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Validation Report and Conclusions

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1. INTRODUCTION

The ee-WiSE project aims to develop a Knowledge Transfer Framework within the value chain of energy efficiency sector in building retrofitting in the Mediterranean Area, with special focus on SMEs.

The objective of the ee-WiSE Knowledge Transfer Framework (KTF) is to facilitate communication and sharing of knowledge in EE retrofitting value chain, and provide guidance and tools to any organization or agent that intends to develop engaging, interesting and attractive training material. The KTF is based on the work done in the previous stages of the project – knowledge transfer flows analysis (WP2), knowledge needs analysis, identified best practices and potential solutions (WP3).

The KTF is a web-based platform that facilitates Energy Efficiency knowledge sharing, and can be accessed through the project website (www.ee-wise.eu). In order to address the needs identified in WP3, knowledge transfer guidelines were developed for each need, specifying:

- who the providers and receivers of knowledge are,
- the type as well as the format in which the knowledge should be transmitted, and
- the most appropriate ICT Tools based on the opinion of consortium partners (in their own role as providers and receivers of knowledge in the EE value chain) .

These guidelines are now part of the KTF and can be used by all knowledge providers in order to transfer their knowledge in the most effective way.

The objective of the validation activities in WP5 was to collect the feedback of the EE retrofitting value chain regarding the adequacy of the developed Knowledge Transfer Framework, knowledge transfer guidelines and tools, and provide recommendations for potential improvements, in order to ensure the validity of the Framework and its adjustment to the real needs of the sector.

This document includes Validation Report and Conclusions, which describes the results of validation activities and presents the Enhancement plan.

Validation Report and Conclusions were developed by X-Panel Ltd, with feedback and contribution of all project partners.

4.1. Field of application - scope

Work Package 5 “Framework and tools validation within the value chain and other stakeholders” aims to:

- validate the Knowledge Transfer Framework (KTF) and the selected Tools, assess and contrast their effectiveness, so that a solid KTF can be established as a support structure resulting of the work undertaken within the ee-WiSE project;
- guarantee the KTF’s durability within maintenance and retrofit actions;
- give evidence, through real validation activities, to base recommendations and guidelines for the sector and reveal tacit knowledge among players.

The tasks that were implemented in Work Package 5 are:

Task 5.1 Framework's Validation Workshops

Task Leader: X-Panel

The Knowledge Transfer Framework was presented to representatives of the value chain and feedback was obtained on the focus of its adequacy. The Framework validation activity took place on two levels: on country level and on consortium level. The consortium-level validation workshop was an internal workshop involving project partners, while in the country-level workshops external validation took place. The country-level Framework validation workshops were merged with Knowledge Management Tools Validation workshops (Task 5.2).

Task 5.2 Knowledge Management Tools Validation Workshops

Task Leader: X-Panel

The partners have used the knowledge transfer tools from the Framework to organise a knowledge transfer and sharing experience in their specific area. Before the beginning of validation activities partners selected a specific focus from a matrix of knowledge transfer guidelines containing recommended knowledge transfer tools and practices, ensuring as wide as possible coverage of guidelines, tools and practices to be validated.

Task 5.3 Monitoring activities to ensure KTF effectiveness and improvement proposal

Task Leader: X-Panel

The KTF's main objective is, through different actions, to address knowledge transfer issues and breakages within the EE sector value chain. The validation workshops provided information to develop the final KTF. Indicators to measure effectiveness and mechanisms for agents' participation were introduced in the Monitoring plan. The monitoring and evaluation of these actions was to show the level of success on its performance. The results were collected, and the recommendations for improvement of KTF are proposed in this document.

The **Validation Report and Conclusions** presents the results of the validation phase of the project, as well as the Enhancement plan with recommendations aiming to create an optimum KTF. The Report is the second and final Deliverable of the Work Package 5.

2. VALIDATION METHODOLOGY AND PROCESS

The validation methodology and plan are described in detail in Deliverable 5.1 "Validation Plan". This section provides a short overview of the methodology and explains the process that was actually applied.

The Knowledge Transfer Framework developed in ee-WiSE WP4 forms the basis for all the activities and solutions proposed to tackle the identified breakages and knowledge needs in the EE retrofitting sector value chain. The design of the Framework has been based on the data collected in WP2 and WP3 and on identified good practices implemented in different regions.

The approach that was chosen focuses the use of different ICT tools (described in the deliverable D4.2 "Knowledge Transfer Framework Design") as an efficient and effective way to address Knowledge Transfer Needs (identified in ee-WiSE WP3). For each need, specific knowledge transfer guidelines have been developed in WP4 employing different ICT Tools based on the preferences of the agents (providers/receivers) involved.

It was decided that not only the Knowledge Transfer Framework and Tools, but also the guidelines needed to be validated against their potential in addressing the targeted needs. The guidelines are in fact tools for knowledge providers in the attempt to share their knowledge.

2.1. Two levels of validation

The Knowledge Transfer Framework (KTF), knowledge transfer guidelines and tools were validated using a two-level approach, where the validation actions were implemented on country level, as well as on a consortium level.

The consortium-level validation was the internal validation by the partners of the consortium that represents the whole value chain. It was planned to implement the consortium-level validation activities (workshop) after the country-level validation is completed. However, it started before the country-level validation, as after the first version of KTF was developed the partners were continuously testing it and providing suggestions for improvement, aiming to develop the next version of KTF for external testing. Consortium-level validation further continued after the country-level activities, as foreseen in the Validation Plan.

The validation activities were implemented according to the proposed timeline:

	February 2014				March 2014				April 2014				May 2014				
Week / **Activity**	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Country-level workshops																	
Selection & recruitment of participants																	
Workshops																	
Evaluation Interviews & Questionnaire																	
Country-level reports																	
Initial recommendations for KTF																	
Consortium-level workshop																	
Workshop																	
Consortium-level report																	
Validation report and conclusions																	

Table 1. Validation timeline

The consortium aimed to evaluate the following aspects in relation to the KTF, knowledge transfer guidelines and ICT tools:

- Adequacy to the target group,
- Accessibility,
- Visceral appeal,
- Functionality,
- Understanding/comprehension,
- Usability,
- Innovation,
- Cost of use/ application,
- Applicability in other sectors of the building industry and/ or other European regions.

The tools chosen for analysis were a questionnaire survey and interviews. With respect to the aggregated analysis the following levels were defined for each question:

- A threshold level of VERY GOOD for the aggregated results of the validation exercise means no improvements are necessary in this field.

- A threshold level of GOOD for the aggregated results means only minor improvements should be considered. If no specific comments are provided partners will revise the KTF and related tools for any needed improvements.

- A threshold level of AVERAGE for the aggregated results means specific improvements are necessary. The results from the comments in the questionnaires and the interviews should provide insight in how to do this.

- A threshold level of POOR or VERY POOR for the aggregated results means a complete re-assessment of the specific item, and both the comments in the questionnaires and the interviews will provide insight. Additionally the project partners that belong to EE retrofitting value chain will be required to provide support on the identification of areas where the improvements, adjustments and modifications are necessary.

2.1.2. Country-level workshops

The country-level validation workshops took place in partner countries in February-March 2014.

The country-level workshops aimed to:

- increase the awareness of the agents in EE retrofitting value chain regarding the concept, benefits and opportunities of Knowledge Transfer,
- introduce the developed Knowledge Transfer Framework, lesson guidelines and some practical examples of Knowledge Transfer Tools,
- collect the feedback of the agents of the value chain regarding the KTF, guidelines and Tools and develop recommendations for improvement,
- encourage the target group to use the ee-WiSE Knowledge Transfer Framework and apply the developed Tools in practice.

In order to test and evaluate the 18 knowledge transfer guidelines corresponding to 18 knowledge transfer needs identified in WP4, the partners followed the process described in the Validation Plan and selected the guidelines to be validated as shown in the matrix below:

Need / Country		Bulgaria	Cyprus	Greece	Italy	Malta	Spain (East)	Spain West	Turkey
E1	EC guidelines for knowledge dissemination from the research institutions.	**x**						x	
A2	Exposing the end users to the technological results of the research organizations.			x			x		
B4	Connecting technical commercial advice to EPBD - energy performance and requirements of the actual buildings.		x				x		
D3	Occupants need financial support to invest in EE retrofitting technology.		**x**				x	x	
D2	Industry needs financial support to take up results of scientific innovation.		x		x				
A4	The business society needs to be aware of tools to manage intellectual property.			**x**		x			
A5	Training of construction professionals (including architects, civil engineers, building services engineers, project managers,				x	x	x		
D1	Increase business motivation through public R&D initiatives and innovation funding.	x				x			
E2	Evaluation of publicly funded research projects via it's applicability to the end-user.					x			x
A3	Training the business society to access the knowledge stock.			x		x			

B1	Establishing network organisations that will coordinate knowledge transfer from innovation groups and assist in	x		x	**x**				
C3	R&D to divert their activity rapidly in response to changes in the market.		x						x
B2	Increased interaction amongst research institutions.				x				x
B3	Clustering within the retrofit market to provide integrated solutions.	x	x						
A1	Training of traditional craftsmen on EE retrofitting innovations.	x			x		x	x	
C4	When communicating research results, more focus needs to be given to practical benefits of the retrofit technology.			x					x
C2	Real-life evaluation of research results.		x					x	
C1	Scientists need to have increased contact with the end-users in order to understand the applicability of their research.							x	x

Table 2. Validation matrix

One partner per project country was initially responsible for country-level validation workshops: PIM (Malta), BCC (Bulgaria), AIDICO (Spain), HoR (Greece), EU-CEO (Turkey), ISTEDIL/ ANCE (Italy), and X-PANEL (Cyprus). In addition to that, INTROMAC decided to organise the second validation workshop in Spain, in West region, as it would provide a better coverage of knowledge transfer needs and more agents of the value chain would be involved.

The participants of the workshops were invited using the partners' contacts with the representatives of EE retrofitting value chain in their countries, that were expanded through ee-WiSE dissemination and WP3 survey, which contained a question related to validation workshops ("Are you interested in participating in ee-WiSE workshops where knowledge transfer tools will be presented?"). Participants in each country/ region were selected according to the type of agents that the knowledge transfer guidelines and tools chosen for validation were addressing.

Validation workshops were organised as multi-company events, in-company workshops and individual consultations, or as a combination of different types:

Country	**Workshop date(s)**	**Workshop type(s)**	**Number of participants**
Bulgaria	Week 11	One multi-agent workshop	21
Cyprus	Weeks 8-12	Several small workshops	21
Greece	Week 12	Two multi-agent workshops	20
Italy	Weeks 10-11	Several small workshops	27
Malta	Weeks 8-11	Several small workshops and individual consultations	21
Spain East	Weeks 10	One multi-agent workshop	21
Spain West	Week 11	One multi-agent workshop	22
Turkey	Week 11	One multi-agent workshop	26

Table 3. Validation workshops dates, types and participants per country

The country-level validation was expected to involve at least 20 participants per country/ region. This target was achieved in the 8 different regions. In total, 179 representatives of EE retrofitting value chain took part in validation activities.

Independent of what type(s) of workshop(s) was chosen, the validation activities involved multi-agent audience in each partner country. This was the main requirement when organising the country-level validation; the partners were free to choose the type of workshops that they thought would be most effective in their region in order to get the feedback of the target group.

Some participants represented more than one agent of the value chain. The general and country/region level distribution of participants per value chain agent type is presented in secton 3.1. of this report.

The country-level workshops followed the agenda proposed in the Validation Plan:

- Introduction to ee-WiSE project (background/ rationale, objectives, results)
- Knowledge Transfer Framework (overview and how to use it)
- Presentation of Knowledge Transfer Tools (included in the KTF)
- Presentation and testing of selected Lesson Guidelines and ICT Tools
- Discussion and Evaluation

The validation was performed by presenting the developed KTF, guidelines and Tools to the target audience (agents of the value chain) and analysing participants' feedback, which was collected through questionnaires and interviews. The questionnaire and interview guidelines were provided in the Validation Plan.

The validation activities in partner regions are shortly described below.

BULGARIA

The Bulgarian validation workshop targeted wider value chain audience. In the end we host a meeting with bigger number of owners and the VET providers. The functionality of the KTF tool was presented on multimedia screen. The participants expectations are to receive more practical answers in energy efficiency. They expect to find the tool in Bulgarian language, as concerns navigation. There was criticism towards energy efficiency, as concerns administration, bureaucracy and not working existing financial mechanisms. The tool was identified as a great opportunity to find and exchange knowledge.

CYPRUS

The validation of KTF in Cyprus addressed different knowledge transfer needs (financial, knowledge management, R&D approach) and involved a mixed audience, with bigger representation of energy and retrofitting service providers, public bodies and financial agents and the demand part of the value chain. The participants agreed that KTF could become a valuable tool to improve exchange of knowledge in the area of EE retrofitting, especially if the platform manages to attract many providers and users of knowledge. They have stressed that ensuring the quality of the KTF Tool including its functionality and quality of contents will be very important for its success.

GREECE

The HoR organized a Validation Workshop in order to present the KTF Tool and to evaluate the practical implementation to simple users. The audience consisted of various agents but mostly of public & governmental bodies. The acceptance of the Tool was very positive; as they realized that they would benefit by its application as well as to build a communication network between different experts. The feedback from the questionnaires and the interviews showed us that we need to do some improvements, such as to increase the emphasis to the public sector, to give more information on practicing these ideas and to simplify the use of the Tool.

ITALY

The Italian validation workshop was mostly built around the interaction between research institution and industry and the training of the various agents of the value chain. For this reason the most represented profiles were Architects & Engineers, R&D Institutes, Public Administration bodies and Technical Solution Developers. The approach of all the participants was very positive: the users were interested in the innovation displayed; they mostly asked for a simplification of the process in order to have a more user-friendly and understandable website.

MALTA

The validation exercise was mostly built around training of the various agents on knowledge transfer related issues and also included the aspect of funding to assist business in accessing the knowledge base. Therefore, the major part of the participant base consisted of Architects & Engineers, SMEs and Public Administration bodies. The overall intention of the KTF Tool was well accepted since the participants acknowledged that knowledge transfer in the EE Retrofitting sector is lacking. However, the general feedback was that much more work needs to be done on the tool to make is more user friendly and attractive in order to enable a wide out-reach to the target audience.

SPAIN-EAST

The Eastern Spanish Validation Workshop was performed by AIDICO, presenting the developed KTF and Tools to the target audience – External agents, which were representative of the 6 identified groups of the value chain – analysing participants' feedback, collected through questionnaires and interviews that were been translated into conclusions to improve the developed Framework and Tools. The collected feedback is focused on specific needs and categories which were analysed as providers or receivers by the participants, in function of their different roles. By this, each need has been fully tested from different points of view and KTF was used as real situations of knowledge transfer.

SPAIN-WEST

The Spanish-West validation workshop was built around most of the scientific development related needs. For this reason the most represented profiles were technicians of the sector in general, which develop their work in Technical Solutions, Architecture, Public Administrations, R&D, etc. The ee-WiSE idea was very well received however some simplification of the process and quality of the content was demanded during the testing. One of the main gaps detected to be solved thanks to the tool was the need for a common platform that connects different profiles for Energy Efficiency matters.

TURKEY

The Turkish validation workshop was focused on the energy efficient retrofitting KT needs of the Aegean (Ege) Region of the Country which is located as a part of the Mediterranean Climate zone. As the lead partner Ege University having the largest researcher potential (more than 3000

academicians), it has used its network to reach the researchers in the area as well as the leading key players of the energy and construction sector. The participants has discovered that the knowledge transfer gap between academia and industry can be recovered by using the eeWise KTF and the tool, both sides being enthusiastic about providing input and/or receiving knowledge by using the tool.

The validation partners (PIM, BCC, AIDICO, INTROMAC, HoR, EU-CEO, ISTEDIL/ ANCE, and X-PANEL) provided reports on the results of the country-level validation. The reports include both summary of questionnaire data and information/ impressions collected through interviews. The Country-level reports (see Annex 1) were analyzed and the results were discussed in the Consortium-level workshop. They are presented in section 3 of current report.

2.1.2. Consortium-level workshop

Consortium-level workshop was organised as the second level of validation activities. The workshop was implemented by the Scientific Coordinator of the Project, INTROMAC and X-Panel Ltd, with support and participation of other partners. The workshop had several objectives – internal evaluation of the KTF, presentation of country-level validation results, and discussion on possible improvements.

The consortium-level validation workshop was held on 27 March 2014 in Malta. The number of participants was 23; they all came from project partner organisations that represent the whole value chain of EE retrofitting.

The duration of the workshop was 3 hours. The agenda included:

- Introduction of the aims of the workshop (INTROMAC, X-Panel)
- Overview of country-level validation results – questionnaire survey (X-Panel)
- Conclusions of country-level validation workshops (AIDICO, INTROMAC, PIM, BCC, HoR, EU-CEO, ISTEDIL/ ANCE, X-Panel)
- Discussion on improvement of KTF and Tools (All partners)

After the workshop, the Consortium workshop report was produced and is used as a basis for Validation report and conclusions.

2.2. Validation Monitoring Plan

In the Validation Plan, there were a number of indicators selected to measure the impact and effectiveness of validation actions on the EE retrofitting value chain. The indicators, thresholds and the results are presented in the table below

Indicator	**Threshold**	**Result**
Number of validation workshops	≥ 7	8 (workshops in 8 regions, in some cases more than 1 workshop per region)

Number of countries where validation activities were implemented	7	7
Number of participants of validation workshops	≥ 20 part. per country; ≥ 140 in total	≥ 20 part. per country; 179 in total
Number of evaluation questionnaires filled in	> 80% of participants	92% of participants
Number of lesson guidelines evaluated	18	18
Number of ICT tools (proposed in lesson guidelines) validated	>70% expected	100%
Level of satisfaction with KTF and Tools	GOOD for the aggregated results	Level GOOD (average evaluation 4 out of 5) achieved on evaluation of all statements related to the KTF except of the following that received AVERAGE mark: - I found the different tools in the KTF were well integrated; - The help system of the KTF is good; - The KTF fulfilled my expectations.

Table 4. Validation idicators

3. VALIDATION RESULTS

A questionnaire survey was the main tool for collecting the feedback of the participants of validation workshops. The questionnaire was translated into the languages of project partners (when necessary); the questionnaire was uploaded on surveymonkey website. The collected questionnaires were analysed by the partners responsible for country-level workshops. The reports were sent to X-Panel for further analysis and elaboration of recommendations.

In addition to questionnaire survey, the partners performed a number of short face-to-face interviews with the agents of the value chain that took part in the validation activities. The aim of the interviews was to record opinions/ feelings/ impressions that could lead to further improvements of the KTF.

3.1. Questionnaire Survey

In total, 164 evaluation questionnaires were received – filled in by 92% of all participants of validation activities. The respondents represent the whole EE retrofitting value chain: 28,6% of them came from Knowledge and Product Providers, 25,1% from Demand (occupants and building managers), 21,3% from Energy and Retrofitting Services Providers, 16,1% - Public Bodies and Finance, 4,6% - Quality Assurance, 4,4% - Energy Providers:

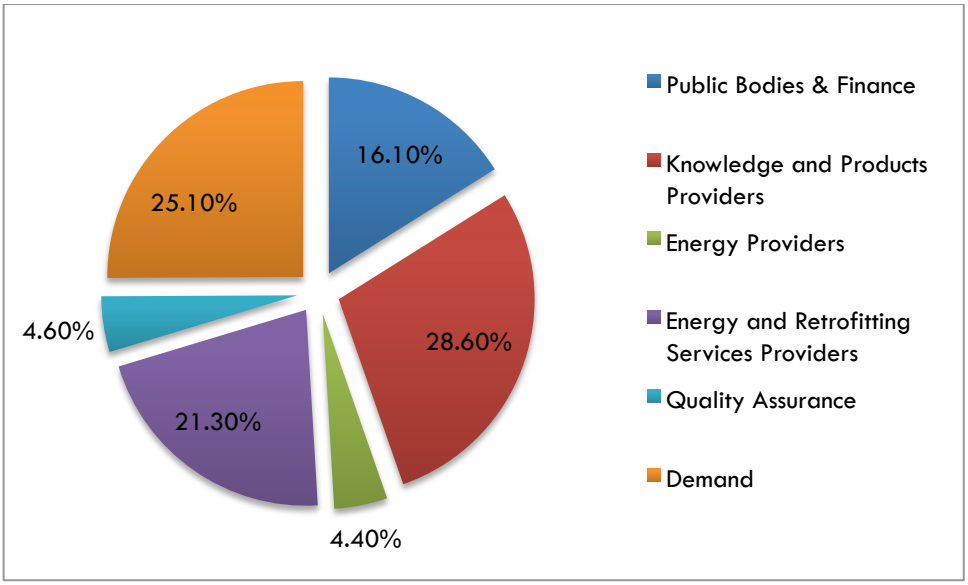


Figure 1. Participants of validation survey, by groups of agents of EE retrofitting value chain

The different agents of the value chain were represented as follows (in % of total number of agents per country/ region and % of total number of agents):

Country/ region Agents of the value chain	Bulgaria	Cyprus	Greece	Italy	Malta	Spain-East	Spain-West	Turkey	Total
Public Bodies & Finance									
Financial agent	0	9	5	2	9	1	2	0	3,0
Public administration	0	13	15	15	3	6	6	17	9,8
Government	0	9	10	0	3	0	0	2	2,2
Standardization body	5	2	0	0	0	2	0	0	1,1

Knowledge and Products Providers									
Software Developer	0	0	5	2	6	4	4	0	2,5
Technical solutions developer	62	7	5	4	14	5	12	0	9,3
Building Materials Manufacturer	0	0	5	0	0	2	4	3	1,9
Installer	0	4	5	4	3	6	4	3	4,1
R&D Institute / University	0	0	5	15	3	8	8	30	10,6
Meteorologist	0	0	5	0	0	0	0	0	0,3
Energy Providers									
Renewable Energy Company	0	2	5	2	9	4	2	3	3,3
Energy distributor	0	0	5	0	0	0	2	0	0,5
Electric Power Transmission Grid Operator	0	0	0	2	0	0	2	0	0,5
Energy and Retrofitting Services Providers									
Energy Service Company (ESCO	0	0	5	4	0	6	2	2	2,7
Architecture and Engineering company	0	16	10	11	23	15	13	9	13,1
Energy Auditing Firm	0	0	0	7	9	14	4	0	5,4
Quality Assurance									
Patent office	0	0	0	2	0	0	0	0	0,3
Life Cycle Assessment Company	0	0	0	2	0	1	0	0	0,5
Certification Body	0	2	5	4	6	5	4	3	3,8
Demand									
Building Manager	10	4	5	2	6	1	0	0	2,5
Occupant	24	31	5	20	9	19	33	28	22,6

Figure 2. Participants of validation survey, in % of value chain agents per country and total

The differences in representation of different agents per country is related to the different focus of validation activities, i.e. validation of specific knowledge transfer guidelines required participation of specific agents.

In general, the developed KTF has received a positive evaluation.

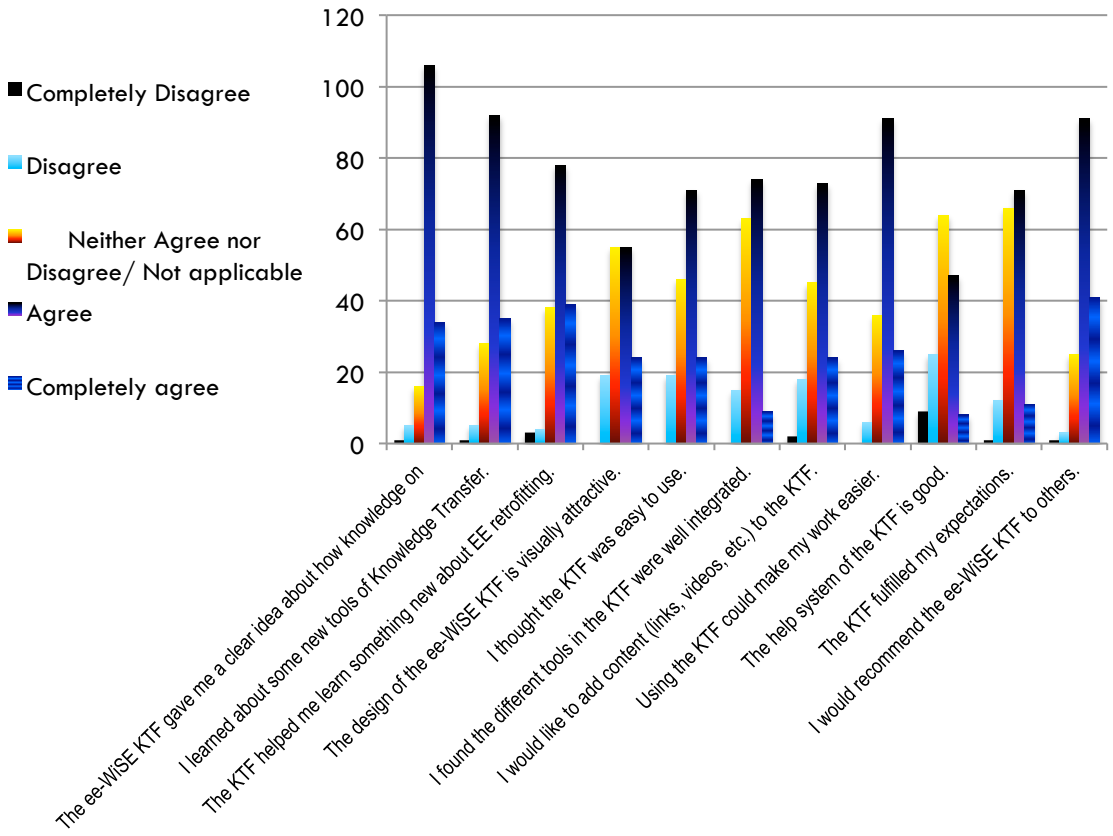


Figure 3. Evaluation of different aspects of KTF, by total number of survey participants

Most respondents agreed that the KTF gave them a clear idea about how knowledge on EE retrofitting can be shared; they learned about some new tools of Knowledge Transfer and something new about EE retrofitting; using the KTF could make their work easier; they would recommend the ee-WiSE KTF to others.

