

Project funded by: Erasmus+ / Key Action 2 - Cooperation for innovation and the exchange of good practices, Strategic Partnerships for youth (European Commission, EACEA).



iDEA | Country Specific Report SLOVENIA

IDEA 2017-1-CY01-KA204-026725

IO1.A3

Funded by



Partners



FINANCED BY THE EUROPEAN UNION. THE EUROPEAN COMMISSION SUPPORT FOR THE PRODUCTION OF THIS PUBLICATION DOES NOT CONSTITUTE AND ENDORSEMENT OF THE CONTENTS WHICH REFLECTS THE VIEWS ONLY OF THE AUTHORS AND THE COMMISSION CANNOT BE HELD RESPONSIBLE FOR ANY USE WHICH MAY BE MADE OF THE INFORMATION CONTAINED THEREIN

Document Info

Deliverable Number	I01.A3
Deliverable Title	Country Specific Report
Intellectual Output Title	
Activity description	Document presents the analysis of existing tools, methods and educational practices in the areas relevant for energy poverty, identification of knowledge gaps in existing tools, relevant stakeholders in the area of energy poverty and adult education, and the training needs assessment in the area of energy poverty
Authors organization/partner	Focus Association for Sustainable development
Status (D: draft; RD: revised draft; F: final)	Final
Date (versioning)	02/02/2018 (v1)

Document History

Authors	Reviewer	Date	File suffix [Version.Revision]	Approval
FOCUS		02/02/2018	v1	Yes

Executive Summary:

Aim of this document is to present the analysis of existing tools, methods and educational practices in the areas relevant for energy poverty, identification of knowledge gaps in existing tools, relevant stakeholders in the area of energy poverty and adult education, and the training needs assessment in the area of energy poverty.

Purpose of the analysis and this document is to develop an up to date overview of quality learning practices relevant for the area of energy poverty, thereby improving the existing educational practices on the topic by highlighting the most participatory, innovative and efficient methods and practices that exist throughout Europe in order to make them available to the interested institutions dealing with training of adults, CSOs and other stakeholders.

In first part of the document, the tools and stakeholders identified in Slovenia are presented. The tools presented can be useful in the procedure of developing this project's specific tools. Their features and functionalities could be analysed and reinforced, as to design the new tools. Stakeholders can be valuable providing their advices, tips and help throughout the duration of the project, and some of them are already recognized as beneficiaries of the project results.

In second part of the document, results of the survey are presented. The questionnaire was sent and filled in by relevant stakeholders in Slovenia. Needs of the stakeholders were identified (issue of energy poverty and cooperation with different stakeholders) and most appropriate and suitable tools (online platform, practical activities, applications, educational material and workshops) and content (detecting energy poverty, practical training on implementation of energy advising, energy use of domestic devices and appliances, social security aspect, information about social and energy actors and schemes that can help energy poor households, communication training) selected by respondents.

Last section is devoted to Slovenian specifics on energy poverty. Most of the energy is spent on heating of rooms and water, totalling at more 80 % of the energy used in households. Majority of the housing stock is energy inefficient and in need of energy refurbishment, as almost 70 % of the dwellings are older than 30 years. There is still no official definition of energy poverty. Regarding ongoing programs and schemes for alleviation of energy poverty, Eco Fund is running ZERO program (free energy advising in energy poor households), and Ministry of Infrastructure is starting with their 5 million EUR worth program for implementation of infrastructural measures for improving energy efficiency in homes of energy poor households.

Contents

Introduction.....	5
About the project.....	5
1. Existing tools, methods and educational practices for trainings in the areas relevant for energy poverty.....	5
2. Relevant stakeholders in the area of energy poverty and adult education.....	8
3. Training needs assessment in the area of energy poverty.....	9
3.1 Understanding of energy poverty and involvement in the topic.....	10
3.2 Stakeholders' needs in the area of energy poverty.....	11
3.3 Households' needs in the area of energy poverty.....	12
3.4 Form of educational materials and tools on the topic of energy poverty....	13
3.5 Content of educational materials and tools on the topic of energy poverty	14
4. Country specifics on energy poverty.....	15

Introduction

Aim of this document is to present the analysis of existing tools, methods and educational practices in the areas relevant for energy poverty, identification of knowledge gaps in existing tools, relevant stakeholders in the area of energy poverty and adult education, and the training needs assessment in the area of energy poverty.

