

Table 42 Presence of smart meters in respondents' accommodation - total sample and per country

Do you have a smart meter in your current accommodation?		**Greece**	**Lithuania**	**UK**	**Total**
Yes	**Follow-up**	66,7%	72,7%	19%	40%
	Baseline	0,0%	63,6%	19%	31,6%

Do you have a smart meter in your current accommodation?		Greece	Lithuania	UK	Total
	difference from baseline	66,7%	9,1%	0,0%	8,6%
No	**Follow-up**	0,0%	9,1%	28,6%	20,0%
	Baseline	66,7%	0,0%	9,5%	11,3%
	difference from baseline	-66,7%	9,1%	19,1%	8,6%
No, but I would like to have one	**Follow-up**	33,3%	9,1%	47,6%	34,3%
	Baseline	33,3%	18,2%	52,4%	40,0%
	difference from baseline	0,0%	-9,1%	-4,8%	-5,7%
Don't know	**Follow-up**	0,0%	9,1%	4,8%	5,7%
	Baseline	0,0%	18,2%	19%	17,1%
	difference from baseline	0,0%	-9,1%	-14,2%	-11,4%

3.11 Shared opinions on smart metering

Respondents were asked about the level of agreement, if at all, with given statements with respect to smart meters. Results are summarised in Table 43 to Table 47 for each country and in Figure 10 for the total number of respondents. Results are on a 1 to 5 scale (1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly agree). Mean values over 3.5 indicate agreement with the statement. This question was not applicable to participants who replied negatively in the question "Have you heard of smart meters before".

In all countries, respondents in both surveys agreed on three out of five statements (Table 43). They agreed on that a) "Smart meters are an efficient way of monitoring the energy consumption of my house", b) "Smart meters can help me to save money on my energy bills" and, c) "Smart meters provide real time data".

In Greece, according to the follow up survey, respondents agreed the most (4,67± 0,58) that smart meters are an efficient way of monitoring the energy consumption of their houses. The change in mean value, between the baseline (4,33± 0,58) and the follow up survey is +0.34. On the contrary, respondents from Greece almost neither agreed nor disagreed (3,33± 2,08) that "smart meters make life easier by taking away the hassle of meter reads and estimated bills". In this case, the mean value increased by one unit (+1,0) compared to the baseline survey.

Respondents from Lithuania mostly agreed (4,27 ±0,65) that "Smart meters are an efficient way of monitoring the energy consumption of my house". Compared to the baseline survey, an increase of 0.18 decimal units in the mean value is observed. In contrast, a lower level of agreement (3,82 ±0,75) is reported on the statement "Smart meters make my energy easy to understand and control". An almost negligible reduction of 0,09 units in mean value is recorded for the last statement.

By the end of the academic year, participants from the UK agreed the most (4,43±0,68) with the statement "Smart meters are an efficient way of monitoring the energy consumption of my house". A +0,24 change in mean value is recorded compared to the baseline survey (4,19±0,75). On the other hand, the statement "Smart meters can help me save money on my energy bills" records the lowest levels of agreement (4,00±0,95). The observed change in mean value compared to the baseline survey is -0,10.