Most comments concerning the KTF were related to the need to improve the design/ visual appeal and the help system. Almost half of the participants were not sure if the design was visually attractive.

As validation activities took place in different countries and regions, the survey results per region were analysed as well. Some differences in evaluation of different aspects of by participants from various project countries can be observed.

Over 80% of respondents from Bulgaria, Eastern Spain, Malta and Turkey and over 60% of respondents from Western Spain and Cyprus would like to add content to the KTF; in the case of Italy the positive response rate was about 30%. However, almost 80% of Italian respondents thought the KTF was easy to use, while twice less Turkish respondents agree with that. Almost 80% of Italian participants found the design of KTF visually attractive; more than 60% of Spanish participants would like it to be improved. The majority of Bulgarian and Italian participants thought the different tools in the KTF were well integrated; the Greek and Eastern Spanish participants were less positive about it:

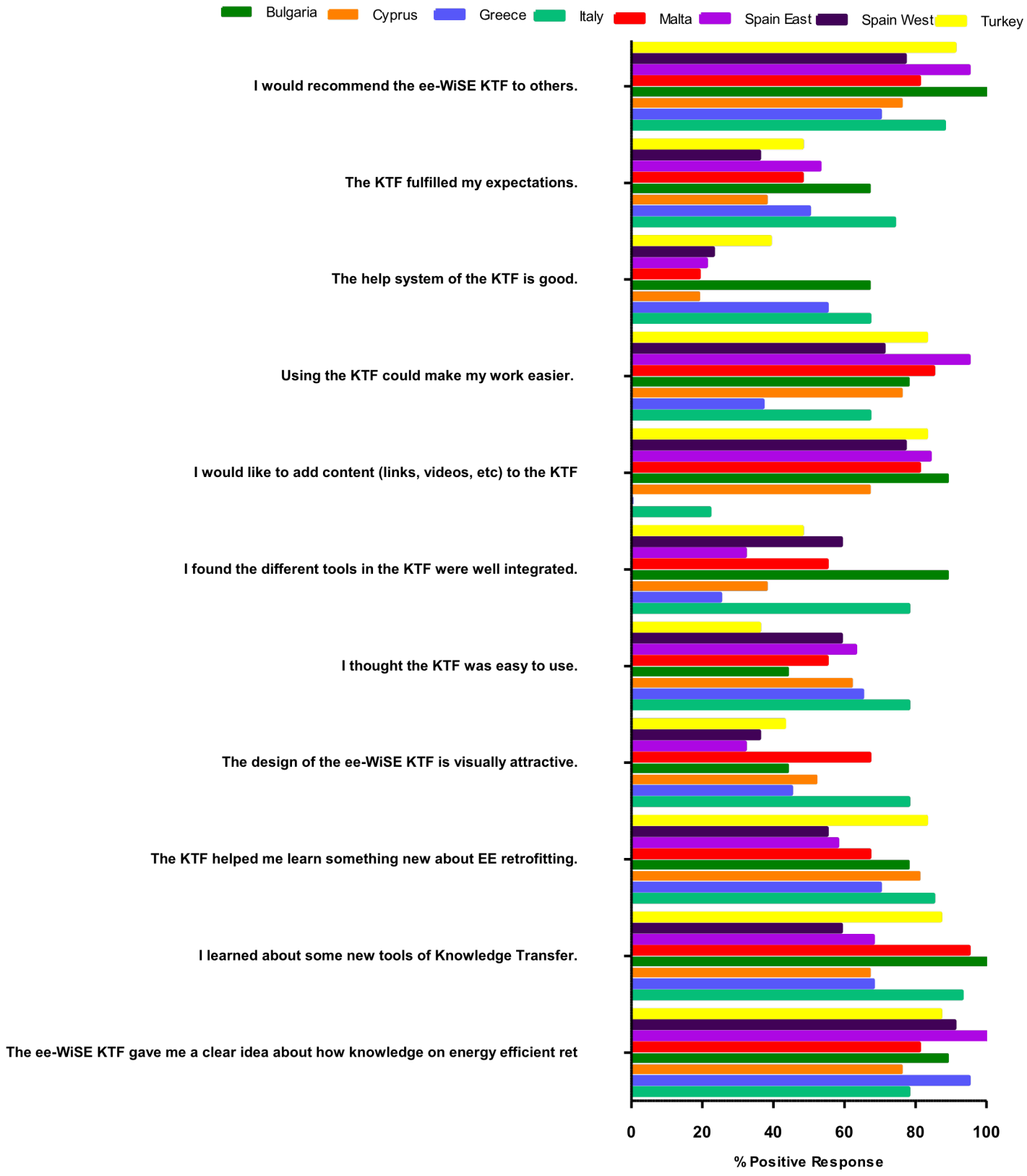


Figure 4. Evaluation of different aspects of KTF, by % of positive responses per country

In all project countries and in answering many questions, there was quite a big number of responses "neither disagree nor disagree" - this might mean that respondents did not understand some tools or features they were asked about, or they could not evaluate the specific feature e.g. help system, because it was still under development.

The partners have concluded that there was some difficulty of clear understanding of the tools and their differentiation, but the target public is more interested in the content than the way it is presented. Nevertheless, as EU-CEO has used a presentation on the ICT tools in the Turkish country-level workshop, it will be adapted and included in ee-WiSE website as a summary of what the tools are about. This will help to increase awareness on the tools, improve understanding and ease of use.

The results of questionnaire survey are provided in the presentation included in Annex 2. Feedback received from the open questions is discussed in the next section of the report.

3.2. Feedback from open questions, interviews and discussion

In addition to the questionnaire survey, all validation partners had interviews with the agents of the value chain, aiming to collect more feedback and recommendations for improvement of the KTF. According to the Validation Plan, at least 2 interviews per project country had to be performed. This was done in all project countries: 2 interviews were held in Bulgaria, Cyprus, Greece and Turkey, 3 interviews in Malta and Italy; in Spain-East validation workshop all (21) participants answered the interview questions in writing, while in Spain-West workshop the interview questions were discussed in a debate where the key problems of the knowledge transfer in the sector where addressed. Agents representing all parts of the EE retrofitting value chain (public bodies and finance, knowledge and products providers, energy providers, energy and retrofitting services providers, quality assurance, demand) provided their opinions and insights in interviews.

The positive feedback of the validation participants includes the following:

- The KTF has a potential to bring together the whole EE retrofitting value chain, facilitating communication, networking and knowledge exchange, and it could become a starting point for development of EE retrofitting community;

- KTF provides an opportunity to collect a lot of information on EE retrofitting in one place, including best practices from different Mediterranean countries;

- The ICT-based approach is modern and attractive;

- Knowledge transfer guidelines ("lesson plans") are a useful tool for contributing material to the KTF;

- KTF could be applicable in other sectors of building industry and in other countries (with adapted content);

- Most participants would use the KTF in the future and would recommend to others (especially is it is further improved).

The main issues identified by the participants were:

- Quality and trustworthiness of the content should be addressed

- Some difficulties in registration process, as well as in the search process – lack of instructions
- Lack of advanced search filters
- Material contribution process could be improved
- The tool needs editing in order to have a proper English version; non-English speaking users might have difficulties using the tool if it's not translated into other languages
- There is a need for help system and more explanations to assist users
- Visual aspects of KTF need to be improved
- W3C Compliance of the tool should be ensured

The participants of validation workshops in many cases included a request for more material, and country-specific information. Including extensive EE retrofitting-related content in the KTF is not in the scope of ee-WiSE project, however the partners have decided to attempt to add additional material. Furthermore, dissemination activities should be intensified in order to encourage the agents of the value chain to contribute material to the portal.

It was decided to have another round of internal/ consortium-level validation after the current recommendations are implemented and the next version of KTF is ready, i.e. in the end of May 2014.

4. ENHANCEMENT PLAN

The ee-WiSE Knowledge Transfer Framework was accepted by EE retrofitting value chain as a valuable initiative and a promising tool for knowledge exchange. The validation activities accomplished in partner countries and on the consortium level provided a number of recommendations for improvement of KTF.

4.1. Improvement areas

Several improvement areas have been identified:

- **Visual design**
  Although attractiveness of KTF design might be considered to be a matter of personal taste, quite a few participants of validation activities noted the need for improvement in this area, thus design options should be re-considered.
  More specifically, the comments of the validation participants included: "branding and visual aspects need to be improved and overall coherence on the design and visual needs to available across the tool", "Improve branding of the site, in terms of colour scheme and design".

- **Functionality**
  Functionality is related to the level of understanding and usability of the tool.
  KTF is a complex tool based on extensive research, serving different needs of the whole EE retrofitting value chain, from professionals in the industry to occupants and anybody interested in EE retrofitting. User-friendliness of the tool is essential if its usage by the whole value is to be achieved.
  The "flow" of the KTF - material search and contribution - should be reviewed and possibly simplified.
  Help system including guidelines/ help/ FAQ for users, as well as on-going guidance during the use of the portal (add-ons explaining actions required, terminology etc.) should be developed.
  Advanced search should be further elaborated – to allow filtering by language, country, ICT tool.
  Translating KTF into other languages should be considered in order to increase usability.

- **Quality of KTF and its contents**
  In order for KTF to be successful, the quality of general presentation (language in all parts of it, correct display of different aspects of KT material, e.g. flags indicating the language) and the quality of material should be improved. The material that has already been included in the tool has to be reviewed, empty entries removed, and material contribution process improved in order to increase its quality. The consortium should also decide how the quality of contents could be ensured and trust increased, e.g. through rating system, development of user profiles, etc.

- **Tools to facilitate development of EE retrofitting community**
  as opposed to a database of EE retrofitting material should be developed. A number of validation participants have noted that the KTF is a valuable tool that has a potential to bring different agents of EE retrofitting value chain together. Different tools could be used to encourage the development of such EE community, e.g. forums, comments, rating of material and knowledge providers, more intensive dissemination efforts to attract a large number of users, etc.

4.2. Responsibilities and timeline

A complete list of suggestions for improvement has been compiled based on the Minutes of the Consortium-level workshop and analysis of the country-level validation reports.

The list was presented to the partner responsible for technical development of the Knowledge Transfer Framework, which has analysed the recommendations and indicated which improvements could be made immediately, and where more support of other partners was necessary.

Following the discussion among the partners, the responsibilities were shared and timeline for improvements established, in order to develop the next improved version of KTF.

The changes in KTF requested by the participants of country-level validation workshops, as well as those defined in the consortium-level workshop will be implemented by 20 May 2014.

Another round of internal testing and validation by project partners in their role as agents of EE retrofitting value chain will be completed in the end of May. Internal validation sheets will be completed by all partners; in this way their opinion on different aspects of KTF (visual design, functionality, etc.) as well as any further recommendations for improvement will be collected. Improvements of KTF may continue till the end of the project, aiming to ensure quality and improve user experience as much as possible.

5. CONCLUSIONS

The ee-WiSE validation activities in partner countries (Bulgaria, Cyprus, Greece, Italy, Malta, Spain, and Turkey) were performed in February-March 2014. The developed KTF, guidelines and Tools were introduced to and tested by the target audience – agents of the value chain. The feedback has been collected through questionnaires and interviews, as well as discussion during the workshops. The results were presented in country-level reports, presented and discussed in consortium-level workshop in Malta (27 March 2014) and translated into conclusions that will be used to improve the developed Framework and Tools.

In general, the participants of the validation activities were positive about the KTF developed and thought it could become a valuable tool to improve exchange of knowledge in the area of EE retrofitting. The main recommendations for improvement of KTF that came out of validation are:

- The overall quality should be improved (including design, functionality, quality of content/ material)
- Visual design needs to be more attractive and the KTF should be more user-friendly and intuitive
- Introductory video or presentation explaining the KTF would help first-time users to navigate the Tool with more confidence
- KTF should be simplified and number of "steps" reduced where possible - the "flow" of KTF should be revised
- Advanced search/ filtering options (language, tool, etc.) as well as keyword search should be developed
- Help system including guidelines/ instructions for users, as well as ongoing guidance during the use of the portal (add-ons explaining actions required, terminology etc.) is necessary
- Material contribution area should be more clear, compulsory and optional fields have to be identified - it must function well in order to encourage Knowledge Providers to add contents
- A quality evaluation system (e.g. rating of material by users) has to be developed in order to increase trust
- A forum or similar tool(s) would allow to create an EE retrofitting community, as opposed to a database of EE retrofitting material
- Translating KTF (menus and knowledge transfer guidelines) into other languages should be considered in order to increase usability

In addition to recommendations for improvement, a number of participants have stressed the need for strong promotion of the KTF, aiming to attract Knowledge Providers as well as users, so that the amount of quality content is increased and the portal becomes a reference point for everybody interested in EE retrofitting in the Mediterranean.

Based on the country-level and consortium-level validation conclusions, the Knowledge Transfer Framework has been improved and a new upgraded version of KTF was released in the beginning of Month 21 (June 2014). Most recommendations listed above have been implemented at this point; the remaining ones (introductory video/ presentations and translation of KTF) will be completed by the end of Month 21.

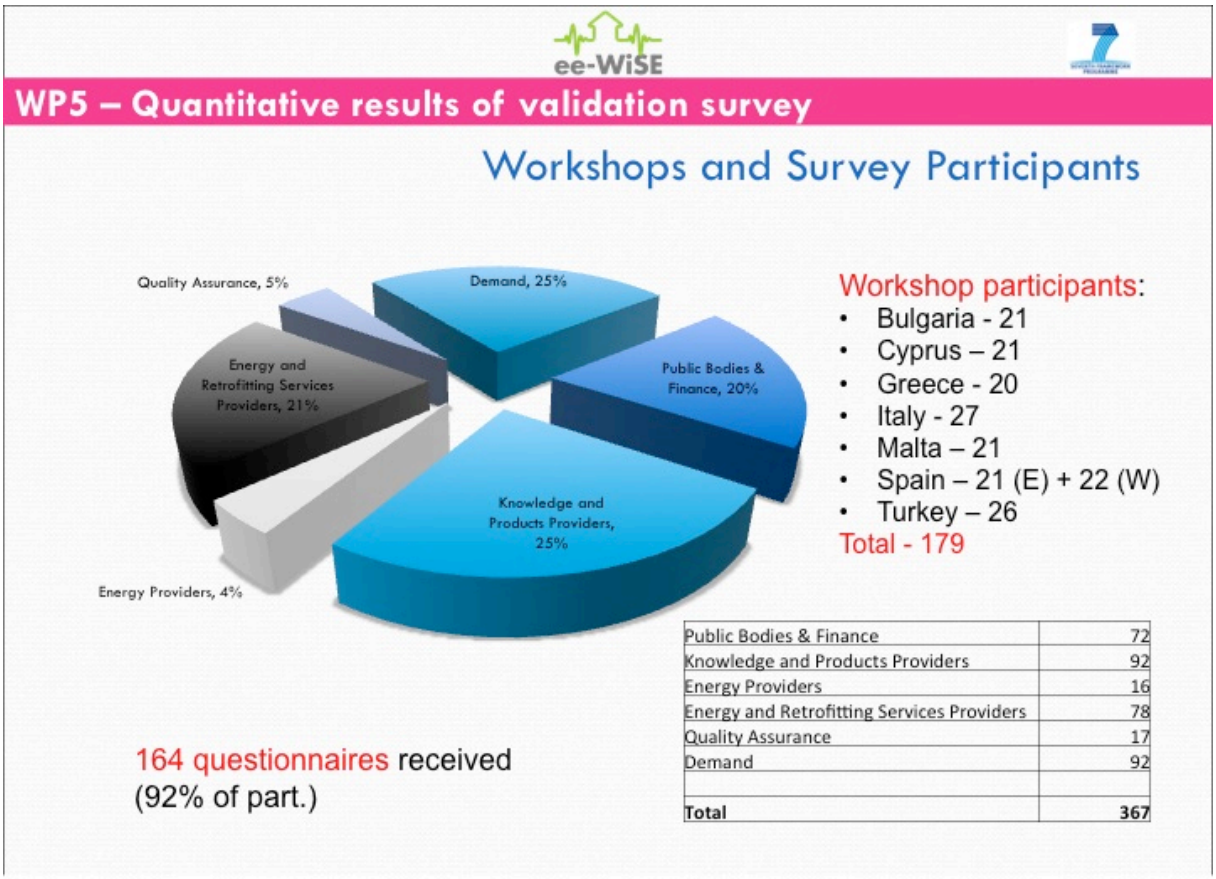
Additional internal validation will take place in Month 21, where all partners will test the KTF once again and provide their conclusions and additional recommendations for improvement. Continuous improvement of KTF will take place where necessary till the end of the project.

Annexes:

Annex 1: Country-level validation reports
Annex 2: Results of validation workshops: questionnaire survey

ANNEX 1: QUESTIONNAIRE SURVEY - ANALYSIS OF VALIDATION RESULTS

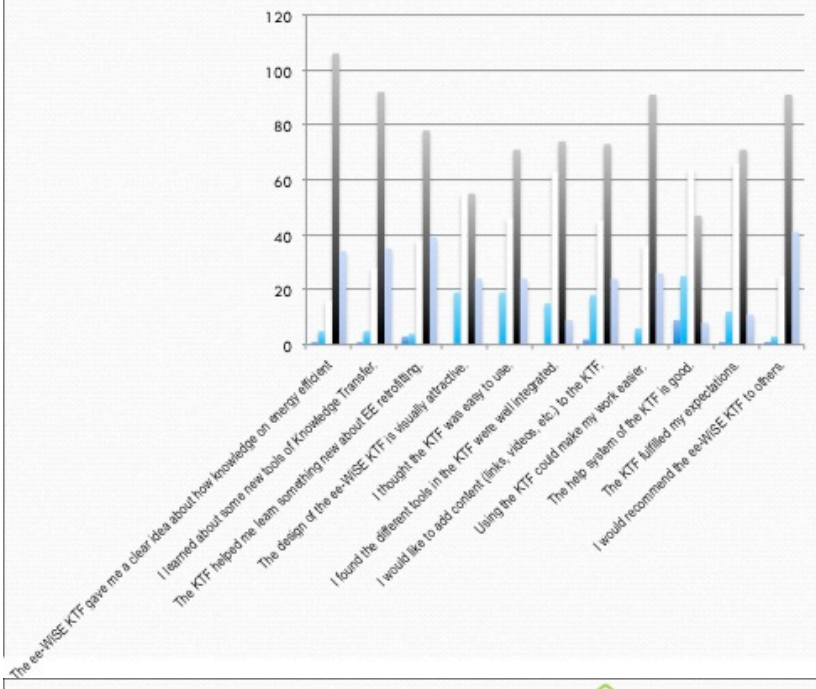
The below graphs show the quantitative results of the questionnaire survey performed during the ee-WiSE validation activities. Following the graphs that present the distribution of responses, conclusions based on the descriptive statistics and correlation analysis are included.



Public Bodies & Finance	72
Knowledge and Products Providers	92
Energy Providers	16
Energy and Retrofitting Services Providers	78
Quality Assurance	17
Demand	92
Total	**367**

WP5 – Quantitative results of validation survey

Evaluation of KTF



Best evaluated:

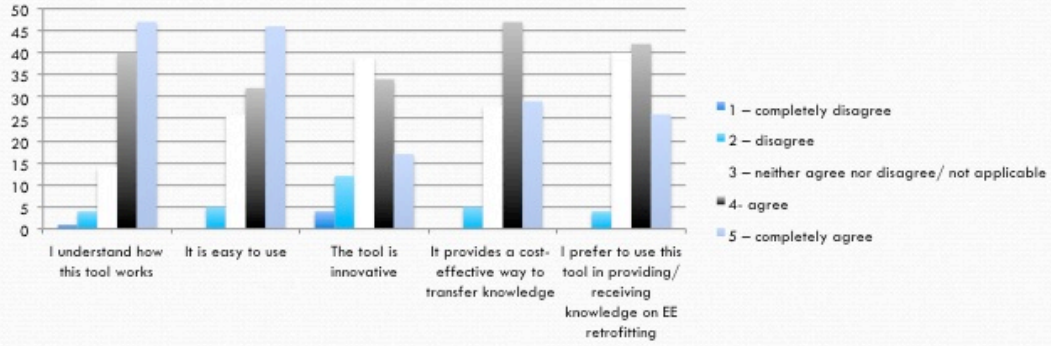
- General concept
- New tools for KT
- Applicable at work
- Would recommend

Less liked:

- Design (visual appeal)
- Help system

WP5 – Quantitative results of validation survey

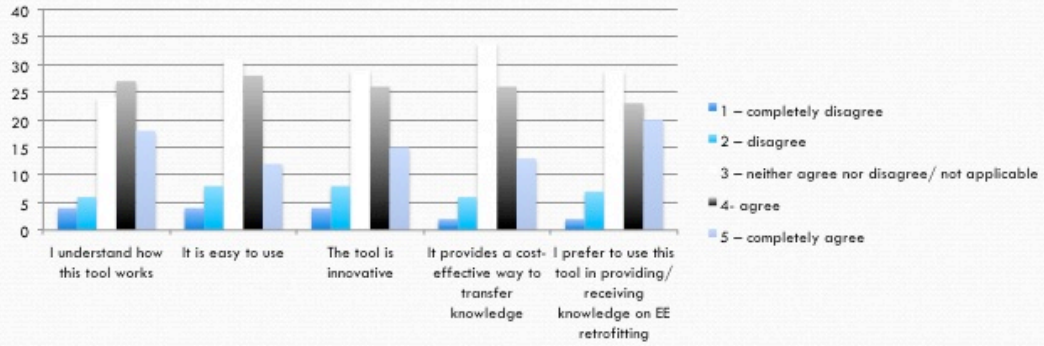
Evaluation of ICT tools: video in ICT learning courses



112 respondents

WP5 – Quantitative results of validation survey

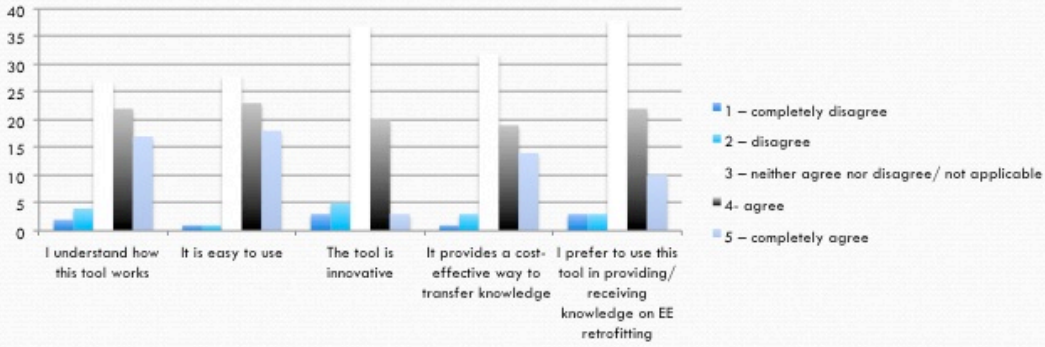
Evaluation of ICT tools: Simulation



83 respondents

WP5 – Quantitative results of validation survey

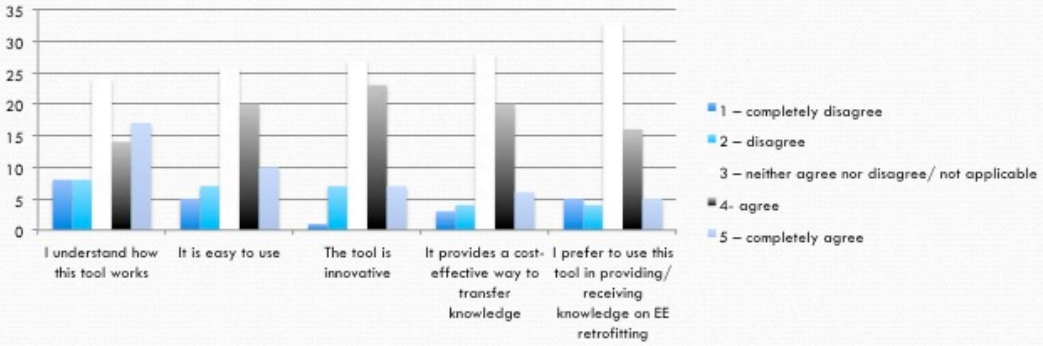
Evaluation of ICT tools: Audio in learning