Purpose of the analysis and this document is to develop an up to date overview of quality learning practices relevant for the area of energy poverty, thereby improving the existing educational practices on the topic by highlighting the most participatory, innovative and efficient methods and practices that exist throughout Europe in order to make them available to the interested institutions dealing with training of adults, CSOs and other stakeholders.

About the project

IDEA (Innovative Direction in Energy Advising) project's purpose is to develop innovations in education about energy poverty. Main objective is to improve existing and develop new innovative educational methods and materials for adult training on energy poverty. The partnership consists of experienced organizations strategically placed in the most affected region regarding energy poverty - in Bulgaria, Croatia, Slovenia and Cyprus. Project is implemented by University of Cyprus, DOOR Society for Sustainable Development Design, Energy Agency Plovdiv and Focus Association for Sustainable Development. It is funded by Erasmus+ programme.

1. Existing tools, methods and educational practices for trainings in the areas relevant for energy poverty

No.	Name of the tool	Author/Institution	Short description of the tool	Format of the tool
1	REACH Textbook: Training course for energy advisers	FOCUS	The tool was used as a script for students - future energy advisers of REACH project. It focuses on all relevant elements, connected to energy poverty (energy use, energy efficiency, electricity, heating, water, communication aspect). It is one of the most relevant tools for IDEA project - as a theory guidebook.	Educational material (text)
2	REACH Set of ppt presentations for training of energy advisers	FOCUS	The tool (set of ppt presentations) was used for training of students - future energy advisers of REACH project. It includes topics and most important elements from REACH training course; but it includes also the practical part of the training (how to implement visits in households; how to use the questionnaire and excel tool).	Educational tool
3	REACH Data collection sheet	FOCUS	The questionnaire (paper form) is used by energy advisers when implementing an energy audit in energy poor household. It contains questions related to the type and characteristics of the dwelling and energy and water use. Together with REACH excel tool it provides a good starting point for development of a new, more user friendly tool.	Questionnaire – data collection sheet
4	REACH excel tool	FOCUS	The tool was used together with the REACH Data collection sheet. Data from the collection sheet was put in the excel tool, together with	ICT tool

			selection of devices for energy savings that were given to household. Based on this data, the tool calculates households' energy and water use and expected energy and water savings. Plan is to make it more user friendly.	
5	REACH Guidebook for reducing energy use in households	FOCUS	Text guidebook with tips for energy and water savings in households. It includes a list of relevant stakeholders that can provide additional help to the household.	Educational material (text)
6	ACHIEVE Textbook: Educational modul for energy advisers	FOCUS/ACHIEVE consortium	The tool was used as a script for unemployed - future energy advisers of ACHIEVE project. It focuses on all relevant elements, connected to energy poverty (energy use, energy efficiency, electricity, heating, water, communication aspect). It is one of the most relevant tools for IDEA project - as a theory guidebook and more or less identical to REACH training modul.	Educational material (text)
7	ACHIEVE Textbook: Educational module for trainers	FOCUS/ACHIEVE consortium	The tool includes a set of recommendations on how to implement training for energy advisers (related to energy poverty) and is focusing of providers of the training - training the trainers. It includes basic information on how to implement trainings, and also includes steps on how to implement energy advising visits in energy poor households.	Educational material (text)
8	ACHIEVE Set of ppt presentations for training of energy advisers	FOCUS/ACHIEVE consortium	The tool (set of ppt presentations) was used for training of students - future energy advisers of REACH project. It includes topics and most important elements from REACH training course; but it includes also the practical part of the training (how to implement visits in households; how to use the questionnaire and excel tool). It also includes some exercises and games/role playing in communication part of the training.	Educational tool
9	ACHIEVE Modules for training	FOCUS/ACHIEVE consortium	The tool is based on ACHIEVE Textbook Educational modul for energy advisers and represents a starting point for preparation of ppt presentations for training of energy advisers. It includes all the relevant topics and excersises. It is available in EN and Si language.	Educational tool
10	GOLEA e-educational material	GOLEA	E-educational materials include ICT based tools for education about renewables and energy efficiency. It has a special section of IT games for various target groups, form small children to students and adults. It also inlcudes tests and exercises.	ICT tool
11	GOLEA Educational material on RES and EE	GOLEA	Materials consist of various forms and tools that local energy agency GOLEA uses for education about RES and EE. It also includes description of various tools and methods that can be used in education about energy topics.	Educational tool
12	Textbook for primary school teachers' training on energy efficiency	FOCUS	The textbook consists of ppt presentations that were used for training of primary school teachers on energy efficiency. it includes topics: basics about EE and RES, energy in buildings, EE measures, how to include topic of EE in curriculums	Educational tool
13	NEP Vitra	Vitra Cerknica	A web-based platform with information and measures for energy efficiency in homes. It includes a data base of good (and bad) practice examples of practical implementation energy efficiency measures in Slovenian households.	ICT tool
14	Climate Literacy	Inštitut Integra	Tools are focusing on the topic of climate change and related aspects. It consists of various educational modules on the topic, suggestions on how to include the modules in curriculums for various target groups, and a mobile application.	ICT tool
15	MOBISYTL Recommendations for ICT developers	IRI UL	Recommendations for developers, when developing ICT tools for energy efficiency. Short set of 10 recommendations with focus on user experience.	Educational material (text)
16	Application Use	Informa Echo	Web-based application for calculating energy	ICT tool