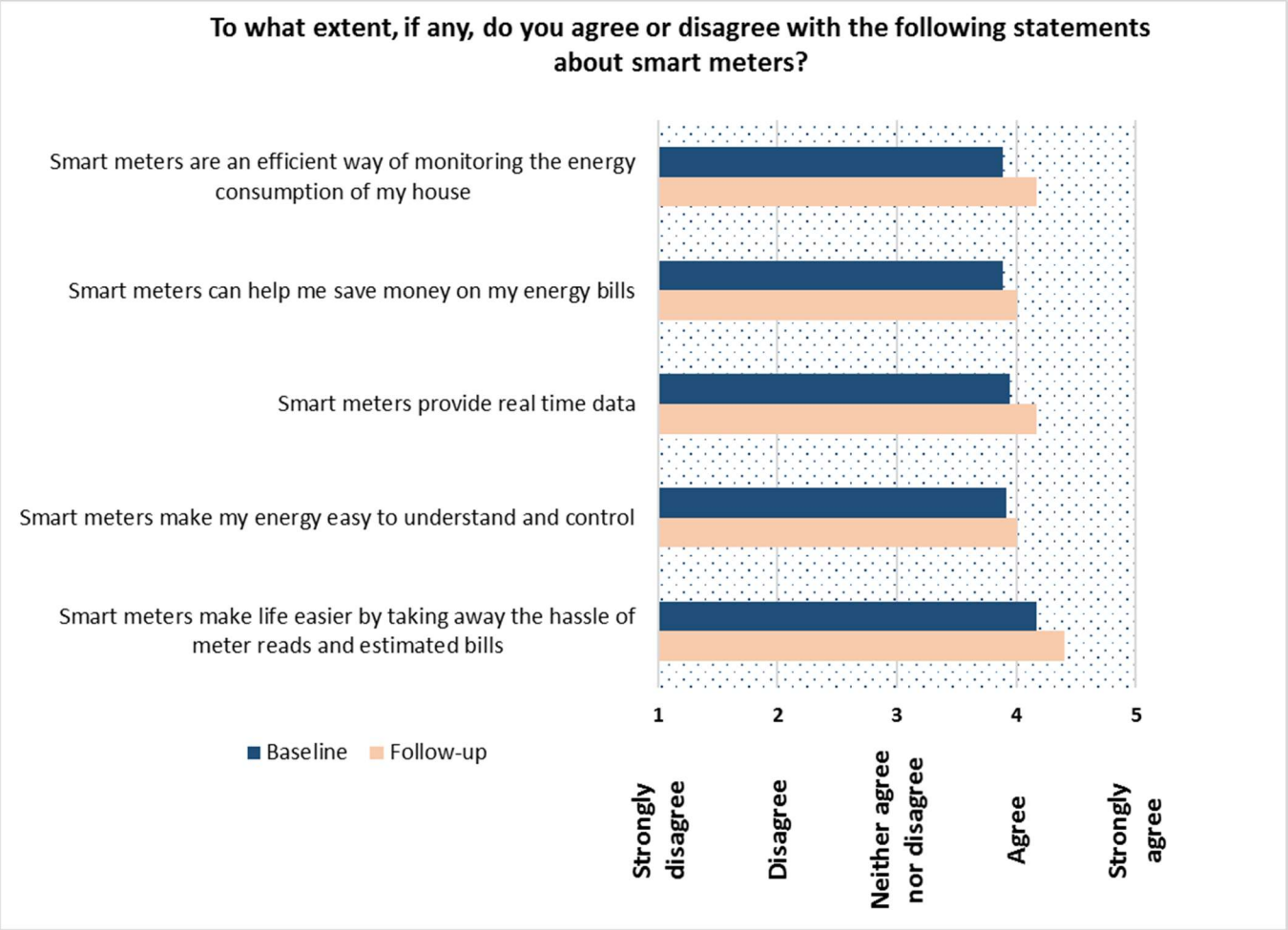

Figure 10 Shared opinions about smart meters - Total sample

Table 43 Mean values and standard deviations on "Smart meters are an efficient way of monitoring the energy consumption of my house" statement - total sample and per country

Smart meters are an efficient way of monitoring the energy consumption of my house						
	Baseline		Follow-up		Change in mean value	% change in mean value
	mean	SD	mean	SD		
Greece	4,33	0,58	4,67	0,58	0,34	8%
Lithuania	4,09	0,83	4,27	0,65	0,18	4%
UK	4,19	0,75	4,43	0,68	0,24	6%
Total	4,17	0,75	4,40	0,65	0,23	5%

Table 44 Mean values and standard deviations on "Smart meters can help me to save money on my energy bills" statement - total sample and per country

Smart meters can help me save money on my energy bills						
	Baseline		Follow-up		Change in mean value	% change in mean value
	mean	SD	mean	SD		
Greece	3,67	0,58	4,33	0,58	0,67	18%
Lithuania	3,64	0,50	3,91	0,83	0,27	8%
UK	4,10	0,77	4,00	0,95	-0,10	-2%
Total	3,91	0,70	4,00	0,87	0,09	2%

Table 45 Mean values and standard deviations on "Smart meters provide real time data" statement - total sample and per country