76 respondents

WP5 – Quantitative results of validation survey

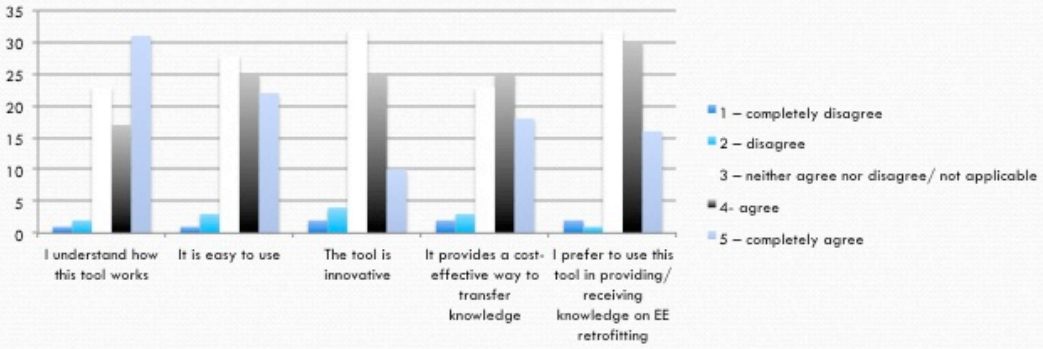
Evaluation of ICT tools: Podcasts



71 respondents

WP5 – Quantitative results of validation survey

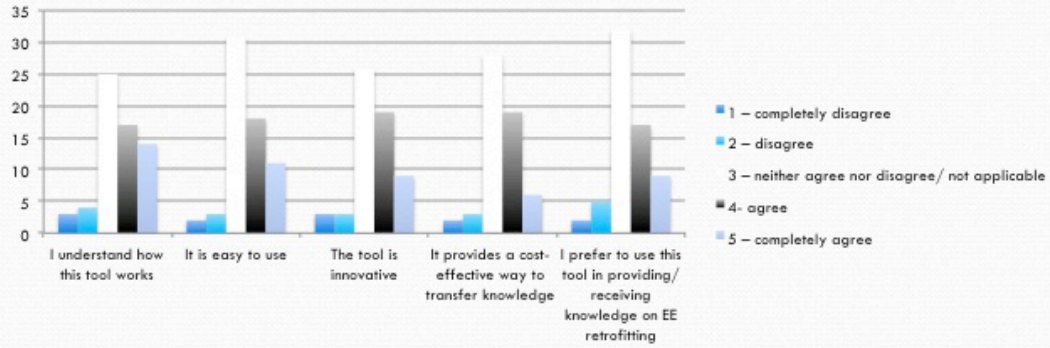
Evaluation of ICT tools: e-learning courses



81 respondents

WP5 – Quantitative results of validation survey

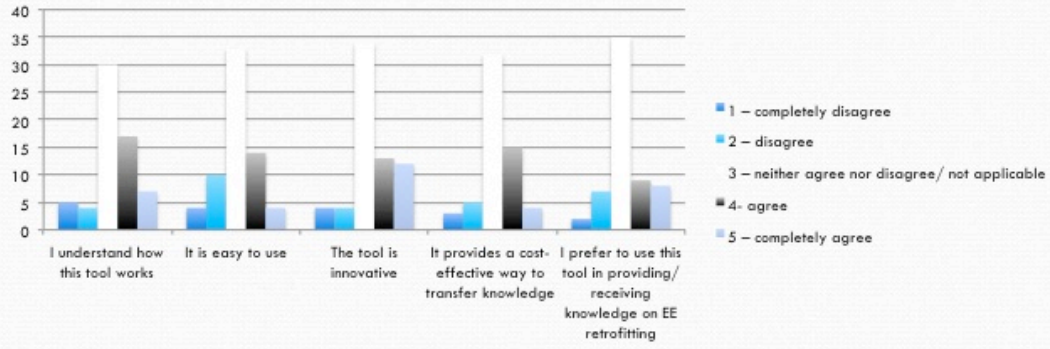
Evaluation of ICT tools: educational games



65 respondents

WP5 – Quantitative results of validation survey

Evaluation of ICT tools: Augmented Reality applications & software/ Virtual Reality worlds

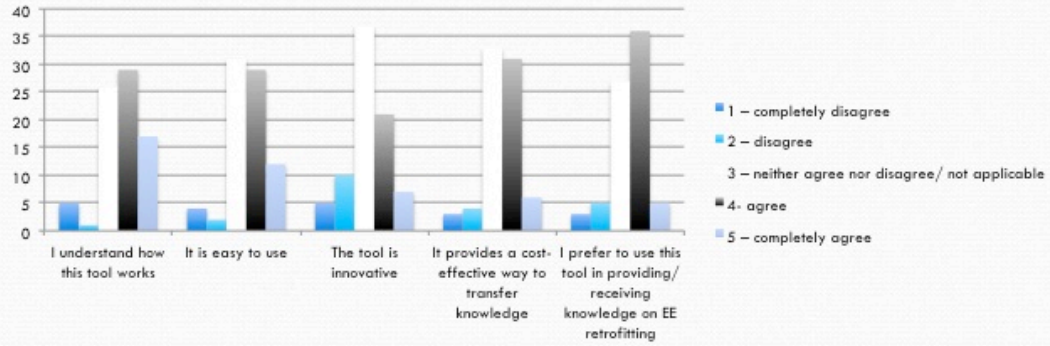


67 respondents

ee-WiSE

WP5 – Quantitative results of validation survey

Evaluation of ICT tools: Communication tools

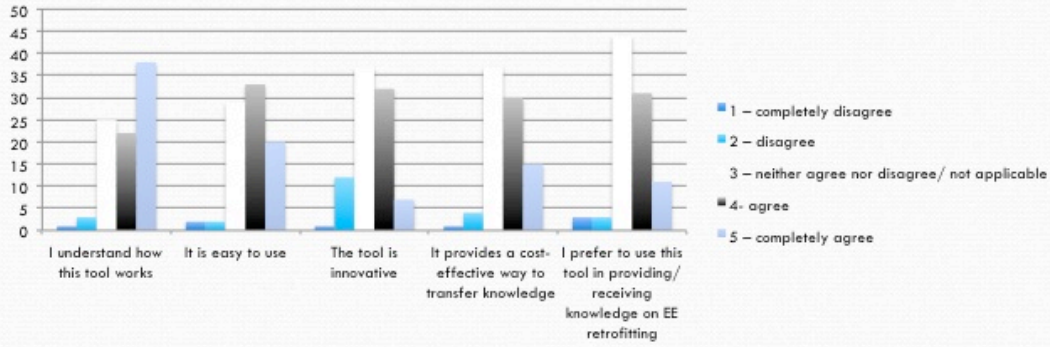


80 respondents

ee-WiSE

WP5 – Quantitative results of validation survey

Evaluation of ICT tools: Blog-based learning / Social networking sites/ Community portals

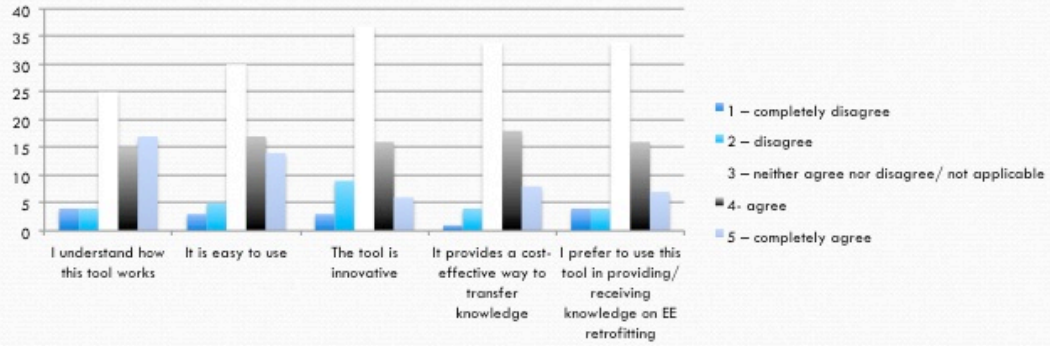


92 respondents

ee-WiSE

WP5 – Quantitative results of validation survey

Evaluation of ICT tools: Wiki tools

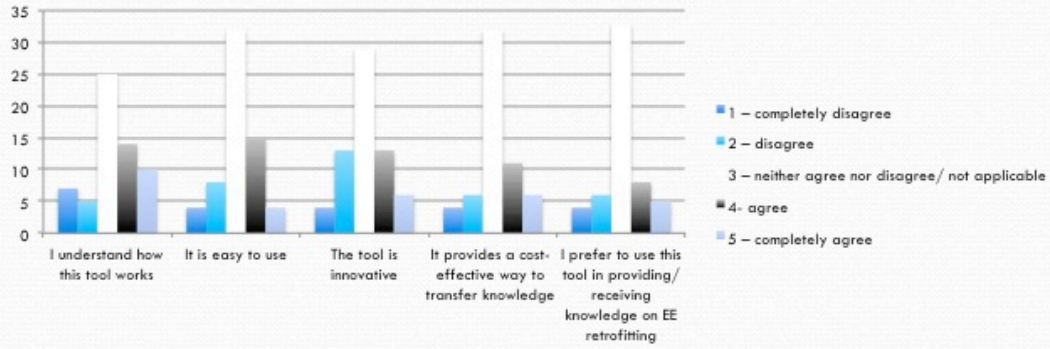


71 respondents

ee-WiSE

WP5 – Quantitative results of validation survey

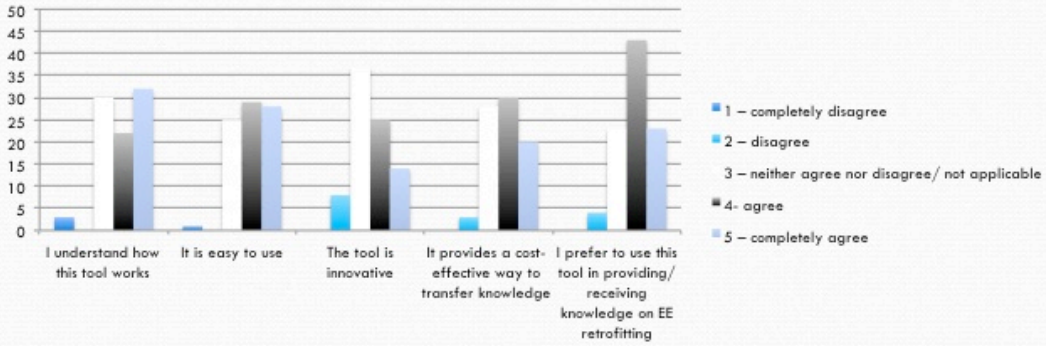
Evaluation of ICT tools: mind mapping



65 respondents

WP5 – Quantitative results of validation survey

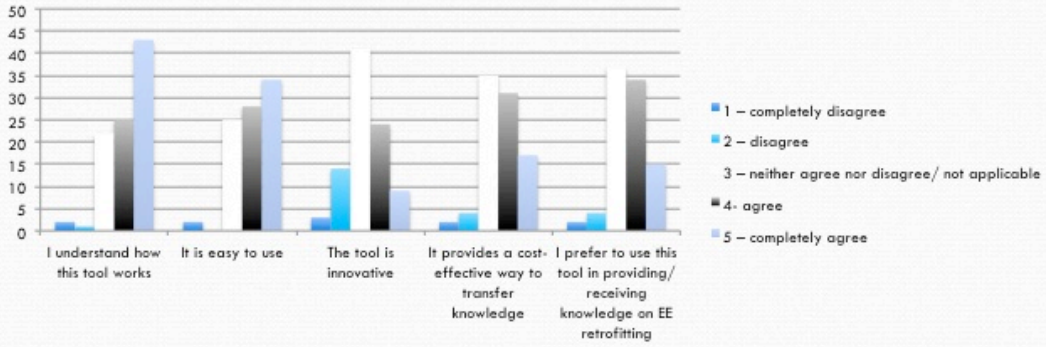
Evaluation of ICT tools: webinars, web meetings, online conferences



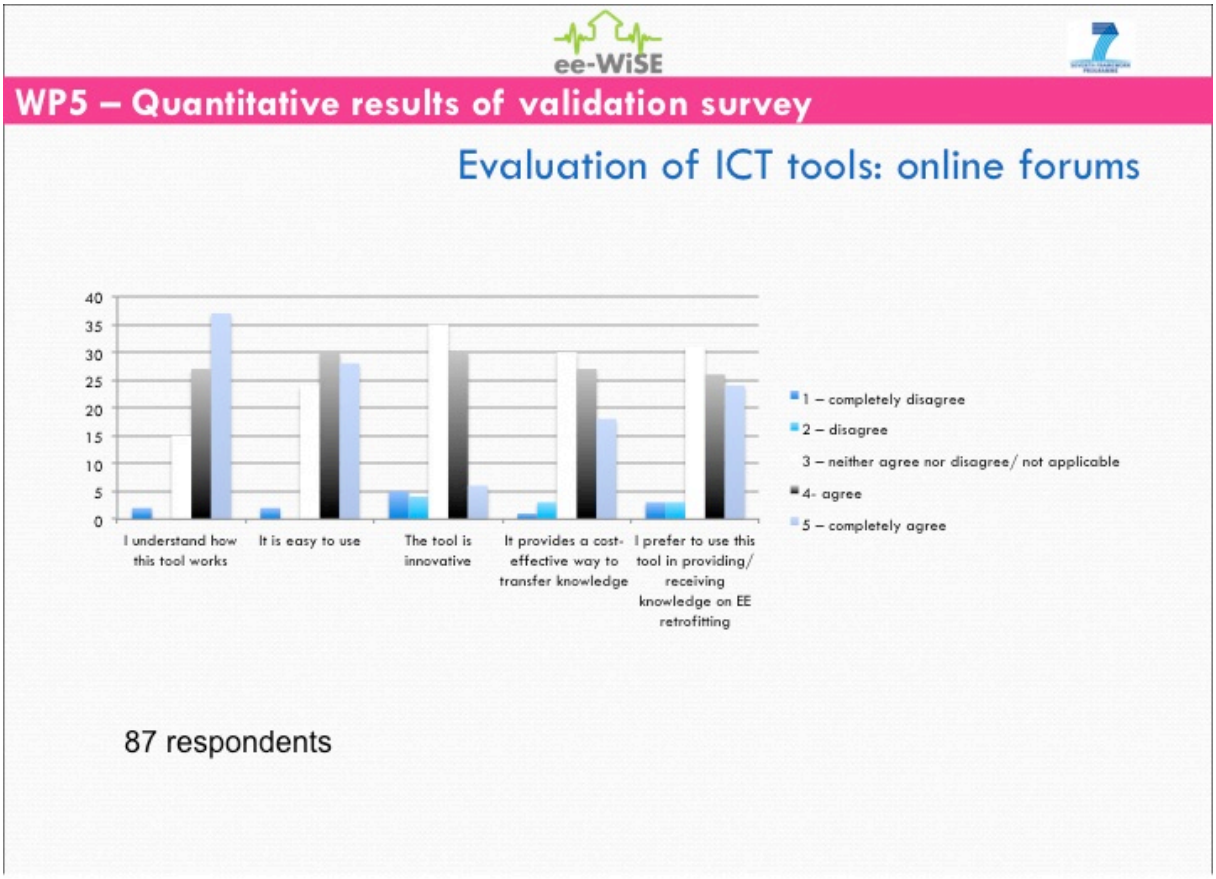
93 respondents

WP5 – Quantitative results of validation survey

Evaluation of ICT tools: e-book



93 respondents


ee-WiSE
WP5 – Quantitative results of validation survey
Evaluation of ICT tools: online forums
40
35
30
25
20
15
10
5
0
I understand how this tool works
It is easy to use
The tool is innovative
It provides a cost-effective way to transfer knowledge
I prefer to use this tool in providing/ receiving knowledge on EE retrofitting
1 – completely disagree
2 – disagree
3 – neither agree nor disagree/ not applicable
4- agree
5 – completely agree
87 respondents

Conclusions based on the descriptive statistics and correlation analysis

Author: Lilly T. Christoforidou, Ph.D. (HoR)

The overall assessment of the mean validation scores is positive. The response values are lower on questions, such as "I thought the KTF tool was easy" or "The KFT fulfilled my expectations". The human factors issue has to be taken into consideration if the KTF impact to users is important. Perhaps more and clear instructions across MENUS and SUBMENUS will enhance the ease during use.

The lowest overall mean value was obtained at the question "The KFT fulfilled my expectations" which could be attributed to the preliminary content selection. The second lowest mean assessment score was received at the question "The design of the KTF is visually attractive" and this probably means more simple and less ornate designs, in other words, a more plain and simple aesthetic appearance. Perhaps the expectation of the users for professional information is related to more simple and easy to understand graphic designs.

So, our conclusions from the descriptive statistics and more importantly the calculation of the correlation coefficients is that there is a need for improving and integrating further the different functions of the MENUS and SUBMENUS, providing more coherent instructions to users, improving the quality of the content.

Regarding the correlation analysis across the overall mean responses of the participants, some partners expressed their KTF tool validation responses in more similar ways than others. There are partners who are very similar in their overall assessment of the KTF tool and this is expressed very strongly in more than 50% percent of the consortium. This implies that the majority of the participants view the KTF tool in a similar way. This is an important result.

	Bulgaria	Cyprus	Greece	Italy	Malta	Spain East	Spain West	Turkey
Bulgaria		0.36	0.03	0.01	0.53	0.50	0.59	0.79
Cyprus	0.36		0.28	0.09	0.85	0.82	0.78	0.80
Greece	0.03	0.28		0.75	0.07	0.21	0.12	0.18
Italy	0.01	0.09	0.75		0.04	-0.12	-0.14	-0.02
Malta	0.53	0.85	0.07	0.04		0.76	0.76	0.81
Spain East	0.50	0.82	0.21	-0.12	0.76		0.88	0.81
Spain West	0.59	0.78	0.12	-0.14	0.76	0.88		0.75
Turkey	0.79	0.80	0.18	-0.02	0.81	0.81	0.75	

However, some improvements are needed in the designs and instructions accompanying the MENUS and SUBMENUS as well as the content mix and navigation across the MENUS and SUBMENUS. These are human factors issues that require special attention.

ANNEX 2: COUNTRY-LEVEL VALIDATION REPORTS

Project full title: Energy Efficiency Knowledge Transfer Framework for Building Retrofitting in the Mediterranean Area

Grant agreement no: 314347

EeB.NMP.2012-6 - Methodologies for Knowledge transfer within the value chain and particularly to SMEs

KTF Validation Workshops

Country Level Report - BULGARIA

Circulation: Confidential

Partners: BCC

Authors: Stiliyan Ivanov

Date: 19/03/2014

Doc. Ref. N°: ee-WISE-WP5-Task5.1-Bulgaria_Country_Level_Workshops-V2-07042014

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VERSION CONTROL

Version	*Date*	*Comment*
01	19th March 2014	ee-WiSE-WP5-Task5.1-Bulgaria_Country_Level_Workshops-V1-19032014
02	7th April 2014	ee-WiSE-WP5-Task5.1-Bulgaria_Country_Level_Workshops-V2-07042014

TABLE OF CONTENTS

1. INTRODUCTION

The validation workshop was carried out in Bulgaria on 12th of March 2014 with the participation of different agents active in the EE Retrofitting Value Chain. Invitations, agenda, links to the platform and the online questionnaire were sent to the aforementioned representatives of the Value Chain before the workshop. They were asked to test the platform in advance and fill in the online survey. All invited parties are actors on several VC positions – at least owner + trainer, or owner + trainer + active designer/supervisor in construction.

The knowledge transfer needs assigned and discussed were:

- Increase business motivation through public R&D initiatives and innovation funding.
- Establishing network organisations that will coordinate knowledge transfer from innovation groups and assist in the implementation.
- Clustering within the retrofit market providing integrated solutions.
- Training of traditional craftsmen on EE retrofitting innovations.
- When communicating research results, there is a need of a greater emphasis on the practical benefits of the retrofit technology.

2. WORKSHOP STRUCTURE

The agenda of the workshop was the following:

- General overview of the ee-WiSE project with details on the activities that has been done so far.
- Going through the ee-WiSE online Knowledge Transfer Tool – differences and options regarding the provider and the receiver. The different roles of the VC agents.
- The existing materials on the platform were presented and it was explained how to search training content.
- The steps towards uploading were presented.
- Feedback, interview and discussions; a paper based questionnaire relevant to the KTF Tool Validation exercise.

Documents:

1. Agenda for KTF validation
2. Improved final version of the formal project presentation in Bulgarian
3. Questionnaires – 5 questions
4. List of questions for the interview
5. List of participants

Place: BCC premises - Sofia, Bulgaria

Date: 12.03.2014

Moderator/Presenter: Stiliyan Ivanov, Nina Georgieva, Miroslav Nlkolov

The meeting began according to plan. The project was presented by using the standard project presentation with some up-to-date improvements. The main goal was to recognize the project's objectives and to disseminate the ee-WiSE project. The energy efficiency is part of the agenda of all stakeholders-participants and they are all aware of the benefits, the barriers and the possible issues. All of them are practically oriented and engaged in energy efficiency in the real life, either as a provider or receiver/demand. The ee-WiSE project attracted a great deal of attention among the participants. The KTF platform and the Surveymonkey links were presented again. The presentation with the links, along with all other available materials, were sent to all participants after the KTF validation event. The duration of the workshop was 4 hours. The number of participants - 21, including the team working on the project.

After the general introductory presentation, the KTF tool was presented. And the two main roles - receiver and provider, were thoroughly explained. All of us are receivers and providers in all cases in the KTF tool. The mechanism of receiver was presented – e.g. how to look for certain information on the platform. Consequently, several examples were shown, as well as a clear explanation of the types of agents.

Next was presented the upload mechanism, and all necessary details were thoroughly explained too. Meanwhile, BCC team remains open to review with them or other VC members, the uploading process with appropriate tools at the appropriate place. And finally, we could upload some good products on their behalf. Thus, several options were discussed, using the English version of the platform.

It was stressed that the tool could be useful for the knowledge providers on ee-WiSE knowledge platform for several reasons: improved image of the institution/organization, increased attractiveness and provision of sustainability for their projects, etc.

3. DATA ANALYSIS

This section presents a summary of the feedback from both the questionnaire responses that were filled in by the participants and form the general discussion after having tested the KTF tool. Both quantitative and qualitative responses are summarised here.

3.1. Quantitative Results

The quantitative results are provided in a separate Excel document [ee-WiSE_validation questionnaires_Bulgaria_Workshops.xls].

Comment: The participants were asked to fill in the online questionnaires before and after the meeting. Until the 19th of March we received 9 online and 10 paper based questionnaires. Some of the questionnaires were filled in on paper, unfortunately they do not cover the whole electronic survey.

3.2. Feedback from the discussion

We had a discussion/+paper/ on the KTF platform. Following is a resume of all questions/topics that were thoroughly discussed, as well as a table summarizing two short interviews with 5 additional questions regarding the NEEDs.

1. What do you like the most and respectively the least in the KTF?

While summarizing the responses of the participants in the workshop it became clear that there are a few common aspects that are seen as the best characteristics of the KTF tool. The same goes for the worst, of course. Generally speaking, the KTF platform is seen as a potentially very effective opportunity and instrument for both providers and receivers. Probably the thing praised the most is the fact that the platform provides very useful information. Not only that, but above all there is a strong guarantee that this information is accurate, relevant, and important. This guarantee is granted by the participation of representatives from the whole Value Chain. This would also significantly improve the communication among them, which is also seen as a very positive element. In addition, the majority of the participants in the workshop expressed great satisfaction that a tool providing energy related solutions would finally be available in Bulgaria.

There is probably one disadvantage that all participants mentioned, one way or another. And this is the lack of Bulgarian version of the KTF tool, and also the need of adding different search filters, which would ease the users when working with the platform. Of course, there were some participants who criticised the tool for being too complicated and challenging for the end users. The main concern here is that the uploading mechanism is too abstract. Understandably, the discussion was not entirely focused on the KTF tool. This is so, because most of the participants are facing different administrative challenges in Bulgaria and they were eager to discuss them.