	Less (manjporabi)		use in a household and for calculating potential savings in case of implementation of EE measures.	
17	Uresničujmo, z energijo varčujmo	SODO	Web-based application for calculating energy use of domestic appliances and for calculating potential savings in case of implementation of EE measures.	ICT tool
18	iEnergija	EN-LITE	Web-based interactive platform that explains how electricity system is working and how it is changing from traditional to new, more decentralized.	ICT tool

Table 1.1: Identified tools, methods and educational practices in Slovenia

Identified tools can be divided into four main groups: content for education on energy poverty and related topics; tools for energy advising/audits in households; content for end users (energy poor households); and different ICT tools, that have interested form and will be useful in the development phase of IDEA tools.

Most suitable and important **content for education on energy poverty** are tools developed in the scope of **REACH** project (textbook, ppt presentations), **ACHIEVE** project (modules for training and educational module for trainers), and **NEP Vitra** web-based platform on measures for energy efficiency in homes. REACH and ACHIEVE tools have been specifically developed and designed for the purpose of education on energy poverty and would be for that reason present a good starting point for IDEA tools content. Their main weaknesses are that they don't include social and entrepreneurship topics. Main strength of the NEP Vitra tool is it's inclusion of good and bad practice examples of practical energy efficiency measures in households. It provides first hand access to 'real-life' situations and most common mistakes when implementing specific EE measure.

REACH Data collection sheet and Excel tool present a combination of **tools for energy advising/audits** in energy poor households. The tools were used in REACH project for more than 400 household visits in Slovenia and present an upgraded version of similar tools from ACHIEVE project. They will be used in IDEA project, as aim of the IDEA project is also to develop a more user friendlier versions of the tools for energy advising or energy auditing in households.

Tools with content for end users - (energy poor) households present: REACH Guidebook for reducing energy use in households, 'Uresničujmo, z energijo varčujmo', and in some aspects NEP Vitra web-based platform.

As positive examples of different forms and formats of the (ICT) tools we have identified GOLEA e-educational material and Climate Literacy ICT tools. Both include various forms and different interactive tools for educational purposes and both of them refer to climate and sustainable energy topics. Interesting interactive tools for end-users are Application Use Less, and 'Uresničujmo, z energijo varčujmo', both of which are focusing on energy efficiency in households and provide a set of tools for calculation of savings for the end user.

When developing ICT tools it is important to have in mind the user friendliness aspects. For that reason we have included MOBISYTLE Recommendations for ICT developers, intended for developing ICT tools for energy efficiency.