Smart meters provide real time data						
	Baseline		Follow-up		Change in mean value	% change in mean value
	mean	SD	mean	SD		
Greece	3,67	0,58	3,67	1,15	0,00	0%
Lithuania	3,82	0,75	4,09	0,70	0,27	7%
UK	4,05	0,80	4,29	0,64	0,24	6%
Total	3,94	0,76	4,17	0,71	0,23	6%

Table 46 Mean values and standard deviations on "Smart meters make my energy easy to understand and control" statement - total sample and per country

Smart meters make my energy easy to understand and control						
	Baseline		Follow-up		Change in mean value	% change in mean value
	mean	SD	mean	SD		
Greece	3,00	1,00	3,67	1,53	0,67	22%
Lithuania	3,91	0,54	3,82	0,75	-0,09	-2%
UK	4,00	0,73	4,15	0,49	0,15	4%
Total	3,88	0,73	4,00	0,70	0,12	3%

Table 47 Mean values and standard deviations on "Smart meters make life easier by taking away the hassle of meter reads and estimated bills" statement - total sample and per country

Smart meters make life easier by taking away the hassle of meter reads and estimated bills						
	Baseline		Follow-up		Change in mean value	% change in mean value
	mean	SD	mean	SD		
Greece	2,33	1,15	3,33	2,08	1,00	43%
Lithuania	4,00	0,63	4,18	0,60	0,18	5%
UK	4,05	0,67	4,29	0,72	0,24	6%
Total	3,89	0,83	4,17	0,86	0,29	7%

3.12 Knowledge of Energy Performance Certificate (EPC)

Respondents were asked if they had heard of Energy Performance Certificates (EPC) before. The results are shown in Figure 11 and Table 48.

At the beginning of the academic year, less than half of the respondents (44% of the total sample) had heard of an EPC before. At the end of the academic year this share was higher by 36 percentage points which is positive. According to the follow up survey, at the end of the academic year, 80% of total respondents had heard of an EPC.