Comment: What was mentioned as a potential setback is the time frame in terms of building retrofitting in Bulgaria. The biggest concern is that since there is almost no realization of the EU funding in the EE building retrofitting in Bulgaria so far, there won't be enough time for the Value Chain actors to take full advantage of the KTF tool. "The platform looks great, but it could be useful only for the next programme period till 2020. The funding provided for the energy-efficient refurbishment of the

building stock in Bulgaria so far is EUR 32 million and up to date/March 2014/ the realization of this funding equals to zero. The programme ends in December 2015, claimed one of the participants in the workshop.

2. **Please give us your opinion for the tested instruments and the potential use in your work.**

Regarding the KTF definition, most of the participants agreed that it is very useful. In their opinion the tool could be described as contemporary. Also they shared the understanding that it has a great potential to become a very successful instrument, which could be of a great assistance to all Value Chain actors. But considering Bulgaria's slow rhythm in realizing and benefitting from the EU funds in the energy-efficient refurbishment of the building stock, this great potential of the KTF tool is unfortunately mostly seen in the not so near future.

One of the biggest advantages the KTF tool has, according to the majority of the participants, is the possibility to be used as a collecting mechanism. In other words, it could be used to collect best practices in the EU regarding energy efficiency. This is seen as a very positive option, especially since the general expectation is that such best practices could be also extremely helpful in boosting the green economy in Europe.

3. **Would you use the KTF platform?**

Following all the positive comments, the majority of the participants in the workshop expressed a strong confidence that they would not only use, but also they would recommend the KTF platform as much as possible. They spoke with great certainty that as long as the tool is widely popularized, it could potentially have a significant positive influence on the building retrofitting process in Bulgaria.

4. **Do you think that the Framework can be used for other construction sub-sectorial activities and in other countries?**

This question raised many follow-up topics. Most of the participants agreed upon the possibility for the Framework to be used for other construction sub-sectorial activities and in other countries. Their major concern though is that the main obstacle for such tool to be effective is the heavy administrational regimes and bureaucratic barriers. In this regard, the majority of the participants are certain that precisely this would be the biggest challenge for the successful implementation and use of the KTF platform in countries like Bulgaria, and others with similar bureaucratic issues. "Yes, they can apply the Framework in other countries, especially if they do not have the same bureaucratic administration, like ours", this is how one of the participants summarized the general concern on this topic. Furthermore most of the Value Chain actors agreed upon the need of better time management, work efficiency and practical solutions, not only in building retrofitting, but also in other construction sub-sectorial activities in Bulgaria. Only then the Framework could be used effectively, according to the participants in the workshop.

5. **How do you feel about the ICT-based approach of the KTF? How attractive and convenient is it to you as a provider/receiver of EE retrofitting knowledge?**

The KTF platform is widely seen most of all as an opportunity for both providers and receivers. Such opportunity has long been expected, especially considering the significant lack of information on energy efficiency and the very low levels of EE retrofitting knowledge in Bulgaria. The Value Chain actors and participants in the workshop expressed great satisfaction that a tool providing energy related solutions would be available. Not only that, but also they underlined how important for them is the option that the KTF tool provides – updating information in real time. Regarding the attractiveness and the convenience of the platform, it became clear that most of the participants see it as a perfect instrument for improving the communication among all Value Chain actors. The only disadvantage here is the lack of Bulgarian version of the KTF tool. Another interesting suggestion is adding different search filters, which would ease the users when working with the platform.

6. **Can you please indicate your opinion and feelings about the lesson guidelines and knowledge transfer tools you have tested, and their potential application in your work?**

- The general position of the participants is that the guidelines and the knowledge transfer tools are very helpful and that they have great potential to become a central pillar in the EE building retrofitting in Bulgaria. Most participants also acknowledged the need of more practical advice and guidance. But again most of them acknowledged many other issues in the sector, which most definitely prevents them of assessing the KTF tool objectively enough, because they seem more focused on the administrative setbacks and not so much on looking for practical solutions to the existing issues in the building retrofitting exclusively.

3.3 General comments on the tool (quotes):

Positive:

- "Opportunity to find a lot of useful knowledge for the different VC members."
- "The participation of representatives from the whole Value Chain, serves as a guarantee for the provision of the focus of significant amount of knowledge."
- "Opportunity, for the users, to receive the proper energy related solutions."
- "It is good that the information could be updated in real time."
- "It is great that the project aims to improve the communication among the EE Value chain actors."
- "The collection and the spreading of best practices is very useful."

Negative:

- "There must be a Bulgarian version of the KTF tool"

- "There should be an option to switch languages in advance"
- "Different search filters – language, video, pdf, etc."
- "The KTF tool shall be more intuitive."
- "The KTF tool is too complicated and difficult to use."

Needs	PI	OP
Increase business motivation through public R&D initiatives and innovation funding.	**Yes**	**No**
Establishing network organisations that will coordinate knowledge transfer from innovation groups and assist in implementing in.	**Yes**	**Yes**
Clustering within the retrofit market to provide integrated solutions.	**No**	**NA**
Training of traditional craftsmen on EE retrofitting innovations.	**Yes**	**Yes**
When communicating research results, more focus needs to be given to practical benefits of the retrofit technology.	**Yes**	**Yes**

- "The uploading/searching mechanism is abstract and could potentially become a serious disadvantage."
- "The search engine on the ee-wise.eu does not search within the KTF tool."
- "The platform looks great, but it could be useful only for the next programme period till 2020. The funding provided for the energy-efficient refurbishment of the building stock in Bulgaria so far is EUR 32 million and up to date/March 2014/ the realization of this funding equals to zero. The programme ends in December 2015."

4. FEEDBACK OBTAINED FROM INTERVIEWS

Two short interviews were carried out with M.Sc. Eng. Petya Ivanova/Construction engineer – Principal of the secondary VET school and Onik Pilibossyan – Manager of condominium. The Q&A are represented below:

- Regarding the energy efficiency, the most serious issue is the heavy administration and the additional taxations, where greater efforts must be taken.

5. CONCLUSION

Opportunity, useful knowledge, proper energy related solutions, updated information, improved communication along the whole Value Chain, collection of best practices, these are only some of the positive comments and conclusions expressed by the participants. However, among the conclusions following the KTF Validation Workshop in Bulgaria is that the general appearance of the KTF tool has to be improved. In that context were some of the main concerns. The majority of the participants stressed on the fact that a Bulgarian version of the platform is a must due to the need of a better understanding and applicability. Another important aspect is the necessity of more intuitive navigation through the KTF platform, which would be able to support the receivers/end users to find the result they need way faster and much more accurate. This implies different search approaches for the database, improving the search engine, an option to switch languages, advanced search, etc. Such "intuition" would also make the Platform easier to use and not so "complicated", "abstract" and even sometimes "confusing" for the end users. Besides these general suggestions and advice, the overall impression and comments are positive and more importantly useful for the Consortium in terms of improving the product of the ee-WiSE project – the Energy Efficiency Knowledge Transfer Framework for Building Retrofitting in the Mediterranean Area.

Project full title: "Energy Efficiency Knowledge Transfer Framework for Building Retrofitting in the Mediterranean Area

Grant agreement no: 314347

EeB.NMP.2012-6 - Methodologies for Knowledge transfer within the value chain and particularly to SMEs

COUNTRY-LEVEL VALIDATION REPORT: CYPRUS

Circulation: Confidential
Partners: X-Panel Ltd
Authors: Vita Adomaviciute, Elias Kouloumis (X-Panel)
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01	19th of March 2014	eeWISE-WP5_D5.1_Country_Level_Validation_Cyprus

TABLE OF CONTENTS

1. INTRODUCTION

The main objective of the ee-Wise project is to develop a ***Knowledge Transfer Framework*** (KTF) within the value chain of EE sector in building retrofitting in the Mediterranean, and with special attention to SMEs.

The validation activities of WP5 aim to collect the feedback of the EE retrofitting value chain regarding the adequacy of the developed Knowledge Transfer Framework, knowledge transfer guidelines and ICT tools, and provide recommendations for potential improvements, in order to ensure the validity of the Framework and its adjustment to the real needs of the sector.

This report contains the results of the KTF and Tools Validation activities *implemented* in Cyprus.

The knowledge transfer needs addressed in the Cyprus Validation Workshops were:

B4: Connecting technical commercial advice to EPBD - energy performance and requirements of the actual buildings.

D3: Occupants need financial support to invest in EE retrofitting technology.

D2: Industry needs financial support to take up results of scientific innovation.

C3: R&D to divert their activity rapidly in response to changes in the market.

B3: Clustering within the retrofit market to provide integrated solutions.

C2: Real-life evaluation of research results.

2. WORKSHOP AGENDA AND PARTICIPANTS

In Cyprus, a total of 6 workshops (2 in-company and 4 multi-company) were held during the validation period, between 20 February and 17 March. The total number of agents that participated in these events was 21; most of them were active in more than one part of the EE retrofitting value chain. In their validation questionnaires, the agents marked their roles as follows:

1. Public Bodies & Finance: Financial agent (4 participants), Public administration (6), Government (4), Standardization body (1)
2. Knowledge and Products Providers: Technical solutions developer (3), Installer (2)
3. Energy Providers: Renewable Energy Company (1)
4. Energy and Retrofitting Services Providers: Architecture and Engineering company (7)
5. Quality Assurance: Certification Body (1)
6. Demand: Building Manager (2), Occupant (14)

The duration of the workshops differed (1-3 hours) and it was related to the number, type and needs of participants. In general, the agenda of the workshops was as follows:

- Welcome and introduction of participants
- Introduction to ee-WiSE project (background/ rationale, objectives, results)
- Knowledge Transfer Framework (overview and how to use it)
- Presentation and testing of selected Guidelines and Knowledge Transfer Tools
- Discussion and Evaluation

The participants have tested the guidelines and tools listed in section 1 that were applicable to them according to their role in the value chain, however some of them have also checked other needs/ tools. There were many participants representing several agents of the value chain, and they were willing to test additional guidelines together with those suggested.

3. QUESTIONNAIRE SURVEY

This section presents a summary of the feedback from the questionnaire responses that were filled in by the participants after having tested the KTF and tools.

1.1. Quantitative Results

The quantitative results are provided in a separate Excel document [ee-WiSE_validation questionnaires_Cyprus.xlsx].

1.2. Feedback from the Open Questions

The participants of the questionnaire survey could express their suggestions related to improvement of the KTF by answering three open questions. The input of the participants is provided below.

Do you have any suggestions on how to improve the Knowledge Transfer Framework?

In answering this question, the participants addressed the issues of quantity and quality of materials on EE retrofitting available on the ee-WiSE platform, the need for country-specific material, some issues related to contributing material, etc.:

- Add more material.
- Include more country-specific material. Try to collect all material related to legal matters as it is difficult to find it in one place in Cyprus.
- Mark which country the displayed material comes from/ is relevant to.
- Create a control system (committee?) to check and validate the information that is being uploaded. Improve graphics/ visual presentation.
- It would be easier to contribute material without choosing the need first.
- Include a tool (forum, chat) to communicate with other providers and users of material.
- Provide technical support, e.g. live chat.
- Improve search engine (allow filtering material by language, type of tool, etc.).
- Include adverts as a way to fund the operation of the platform

If you encountered problems in using any of the Tools, please give us the details:

- Some material is not in the language that it is indicated.
- A forum provided contained almost no information.

- There are some "materials" with no contents at all.
- Quality of material should be checked.
- Search tool could be improved (e.g. no search by company name available at the moment).
- Limited material.

Do you have any suggestions on how to improve the Knowledge Transfer Tools?

The participants provided the following recommendations for improvement of Knowledge Transfer Tools:

- Include more material using some tools from the list included in the questionnaire, e g. educational games.
- Allow filtering material by language, country, etc.
- Check the quality of material provided, remove empty "material".
- Show next to material what tool is used and make tools clickable (so that it's possible to choose the tool you like)
- Include tools in different languages and show in what language the tool is available (now in some cases it shows that the material is in English but it is not).
- Add chat - technical support.
- Include online calculator tools for estimates of energy usage, etc.
- Promote the platform more aggressively. Providers will come if users are there and vice versa!

4. INTERVIEWS

Interview 1 – Participant is an Architect

1. *What did you like most about the ee-WiSE Knowledge Transfer Framework, and what less? Please explain why.*

   I like it that the platform creates an opportunity to collect a lot of information on EE retrofitting in one place. It is not easy to get all information related to retrofitting (e.g. legal) in Cyprus; if it was available on this platform – or at least relevant links - that would be very useful.

   Small companies related to retrofitting could use the platform to upload information about themselves/ their services – instead of having their own website or in addition to that.

   I think the platform could be improved. The quality of material should be better controlled as at the moment there are some empty entries, some material is without titles, and in general it's not clear which material is trustworthy.

   The terms and conditions say that the managers of the platform are not responsible for the content provided. Although it is understandable why these terms are included, they reduce trustworthiness of the platform and the willingness to use it.

2. *Can you please indicate your opinion and feelings about the lesson guidelines and knowledge transfer tools you have tested, and their potential application in your work?*

   The guidelines for contributors is a good idea. However, I think they are more suitable for advanced users as they are not so easy to understand, especially the titles.

   I'm not sure why we have to choose the guideline first in order to add material to the platform.

   I have tested several tools – video, webinar, e-book – and I think they could all be useful to transfer knowledge. I'm not sure though how a webinar should be developed/ recorded, so in order to use it some guidelines/ instructions would be beneficial.

3. *How do you feel about the ICT-based approach of the KTF? How attractive and convenient is it to you as a provider/ receiver of EE retrofitting knowledge?*

   I like the ICT-based approach, it is attractive, but I think it's not usual in Cyprus. The culture here is not to search for information online but to call somebody you know. However, it could be related to the fact that not so much information is available in internet (especially local information – law, requirements, etc.).

4. *In your opinion, could the Knowledge Transfer Framework be applicable in other sectors of the building industry? Could it be applied in other countries?*

   Yes, the Framework as such could certainly be applicable in other sectors of the in industry and in other countries. However, the materials would need to be different. I would not mix material

relevant to too many different regions in one platform, unless there is a good way to sort it by region/ country.

5. *Could you suggest any improvements to the Knowledge Transfer Framework?*

   It is important to add more country-specific information or links to it, and allow search by country. Best practices from other regions are interesting but we need more practical information applicable in our case (e.g. legal). The quality of material in the platform is an issue – there should be some way to control it.

6. *Would you use the ee-WiSE KTF in the future and recommend it to others?*

   Yes, but some functionality and quality of the contents should be improved.

7. *Would you like to add anything else?*

   No

Interview 2 – Participant is an Occupant

1. *What did you like most about the ee-WiSE Knowledge Transfer Framework, and what less? Please explain why.*

   I like it that everybody related to the area of retrofitting or even just interested in it (like occupants) can contribute material to the platform. It becomes like a forum to exchange knowledge. It might be even better if there was actually a forum on the website to discuss the presented materials, exchange opinions, maybe get advice from professionals, etc. I didn't like the search engine so much, it doesn't allow to sort the material the way I would like, e.g. if I wanted to find only videos or blogs. At the moment there is not much material but if there was more, it would be really important to be able to filter the results.

2. *Can you please indicate your opinion and feelings about the lesson guidelines and knowledge transfer tools you have tested, and their potential application in your work?*

   I will not use these in my work (as an occupant) but I liked it that there are different tools and I can get or provide information in different ways. There were even more tools mentioned in the questionnaire that were not included in the guidelines I tested, it would be interesting to see those too.

3. *How do you feel about the ICT-based approach of the KTF? How attractive and convenient is it to you as a provider/ receiver of EE retrofitting knowledge?*

   ICT-based approach is good, I like searching for information in internet, it's fast and convenient.

4. *In your opinion, could the Knowledge Transfer Framework be applicable in other sectors of the building industry? Could it be applied in other countries?*

   Yes, I think it could be applied in other countries as well.

5. *Could you suggest any improvements to the Knowledge Transfer Framework?*

   The texts in the platform should be edited to fix all the mistakes/ typos – there are too many of these at the moment. Search engine could be improved, filtering options by language, country, tool could be added. The Framework needs to have more information to be useful and attractive to users. A helpdesk or something similar could be useful for those that try to add material.

6. *Would you use the ee-WiSE KTF in the future and recommend it to others?*

   I think so.

7. *Would you like to add anything else?*

   No

Feedback from discussion

In addition to interviews, we had a general discussion during all workshops. The comments of the participants can be summarised as follows:

- The quality of material uploaded on the website should be controlled; there should be some quality standards agreed and adhered to
- When a Receiver chooses a Need and then gets a list of materials/ results, the materials that are not relevant to that specific need are displayed as well. It makes no sense to choose a need if the results are displayed in such a way
- There is a list of tools next to each material but there is no indication in what way/tool the selected material is presented
- The materials available in Knowledge Transfer Tool should be sorted by language (include correct flags), country (Where does the information come from? Or to which country is it relevant? e.g. in case of legal information/ retrofitting requirements), tool (the user may want to get information through a specific tool, e.g. videos only)
- The knowledge provided on the website could be further classified, e.g. general information, legal information, financial information, retrofitting products, retrofitting services, etc.
- Technical support/ helpline should be considered – maybe through Skype or another way of live chat
- Some companies might use "Comments" to promote their own products. This could create problems as only some products would be offered and not a general solution. On the other hand, this could be used for funding of the platform (paid adverts)
- What is the difference of search on the ee-WiSE platform compared to Google search? The benefits of using the KTF should be somewhere explained/ promoted

- The KTF seems to be more suitable for advanced users and could be too complicated for other users, e.g. installers
- Is there a limit per user for uploading information?

5. CONCLUSIONS

The validation activities in Cyprus have been performed by X-Panel Ltd with support of IMA Architecture, in February-March 2014. The developed KTF, guidelines and Tools were introduced to and tested by the target audience – agents of the value chain. The feedback has been collected through questionnaires and interviews, as well as discussion during the workshops. The results are presented in this report and translated into conclusions that will be used to improve the developed Framework and Tools.

In general, the participants of the validation activities were positive about the KTF developed and thought it could become a valuable tool to improve exchange of knowledge in the area of EE retrofitting. The main recommendations for improvement of KTF that came out of Cyprus validation are:

- Set quality standards and then check/ improve the quality of material uploaded on the website
- Remove empty entries and make sure there is no material without titles
- Add more material, especially country-specific
- Next to each material, indicate which tool was used to present it
- Include interesting tools, e.g. online calculator for estimates of energy usage, etc.
- Guidelines/ instructions on how to develop some tools (e.g. webinar) could be useful
- It could be easier to contribute material without having to choose a need/ guideline first – if relevant need(s) could be indicated in the process of contributing the material
- Improve search – allow to filter materials by language, country, tool
- Display only the results relevant to the need chosen by Receiver
- The knowledge provided on the website could be further classified, e.g. general information, legal information, financial information, retrofitting products, retrofitting services, etc.
- Provide technical support/ helpline and a forum
- Correct mistakes/ typos in the description of guidelines and materials, and in general everywhere on the platform
- Consider including paid adverts as a way to fund the platform in the future

- Invest in promoting the KTF – the providers will come and contribute their knowledge if there are many users, and the Receivers will use the platform if it contains enough information.

Project full title: " Energy Efficiency Knowledge Transfer Framework for Building Retrofitting in the Mediterranean Area

Grant agreement no: 314347

EeB.NMP.2012-6 - Methodologies for Knowledge transfer within the value chain and particularly to SMEs

Framework and Knowledge Management Tools

Country Level Workshop Report-Turkey

Circulation: Confidential

Partners: Ege University

Authors: Özge Andiç- Çakır, Türkan Göksal Özbalta, Özge Akboğa

Date: 15/03/2014

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1. INTRODUCTION

The Country level workshop of ee-Wise project was held in 05 March 2014 by Ege University Civil Engineering Department, entitled (in Turkish) "Akdeniz İkliminde Enerji Etkin Bina İyileştirme Bilgi Akış Ağı Çerçevesi Çalıştayı". The event took place in conjunction with a twinning event (in Turkish) "Firma Tematik Günleri" of Industry & Academia that was organised by Ege University Science and Technology Centre- Technology Transfer Office (EU EBILTEM-TTO). The twinning event took place between 10:00 to 12:30 local time and after the lunch break, ee-Wise Workshop started at 13:30 and the events were finalized at 15:45 in the afternoon. The participants were invited to both events and online registrations were possible selectively either for the Twinning Event, the ee-Wise Workshop or both. The online registrations for the events were collected by EU EBILTEM-TTO by the online registration form.

The aim of the Twinning Event is to league together the Academic researchers and the Industrial practitioners and R&D staff of Industry under the main theme "Energy Efficiency" in order to set forward new partnerships for R&D projects, innovative solutions and services. During the Twinning Event 6 Companies; Saint-Gobain Weber (Manufacturer), Eneko A.Ş. (TechSol), Turgutlu Clay Brick and Roof Tile Manufacturers' Association (Manufacturer), ENISOLAR (Audit) and Onur Enerji (ESCO) have presented their innovative solutions and further project ideas. The Companies have also attended in the workshop. A total of 26 participants attended the Twinning Event. At the beginning of the Twinning Event, the ee-Wise project was presented on the Prezzi by Özge Andiç Çakır.

The aim of Country-level ee-Wise validation workshop in Turkey, Izmir is to raise awareness on the energy efficiency knowledge transfer, give brief information about ee-Wise project, present the KTF, guidelines and Tools to the target audience – agents of the value chain –and finally analysing the participants' feedback, which were collected through questionnaires and interviews. A total of 26 participants attended the workshop. Both Twinning Event and Workshop participants were met at a co-organised lunch. Twinning Event and Workshop programme was announced two weeks ago to by EU EBILTEM- TTO mail chimp system, Ege University Academicians e-mail announcement system, via Social Media and telephone. It was also announced the participants to bring their own PCs to the Workshop. A cartoon file was given to all registered Workshop participants with the printouts of presentations, necessary word documents, ee-Wise leaflet, EU EBILTEM-TTO brochure, name tags, notebook and pencil.

2. WORKSHOP AGENDA AND PARTICIPANTS

During the Workshop the following Agenda was followed:

13:30-13:45 Opening Remarks by Professor Kambiz RAMYAR, Head of Civil Engineering Department mentioned about the importance of Energy Efficient Retrofitting and the knowledge transfer mechanisms, mainly focusing on the knowledge transfer between Academia and End-Users.

13:45 – 14:15 ee-Wise Project KTF Speech by Professor Türkan Göksal Özbalta, information about Energy Efficient retrofitting, ee-Wise project and KTF was given.

14:15-14:45 Knowledge transfer tools were discussed by Professor Özge Andiç Çakır and information about ICT tools were given by Reha S. Şentürk, Expert on Informatics.

After the coffee break, KTF and lesson guidelines were tested online together with Özge Andiç Çakır with the additional data given in the printout. Five lesson guidelines with the codes, E2, C3, B2, C4 and C1 were tested, respectively.

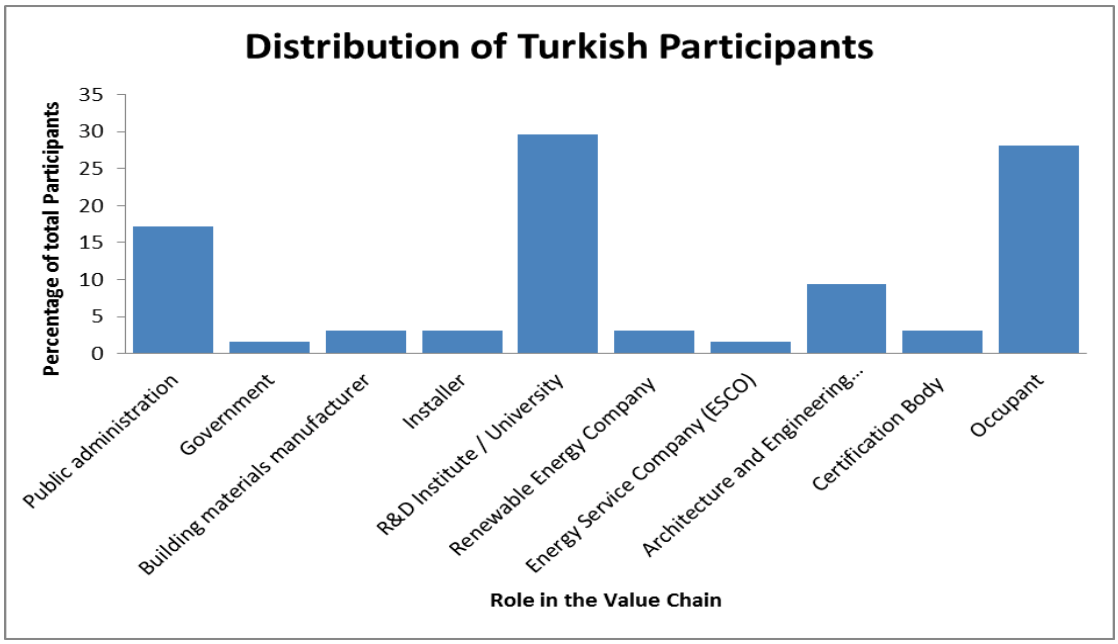
Both of the events were recorded by the news agency (Ege Ajans) and distributed through the local media channel, Ege University TV, through social media channels of EU EBILTEM-TTO, i.e. Facebook and Twitter accounts, respectively.