2. Relevant stakeholders in the area of energy poverty and adult education

No.	Stakeholder	No.	Stakeholder	No.	Stakeholder
1	Ekosklad	2	ENSVET mreža	3	Andragoški center Slovenije
4	LEA Pomurje	5	LEAG	6	KSSENA
7	ENERGAP	8	LEA SP	9	LEAD
10	Zavod za zaposlovanje Ljubljana	11	GOLEA	12	MOP
13	Vitra Cerknica	14	Inštitut Integra	15	IRI UL
16	Informa Echo	17	MDDSZ	18	Karitas Ljubljana
19	Rdeči križ	20	ZPM Moste	21	ZPS
22	Statistični urad RS	23	CSD Zagorje ob Savi	24	CSD Trbovlje
25	MzI	26	Skupnost centrov za socialno delo	27	CSD Ljubljana
28	Elektro Ljubljana	29	GI ZRMK	30	Zenergija
31	IJS CEU	32	SODO	33	Srednja tehniška in poklicna šola Trbovlje

Table 2.1: Identified stakeholders in the area of energy poverty and adult education in Slovenia

Most important and relevant stakeholders on the topic of energy poverty are national institutions, primarily **Eco Fund**, **Ministry of Infrastructure** (Mol), **Ministry of Environment and Spatial Planning** (MESP), and **Ministry of Labour, Family, Social Affairs and Equal Opportunities** (MLFSE). While the role of MESP and MLFSE is mainly in supporting other two actors, Mol is responsible for implementation of a programme for alleviation of energy poverty, financed from Cohesion Fund, and Eco Fund is coordinating program ZERO for reduction of energy poverty through energy advising in households. Energy advising is carried out by **network of energy advisers ENSVET** (more than 60 individuals included) in cooperation with **Centres for Social Work** (CSW) from all over Slovenia. CSWs present an entry point, where energy poor households get information about ZERO program and can also apply for free-of-charge energy advising from ENSVET network.

Regional energy agencies (LEA Pomurje, LEAG, LEAD, GOLEA, LEAG, KSSENA) also represent important stakeholders, as they cover energy topics and have insights into regional and local policies, activities and problems. Some of them are already familiar with energy poverty (most notably **LEA Pomurje** and **LEAG**) and have already implemented projects on the topic. As one of the roles of energy agencies is also awareness raising, and education on energy issues, they could benefit from developed IDEA tools and might give some thoughtful inputs in the process of developing the ICE tools.

Humanitarian organizations (Red Cross, Caritas, ZPM Moste) are already familiar with energy poverty and some of them were involved in ACHIEVE and REACH projects in similar role as Centres for Social Work – as entry points for

energy poor households, where they could apply for 'free-of-charge' energy advising. They have good knowledge and experience regarding the needs of energy poor households.

Statistical Office of RS is important from the viewpoint of setting up and monitoring of indicators that are important from energy poverty aspect. **Job Centres** and **Slovenian Institute for Adult Education** are important from the view point of adult education, as both of the institutions organise educational activities. SIAE is also an expert institutions that can provide input in the development process of IDEA tools.

Apart from stakeholders included in the table above, we could add here also more than **30 adult education institutions** (Ljudske univerze) in different Slovenian cities. They could be important as beneficiaries of the project, when the IDEA tools will already be developed.

3. Training needs assessment in the area of energy poverty

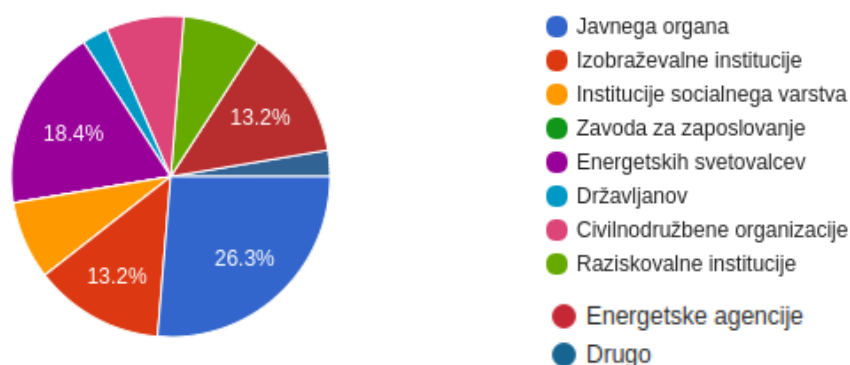
Training needs assessment was carried out with a web-based questionnaire. Purpose of the questionnaire was to collect information from different stakeholders on their current existing understanding of and involvement in the area of energy poverty. Inputs were collected anonymously.

Questionnaire was filled in by 38 respondents. Majority of respondents were representatives of public authorities (26.3 %). These are followed by energy advisers (18.4 %), educational institutions (13.2 %) and energy agencies (also 13.2. %). Respondents from social care institutions, civil society organizations and research institutions were represented equally (each 7.9 %), as shown in Figure 3.1.