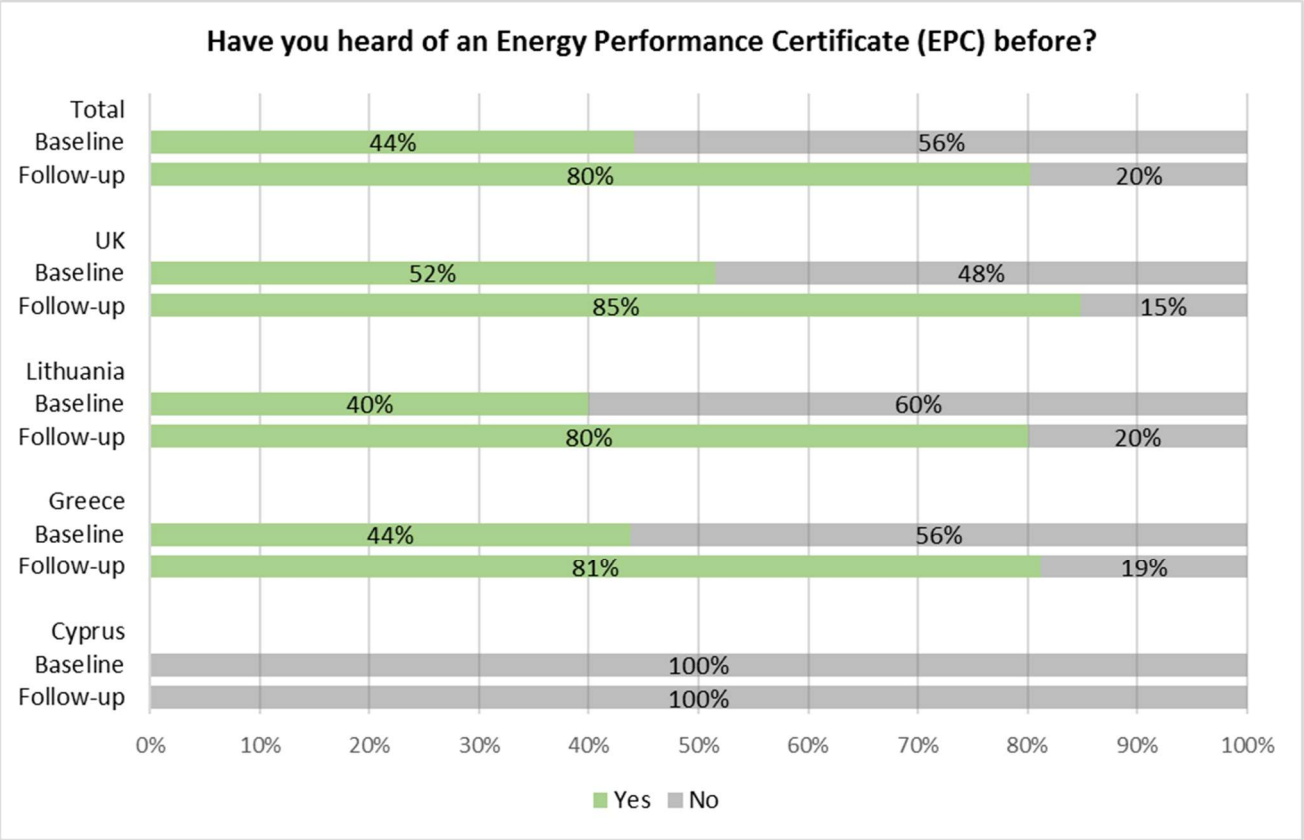

Figure 11 Awareness of Energy Performance Certificate - Total sample and per country

In all countries except for Cyprus, respondents stated in both surveys that they had heard of EPCs before. Interestingly, the follow up shares are more than 30% higher than in baseline for every country apart from Cyprus. The highest shares of respondents who had heard of EPCs before the baseline survey are recorded in the UK (52%). By the end of the academic year this share reached 85%.

In Lithuania, 60% of the respondents had not heard of EPCs at the beginning of the academic year. However, this situation is reversed in the follow up survey where 80% of the respondents stated that they had heard of EPCs before.

In Greece, a 37-percentage point increase from the baseline survey is recorded at the end of the year. At the end of the academic year, 81% of the respondents stated that they had heard of an EPC before compared to 44% at the beginning. On the other hand, none of the respondents in Cyprus had heard of EPCs before either in the baseline or in the follow up survey.

Table 48 Awareness of Energy Performance Certificate - total sample and per country

Have you heard of an Energy Performance Certificate (EPC) before?		Cyprus	Greece	Lithuania	UK	Total
Yes	Follow-up	0,0%	81,3%	80,0%	84,8%	80,2%
	Baseline	0,0%	43,8%	40,0%	51,5%	44,2%
	difference from baseline	0,0%	37,5%	40,0%	33,3%	36,0%
No	Follow-up	100,0%	18,8%	20,0%	15,2%	19,8%
	Baseline	100,0%	56,3%	60,0%	48,5%	55,8%
	difference from baseline	0,0%	-37,5%	-40,0%	-33,3%	-36,0%

3.13 Energy Performance Certificate as a criterion when selecting next accommodation

Respondents were asked whether they will take the Energy Performance Certificate score into account when choosing their next accommodation. This question was not applicable to participants who replied negatively in the question "Have you heard of an Energy Performance Certificate (EPC) before". The results are illustrated in Figure 12.