Following lesson guidelines were tested throughout the interactive workshop presentations:

	NEEDS		Public Bodies & Finance				Knowledge & Products Providers							Energy Providers			Energy & Retrofitting Services			Quality assurance			Demand		ICT Tools
			Financial Agents	Public Admin.	GOV	Standarization	Software Developers	Technical Solutions	Manufacturers	Installers	R&D	Climate		Renewable Energy	Energy Dsitributors	Grid Operators	ESCO	Architect. & Engineer.	Audit Firms	Patent Offices	Life Cycle Assessment	Certificate entities	Building Managers	Occupants	choice #1 choice #2 choice #3
E2	Evaluation of publicly funded research projects via it's applicability to the end-user.	R		X	X																		X		1. Blogs 2. e-Forums 3. Simulation
		P									X														
C3	R&D to divert their activity rapidly in response to changes in the market.	R		X	X					X								X					X	X	1. Blogs 2. Webinars 3. Video
		P						X			X														
B2	Increased interaction amongst research institutions.	R		X	X																				1. e-Forums 2. Comm-Tools 3. Webinars
		P									X														
C4	When communicating research results, more focus needs to be given to practical benefits of the retrofit technology.	R								X								X					X	X	1. e-Forums 2. e_Learning 3. Blog
		P		X				X	X		X			X			X	X						
C1	Scientists need to have increased contact with the end-users in order to understand the applicability of their research.	R						X			X														1. Webinars 2. e-Forums 3. Comm-Tools
		P		X					X	X														X	

Distribution of the participants by type of the agent: 10 participants from the University Faculties (mainly Civil Engineering Department, Architecture Department and Energy Department), 4 from R&D Institutes (mainly Solar Energy Institute), 5 participants from A&E Companies, 3 from Manufacturers, 1 Installer and 1 ESCO and 1 Building Manager, 1 Patent Officer (PO), respectively. During the Workshop the participants were asked to identify their roles (could be more than one role) in the Value Chain and fill-in their name tags accordingly. Below is the distribution of the Turkish attendees with their self-determined role in the Value Chain. Questionnaires were sent to all workshop participants and a

total of 25 replies were collected. The Figure below shows the distribution of the Turkish participants' among the value chain as they have stated in the Questionnaire form.



3. QUESTIONNAIRE SURVEY

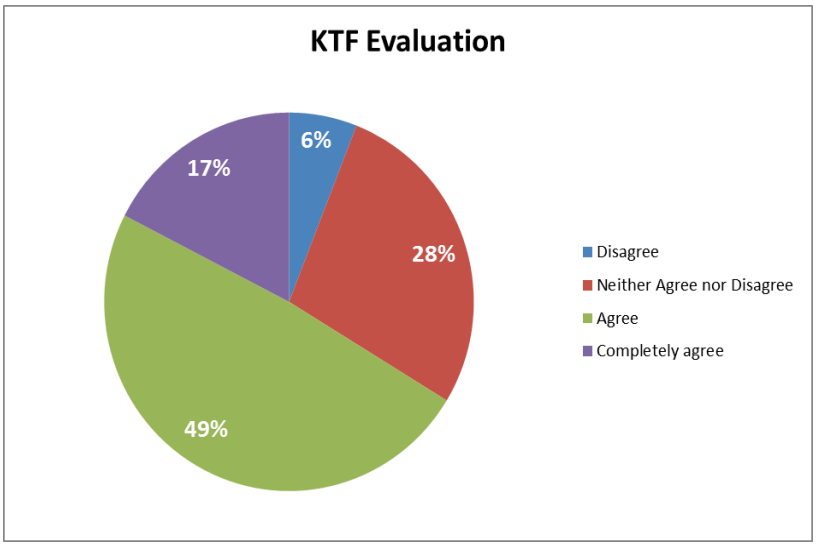
A. Participant details

Participant details are summarized as above where following values chain actors were not represented in the Workshop participants' list of attendence:

- Financial agent
- Standardization body
- Software Developer
- Technical solutions developer
- Meteorologist
- Energy distributor
- Electric Power Transmission Grid Operator
- Energy Auditing Firm
- Patent office
- Life Cycle Assessment Company
- Building Manager

B. Knowledge Transfer Framework (KTF) Evaluation:

B.1 Evaluation of Statements: Following replies were taken from Section B.1 of the Questionnare, the numbers in the pie chart representing the total number of replies to eleven questions. As the questions represent positive statements, the percentage "agree and completely agree" replies that were calculated as 66%, it can be assumed that the KTF has a positive influence over the participants.



B.2 Do you have any suggestions on how to improve the Knowledge Transfer Framework?

Eleven participants over a total of 25 replies (44%) have suggestions for the improvement of KTF:

1. Categorisation of database such as conference, video etc. would be useful,

2. A search engine can be added to the tool and keyword search option may be present.

3. Twitter based dissemination would be useful for ee-Wise tool, e.g. hashtags can be added to well known user channels.

4. Voluntary studies can be useful to add new knowledge to the tool.

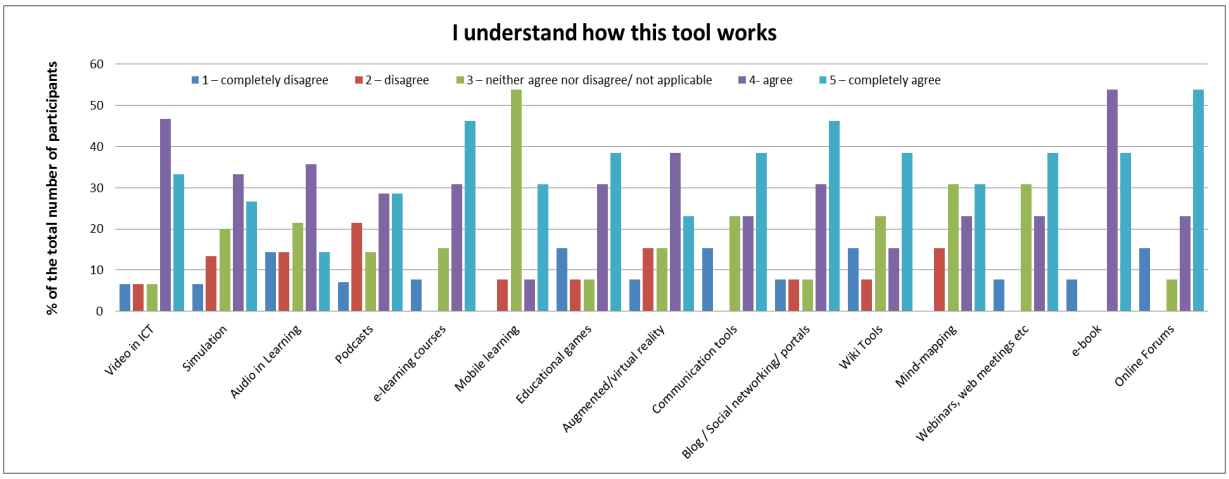
5. Collaboration of universities and industry may prove more realistic research results, thus, awareness should be raised on this issue.

6. Web-site is not user-friendly with too much written information. It can be more visual and statistical information can also be added.

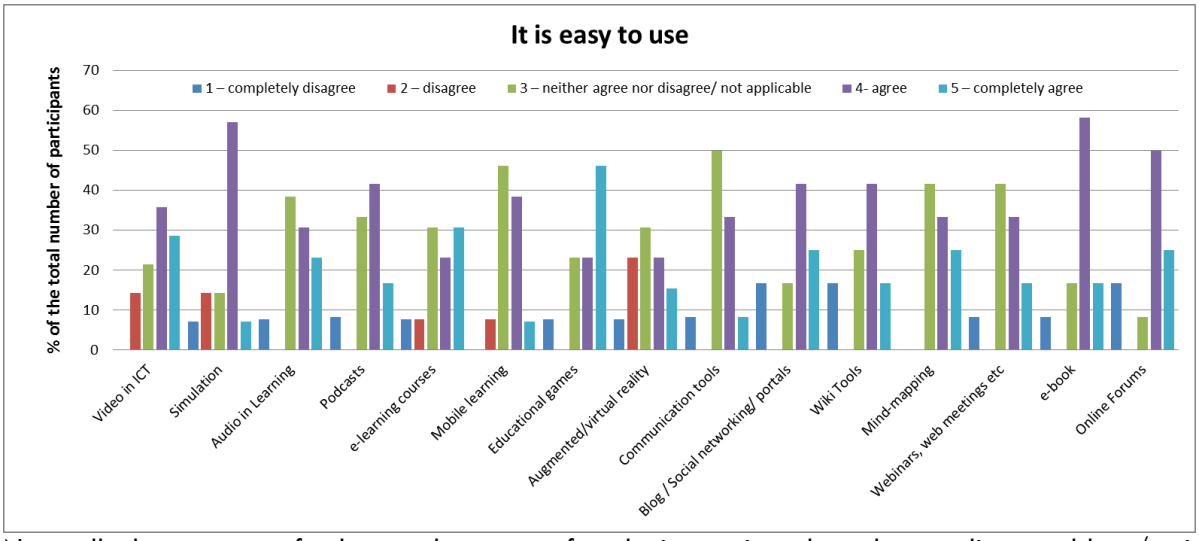
7. Expression of the statements presented in the KTF can be more simple and understandable.

C.1. Evaluation of ICT tools

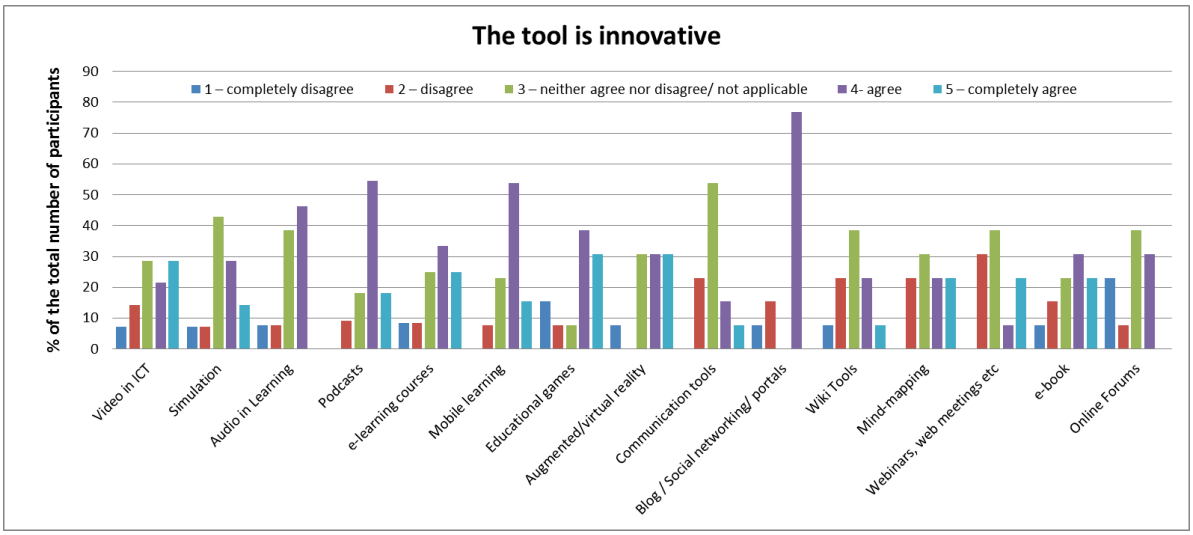
The questionnare replies were categorised below, respectively. The first question was to understand and evaluate whether the attender understood how to use the tool or not. It was generally understood how these tools works. Among all ICT tools, e-books, video courses and online forums are the most well-known ones while, mobile learning, wiki tools and mind mapping are the least.



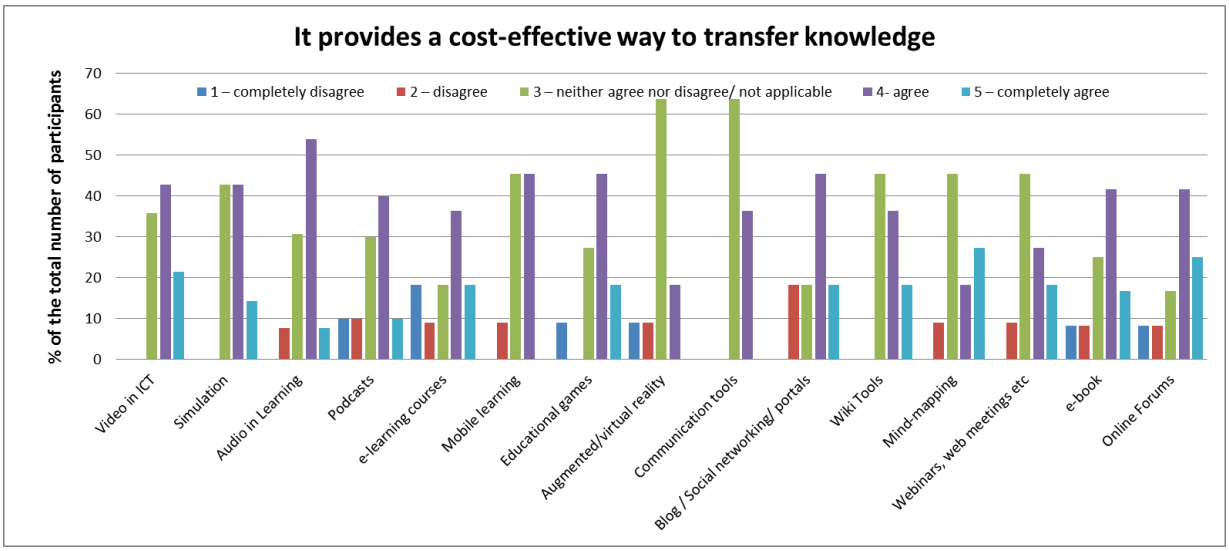
The second question evaluates the ease of utilization among the all ICT tools, e-books, forums, videos, and blogs/social networking/community portals being the easiest from the users viewpoint. Augmented/virtual reality tools do not seem user-friendly, mostly probably due to the defficiency of knowledge about them.



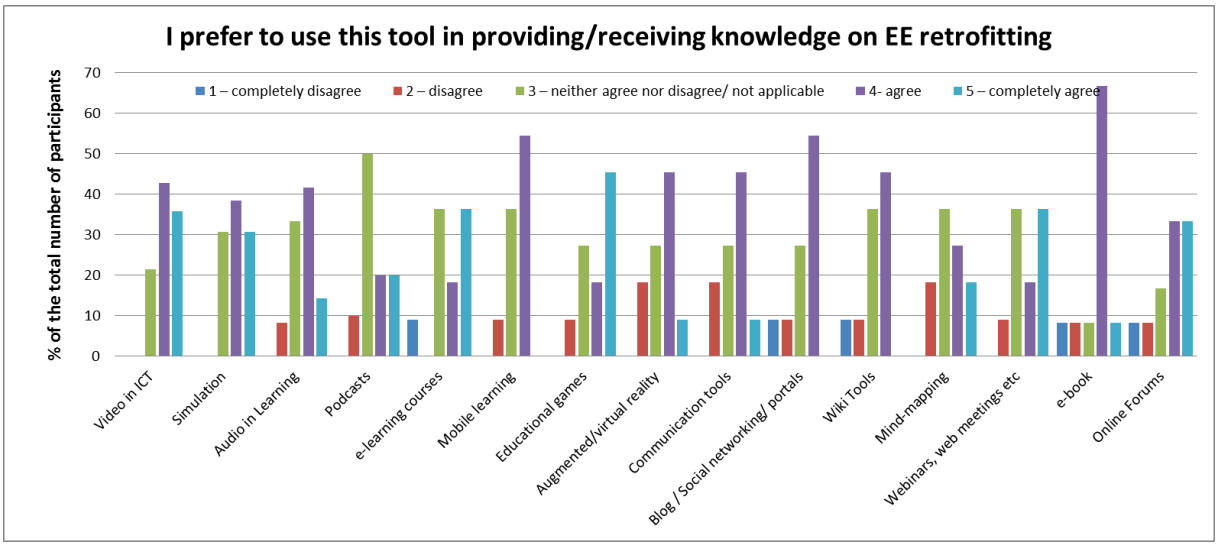
Not all but most of the tools were found innovative by the audience, blogs/social networking/community portals and podcats being the most innovative choices.



As there is a deficiency of knowledge in the audience about to cost of some ICT tools, e.g. Augmented reality/Virtual reality tools, online forums, blogs and video courses were found to be mostly cost effective solutions.



Finally it was questioned if the audience would like to use these tools for transferring knowledge, an interestingly, most of them prefer to use videos, e-books, simulations, educational games and forums for transferring knowledge.



C.2. If you encountered problems in using any of the Tools, please give us the details:
No body replied this question meaning that no problems while using the tools.

C.3. Do you have any suggestions on how to improve the Knowledge Transfer Tools?

Following replies were given by three participants;

- Intellectual property rights of the knowledge shared is important, thus, a moderation system should be activated for control.

- Awareness of people on the ee-Wise project and the tool should be increased by territory applications.

- Importance of face to face interaction while transferring knowledge should be considered.

4. INTERVIEWS

Questions;

1. What did you like most about the ee-WiSE Knowledge Transfer Framework, and what less? Please explain why.

2. Can you please indicate your opinion and feelings about the lesson guidelines and knowledge transfer tools you have tested, and their potential application in your work?

3. How do you feel about the ICT-based approach of the KTF? How attractive and convenient is it to you as a provider/ receiver of EE retrofitting knowledge?

4. In your opinion, could the Knowledge Transfer Framework be applicable in other sectors of the building industry? Could it be applied in other countries?

5. Could you suggest any improvements to the Knowledge Transfer Framework?

6. Would you use the ee-WiSE KTF in the future and recommend it to others?

7. Would you like to add anything else?

Response from Interview 1 (a Building Manager);

1. The idea that I like most about the ee-WISE Knowledge Transfer Framework is information transfer and collecting the information about Energy efficient retrofitting.

2. Lesson guidelines were very applicable and clear. I have tested it and I will use it.

3. ICT is the best way to approach and reach the right people, when I first use the tool I was amazed cause there was very smart solutions and papers web site information's under the types of knowledge.

4. KTF could be applied in other countries, but I think it is hard to apply it to other sectors of building industry. Energy efficient building sector is now growing in my country and people have less information and knowledge, so they would try to learn information about energy efficiency building retrofitting and they would use toolbox.

Knowledge transfer is a big problem in building construction. KTF can be applied to two/more ongoing construction projects and then the idea about behavior of other sectors could be clear.

5. I couldn't suggest any improvement because KTF is new for me, the more I use it, I will have some more opinions.

6. Yes, I would use and recommend it to others in this sector.

7. Thank you.

Response from Interview 2 (an Installation Engineer of a Solar Panel Company);

1. User friendly design lets user to find anything and the design also provides a well-developed guidance. The only problem I have encountered is the quickness of the software while exploring different parts but that might be due to some other reasons which are not related directly to the software.

2. Online Knowledge Sharing is quite useful, by means of a certain type of classification a searching option only for the uploaded data could be provided. (e.g. Index Search/Video Search/Website Search, etc.)

3. Even though I am not a quite tech-friendly person, the ICT-based design makes me think that I can reach the knowledge in a multimedia medium easily and no need to have high level of knowledge.

4. If only the knowledge transfer is under question yes, it can be applied, even it should be applied in other sectors also for other countries.

5. A direct communication option might be added (speaking for the website). Just in case of urgent information/partner a direct message, online chatting might be useful. Since I am not used to the technical background of a software design, I am not sure it's applicable but a separate section having professional information and instant messaging would be nice.

6. Of course.

7. A mobile application would be created. As I have mentioned above about instant messaging, if the application of such a property on online version, a mobile version might be useful for such feature.

5. CONCLUSIONS

Following the validation Workshop, the developed Knowledge Transfer Framework, lesson guidelines and knowledge transfer tools are evaluated via validation workshop that is held in Ege University on 05 March 2014.

During the announcement of the workshop (the validation event) it was emphasized that the attenders should bring their personal computers, so that it was possible for them to validate the tool online. Thus, a positive feedback was observed during the Workshop, many of the attenders were eager to follow and apply the validation, most of them asking questions and giving feedbacks.

It was also important for the attenders that they already know which member of the value chain they belong to. The value chain members were defined at the beginning of the meeting, later on, they were asked to declaim their role in the value chain and write it down to their own name tags. Thus, it became possible for us to know the audience and for them to know their role-mates.

In the Workshop programme, first the presentations were made explaining the importance of energy saving and retrofitting and then brief information was given about the project, the KTF and lesson guidelines. An informatics expert was also given a speech on the ICT tools. The final part of the workshop belonged to the explanation and interactive validation of the tools and the lesson guidelines.

Oral and written comments were taken from the audience during the discussion part at the end of the presentations, by interviews and through the questionnaire. All of the relevant comments were given above in this report, respectively.

The main conclusions drawn from this validation is that the tool is effective and promising but still needs improvements. Such as the keyword search can be implemented, IPR problems should be solved by a proper monitoring system, and the information uploaded to the system should be controlled by a moderator. Finally all of the attenders agree that the tool and ee-Wise website should be promoted through the social media channels by the effort of NGOs, agencies, and as it is in this example, the TTOs.

Project full title: "Energy Efficiency Knowledge Transfer Framework for Building Retrofitting in the Mediterranean Area

Grant agreement no: 314347

EeB.NMP.2012-6 - Methodologies for Knowledge transfer within the value chain and particularly to SMEs

KTF Validation Workshops

Country Level Report - Greece

Circulation: Confidential

Partners: HoR

Authors: Elena Tseva, Lilly T. Christoforidou

Date: 19/03/2014

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1. INTRODUCTION

According to the needs of the WP5 (Framework & Tool validation), the HoR team carried out a country-level workshop on the 17th & 18th of March 2014, in order to present to all members of the value chain the results of the KTF Tool. Both private & public stakeholders attended the two (2) different workshops. These were agents who contributed to the validation of the KTF Tool, giving us a fine representation of the public user's sample. Most specifically, the agents represented the following categories:

	Category	**Number of Participant**
1	Financial Agent	1
2	Public Administration	3
3	Government	2
4	Software Developer	1
5	Technical Solutions Developer	1
6	Building Materials Manufacturer	1
7	Installer	1
8	R&D Institute/University	1
9	Meteorologist	1
10	Renewable Energy Company	1
11	Energy Distributor	1
12	Energy Service company	1
13	Architecture and Engineering company	2
14	Certification Body	1
15	Building Manager	1
16	Occupant	1

TOTAL:	**20**

2. STRUCTURE

The objective of the two (2) workshops was to present the Tool to all the agents and to ask them to use and evaluate it as real users. The following procedure took place:

Firstly, we made an introduction about the project ee-WiSE and its Work Packages, and then we asked the users to enter the project website.

Secondly, we presented the KTF Tool and made several entry attempts as different members of the valve chain with each participant.

Thirdly, we asked the participants to examine the Tool as Providers or Users by themselves, in order to become familiar with the use of the Tool.

Fourthly, the participants completed a printed copy of the questionnaire.

Finally, the participants were interview upon returning the filled questionnaire and had an exchange with the workshops organizers, about the overall experience on the KTF Tool.

The total duration of each workshop was 3 hours. It should be noted that the diversity of the groups facilitated our understanding about plausible additional needs and improvements.

3. RESULTS

The results of the two (2) workshops, expressing the opinions of the agents are the following:

The majority of the participants found the KTF Tool of the ee-WiSE project as useful and felt that it gave them more and new information about energy efficient retrofitting for private and public buildings. Public administrators suggested that more information on energy efficient building retrofitting should be given for public buildings and therefore the knowledge transfer Tools should address their interest.

Also it was suggested that materials and methodologies, used in patents should be highlighted, across all knowledge transfer means, because they carry a special value in biddings. The comments for improvement are:

4. Better description in English,
5. The site address a specific audience,
6. The presented information isn't useful to an ordinary user,
7. What is so specific about Tools and Methodologies, used in the Mediterranean countries?,
8. Great need to include more information for the public sector,
9. The promoted Tools and Methodologies have to provide information to ordinary agents,
10. Not funds in Greece, to realize these ideas,
11. More information about the cost of practising.
12. For how long the Tool is going to be available, is it sustainable?

13. Additional information provided be the Tool, could reach users or providers, through the social media.

Knowing that in Greece there is a high number of people without internet, there is a need for reaching the rest of the population, in order to achieve a real knowledge transfer impact on energy efficient building retrofitting.

For example, applications as "Augmented Reality applications" or "Wiki Tools" were not so favoured and others as "Podcast" or "Mind Mapping" were rejected as "not easy to be used" or "not understandable". By contrast, the most favourable applications were "Mobile learning", "Video in learning", "e-learning" and "blogs / online forums".

Finally, we realized that Tools relying on Image & Sound are more preferred by the Greek agents. An explanation could be that these applications do not demand much time or effort and can be used at any time and at anyplace.