Figure 3.1: Respondents of the questionnaire by their representation

1a. Vprašalnik izpolnjujem kot predstavnica/k:

38 responses



3.1 Understanding of energy poverty and involvement in the topic

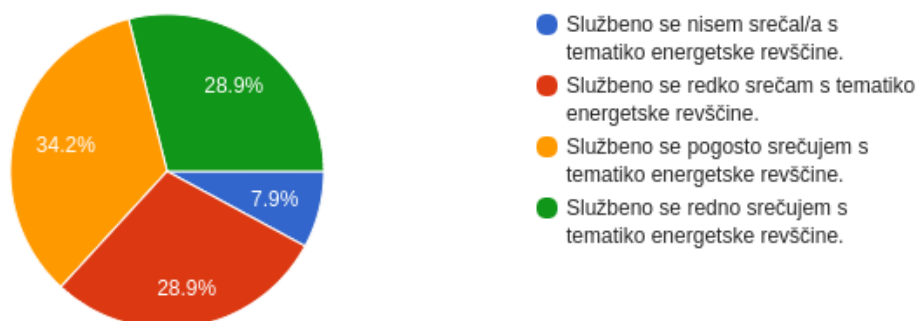
Regarding the question if they are familiar with the problem of energy poverty, majority of respondents have stated that they are fully familiar with the problem of energy poverty (60.5 %) and 36.8 % have stated that they have basic insight of the problem. Only 1 respondent has stated that he/she has heard of the term, but is unfamiliar with it and none of the respondents stated that they have never heard of energy poverty.

When it comes to dealing with the energy poverty at their work (Figure 3.2), majority of respondents have stated that at their work they are often dealing with the topic of energy poverty (34.2 %). 28.9 % of respondents have stated that they at their work they are regularly dealing with the topic and the same share of respondents have stated that they rarely come across the topic at their work. Only 7.9 % of respondents have stated that so far they have not met with the topic at their work.

Figure 3.2: Respondents dealing with the energy poverty at their work

2b. Ali se s tematiko energetske revščine srečujete v sklopu vaših delovnih obveznosti?

38 responses



Respondents that are dealing with the topic of energy poverty in their work, are facing it in various kind of ways:

- within energy advising to households and implementation of program ZERO for reducing energy poverty;
- within preparation and implementation of policies and programs for alleviation of energy poverty;
- when socially vulnerable individuals ask them for help in the form of energy saving advices and with payments for energy bills;
- cooperation in projects that address or research energy poverty;
- in educational processes and through taking with participants of educational programs for adults.

Big majority of respondents think that energy poverty is very relevant (44.7 %) and relevant (39.5 %) to their field of work. 4 respondents (10.5 %) have stated that energy poverty is somewhat important and only 2 (5.3 %) of them that it is not relevant for their field of work.

Almost all respondents (94.8 %) have stated that generally the issue of energy poverty is important (47.4 %) or very important (47.4 %).

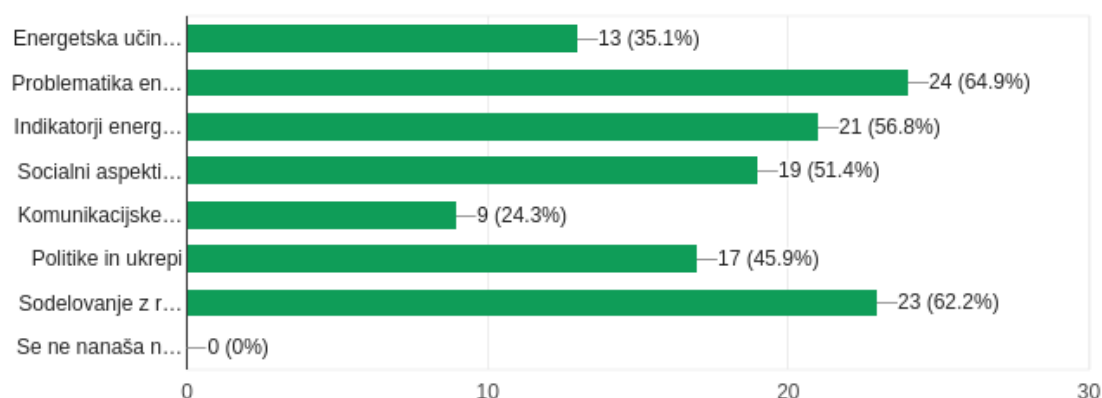
3.2 Stakeholders' needs in the area of energy poverty