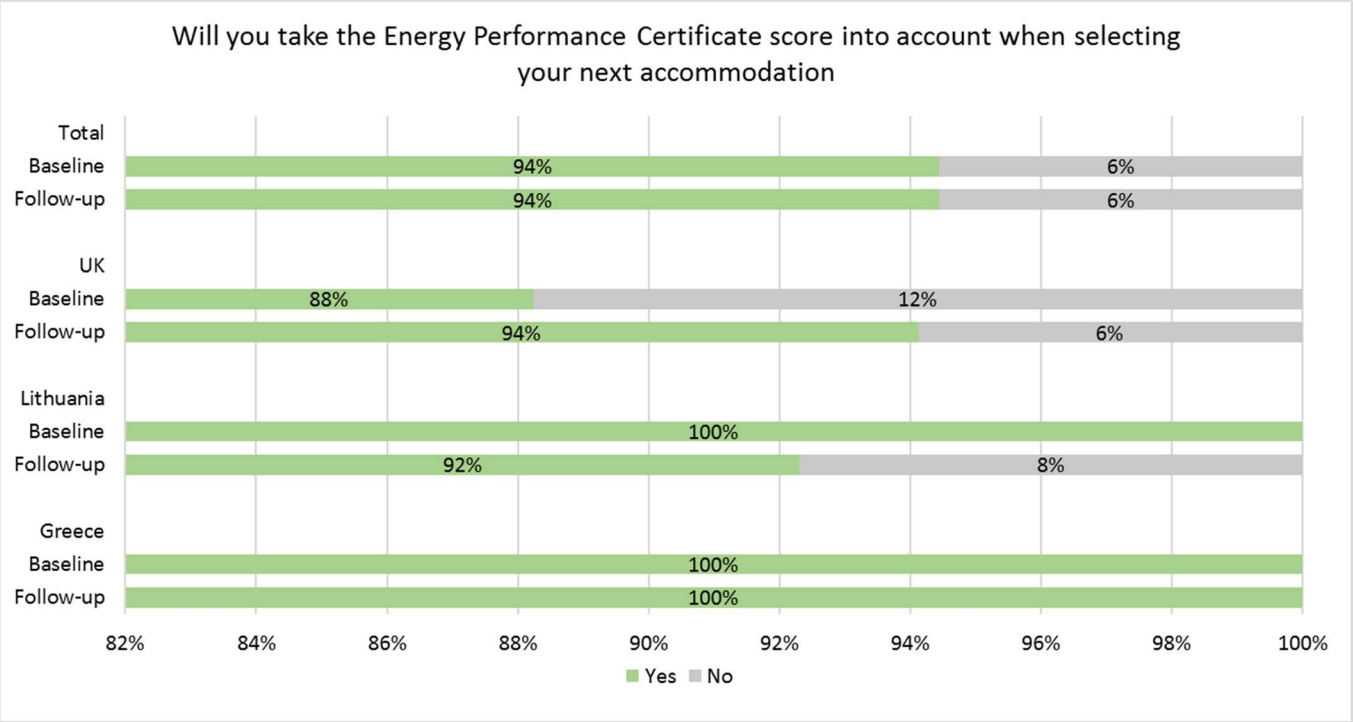

Figure 12 Energy Performance Certificate as a criterion when selecting next accommodation - total sample and per country

Ninety four percent of those who had heard of an EPC before, at the end of the academic year stated that they will take the EPC score into account when selecting their next accommodation. This share remained stable between the two surveys.

In the UK, at the end of the academic year more respondents stated that they will take the EPC score into account when selecting their next accommodation (94%) than in the beginning of (88%). In Lithuania, these shares were 92% and 100% respectively.

In Greece 100% of the respondents stated at the end of the academic year that they will take the EPC score into account when selecting their next accommodation. Also, in the baseline survey, all of them would have taken it into account.

Table 49 Energy Performance Certificate as criterion when selecting next accommodation - total sample and per country

Will you take, the Energy Performance Certificate score into account when selecting your next accommodation?		**Greece**	**Lithuania**	**UK**	**Total**
Yes	**Follow-up**	100,0%	92,3%	94,1%	94,4%
	Baseline	100,0%	100,0%	88,2%	94,4%
	difference from baseline	0,0%	-7,7%	5,9%	0,0%
No	**Follow-up**	0,0%	7,7%	5,9%	5,6%
	Baseline	0,0%	0,0%	11,8%	5,6%
	difference from baseline	0,0%	7,7%	-5,9%	0,0%

4 Discussion and Conclusions

The impact of the SSO+ campaign was evaluated through the level of increased energy awareness; namely on smart meters and on housing choices that can minimize exposure to fuel poverty. Changes in the awareness levels of respondents were evaluated through pre- (baseline) and post-intervention (follow-up) questionnaire surveys.

Respondents to the follow-up survey, were matched with the respondents of the baseline survey through their email or name in order to be included in the pre- post- comparison evaluation. A total of 86 respondents from four EU countries (Cyprus, Greece, Lithuania and the UK) were identified. Statistically, the responses to the survey are low so cannot be considered representative, however from a qualitative viewpoint they give valuable insights on the impact the Student Switch Off+ information campaign has had on students and on the aspects of the campaign that could be improved the next academic year (2018-19) in the full roll-out of the campaign. It is noted that in Cyprus significant changes are observed in a number of variables, however, this is mainly attributed to the very small sample size (two matched respondents) rather than to more significant changes compared to the other countries.