4. FEEDBACK OBTAINED FROM INTERVIEWS

In general, the participants suggested that the site of the ee-WiSE project, the KTF Tool and the research carried by the consortium is important for them. We observed that the younger participants were more enthusiastic, partly because they spoke very good English and they could appreciate the full content of the KTF Tool. We would like to bring to the attention of the KTF Tool designers and operators that an effort needs to be made, in order to accommodate the less informed audience. It is important that ee-WiSE develops a Tool that address the needs and interests of ALL members of the value chain. We believe that it has the potential to do so; it only needs a little bit more effort.

Agents such as simple occupants & builders are not so familiar firstly with the technology and secondly with the terminology of the Tool. Some of them argued that there is not a great use if something is not reachable and quickly understandable to them, without any explanation.

In closing, we are pleased to find out that the public sector participated in the validation of the KTF Tool and that participants are looking forward to see the Tool become available to all. Overall, the KTF Tool was appreciated by the users.

The following answers to the questions presented in the interviews were received:

1. What did you like the most about the ee-WiSE Knowledge Transfer Framework, and what less? Please explain why.

a) The KTF introduced me to some new ideas and to an innovative perspective of new technologies and practices. I am an engineer and these new ideas-at least new to me-will certainly help me to promote and to improve my work's results.
I have some worries about the cost of practising the ideas.

b) I liked the structure of the site, it was very explanatory and I surely got the main idea. I am not part of a relevant profession, but as a simple citizen, I am interesting in the ways of energy reducing, for the sake of our planet.
Since I am not a professional, is it possible for me to have the same level of access, as a professional one?

c) It is good to know that new practices & methodologies are available for the Mediterranean countries and as soon as they are reachable in the market, I won't hesitate to adapt some of them.
The cost is worrying me.

2. Can you please indicate your opinion and feelings about the lesson guidelines and knowledge transfer tools you have tested, and their potential application in your work?

a) I got confused at one point about the choices and how could I continue the process. Perhaps an issue of confusing guidelines. If I clarify some points, I find it very useful.
b) I would prefer if I had a combination of image & sound. It would make it easier and more vivant. I am not a professional, so it is only for personal use & gain.
c) I would prefer to test the tool in a different language. I am not sure yet. I have to test it once more.

3. How do you feel about the ICT-based approach of the KTF? How attractive and convenient is it to you as a provider/receiver of EE retrofitting knowledge?

a) I totally like this approach. It was convenient for me; it helped me understand better the use of the Tool.

b) I don't think that it helped me so. It confused me more. I tried the Tool as a receiver and at the end I did not have the feeling that I learned something new.

4. In your opinion, could the Knowledge Transfer Framework be applicable in other sectors of the building industry? Could it be applied in other countries?

a) Yes, in my opinion the KTF could be applicable in other sectors as well. For example, not only in construction / renovation but in the subsistence of the buildings. It could be applied in other countries, not only in the Mediterranean ones, but in others as for example in the Pays-Bas or the Northern Europe. The applications may vary, but the main idea would be the same.

b) I don't believe that the KTF could be applicable in other sectors. I think that the site & the guidelines are very qualified and are addressed to a specific audience. I have the impression that you must be a specialist, in order to understand clearly the practice of the guidelines. I am not sure if they are

applicable in other countries. I cannot figure out whether the applications need the climatic environment of the Mediterranean region or not.

5. Could you suggest any improvements to the Knowledge Transfer Framework?

a) I believe that a clearer classification of the Tool, could guide the user better and more effectively to the practice that reflects best his needs.

b) I would suggest that a forum, as part of the site could help the interaction and the exchange of views between the users, so if someone has a suggestion or just a question, he could be helped by others in no time nor effort.
c) More publication would profit more the spread and the recognition of the KTF, so the users / receiver would be more numerous.

6. Would you use the ee-WiSE KTF in the future and recommend it to others?

a) My job isn't relevant, so I don't believe that I will be using the KTF in the future. I am glad for receiving this info, I surely enriched my general knowledge, but I won't be using it again. I don't mind sharing it with others, someone else may find it more useful than me.

b) I will definitely be using the KTF in the future. I thought that much information is gathered in the KTF, so someone could use it in both cases, even he is professional or just a reader. My will is to practice this knowledge. I am sure that the results will improve the quality of my work.

***7*. Would you like to add anything else?**

a) I found everything very interesting & I am glad that I can be part of these new practices.

b) I must clarify some points, in order to decide if I could practice or not the KTF.

Project full title: "Energy Efficiency Knowledge Transfer Framework for Building Retrofitting in the Mediterranean Area

Grant agreement no: 314347

EeB.NMP.2012-6 - Methodologies for Knowledge transfer within the value chain and particularly to SMEs

KTF Validation Workshops

Country Level Report - ITALY

Circulation: Confidential

Partners: ISTEDIL/ANCE

Authors: Camillo Orsi, Carlotta Berta, Nicola Massaro, Giulio Guarracino

Date: 19/03/2014

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1. INTRODUCTION

The main purpose of ee-WiSE project is to develop a Framework for knowledge Management and Transfer within the value chain of EE sector in building retrofitting in the Mediterranean, with special attention to SMEs.

The validation workshops were carried out in Italy between the 7th and 18th March 2014 involving many of the different agents active in the EE Retrofitting Value Chain.

The knowledge transfer needs assigned to the Italian Validation Workshops were:

- D2: Support Industry in R&D Take-Up
- A5: Training Architects & Engineers in Retrofitting Technology
- B1: Building Consortia & Energy Efficiency Networks
- B2: Intra-Academy Interaction
- A1: Exposing Craftsmen to Innovation

The invitations to the validation workshops were sent to the agents who had participated in the feedback questionnaires related to WP3.

The workshop were held with individual consultation or in groups of 3-4 people.

2. WORKSHOP STRUCTURE

The workshops agenda was as follows:

- Presentation of the ee-WiSE project (context, objectives and expected results)
- Overview of the ee-WiSE website and explanation of the needs
- Testing of the platform
- Feedback and Q&A sessions

The link of the Questionnaire was sent at the end of the workshop in order to give the participant the possibility to fill in the questionnaire at any time.

#	Participant ID	Primary Role	Secondary Role	Tertiary Role
1	3130096535	Installer		
2	3130094192	Installer		
3	3129993376	Software Developer		
4	3128045974	A & E		
5	3128030534	A & E		
6	3128020819	Public Administration		
7	3123818396	Public Administration		
8	3121857995	Occupant		
9	3121690386	Financial Agent		
10	3121677199	Public Administration		
11	3121635037	Tech Sol Developers		
12	3121505299	Tech Sol Developers		
13	3120268041	A & E		
14	3119262907	Occupant		
15	3118848949	R & D / University	Occupant	
16	3118848465	R & D / University	Certification Body	Occupant
17	3118815454	R & D / University		
18	3118812925	R & D / University		
19	3118803130	Tech Sol Developers		
20	3118757050	R & D / University		
21	3121619877	Public Administration	Occupant	
22	3121611012	A & E	Occupant	
23	3118900987	Public Administration	Tech Sol Developers	Electric Power
24	3118726283	Public Administration	R & D / University	Renew Company
25	3117868988	Public Administration	Occupant	
26	3117292786	A & E	Certification Body	
27	3108603636	R & D / University		

3. DATA ANALYSIS

This section presents a summary of the feedback from the questionnaire responses that were filled in by the participants after having experienced the KTF tool.

3.1. Quantitative Results

The quantitative results are provided in a separate Excel document [ee-WiSE_validation questionnaires_Italy_Workshops.xls].

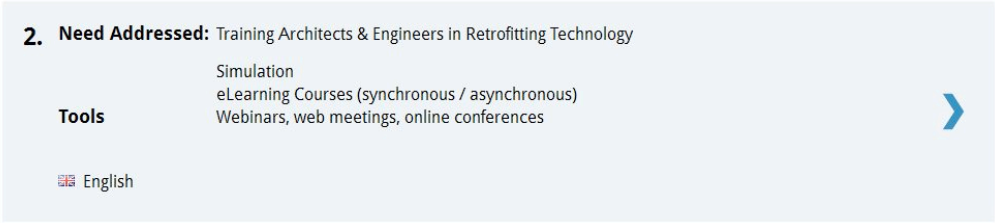
3.2. Feedback from the participants

3.2.1. Receiver's step 2 & 3

- The receiver could be interest not only in training resource regarding the needs we selected in WP3 & WP4: it could be interesting to add a button: "See all the training resources"
- In the step 3, when you click on a need, the button "Continue" appears at the bottom of the page: it's better to have it near the need
- If you are a Public Administration or an Installer, when you click on Building Consortia & Energy Efficiency Networks, the website open this page: http://www.ee-wise.eu/eewise/app/tr/wp3_graph

3.2.2. Receiver's step 4

- Which is the order of the displayed results? The participants suggest that the best order could be the number of votes
- The displaying of the results is not so useful:
  - ✓ Probably it's better if the title of the training resource is mandatory (there are some materials without title that are not understandable)



  - ✓ It's not useful to have the list of 3 tools
    Quote: "*Why we have this list repeated for every resource?*"

- ✓ It could be interesting to have the indication of the kind of tool for the specific results
  Quote: *"Sometimes the tools indicated in the page with results are different from the effective tool of the specific resource. It's not so useful"*

- The flag of the language is the same for every language

- In some resources there is the indication of "Course created by: ..." and in other there is not.

- There are a lot of blank material. The participants ask for a moderation process to have a more usable platform.
  We ask them to copy and paste the blank pages in order to have the links: The list of the blank link is at the end of the document.
- Some material are displayed as English, but they are not; some others are not correct links: also in this case a moderation process could be useful.
  We ask them to copy and paste the not-correct pages in order to have the links: the list of the mistakes is at the end of the document.
- In some cases the material are repeated:
  http://www.ee-wise.eu/eewise/app/cms/courseID/275/searchResult/275/lang/en/page/learningCourse
  http://www.ee-wise.eu/eewise/app/cms/courseID/276/searchResult/276/lang/en/page/learningCourse
  http://www.ee-wise.eu/eewise/app/cms/courseID/277/searchResult/277/lang/en/page/learningCourse
- In some cases the website display results not only for the selected need, but also for another:
  - ✓ Intra-Academy Interaction and also Building Consortia & Energy Efficiency Network
    http://www.ee-wise.eu/eewise/app/cms/receiverID/1/needID/8/step/step4/searchType/RECEIVER/lang/en/page/coursesSearch
  - ✓ Exposing Craftmen to Innovation and also Intra-Academy Interaction
    http://www.ee-wise.eu/eewise/app/cms/receiverID/7/needID/4/step/step4/searchType/RECEIVER/lang/en/page/coursesSearch
  - ✓ Building Consortia & Energy Efficiency Network and also Exposing Craftmen to Innovation
    http://www.ee-wise.eu/eewise/app/cms/receiverID/7/needID/7/step/step4/searchType/RECEIVER/lang/en/page/coursesSearch

- At the end of the process, it is necessary a button "Back", apart from the "Back to wizard" button, in order to go back to the list of materials

3.2.3. Provider's STEP 4

- The link to view other material is not easy to find. It probably should be more visible

3.2.4. Provider's material contribution

- The box "Contribute a material to training Architects & Engineers in Retrofitting Technology" is not so simple to use:
  - ✓ *Quote: "In which field the user has to insert the link of the resource?"*
  - ✓ *Quote: "I cannot understand the difference between the first and the second part of the page"*
  - ✓ *Quote: "The user has to fill all the fields or only someone?"*
  - ✓ *Quote: "What is |Enter a description in another language|?"*
  - ✓ *Quote: "The box Material Upload Area is very simple to understand, but the first part Material Ref No is not so simple. The line between the two part make you thinking that these are two different things"*
- The system has not mandatory fields: this allows the fact that a lot of materials are black pages

3.2.5. Receiver - Provider

- The button Terms and Condition is at the bottom of the page and it's not easy to see.

4. FEEDBACK OBTAINED FROM INTERVIEWS

Interview 1 – Participant is an Engineer

Question	Answer
What did you like most about the ee-WiSE Knowledge Transfer Framework, and what less? Please explain why.	Most: I like the idea of a database of information about energy-efficient retrofitting Less: The fact that the system is not so simple to use
Can you please indicate your opinion and feelings about the lesson guidelines and knowledge transfer tools you have tested, and their potential application in your work?	The system is very useful and could be a starting point for a sort of community of agents who works in the energy-efficiency retrofitting sector.
How do you feel about the ICT-based approach of the KTF? How attractive and convenient is it to you as a provider/receiver of EE retrofitting knowledge?	Very attractive and convenient. Some tools are very interesting and innovative.
What tools are you referring to?	For example Podcast, Mobile learning, Augmented reality, Wiki tools
In your opinion, could the Knowledge Transfer Framework be applicable in other sectors of the building industry? Could it be applied in other countries?	Yes
Could you suggest any improvements to the Knowledge Transfer Framework?	Probably it could be useful to have a list of all the resources without selecting a particular need
Would you use the ee-WiSE KTF in the future and recommend it to others?	Yes
Would you like to add anything else?	No

Interview 2 – Participant is an Occupant

Question	Answer
What did you like most about the ee-WiSE Knowledge Transfer Framework, and what less? Please explain why.	Most: I like to have the possibility to search good information and training tools about energy-efficient retrofitting Less: The website is not complete now
Can you please indicate your opinion and feelings about the lesson guidelines and knowledge transfer tools you have tested, and their potential application in your work?	The potentiality is to give the possibility to Occupants to have correct information about the retrofitting
How do you feel about the ICT-based approach of the KTF? How attractive and convenient is it to you as a provider/receiver of EE retrofitting knowledge?	The approach is very interesting and innovative
In your opinion, could the Knowledge Transfer Framework be applicable in other sectors of the building industry? Could it be applied in other countries?	Yes
Could you suggest any improvements to the Knowledge Transfer Framework?	Not now...I think that the website has to be improved with new materials and tools to be used. The translation in different languages could be interesting.
Would you use the ee-WiSE KTF in the future and recommend it to others?	Yes
Would you like to add anything else?	No

Interview 3 – Participant is an Installer

Question	Answer
What did you like most about the ee-WiSE Knowledge Transfer Framework, and what less? Please explain why.	Most: I like the potentiality to have all the information in the same website Less: the website is not so simple to use
Can you please indicate your opinion and feelings about the lesson guidelines and knowledge transfer tools you have tested, and their potential application in your work?	This information and tools could be very useful for my work, also for example with a mobile app
How do you feel about the ICT-based approach of the KTF? How attractive and convenient is it to you as a provider/receiver of EE retrofitting knowledge?	I really like the approach: I think I will use more as a receiver than as a provider.
In your opinion, could the Knowledge Transfer Framework be applicable in other sectors of the building industry? Could it be applied in other countries?	Yes
Could you suggest any improvements to the Knowledge Transfer Framework?	Mobile application
Would you use the ee-WiSE KTF in the future and recommend it to others?	Yes
Would you like to add anything else?	No

Interview 4 – Participant is a Public Administration

Question	Answer
What did you like most about the ee-WiSE Knowledge Transfer Framework, and what less? Please explain why.	Most: I like the fact that it could be a very good instrument for working and have network in the sector Less: I think that the website has to be completed and simplified
Can you please indicate your opinion and feelings about the lesson guidelines and knowledge transfer tools you have tested, and their potential application in your work?	The application in my work could be very interesting: I could use it to have information and I can share it with people to give information.
How do you feel about the ICT-based approach of the KTF? How attractive and convenient is it to you as a provider/receiver of EE retrofitting knowledge?	The approach is very innovative: I like it
In your opinion, could the Knowledge Transfer Framework be applicable in other sectors of the building industry? Could it be applied in other countries?	Yes
Could you suggest any improvements to the Knowledge Transfer Framework?	I think that the website has to be simplified
Would you use the ee-WiSE KTF in the future and recommend it to others?	Yes
Would you like to add anything else?	No

5. GENERAL CONCLUSIONS

For a final comment about the Italian workshops, we could say that the approach of the participants is very positive: the users were interested in the innovation displayed and in the fruibility of the sections. The results are very good, even if there are some problems.

For a general feedback, we could say that the principal things to review are the following:

1. The results list has to be modified in order to be more understandable
2. The full list of knowledge transfer needs must be displayed without choosing a specific need
3. A moderation process is necessary
4. The dissemination activity has to be very strong in order to obtain a good tool

ANNEX A

MISTAKES

The material is not in English as displayed:

http://www.ee-wise.eu/eewise/app/cms/courseID/158/searchResult/158/lang/en/page/learningCourse

http://www.ee-wise.eu/eewise/app/cms/courseID/295/searchResult/295/lang/en/page/learningCourse

http://www.ee-wise.eu/eewise/app/cms/courseID/137/searchResult/137/lang/en/page/learningCourse

http://www.ee-wise.eu/eewise/app/cms/courseID/212/searchResult/212/lang/en/page/learningCourse

http://www.ee-wise.eu/eewise/app/cms/courseID/217/searchResult/217/lang/en/page/learningCourse

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http://www.ee-wise.eu/eewise/app/cms/courseID/141/searchResult/141/lang/en/page/learningCourse

http://www.ee-wise.eu/eewise/app/cms/courseID/207/searchResult/207/lang/en/page/learningCourse

The link is not correct:

http://www.ee-wise.eu/eewise/app/cms/courseID/294/searchResult/294/lang/en/page/learningCourse

http://www.ee-wise.eu/eewise/app/cms/courseID/144/searchResult/144/lang/en/page/learningCourse

The resource is a test:

http://www.ee-wise.eu/eewise/app/cms/courseID/271/searchResult/271/lang/en/page/learningCourse

EMPTY PAGES

http://www.ee-wise.eu/eewise/app/cms/courseID/88/searchResult/88/lang/en/page/learningCourse

http://www.ee-wise.eu/eewise/app/cms/courseID/95/searchResult/95/lang/en/page/learningCourse

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http://www.ee-wise.eu/eewise/app/cms/courseID/378/searchResult/378/lang/en/page/learningCourse

Project full title: "Energy Efficiency Knowledge Transfer Framework for Building Retrofitting in the Mediterranean Area

Grant agreement no: 314347

EeB.NMP.2012-6 - Methodologies for Knowledge transfer within the value chain and particularly to SMEs

KTF Validation Workshops

Country Level Report - MALTA

Circulation: Confidential

Partners: PiM

Authors: Brian Restall, Katia Mifsud

Date: 18/03/2014

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02	13th March 2014	ee-WiSE-WP5-Task5.1-Malta_Country_Level_Workshops-V2-13032014
03	17th March 2014	ee-WiSE-WP5-Task5.1-Malta_Country_Level_Workshops-V3-17032014
04	18th March 2014	ee-WiSE-WP5-Task5.1-Malta_Country_Level_Workshops-V4-18032014

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1. INTRODUCTION

The validation workshops were carried out in Malta between the 10th and 17th March 2014 involving many of the different agents active in the EE Retrofitting Value Chain.

The knowledge transfer needs assigned to the Malta Validation Workshops were:

- A3: Training the business society to access the knowledge stock
- D1: Increase business motivation through public R&D initiatives and innovation funding
- A5: Training of construction professionals in retrofit technologies
- A4: The business society needs to be aware of tools to manage intellectual property
- E2: Evaluation of publicly funded research projects via its applicability to the end-user

The invitations to the validation workshops were sent to those agents that had participated in the feedback questionnaires related to WP3.

2. WORKSHOP STRUCTURE

The workshops agenda was as follows:

- Part A: General overview of the ee-WiSE project with details on the activity that has been done so far.
- Part B: General overview of the ee-WiSE project website.
- Part C: Run through of the ee-WiSE online Knowledge Transfer Tool including the registration process, the methods of accessing information through the tool and the methods and guidelines for acting as a provider of information to the rest of the value chain.
- Part D: Workshop participants allowed time to experiment with the system through the various knowledge transfer needs and value chain agents both in receiver and provider roles.
- Part E: Feedback and Q&A sessions during which participants also filled in the online questionnaire relevant to the KTF Tool Validation exercise.

A total of 5 in-company workshops were held during the validation period. The total number of agents that participated in these events was 21and the agents were distributed as shown in the below table.

Participant Ref #	Survey Ref #	Primary Role	Secondary Role	Tertiary Role
1	3108635392	Technical Solutions Developer	Occupant	
14	3114800842	Financial Agent		
13	3114924995	Financial Agent	Building Manager	
12	3114950053	Financial Agent		
11	3114970663	Technical Solutions Developer	Renewable Energy Company	Architecture & Engineering Company
10	3117507139	R&D Institute / University		
9	3117538933	Renewable Energy		

		Company		
8	3117556482	Occupant		
2	3117758306	Occupant	Software Developer	
7	3119272887	Software Developer	Technical Solutions Developer	Building Manager
6	3119293340	Installer		
5	3119306038	Public Administration	Government	
4	3121200253	Energy Auditing Firm		
3	3122471420	Renewable Energy Company	Energy Auditing Firm	
15	3127181118	Architecture & Engineering Company	Certification Body	
16	3127185482	Architecture & Engineering Company	Certification Body	
17	3127190189	Architecture & Engineering Company		
18	3127198802	Architecture & Engineering Company		
19	3127260857	Architecture & Engineering Company	Technical Solutions Developer	
20	3127267987	Architecture & Engineering Company	Technical Solutions Developer	
21	3127273435	Architecture & Engineering Company	Energy Auditing Firm	

3. DATA ANALYSIS

This section presents a summary of the feedback from the questionnaire responses that were filled in by the participants after having experienced the KTF tool. Both quantitative and qualitative responses are summarised here.

3.1. Quantitative Results

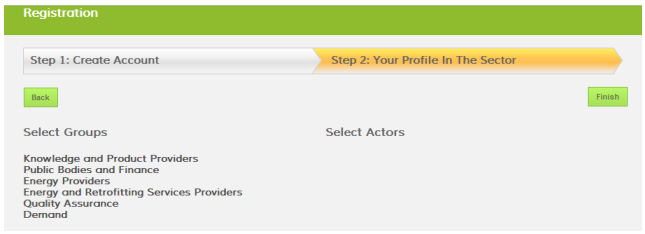
The quantitative results are provided in a separate Excel document [ee-WiSE_validation questionnaires_Malta_Workshops.xls]. The accumulated responses from all country workshops will be presented together in a report to be prepared by X-Panel.

3.2. Feedback from the Open Questions

The main comments for improvement of the KTF Tool resulting from the open questions have been sub-divided into the main topics listed below:

3.2.1. Registration process

- In Step 2 of the registration process, the user is not completely familiar with the value chain groupings as they are presented and thus it is not straight forward for them to choose their agent type. The suggestion in this area of the registration is to display the full list of agents instead of only the groupings to make it easier for the user to select his/her agent type. Groupings would help to make the screen visually pleasing, but visibility of all the agents is important at this stage.



- Terms and conditions do not appear when a user is creating a login. Ideally the acceptance of the T&C should be presented on registration as well as EVERYTIME, irrespective of login, when choosing receiver or provider roles.

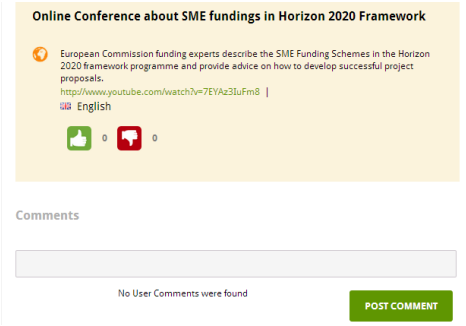
3.2.2. Material content available

- Many of the K.T. materials currently presented to the user as a receiver of information are either blank or not relevant to the need they are assigned to. Is there a moderation process via which contributed material is vetted for validity and suitability and then accordingly accepted or rejected as part of the knowledge transfer content made available to the receivers of information? Redundant material should be removed in the meantime.

Quote: "I am an installer and chose Business Society Access to Knowledge Stock. The first link is not in english but in bulgarian and the 2nd link is empty. The rest of the links were relevant and useful."

Quote: "The first 5 teaching courses i looked at are either links to generic websites, or empty."

3.2.3. Receiver of Information Role

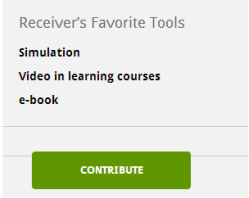


- When someone writes a comment to material that has been uploaded to the tool, ideally the knowledge provider should be informed via an automatic email. This might be necessary for building of clusters or simply for providing further information. Furthermore, the comments and rating submitted by the users to the material submitted by another agent should be visible to all other users of the system.

- After having viewed the description and link to a particular material obtained through the search results, apart from the "Back to Wizard" button to change the search criteria, the user should also have the option of another button named "Back to Search Results" to go back to the list of materials and possibly select another material to view. This will avoid having to start the search process all over again. In the absence of this button, users were using the browser back button with the result that the system loses track of what was selected and providing different search results that what was obtained in the first search process.