When asked in which categories related to energy poverty respondents would need more knowledge or external support, 64.9 % have stated 'issue of energy poverty (causes, problems, solutions, problem identification)', 62.2 % 'cooperation with different stakeholders and cross-sectoral integration', 56.8 % 'indicators of energy poverty and their monitoring', and 51.4 % 'social aspects of working with socially disadvantaged households'. Less than half respondents have stated they would need more knowledge or external support in 'policies and measures' (45.9 %), 'energy efficiency and related measures' (35.1 %), and 'communication skills' (24.3 %). Results are shown in Figure 3.3.

Figure 3.3: Categories related to energy poverty where respondents would need more knowledge or external support

3a. Prosimo izberite kategorije, povezane z energetske revščino, kjer bi si želeli ali bi potrebovali več znanja a...unanje podpore? (možnih več odgovorov)

37 responses



When it comes to suitability of tools for respondents' involvement in energy poverty, in case of gaining more knowledge or external support, they have stated that the most suitable tool or format would be 'an online platform with information on energy poverty (measures, relevant actors,...)'. Second best was 'database on energy poverty in households (on country/regional level)', and third 'workshops' and 'educational material as text documents'. Out of all options, respondents have stated that 'videos and case studies on energy poverty' are a less suitable option. Detailed results are shown in Table 3.1.

No.	Tools	Suitability of the tool (from 1-not suitable at all to 5-very suitable)
-----	-------	--

1	Online platform with information on energy poverty (measures, relevant actors,...)	4.31
2	Database on energy poverty in households (on country/regional level)	4.06
3	Workshops	3.97
4	Educational material as text documents	3.97
5	Educational seminars	3.92
6	Set of statistics on relevant indicators of energy poverty	3.81
7	Database of relevant stakeholders	3.74
8	Managing stakeholders' dialogues	3.69
9	Questionnaire and tool for energy audits in households	3.64
10	Videos and case studies on energy poverty	3.63

Table 3.1: Most suitable tools for respondents' involvement in energy poverty

Respondents have also mentioned some other tools and content that they see as useful for their work:

- connecting energy poverty to health aspects (bad indoor air quality, cold homes, burning waste for heating);
- informational brochures for households;
- cooperation and coordinated actions between institutions and stakeholders;
- finding ways to motivate energy poor households for activation;
- how to access energy poor households or how to access data about energy poor households;
- project cooperation;
- defined definition of energy poverty;
- higher involvement of national institutions responsible for social policies;
- data base of good practices and efficient measures.

3.3 Households' needs in the area of energy poverty

Regarding the question 'Which of the following do you think would be most beneficial for energy poor households', respondents have stated that 'energy advising and auditing' is the most beneficial for energy poor households. This answer is closely followed by 'practical measures for reducing energy and water use', 'implementation of structural measures' and 'training about measures they can implement themselves'. Answers 'awareness raising', 'education and information sharing' and 'information about energy and social actors that could help households' were rated as slightly less beneficial than first four options, but still as beneficial for energy poor households. As seen in Table 3.2 below, all answers got a grade above 4 on a scale from 1 to 5.

No.	Content for households	Beneficialness of content (from 1-not beneficial at all to 5-very beneficial)
1	Energy advising and auditing	4.50
2	Practical measures for reducing energy and water use	4.42
3	Implementation of structural measures	4.36
4	Training about measures they can implement themselves	4.34
5	Awareness raising	4.16
6	Education and information sharing	4.11
7	Information about energy and social actors that could help households	4.03

Table 3.2: Respondents' input on beneficial content for energy poor households

Respondents have also mentioned some other content that they see as beneficial for energy poor households:

- monitoring on internal environment (air quality, temperature, humidity, mould);
- comprehensive approach (education, financial assistance for renovation, support throughout the process and post-process support);
- campaign for energy poor households with positive notion (so they see this as an option, not as 'pity');
- clear information for households where they can get help regarding energy poverty;
- individual advising in households;
- 100 % financial support for energy poor households for energy efficiency measures and advising;
- training for stakeholders that are working with energy poor households.