The Student Switch Off+ (SSO+) campaign provided information and advice on energy saving to students who lived in private accommodation. Information involved tips for saving energy at home, Energy Performance Certificates, energy efficiency and smart energy meters. Evidence of the research presented in this report suggests that a good proportion of students retained some of the messages of the campaign.

Overall, the level of information respondents felt that they have about their energy consumption, the energy saving measures they can adopt along with the relevant impacts and their choices and rights as energy costumers, is low to moderate and kept almost stable within the period of the two surveys. This suggests great potential for the SSO+ campaign to increase the energy awareness of students further and emerge as a major source of influence on energy efficiency.

Sources of information

Results show that a noteworthy change in the sources from which respondents got information about energy saving occurred through the year. A significant proportion of students who at the beginning of the academic year received the information from their friends (-6% change from baseline), families (-3%) or local/national authorities (-4%), at the end of the year stated that they received such information from their universities (+9%) or their students' unions (+4%), the main organizations that run the SSO+ campaign.

At the end of the academic year, universities played the most important role in the communication of advice and support to students in the private accommodation sector helping them to be more energy efficient in their behaviors and understand their energy bills. In all countries, the role of universities as sources of information was improved with the majority of the respondents (49%) reporting that over the last six months, they had received information or advice about energy saving from their university.

SSO+ overall contribution to improving living conditions

The Student Switch Off+ campaign provided information and advice on housing choices that can minimize exposure to fuel poverty. The campaign has been effective in delivering advice on increasing energy efficiency in numerous commonly undertaken practices as well as advice on specific actions that can reduce the energy costs. At the end of the academic year, the evidence suggests that students feel more empowered about their effective energy use. This is highlighted through the fact that at the end of the academic year, 60% of the total respondents, described their feelings about saving energy in a positive manner (+2% change from baseline) using words such as "Optimistic", "Proud", Content" or "Relaxed". Moreover, respondents were in a stronger agreement on that they can reduce their energy use easier than they did at the beginning of the academic year and they intend to try harder to reduce their energy use the next academic year compared to this academic year.

Energy practices

Overall, the actions respondents took more often at the end of the academic year compared to the beginning were: "Switch off lights and appliances when not in use", "Take showers rather than baths" and "Allow food to

cool down before putting it to fridge". In individual countries, significant changes (increase in frequency the action was performed) were found in the frequency that the 'right amount of water is boiled in the kettle'.

The action performed more often at the end of the academic year than at the beginning in Cyprus, Lithuania and the UK is that of trying to 'reduce the temperature by opening windows before using a cooling device'. In Greece, the action performed more frequently at the end of the academic year is that of 'washing clothes only when having a full load'.

The least performed action in Cyprus, Greece and the UK is that of 'microwaving rice instead of boiling it'. In Lithuania, 'tumble drying clothes rather than leaving them dry naturally' is the action taken the least frequently.

Actions taken to reduce energy costs

At the end of the academic year respondents appeared more active in reducing their energy costs. The majority (57%) of those surveyed in the follow-up survey reported that they took actions to reduce their energy usage. This share, at the beginning of the academic year was 44% so an increase of 13 percentage points is recorded.

Interestingly, the share of respondents who wore outdoor wear (e.g hat/scarf/coat/gloves) or more clothes to keep warm in their homes is lower at the end of the academic year (53%) compared to the beginning (55%) and this action records a small change between the two surveys (total sample). However, in Cyprus, Greece and the UK wearing extra clothes is the most common action taken to reduce energy costs, whereas in Lithuania, taking actions to reduce energy usage is the most common.

In Greece the share of those who approached their landlord to buy more energy efficient appliances, or bought some themselves, increased by +37 percentage points. In Lithuania, the share of those who wore more clothes to keep warm in their home decreased by -12 percentage points. In the UK, the share of those who took actions to reduce their energy usage increased by +32 percentage points.

Shared opinions on energy use

In Greece, respondents agreed the most that energy conservation contributes to a reduction of climate change impacts. In Lithuania respondents agreed the most with the statement "I feel jointly responsible for the exhaustion of energy sources". In the UK and Cyprus, respondents mostly agreed on that "everyone including myself is responsible for climate change". On the other hand, in all countries, the statement "saving energy is too much of a hassle" records the lowest levels of agreement. In every statement, the changes observed in the total sample between the baseline and the follow up survey are almost negligible.