- Allow filtering of the search results to reduce the list of material that is presented to the user. Ideally, the user should be presented with a list of the ICT tools with checkboxes so that if he is interested in searching for, for example e-learning courses, he will get directed to a list of e-courses immediately.

3.2.4. Provider of Information Role



- The boxes "Receiver Favourite Tools" and "Recommended Tools" in the Knowledge Transfer Recommendations screen contain the same information. Suggestion is to keep the top left box "Receivers' Favourite Tools" only.

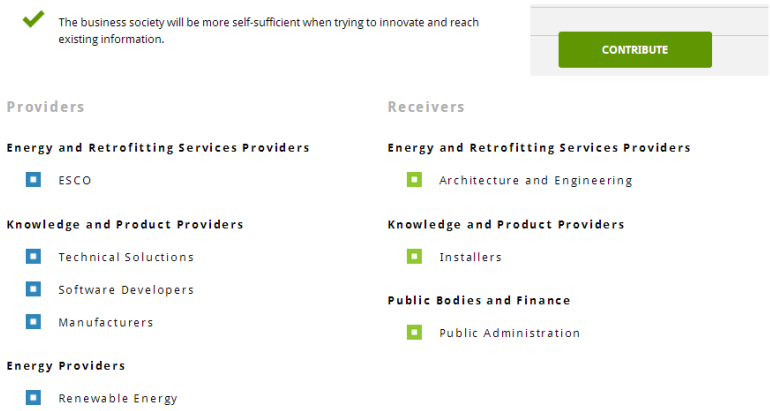
- The suggestion for the knowledge contribution guidelines page is to have 3 buttons on the top left (similar to the "Contribute" button) that will provide links to:
    - *Helpful Tips*
    - *View Other Contributions*
    - *Contribute*

  The link to view the material that has already been uploaded by other knowledge providers is not easily found and it is very important for a first time contributor to be able to view the past

submissions by other knowledge providers in order for him/her to get a better idea of what is already available and the standard of the material that is required for contribution.

- The material contribution screen allows the knowledge provider to submit material even if all fields are left blank thus creating unusable material content which will lower the tool performance. When contributing material the system should define which fields are obligatory.

- Many workshop participants expressed their confusion when presented with the list of providers and receivers on the material guidelines page. Some thought that the box-shaped bullets were actually checkboxes and were wondering whether they were required to make a selection. The value-added for displaying this section on the page is questionable since it has created more confusion rather than a valuable guideline. The overall suggestion was to remove it completely from the page. Another suggestion submitted was to provide checkboxes where the knowledge provider could select for which agents the material he is uploading is more relevant to. Then those agents could receive a notification that a particular material has been uploaded with a link directly to the material page on ee-wise website.



- When a user tried to contribute material without having logged in, the system rightly prompted the user to either login or register. A link to login or register was also provided in the prompt. However, after going through the registration process as instructed, the user was then directed to the homepage instead of the page where he/she was ready to contribute material. This results in a waste of time for the knowledge provider since ideally he/she should be taken back to where he was prior to the prompt.

- When testing the provider role, the tool proved to be relatively easy to use by most of the workshop participants. However some users put forward the suggestion that the material they are contributing could address more than one of the needs, and not just the ones offered by the platform.

3.2.5. General Comments on the Tool

Overall the users identified and related to the main intentions of the tool, and were extremely positive about the direction taken and that the tool could be extremely useful for knowledge sharing across the Mediterranean countries. Most where quite enthusiastic about the potential however a number of constructive suggestions where made:

- Presently, the system sticks strictly to providing options for a specific set of needs, and assumes that the users would not be interested in other needs. The validation exercise has shown that in practice the agents have a very varied interest in receiving information that goes beyond the need categories suggested.

  Quote: "I am a software developer, and a receiver of info but the only option i found was Connecting Commercial Advice to EPBD Activity. Many other options have been offered to other agents and I can't figure out why we are only offered this one. As a provider the options are better."

  The suggested solution here is to display all of the needs to the agent both in the role of receiver and provider. The main needs that are directly of interest to the agent as have been identified within WP3 & WP4 will be highlighted since they are assumed to be directly involved in them but the search should not limit the user to a set of needs. The user should be able to browse through all needs and related material and select the one that is best suited to his/her need. So perhaps we could offer the full list of needs besides the priority needs in a column titled "Other Related Needs"

- Some users have questioned the reason behind having selected their agent type at the registration stage. The question arose from the fact all throughout the tool validation, at no instant did the system stratify or simplify the choices available depending on the registered agent type. It was further suggested that the selection of the agent type at registration should allow the possibility to create the infrastructure that would allow communicating with groups of agents registered with the KTF Tool through mailshots depending on their agent type.

- At Step 3 of the KTF Tool, if the user is not familiar with the ee-WiSE project, then the selection of needs is not obvious and can seem to complicate matters since he/she would not be familiar with the K.T. needs identified during the project. It would help to prompt the user that he can read a short description of the need by clicking on any of them, or else by prompting a roll-over text.

- The description of the knowledge transfer need in "My Categories" should appear immediately below the K.T. Need title itself instead of at the very bottom of the list. When the list of needs was long, users didn't realise that they had to scroll down. Scrolling should be minimised and as it has been suggested that the full list of needs is to be displayed, the amount of scrolling will increase with the description displayed at the bottom.

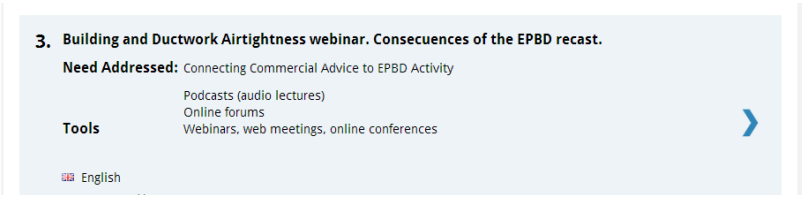
- Some material is flagged as Spanish but bears the UK flag. Same applies for Bulgarian.

- Some of the material that is currently hosted on the tool and being shown to the knowledge receivers contains long text descriptions without any line breaks or formatting. The suggestion is that a text formatting toolbar is included to allow formatting of the text entry boxes especially that of the material description. Bullets and indentations should be allowed.

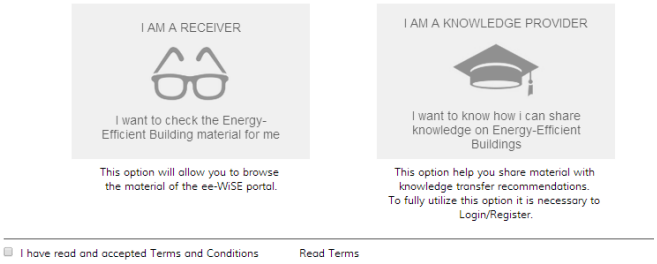
- Navigation through the KTF Tool was sometimes reported as not being so user friendly. One example of this is when the user is prompted to choose between being a receiver or provider

in Step 2. It took the users a while to notice that unless they accept the terms and conditions they cannot proceed. Such terms and conditions should be shown above and not below the receiver/provider icons.

- Within the search results, each material is not being described as what it actually is. Instead the user is presented with a list of three tool types leading to confusion to understand what the material content is. The tool type should be one only and should be linked to the tool type that the provider has chosen during material submission.



- The link to read the terms and conditions before proceeding as a receiver of provider of information should be presented from the start instead of appearing suddenly and should be at the top not underneath the receiver/provider buttons.

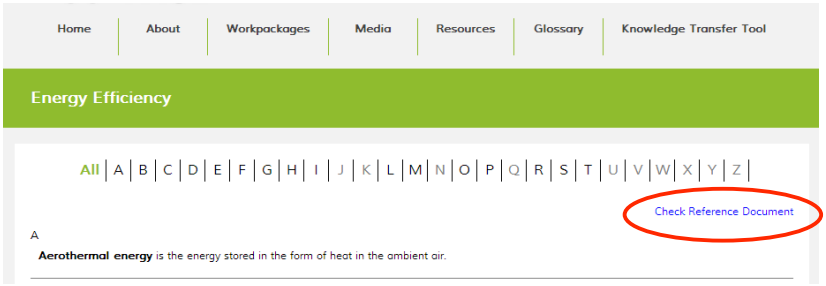


- The Terms & Conditions should include disclaimers that the persons who are contributing material declare that they are the owners of the knowledge or at least have the authorisation to post it. They should ideally also be able to select how they wish the material to be used, e.g. whether only for non-commercial use, or if derivative works are allowed, etc.

- One of the suggestions resulting from the workshops was that the material content should also be identified by EE Retrofit Technology. In other words, if a user uploads a material content that is directly related to one or more technologies in particular, then there should be the possibility to have a list of EE retrofit technologies with check boxes to choose from at the contribution stage. Similarly, if a person is searching for ICT Tools for a particular technology, he/she should be allowed to further define and filer the search criteria by technology too.

3.2.6. General Comments on the Website

- Within the Glossary screens there is a link called "*Check Reference Document*". When clicked the user is prompted to save a file on a local drive. This is not necessary. The link should open the reference document in a new window ideally without the need to save the file on the local drive.



- The written English of the guidelines and the website in general needs to be improved. Many errors have been noted.

- On the website homepage insert a live feed of the most popular / most voted materials submitted and a list of the upcoming events with links to further information on them.

4. FEEDBACK OBTAINED FROM INTERVIEWS

Interview A – Participant is an Occupant

1. *What did you like most about the ee-WiSE Knowledge Transfer Framework, and what less? Please explain why.*

I like the idea that all agents can be gathered in one online tool to share information that is dedicated to EE Retrofitting for the Mediterranean. What I like less is that as the tool is designed, if a user is not well versed on the ee-WiSE project, then it is difficult for him/her to understand the definitions of the knowledge transfer needs. A more general approach or terminologies might be employed to overcome this.

2. *Can you please indicate your opinion and feelings about the lesson guidelines and knowledge transfer tools you have tested, and their potential application in your work?*

The guidelines for material contribution are very helpful but could also be further elaborated giving more practical advice. The tools made available are extensive and as an occupant I found them to be useful.

3. *How do you feel about the ICT-based approach of the KTF? How attractive and convenient is it to you as a provider/ receiver of EE retrofitting knowledge?*

The visuals and design is moderately good.

4. *In your opinion, could the Knowledge Transfer Framework be applicable in other sectors of the building industry? Could it be applied in other countries?*

The knowledge base and building technology differs across regions out of the Mediterranean. Therefore, the content would need to be adapted accordingly. However, the same base framework could be applied successfully.

5. *Could you suggest any improvements to the Knowledge Transfer Framework?*

A mobile application version of the tool could be created in order to increase accessibility.

6. *Would you use the ee-WiSE KTF in the future and recommend it to others?*

Yes

7. Would you like to add anything else?

No

Interview B – Participant is a Renewable Energy Provider

1. *What did you like most about the ee-WiSE Knowledge Transfer Framework, and what less? Please explain why.*

This is a very good initiative and I am pleased that it is being developed and created. It will be a very useful tool. The most important factor in the success of the tool is dissemination and making sure that all the agents know about it and how to use it maximally.

2. *Can you please indicate your opinion and feelings about the lesson guidelines and knowledge transfer tools you have tested, and their potential application in your work?*

The knowledge transfer tools should help to fill a void that we are experiencing in our sector. Many times communication is limited and narrow visioned. We need to have more interaction between the agents and this tool could be the starting point for getting agent together discussing and sharing knowledge.

3. *How do you feel about the ICT-based approach of the KTF? How attractive and convenient is it to you as a provider/ receiver of EE retrofitting knowledge?*

The tool is quite user friendly and easy to follow. However, more effort should be made to make it pleasing to the eye.

4. *In your opinion, could the Knowledge Transfer Framework be applicable in other sectors of the building industry? Could it be applied in other countries?*

Definitely. The tool could be applied to other sectors and countries. However they should be hosted on separate platforms since I feel that if they are on the same platform then the uniqueness of the tool will be lost. People better relate to an area where they are sure to obtain what they require from a specialised area rather than from a generic website.

5. *Could you suggest any improvements to the Knowledge Transfer Framework?*

Not at this stage.

6. *Would you use the ee-WiSE KTF in the future and recommend it to others?*

Yes

7. *Would you like to add anything else?*

Not at this stage.

Interview C – Participant is an Architect

1. *What did you like most about the ee-WiSE Knowledge Transfer Framework, and what less? Please explain why.*

The idea for the tool is very good but the concept is not clear. People would need to know about the project details in order to understand what to do and how to use the tool to arrive to the information that they need. The branding of the site needs a big improvement, in terms of colour scheme and design there is a big lack of quality.

2. *Can you please indicate your opinion and feelings about the lesson guidelines and knowledge transfer tools you have tested, and their potential application in your work?*

Yes the information and guidelines could help to guide the agents, including myself, in my work.

3. *How do you feel about the ICT-based approach of the KTF? How attractive and convenient is it to you as a provider/ receiver of EE retrofitting knowledge?*

There is too much scrolling to do on the majority of the pages. Approach is very limited in terms of user-friendliness.

4. *In your opinion, could the Knowledge Transfer Framework be applicable in other sectors of the building industry? Could it be applied in other countries?*

Yes it could but first it must be improved in order to be in a position to diffuse it among other sectors and countries.

5. *Could you suggest any improvements to the Knowledge Transfer Framework?*

A good background of SEO and keywords is important. Otherwise, no one will use the tool.

6. *Would you use the ee-WiSE KTF in the future and recommend it to others?*

I will have to see the final version.

7. *Would you like to add anything else?*

No

5. CONCLUSIONS

The main conclusions of the validation workshops carried out in Malta are that:

1. The general appearance of the website and the tool needs to be improved and a branding exercise carried out.
2. The written English needs to be reviewed and corrected.
3. Clear instructions need to be included on each page and displayed more prominently to guide the user through the tool.
4. The full list of knowledge transfer needs must be displayed to all users, both providers and receivers, at all times giving them the opportunity to choose at will and not restricting them to a pre-selected group of needs.
5. The short text for the knowledge transfer needs is not too clear for the users and has to be further simplified to help them to arrive to the information they are interested in or to assign the information they are providing to a particular need. The proposed solution is to group the knowledge transfer needs by their categories as defined in WP3. Then the user could direct his/her attention to a group of needs depending on the interest.

Going through all the major and minor improvements highlighted by the workshop participants will change the feel of the website and knowledge transfer tools making it more user friendly and hopefully accessible to all agents within the EE Retrofit value chain.

Project full title: "Energy Efficiency Knowledge Transfer Framework for Building Retrofitting in the Mediterranean Area

Grant agreement no: 314347

EeB.NMP.2012-6 - Methodologies for Knowledge transfer within the value chain and particularly to SMEs

COUNTRY-LEVEL VALIDATION WORKSHOP REPORT: SPAIN (East)

Circulation: Confidential
Partners: AIDICO

Authors: Álvaro Pastor Peral (AIDICO)

Date: 14/03/2014
Doc. Ref. N°: eeWISE-WP5_D5.1_Country_Level_Workshop_Spain_East

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Version	*Date*	*Comment*
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1. INTRODUCTION AND OBJECTIVES

The ee-WiSE Project has been approved in the 2012 FP7 call, within the Theme: *Methodologies for Knowledge Transfer within the Value Chain and particularly to SMEs* and counts with an international consortium of 13 partners that include research institutes, companies (also SMEs), universities and public entities from 7 different countries in the Mediterranean area.

The main purpose of eeWise project is to develop a Framework for knowledge Management and Transfer within the value chain of EE sector in building retrofitting in the Mediterranean, and with special attention to SMEs.

1.1 Country-level validation workshops

The objective of the validation activities is to collect the feedback of the EE retrofitting value chain regarding the adequacy of the developed Knowledge Transfer Framework (KTF) and Tools:

- increase the awareness of the agents in EE retrofitting value chain regarding the concept, benefits and opportunities of Knowledge Transfer.

- introduce the developed Knowledge Transfer Framework and some practical examples of Knowledge Transfer Tools.

- collect the feedback of the agents of the value chain regarding the KTF and Tools and develop recommendations for improvement.

- encourage the target group to use the ee-WiSE Knowledge Transfer Framework and apply the developed Tools in practice.

The KTF is based on the work done in the previous stages of the project – knowledge transfer flows analysis (WP2), knowledge needs analysis, identified best practices and potential solutions (WP3). The KTF is a web-based platform that consists of a number of ICT Tools and can be accessed through the project website www.ee-wise.eu.

By this, recommendations for potential improvements, in order to ensure the validity of the Framework and its adjustment to the real needs of the sector, must be provided through, as a first step, country-level validation workshops in the ee-WiSE project partners´ countries.

Figure 1: Mediterranean basin

The Eastern Spanish Validation Workshop has been performed by AIDICO, presenting the developed KTF and Tools to the target audience – agents of the value chain – analysing participants' feedback, which have been collected through questionnaires and interviews. The collected feedback is presented in this Report and translated into conclusions that will be used to improve the developed Framework and Tools.

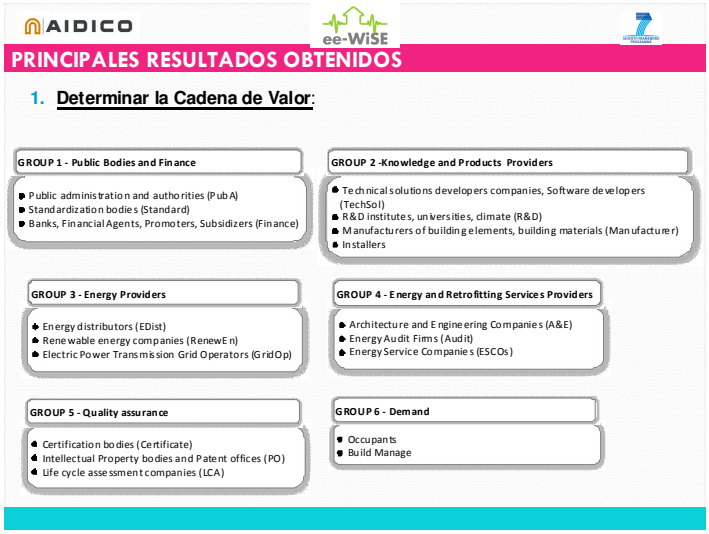
2. MAIN FEATURES OF EASTERN SPANISH VALIDATION WORKSHOP

Eastern Spanish Validation Workshop	
Promoter	AIDICO – Technological Institute of Construction
Date	Tuesday, 4th of March, 2014
Placement	Valencia (SPAIN)
Number of Participants	21
Type of Workshop	Multi-company event. Horizontal Small Workshop. External representative experts of energy efficiency in refurbishment of buildings as well as the 6 Target Groups identified in the Value Chain (as a Providers and Receivers).
Workshop Agenda	- Welcome and brief presentation of the participants. - Presentation of ee-WiSE Project: Objectives, methodology of work, current and expected results. - Coffee break. - Knowledge Transfer Framework (KTF) and Tools Presentation. - KTF Testing: Philosophy of work & methodology for validation. - Evaluation: Questionnaires and Interviews. - Chat / Discussion. - End.
Lesson Plans / Guidelines Tested	1. Exposing the end users to the technological results of the research organizations. 2. Connecting technical commercial advice to EPBD - energy performance and requirements of the actual buildings. 3. Occupants need financial support to invest in EE retrofitting technology. 4. Training of construction professionals (including architects, civil engineers, building services engineers, project managers, building designers, etc) in retrofit technologies. 5. Training of traditional craftsmen on EE retrofitting innovations.
Material & Resources	- Computer with Internet connection per participant. - Common Wi-Fi Connection. - Projector. - Presentations (slides). - Documentation: Information about agents of value chain, Lesson plans and for testing, written interviews. - Conference Room. - Camera for taking pictures of the Workshop. - Catering (Break and lunch). - Additional human resources, supporting the activities.
Duration	5 hours

3. OVERVIEW OF VALIDATION ACTIVITIES

After a brief presentation of each participant in the Validation Workshop and the explanation of the main objective of the event, a first approach of ee-WiSE Project was realized, regarding the concept, benefits and opportunities of Knowledge Transfer: Objectives, scope, methodology and results achieved.

While the definition of Value Chain was shown, the participants were invited to detect in which Group of the Value Chain they identified themselves and, inside of each Group, which type of agent they are. For this task, a specific template was developed and delivered to the participants in order to mark their choices. The identified roles per each one of them were used during the whole event and determined the later actions to realize.



Before the Coffee Break, the ee-WiSE Website was shown and the participants were invited to browse, using their respective Computer.

Later, a first approach of the Knowledge Transfer Framework and Tools were presented by a few slides, showing the philosophy of work, type of users defined, capabilities, explanation of ICT Tools, etc. When the participants were familiarized with the tool, the methodology of testing was presented:

In function of the type of agent and the need to test, they had to access to KTF as a provider, as a receiver or as both roles. For taking this choice, a template with the configurations was delivered to them.

The target group was encouraged to use the ee-WiSE Knowledge Transfer Framework and apply the developed Tools in practice: Each Lesson Plan was tested by the participants during 15-20 min as providers, receivers or both roles, and they were taking notes about the running of the Tools, asking questions, providing training material, etc.

PLAN LESSONS		VALUE CHAIN																			
		1 Public Bodies and Finance				2 Knowledge Providers & Products						3 Energy Providers			4 Energy & Retrofitting			5 Quality			6 Demand	
		Financial Agents	Public Admin.	GOV	Standardization	Software Developers	Technical Solutions	Manufacturers	Installers	R&D	Climate	Renewable Energy	Energy Dsitributors	Grid Operators	ESCO	Architect. & Engineer.	Audit Firms	Patent Offices	Life Cycle Assessment	Certificate entities	Building Managers	Occupants
Applicability to the end users.	R																				X	X
	P									X												
Increase the Connection between Commercial Advice and EPBD	R	X	X		X										X	X	X					
	P														X	X	X				X	X
Financial Support for Occupants in Retrofit Take-Up	R	X																				X
	P		X	X																X		
Training the Construction Industry Professionals in Retrofitting Technology	R		X	X												X						
	P		X	X			X			X						X						
Exposing Craftsmen to Innovation	R								X							X						
	P					X	X	X		X		X				X						
Agents involved in the Eastern ~~Spanish Validation Workshop~~ *(Producers and/or Receivers)*	R	X	X	X	X				X						X	X	X				X	X
	P		X	X		X	X	X		X		X			X	X	X			X	X	X

In case of any participant was not involved on a specific need, he had to ask himself "Which agent, defined as receiver of this need, is more attractive for me?" Then, they had to access to test it as a receiver with this role.

At the end of this stage, the Online Questionnaire (Surveymonkey) was filled up by each one of them and a written interview was delivered them in order to answer additional questions not included in the previous questionnaire. By this, an important feedback of the agents of the value chain regarding the KTF and Tools and develop recommendations for improvement were collected.

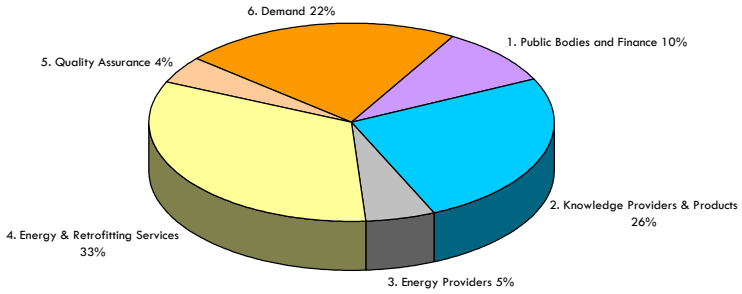
Before the ending of the Validation Workshop, an informal discussion among the whole targeted audience was maintained.

This dialogue was about the KTF and later was addressed to talk about the Knowledge Transfer Strategy from Public Administration and Certification Bodies to rest of groups of the Value Chain, as a first approach for WP6. In fact, a specific questionnaire for participants who marked these types of agents was delivered.