3.4 Form of educational materials and tools on the topic of energy poverty

As most appropriate approaches and tools for education about energy poverty and measures for alleviating energy poverty, respondents have selected 'practical activities', followed by 'applications', 'web based tools', and 'lectures'. 'Games' and 'textbooks' were selected as somehow appropriate tools, and 'role playing' was seen as least appropriate tool on the list. Details can be found in Table 3.3.

No.	Appropriateness of approaches and tools for education about energy poverty and measures for alleviating energy poverty	Appropriateness of approaches and tools (from 1-not appropriate at all to 5-very appropriate)
1	Practical activities	4.37
2	Applications	3.76
3	Web based tools	3.71
4	Lectures	3.66
5	Games	3.37
6	Textbooks	3.11
7	Role playing	2.71

Table 3.3: Respondents' input on appropriateness of approaches and tools for education about energy poverty and measured for alleviating energy poverty

Respondents have also mentioned some other approaches and tools that they see as appropriate for education about energy poverty and measures for alleviating energy poverty:

- formation of support groups for households, where they can share experience and efficient practical solutions;
- monitoring of status in households;
- best practice cases and examples of implemented EE measures and their results;

- presented different models for financing of EE measures;
- awareness raising media campaigns;
- practical workshops;
- compulsory training for social aid beneficiaries.

Majority of respondents think that educational tools should include the possibility of contributing new ideas, notifying the authors about shortcomings and bugs, and proposing solutions for improvement of the tool (89.5 % of all respondents). In that way the tools can be made more user friendly, end users have a feeling of involvement, and improvements can be made based on users' experience and knowledge.

3.5 Content of educational materials and tools on the topic of energy poverty

A most important topic for education about energy poverty and measures for alleviating energy poverty, respondents have selected 'detecting energy poverty' and 'practical training', followed by 'energy use of domestic devices and appliances' and 'social security aspect and related services'. Lowest grade was assigned to 'entrepreneurship', but even that was ranked above 3 on the scale from 1 to 5. Details with listed all 13 topics for education about energy poverty and their accompanied grades are shown in Table 3.4.

No.	Topics for education about energy poverty and measures for alleviating energy poverty	Importance of the topic (from 1-not suitable at all to 5-very suitable)
1	Detecting energy poverty (definition, indicators, causes, solutions)	4.39
2	Practical training (how to implement energy advising in households, measuring energy and water use, replacement of devices in household, identification of key problems in household)	4.39
3	Energy use of domestic devices and appliances	4.32
4	Social security aspect and related services (to be able to identify problem and give advice to household)	4.26
5	Information about energy and social actors and schemes that can help energy poor household	4.13
6	Soft and infrastructural measures and devices for reducing energy and water consumption	4.11
7	Methodology of energy advising in households (process of implementation of energy advising, how to use questionnaire and software tool, saving devices)	3.92
8	Heat Energy, Electric Energy and Water	3.89
9	Basics about energy and energy needs	3.79
10	Communication training (communicating with costumers, households members and other stakeholders)	3.79
11	Renewable energy sources	3.74
12	Climate change and other environmental impacts of energy use	3.45
13	Entrepreneurship (job application, how to start your own business initiative, marketing, etc.)	3.16

Table 3.4: Respondents' input on importance of topics for education about energy poverty and measures for alleviating energy poverty

Respondents have also mentioned some other content that they see as appropriate for education about energy poverty and measures for alleviating energy poverty: health issues connected to energy poverty and interests of energy poor households.

When asked to rank types of modules for education about energy poverty based on their importance, respondents have selected 'practical part (energy advising, implementing measures, saving devices, household visits)' as the most important educational module. This was followed by 'communication part (communicating with costumers, households members and other stakeholders)', 'social aspects of working with socially disadvantaged households', and 'issue of energy poverty'. Respondents have selected 'theoretical part on energy and reducing energy and water use' and 'entrepreneurship part (job application, marketing, hot to start your own business)' as least important modules, although all of the modules got an average grade above 3 (out of 6), as shown in Table 3.5.