Criteria when choosing appliances

Clearly, energy efficiency is at the expense of the cost of the appliance, and as a result, respondents looked for affordable appliances instead of energy efficient ones. In both surveys, the most important criterion when choosing appliances in Cyprus and Greece was the cost of the appliance while in the UK the functionality of the appliance played a key role. In Lithuania, the top criterion was the cost of appliance however, the energy efficiency of the appliance seems to be a priority as well. It is worth noting that in Greece the criterion of energy efficiency, although not in the top, was selected by 25% more respondents at the end of the academic year.

Knowledge about Energy Performance Certificate (EPC)

A large increase in the knowledge about Energy Performance Certificates (EPC) is recorded. At the beginning of the academic year, less than half of the respondents (44% of the total sample) had heard of an EPC before. At the end of the academic year 80% had heard of an EPC, which is very encouraging.

At the end of the academic year, in Greece, Lithuania and the UK, a +37, +40, and +35 percentage point increase from the baseline survey is recorded respectively. The results indicate that the awareness of students living in private accommodation on EPCs has increased over the academic year.

Moreover, the percentage of respondents who will consider the EPC when selecting their next accommodation is encouraging. More than 90% of the respondents who had heard of the EPC before, in each country, stated that

they will take the EPC into account when selecting their next accommodation. However, in Lithuania this share is decreased by 8% compared to the baseline survey. In this case, the SSO+ campaign can have a positive impact by providing more targeted information on the benefits of EPCs to students.

Smart meters

There are also signs of improvement to students' awareness about smart meters and their use. As can be depicted from the analysis the awareness on smart meters significantly increased over the academic year. It is indicative that at the end of the academic year, 60% had heard of smart meters corresponding to a + 12 percentage points increase from the baseline survey. The changes for Greece, Lithuania and the UK are of +13, +8, +15 percentage points respectively. Moreover, an overall increase (+9% from baseline) in the use of smart meters is also observed. In Lithuania more respondents (+9% from baseline) stated that they have a smart meter in their current accommodation. In the UK, the share of respondents who use a smart meter remained stable throughout the academic year (19%) whereas in Greece two out of three respondents stated that they have a smart meter while the third respondent shows interest in acquiring a smart meter in his accommodation. In contrast, in Cyprus, none of the respondents have heard of smart meters probably because smart meters have not been rolled out in Cyprus yet and therefore people are not familiar with them.

Finally, the improvement of students' awareness about smart meters and their use is also suggested by the respondents' opinions about them. By the end of the academic year, respondents who had heard of smart meters before, in total, were more knowledgeable and open to smart meters than they were at the beginning of the academic year. In Greece, Lithuania and the UK, respondents mostly agreed that smart meters are an efficient way of monitoring the energy consumption of their house. Moreover, they also agreed on that smart meters can help them save money on their energy bills and that smart meters provide real time data. The results indicate that respondents at the end of the academic year were more familiar with smart meters than they used to be before the SSO+ campaign started.

Annex I

Number of matched respondents per question and per country				
	Cyprus	Greece	Lithuania	UK
How well informed do you feel about the following?	2	16	35	33
Over the last six months, from which of these sources have you received information/advice about energy-saving?	2	16	35	33
To what extent do you undertake the following actions?	2	16	35	33
Which of the following actions, if any, have you taken whilst in your current accommodation in order to reduce the cost of your energy bill?	2	16	35	33
Which of the following words best describes how you feel about saving energy?	2	16	35	33
Please consider each of the statements below and indicate to what extent you agree or disagree with it?	2	16	35	33
How important, if at all, are the following criteria when you are choosing electrical appliances for your house?	1	4	15	2
Have you heard of smart meters before?	2	16	35	33
Do you have a smart meter in your current accommodation?	0	3	11	21
To what extent, if any, do you agree or disagree with the following statements about the smart meters?	0	3	11	21
Have you heard of an Energy Performance Certificate (EPC) before?	2	16	35	33
Will you take, the Energy Performance Certificate score into account when selecting your next accommodation?	0	6	13	17