No.	Type of modules for education about energy poverty	Importance of the module (from 1-least important to 6-most important)
1	Practical part: energy advising, implementing measures, saving devices, household visits	5.53
2	Communication part: communicating with costumers, households members and other stakeholders	4.63
3	Social aspects of working with socially disadvantaged households	4.42
4	Issue of energy poverty	3.58
5	Theoretical part on energy and reducing energy and water use	3.29
6	Entrepreneurship part: job application, marketing, how to start your own business	3.08

Table 3.5: Respondents' input on importance of different types of modules for education about energy poverty

4. Country specifics on energy poverty

Energy poverty is becoming an increasingly pressing issue in Slovenia, as the rise in energy prices outweighs the rise of household income. In Slovenia, there is an increasingly obvious trend that households with lower income pay relatively more to ensure their energy needs. Thus, in households of the first income quintile (20 % of households with lowest income) expenditure for energy has increased sharply in recent years, and in 2010 it already accounted for 17.4 % of all available income of an individual household (in 2010 this number was at 13.1 %).¹

Risk of poverty rate in Slovenia was increasing in last couple of years and this risk is much higher in the case of unemployed and relatively high in the group of self-employed and retired.² Share of wood and biomass for heating of homes is increasing, while use of extra light heating oil is decreasing, which can be linked to the dynamics of the prices of both energy carriers. Low-income households are increasingly choosing cheaper energy, especially wood, and disconnecting from district heating, which is mostly compensated by heating to electricity. Special problem arises from the increase in the use of wood, as households often burn it in older, inefficient furnaces that do not have adequate filters, resulting in lower air quality. Most of the energy is spent on heating of rooms and water, totalling at more 80 % of the energy used in households. For this reason, measures to reduce energy poverty should be oriented towards reducing the use of (heat)

1 Statistični urad RS: http://www.stat.si/novica_prikazi.aspx?id=5164.

2 Statistični urad RS: <http://www.stat.si/StatWeb/glavnavnavigacija/podatki/prikazistaronovico?IdNovice=5164>

energy by energy refurbishments and increasing energy efficiency of dwellings. Majority of the housing stock is energy inefficient and in need of energy refurbishment, as almost 70 % of the dwellings are older than 30 years. In Slovenia, high proportion of the population is living in a dwelling where either the roof is leaking, the walls are damp or the window frames are inadequate: 27 % of the population in 2013.³ Among households which according to their income are classified as socially vulnerable, this share is 39.6 %. In 2010, in the lowest quintile, 13 % of households could not afford adequately warm dwelling.

Energy poverty still lacks official definition. Appropriate definition would be very welcome, while at the same time researching energy poverty should be done more systematically. Another important challenge is the fact that social sector, due to lack of human and financial resources, does not show sufficient interest in energy poverty and is not sufficiently involved in the debate on addressing the problem. Strategies for housing and energy renovations of dwellings only partially recognize energy poverty as a problem, but do not foresee coherent and structural measures for addressing it. There are few programs and measures addressing energy poverty or energy poor households in Slovenia:

- ZERO program – free energy advising in energy poor households. Whole service is based on REACH project methodology. The program is included in the National Action Plan for Energy Efficiency. Program is coordinated by national Eco Fund and carried out by network of energy advisers ENSVET (more than 60 individuals included) in cooperation with Centres for Social Work. Every households, where the visit has been done, gets a free-of-charge package with energy and water saving devices that generate around 80 EUR/per year of savings.
- 5 million EUR are reserved in Cohesion Fund for implementing a national program for addressing energy poverty. Plan is to implement infrastructural measures for improving energy efficiency of homes (energy refurbishment of buildings, replacement of inefficient heating systems and expensive energy sources for heating). The program is still in it's designing phase and is included in the National Action Plan for Energy Efficiency. Ministry of Infrastructure is responsible for implementation of this program and it should start in 2018.
- Apart from ZERO program, Eco Fund has two other programs that are addressing socially vulnerable or energy poor households: (1) in the case of renovation of multi-apartment building, eligible households are provided with 100 % co-financing; (2) 100 % co-financing for socially weak citizens for replacement of old wood furnaces with new wood heating systems in municipal areas with adopted Decree on Air Quality Plan⁴.
- Caritas Slovenia is implementing a project that helps households in need with one-time financial assistance for heating costs.

3 EUROSTAT: http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search_database

4 Ekosklad: <https://www.ekosklad.si/razpisi/prikazi/tenderID=59>