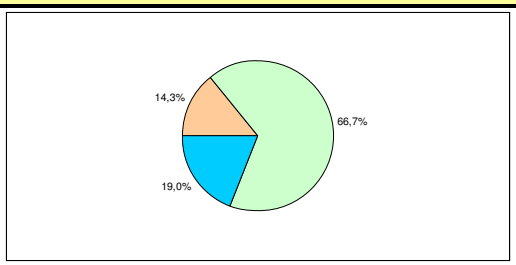
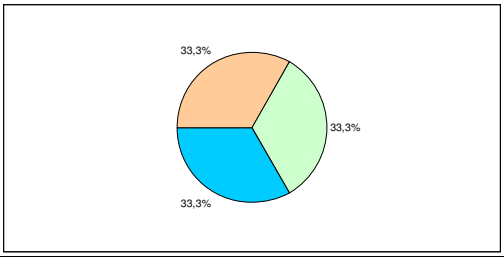
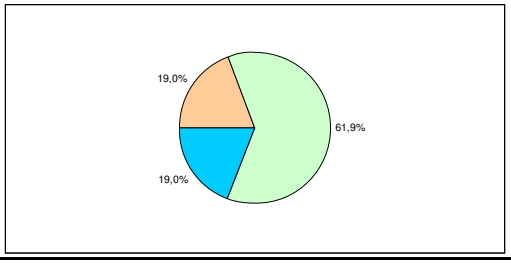
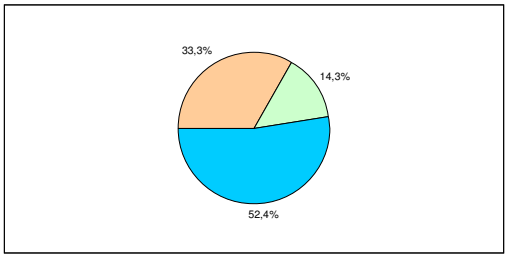
4. PARTICIPANTS WITHIN THE VALUE CHAIN AND PARTICIPATION IN THE LESSON PLANS

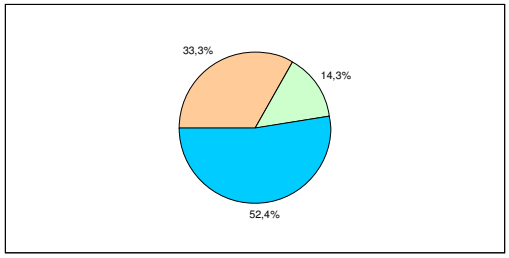
The following data represents the type of agent inside of the value chain that each participant chose in the Eastern Spanish Validation Workshop:

	PARTICIPANT	VALUE CHAIN																				
		1				2						3			4			5			6	
		Public Bodies and Finance				Knowledge Providers & Products						Energy Providers			Energy & Retrofitting			Quality Assurance			Demand	
		Financial Agents	Public Admin.	GOV	Standardization	Software Developers	Technical Solutions	Manufacturers	Installers	R&D	Climate	Renewable Energy	Energy Dsitributors	Grid Operators	ESCO	Architect. & Engineer.	Audit Firms	Patent Offices	Life Cycle Assessment	Certificate entities	Building Managers	Occupants
1	Mr. Rafael Navarro Quilis		X							X												X
2	Mr. Hugo Ruiz Fernández									X					X		X					X
3	Mrs. Begoña Leyva Gómez		X		X		X	X	X						X							X
4	Mrs. Rosa López						X								X	X	X					X
5	Mrs. Sandra Frías Rocha		X						X	X		X			X							X
6	Mr. Manuel Romero Rincón					X				X						X	X					X
7	Mr. Rafael Vázquez Martí														X	X	X					X
8	Mrs. María Ortiz Tarín		X									X										X
9	Mr. Alejandro García Termps					X										X	X					X
10	Mr. José Luís Langa Bañegil						X									X						X
11	Mr. Rafael Tejedor López				X							X				X						X
12	Mr. José Antonio Alcobendas					X	X	X	X	X						X	X						X
13	Mr. Francisco Gómez Marqués						X		X							X	X					X
14	Mr. Jorge Crespo Carralón								X			X				X	X						X
15	Mr. Gustavo Furest Aycart	X			X					X						X	X			X		X
16	Mrs. Auxiliadora Reyes									X		X				X	X					X
17	Mrs. Mª Luisa Campos García															X	X					X
18	Mr. Ignacio Docavo Lobo			X												X						X
19	Mrs. Paula Rivas Hesse															X				X		X
20	Mrs. Dolores Gil Salinas									X									X	X		X
21	Mr. Pablo Guillén Marzal									X						X						X
	AGENTS REPRESENTED	1	4	1	3	3	5	2	5	9	0	5	0	0	5	15	11	0	1	3	0	21
	PARTICIPATIONS PER GROUP	9p				24p						5p			31p			4p			21p	
		9,6 %				25,5 %						5,3 %			33 %			4,3 %			22,3 %	



The following data represents the adopted roles by the participants for each Lesson Plan (needs) tested in KTF during the Validation Workshop:

Lesson Plans / Needs	ROLES			STATISTICS
	Provider	Receiver	Both	
Applicability to the end users.	3	14	4	
Increase the Connection between Commercial Advice and EPBD	7	7	7	
Financial Support for Occupants in Retrofit Take-Up	4	13	4	
Training the Construction Industry Professionals in Retrofitting Technology	7	3	11	

Exposing Craftsmen to Innovation	7	3	11	

5. SUMMARY OF INTERVIEWS

Based on questions included in Deliverable 5.1 "Framework and Knowledge Management Tools Validation Plan", written interviews were delivered to each participant in order to record their opinions/ feelings/ impressions that could lead to further improvements of the KTF.

An overview of these 21 interviews has been compiled in this report:

Interview n°1	
1. What did you like most about the ee-WiSE Knowledge Transfer Framework, and what less? Please explain why	More: The possibility to access to knowledge and studies included by experts from different countries of the Mediterranean Area Less: Validity of the information included in KTF. I´m not sure how can be verify the veracity. It is not an easy to use tool, at least this version.
2. What do you think about the philosophy of work with KTF? It provides information with potential and usual application?	Philosophy: It seems very nice and coherent. However, I think it is too much focused on determined profiles, such as technicians, rather than occupants.
3. As Knowledge Provider, has been KTF a useful tool from the optimal point of view? As Knowledge Receiver, what do you think about the ICT Tools included in KTF?	Provider: Uploading material is an Intuitive process. Receiver: Material provided is so wide and not organized.
4. What could you suggest to KTF Developers in order to improve the Tool?	- Translations in different languages. - To develop a more intuitive tool. - The tool is too restrictive and limits the use. All the users should be access to other needs not included in the list.
5. Would you use the ee-WiSE KTF in the future and recommend it to others?	Yes.
6. Could the Knowledge Transfer Framework be applicable in other sectors of the building industry?	KTF could be a reference for other fields in construction. No in other countries.

Could it be applied in other countries?	
7. Would you like to add anything else?	The transnational character could imply that some national specific needs are not included in the tool.

Interview n°2	
1. What did you like most about the ee-WiSE Knowledge Transfer Framework, and what less? Please explain why	More: Everybody can provider knowledge without limits and minimum conditions.
2. What do you think about the philosophy of work with KTF? It provides information with potential and usual application?	Philosophy: It seems good. Maybe in the future can collapse by too much information.
3. As Knowledge Provider, has been KTF a useful tool from the optimal point of view? As Knowledge Receiver, what do you think about the ICT Tools included in KTF?	Provider: Very easy to use. Receiver: Very easy to use.
4. What could you suggest to KTF Developers in order to improve the Tool?	- Very important to classify the information and allows smart searches by key words, type of ICT Tools, etc. - To develop a tutorial, user manual. - The tool is too restrictive and limits the use. All the users should be access to other needs not included in the list.
5. Would you use the ee-WiSE KTF in the future and recommend it to others?	Yes, and I will recommend it.
6. Could the Knowledge Transfer Framework be applicable in other sectors of the building industry? Could it be applied in other countries?	Yes, but it is very important to have the tool in different languages
7. Would you like to add anything else?	I used Internet Explorer Browser and I had lots of problems.

Interview n°3	
1. What did you like most about the ee-WiSE Knowledge Transfer Framework, and what less? Please explain why	More: The Web Format is very accessible. The idea of sharing material about EE retrofitting is very useful. Less: The Step Route is not evident.
2. What do you think about the philosophy of work with KTF? It provides information with potential and usual application?	Philosophy: It is good but could be better. Maybe How to guarantee the quality of material is an interesting issue to consider.
3. As Knowledge Provider, has been KTF a useful tool from the optimal point of view? As Knowledge Receiver, what do you think about the ICT Tools included in KTF?	Provider: Yes. Receiver: No comments.
4. What could you suggest to KTF Developers in order to improve the Tool?	- Have the chance to rank the quality/usability of the material by the receivers. - As a provider, have the chance to add new categories not included in the needs by material which can not be allocated in the standardized categories. - To implement a system for detection of non-adequate material provided. - Brief explanation of Profiles, included in the KTF. - To visualize the type of file before opening the source. - Forum. - Description of number of documents included on a determined category. - Search system by key words or type of information.
5. Would you use the ee-WiSE KTF in the future and recommend it to others?	Yes, but only for concrete questions and it will be dependent of the quality of provided material.
6. Could the Knowledge Transfer Framework be applicable in other sectors of the building industry? Could it be applied in other countries?	No comments.
7. Would you like to add anything else?	One question: Which is the motivation for provider for uploading material??

Interview n°4	
1. What did you like most about the ee-WiSE Knowledge Transfer Framework, and what less? Please explain why	More: Great quantity of material which can be available in KTF and the structure of the agents involved in the value chain. Less: There is not a system to avoid bad information or non-adequate material.
2. What do you think about the philosophy of work with KTF? It provides information with potential and usual application?	Philosophy: Very interesting. It is the future for knowledge transfer.
3. As Knowledge Provider, has been KTF a useful tool from the optimal point of view? As Knowledge Receiver, what do you think about the ICT Tools included in KTF?	Provider: Yes. Receiver: Yes. KTF considers lots of different ICT tools
4. What could you suggest to KTF Developers in order to improve the Tool?	- To include a user manual, with examples of use, as a pdf file.
5. Would you use the ee-WiSE KTF in the future and recommend it to others?	Yes, I would usually use and I would recommend it.
6. Could the Knowledge Transfer Framework be applicable in other sectors of the building industry? Could it be applied in other countries?	Yes.
7. Would you like to add anything else?	I used Internet Explorer Browser and I had problems.

Interview n°5	
1. What did you like most about the ee-WiSE Knowledge Transfer Framework, and what less? Please explain why	More: Implementation in a Website. Less: Poor quality of design. It is not very easy to use.
2. What do you think about the philosophy of work with KTF? It provides information with potential and usual application?	KTF is a tool with a high level of potential use. However, the implementation of a quality filter for the material provided is very important.
3. As Knowledge Provider, has been KTF a useful tool from the optimal point of view? As Knowledge Receiver, what do you think about the ICT Tools included in KTF?	Provider: Yes, is a powerful and easy to use tool. Receiver: It is not easy to use for searching a determined content, so confused!
4. What could you suggest to KTF Developers in order to improve the Tool?	- To improve the explanation of the categories. - To solve functional mistakes. When receivers are searching material, appears information not involved with the chosen category.

5. Would you use the ee-WiSE KTF in the future and recommend it to others?	Yes, but it will depend of the future material.
6. Could the Knowledge Transfer Framework be applicable in other sectors of the building industry? Could it be applied in other countries?	Yes.
7. Would you like to add anything else?	No comments.

Interview n°6	
1. What did you like most about the ee-WiSE Knowledge Transfer Framework, and what less? Please explain why	More: The opportunity for sharing material and searching concrete information related to energy refurbishment of buildings. Less: The agents are not been indentified.
2. What do you think about the philosophy of work with KTF? It provides information with potential and usual application?	KTF is a very valuable tool. Its contents could be very useful for the agents.
3. As Knowledge Provider, has been KTF a useful tool from the optimal point of view? As Knowledge Receiver, what do you think about the ICT Tools included in KTF?	Provider: Yes, KTF is easy to use. Receiver: It is very confuse.
4. What could you suggest to KTF Developers in order to improve the Tool?	- To improve the classification of the material. The receiver should be able to filter the results by different parameters. - Some fields must be mandatory to fill up by the providers. - Include a brief questionnaire about the quality of the material for the receivers. - To implement a folder with "My Favourite Material" for viewing the material later. - Options in user´s area to change the password or name. - In "Financial Support for Occupants in Retrofit Take-Up" Need, ESCOs and constructive companies should be Knowledge Providers too. - In "Increase the Connection between Commercial Advice and EPBD" Need, Manufacturers should be Knowledge Providers too.
5. Would you use the ee-WiSE KTF in the future and recommend it to others?	Yes, when the tool is finished and passes a deep improvement.
6. Could the Knowledge Transfer Framework be applicable in other sectors of the building industry? Could it be applied in other countries?	Yes, but the energy refurbishment is the most interesting field in construction industry.
7. Would you like to add anything else?	The user needs much time to find the concrete material because of the lack of filters. I´m not sure if companies will share their knowledge. Safari and Firefox works in good conditions.

Interview nº7	
1. What did you like most about the ee-WiSE Knowledge Transfer Framework, and what less? Please explain why	More: The most important agents are represented in the Value Chain.
2. What do you think about the philosophy of work with KTF? It provides information with potential and usual application?	Philosophy: In general, it is good. I think that KTF can be potential of application. At this moment it is not enough information.
3. As Knowledge Provider, has been KTF a useful tool from the optimal point of view? As Knowledge Receiver, what do you think about the ICT Tools included in KTF?	Provider: Yes, but it needs improvements. Receiver: It is very confused.
4. What could you suggest to KTF Developers in order to improve the Tool?	- There should be a Moderator of material, who can filter the material and maintain the valuable content. - In "User Area" >> "Edit your Material" it could be useful the date of the upload of the material. Besides, the fields "Description" and "url" are not saved. - The search system doesn´t work. - To solve the mistakes about the languages and their flags. - Different ways to order the material. - To create a Section of "VIP Material", or The Most Uploaded Material. - To implement an Advanced Search.
5. Would you use the ee-WiSE KTF in the future and recommend it to others?	Yes.
6. Could the Knowledge Transfer Framework be applicable in other sectors of the building industry? Could it be applied in other countries?	Yes.
7. Would you like to add anything else?	No comments.

Interview n°8	
1. What did you like most about the ee-WiSE Knowledge Transfer Framework, and what less? Please explain why	More: The way to collect the information and put them in contact with the agents of the sector who can use. Less: There is a lack of organization of the information and can complicate the use of the tool.
2. What do you think about the philosophy of work with KTF? It provides information with potential and usual application?	Philosophy: Good philosophy. The tool has a big potential but could be very confused if there is not an intelligent browser.
3. As Knowledge Provider, has been KTF a useful tool from the optimal point of view? As Knowledge Receiver, what do you think about the ICT Tools included in KTF?	Provider: There are confused ICT tools Receiver: It is very confused with too much information.
4. What could you suggest to KTF Developers in order to improve the Tool?	- The information about the material must be mandatory for the knowledge providers. - In the list of results should have the option of going up to the top of the list. - The recent material appears at the end of the list. This should be changed. - There is an important need of implementation of a search methodology.
5. Would you use the ee-WiSE KTF in the future and recommend it to others?	Yes.
6. Could the Knowledge Transfer Framework be applicable in other sectors of the building industry? Could it be applied in other countries?	Yes, of course.
7. Would you like to add anything else?	The tool could become in a announcement website with high quality on the contents

Interview n°9	
1. What did you like most about the ee-WiSE Knowledge Transfer Framework, and what less? Please explain why	More: The organisation of the information in categories, the possibility to connect the different agents of the value chain. Potential because of the open platform. Less: Too much technical for final users (occupants).
2. What do you think about the philosophy of work with KTF? It provides information with potential and usual application?	Philosophy: Good philosophy for both directions (provider and receivers)
3. As Knowledge Provider, has been KTF a useful tool from the optimal point of view? As Knowledge Receiver, what do you think about the ICT Tools included in KTF?	No comments.
4. What could you suggest to KTF Developers in order to improve the Tool?	- Filters for searching the information. - Systems for accelerating the access to the material. - A special access for occupants, more intuitive and direct.
5. Would you use the ee-WiSE KTF in the future and recommend it to others?	Yes.
6. Could the Knowledge Transfer Framework be applicable in other sectors of the building industry? Could it be applied in other countries?	No comments.
7. Would you like to add anything else?	No comments.

Interview n°10	
1. What did you like most about the ee-WiSE Knowledge Transfer Framework, and what less? Please explain why	More: KTF is a meeting point with easy using for sharing information. Less: The language, it is only in English.
2. What do you think about the philosophy of work with KTF? It provides information with potential and usual application?	Philosophy: Good philosophy. Great potential of application
3. As Knowledge Provider, has been KTF a useful tool from the optimal point of view? As Knowledge Receiver, what do you think about the ICT Tools included in KTF?	Provider: There are some mistakes during the provision of information. Receiver: It is too early for its evaluation. There is not too much data for the moment.
4. What could you suggest to KTF Developers in order to improve the Tool?	- Filters for searching the information. - Systems for accelerating the access to the material. - A special access for occupants, more intuitive and direct.

5. Would you use the ee-WiSE KTF in the future and recommend it to others?	Yes.
6. Could the Knowledge Transfer Framework be applicable in other sectors of the building industry? Could it be applied in other countries?	Yes.
7. Would you like to add anything else?	No comments.

Interview n°11	
1. What did you like most about the ee-WiSE Knowledge Transfer Framework, and what less? Please explain why	More: KTF is clear and intuitive Less: Should be in Spanish, especially for the occupants.
2. What do you think about the philosophy of work with KTF? It provides information with potential and usual application?	Philosophy: Good philosophy. It will be very important that the providers share useful information with a good quality and adjusted to the specific needs.
3. As Knowledge Provider, has been KTF a useful tool from the optimal point of view? As Knowledge Receiver, what do you think about the ICT Tools included in KTF?	Provider: It should be the possibility to modify the provided material. Receiver: Too much information and should be better organised.
4. What could you suggest to KTF Developers in order to improve the Tool?	- The information should be translated into Spanish. - Search system and filter to organize the information. - A special access for occupants, more intuitive and direct.
5. Would you use the ee-WiSE KTF in the future and recommend it to others?	It is possible.
6. Could the Knowledge Transfer Framework be applicable in other sectors of the building industry? Could it be applied in other countries?	Yes, of course. A specific tool for Labour Risks Prevention.
7. Would you like to add anything else?	Bad use with Internet Explorer Browser.

Interview n°12	
1. What did you like most about the ee-WiSE Knowledge Transfer Framework, and what less? Please explain why	More: KTF is a good chance for sharing the knowledge in energy retrofitting Less: There is a problem for the identification of the agents.
2. What do you think about the philosophy of work with KTF? It provides information with potential and usual application?	Philosophy: Good philosophy. There is a potential problem if the are too much information and could imply a lack of interest.
3. As Knowledge Provider, has been KTF a useful tool from the optimal point of view? As Knowledge Receiver, what do you think about the ICT Tools included in KTF?	Provider: Easy interface for uploading material. Receiver: The variety of different formats for the information is very useful.
4. What could you suggest to KTF Developers in order to improve the Tool?	- Mistakes with the flags and the language. - The description of the content must be mandatory for the providers. - Explanation of the tool as a manual of use with practical examples.

5. Would you use the ee-WiSE KTF in the future and recommend it to others?	Yes, in both cases.
6. Could the Knowledge Transfer Framework be applicable in other sectors of the building industry? Could it be applied in other countries?	Yes, if a previous study supports the development of the tool.
7. Would you like to add anything else?	Very good running with Android device and Google Chrome.

Interview n°13	
1. What did you like most about the ee-WiSE Knowledge Transfer Framework, and what less? Please explain why	More: Interesting and useful tool for technicians and occupants. Less: During the first approach is a bit confused.
2. What do you think about the philosophy of work with KTF? It provides information with potential and usual application?	Philosophy: Good philosophy.
3. As Knowledge Provider, has been KTF a useful tool from the optimal point of view? As Knowledge Receiver, what do you think about the ICT Tools included in KTF?	Provider: Easy interface for uploading material. Receiver: Too much information and is not good classification.
4. What could you suggest to KTF Developers in order to improve the Tool?	- Creation of a Guide Use. - Improve the menus (design).
5. Would you use the ee-WiSE KTF in the future and recommend it to others?	Yes, in both cases.
6. Could the Knowledge Transfer Framework be applicable in other sectors of the building industry? Could it be applied in other countries?	Yes.
7. Would you like to add anything else?	No comments.

Interview n°14	
1. What did you like most about the ee-WiSE Knowledge Transfer Framework, and what less? Please explain why	More: The automatic link between agents of the value chain Less: There is not a chance for choosing the potential receivers for the providers.
2. What do you think about the philosophy of work with KTF? It provides information with potential and usual application?	Philosophy: Good and useful philosophy for sharing knowledge. The potential application for SME´s could be difficult due to their "know-how".
3. As Knowledge Provider, has been KTF a useful tool from the optimal point of view? As Knowledge Receiver, what do you think about the ICT Tools included in KTF?	Provider: The material included can be too much generic or commercial information. Receiver: Useful and very interesting the download of different ICT Tools.
4. What could you suggest to KTF Developers in order to improve the Tool?	- Development of IPR - Searcher. - Filter.

	- To became a professional tool with external providers.
5. Would you use the ee-WiSE KTF in the future and recommend it to others?	Yes, as knowledge receiver and, as a knowledge provider, to put in contact projects and companies with other agents.
6. Could the Knowledge Transfer Framework be applicable in other sectors of the building industry? Could it be applied in other countries?	Yes.
7. Would you like to add anything else?	Very important to connect the different agents.

Interview n°15	
1. What did you like most about the ee-WiSE Knowledge Transfer Framework, and what less? Please explain why	More: The accessibility and the link between agents. Less: There is not a chance for choosing the potential receivers for the providers.
2. What do you think about the philosophy of work with KTF? It provides information with potential and usual application?	Philosophy: Good and useful philosophy. It is needed.
3. As Knowledge Provider, has been KTF a useful tool from the optimal point of view? As Knowledge Receiver, what do you think about the ICT Tools included in KTF?	Provider: Powerful tool for dissemination and knowledge transfer. Receiver: ICT tools are adequate but there should be a control of the quality of contents.
4. What could you suggest to KTF Developers in order to improve the Tool?	- Clear difference between owners and occupants, tertiary and residential buildings, big companies and SME´s. - Improve the quality of the drops. - Improve the general interface of the tool. - Indicator of the role in every moment (provider, receiver, profile…). - Is it possible to store the content for a future visualizing? - Quick step for accessing to "Favourite Material". - Searcher. - Filter. - Very important to control the quality of the contents.
5. Would you use the ee-WiSE KTF in the future and recommend it to others?	Yes, and I would recommend it to others.
6. Could the Knowledge Transfer Framework be applicable in other sectors of the building industry? Could it be applied in other countries?	No comments.
7. Would you like to add anything else?	Very important to disseminate the tool. "Publish": Is not very clear the difference between it and "Upload Material" Browser: Internet Explorer 8

Interview n°16	
1. What did you like most about the ee-WiSE Knowledge Transfer Framework, and what less? Please explain why	More: The possibilities in one tool. Less: Sometimes it is very difficult to find the desired material.
2. What do you think about the philosophy of work with KTF? It provides information with potential and usual application?	Philosophy: Good philosophy.
3. As Knowledge Provider, has been KTF a useful tool from the optimal point of view? As Knowledge Receiver, what do you think about the ICT Tools included in KTF?	Provider: Very good and easy tool. Receiver: Sometimes is very difficult to get the required ICT tool.
4. What could you suggest to KTF Developers in order to improve the Tool?	- In "login", include "Change the user".
5. Would you use the ee-WiSE KTF in the future and recommend it to others?	Yes, in both cases.
6. Could the Knowledge Transfer Framework be applicable in other sectors of the building industry? Could it be applied in other countries?	Yes, as knowledge transfer tool, but the economic situation could difficult future developments.
7. Would you like to add anything else?	Browser: Google Chrome and Internet Explorer

Interview n°17	
1. What did you like most about the ee-WiSE Knowledge Transfer Framework, and what less? Please explain why	More: The philosophy of the tool in general. Less: Difficult using the first time.
2. What do you think about the philosophy of work with KTF? It provides information with potential and usual application?	Philosophy: Good philosophy. Potential: High potential level through the sector.
3. As Knowledge Provider, has been KTF a useful tool from the optimal point of view? As Knowledge Receiver, what do you think about the ICT Tools included in KTF?	Provider: I had problems uploading information. Mistakes in the tool. Some doubts about the languages, the URL. This part should be improved. Receiver: Sometimes is very difficult to get the required ICT tool.
4. What could you suggest to KTF Developers in order to improve the Tool?	- Video about the use of the tool with practical examples. - Improve the section for uploading material. - The provider must upload information from the USER AREA too.

	- Search system and filters. - Introduce a figure as supervisor of the material.
5. Would you use the ee-WiSE KTF in the future and recommend it to others?	Yes.
6. Could the Knowledge Transfer Framework be applicable in other sectors of the building industry? Could it be applied in other countries?	Yes, but as an independent tool.
7. Would you like to add anything else?	Improve the information for the first access. It is decisive. Take care with the tool and try to not convert it in a commercial Website.

Interview n°18	
1. What did you like most about the ee-WiSE Knowledge Transfer Framework, and what less? Please explain why	More: The integration of the agents of the value chain in the same framework. The possibility to transfer knowledge from technicians to final users. Less: Difficult using the first time.
2. What do you think about the philosophy of work with KTF? It provides information with potential and usual application?	Philosophy: Good impression. Potential: High potential level through the sector.
3. As Knowledge Provider, has been KTF a useful tool from the optimal point of view? As Knowledge Receiver, what do you think about the ICT Tools included in KTF?	Provider: Ok. Receiver: The description of the material should include should include, at least, if the content is technical, economic, training, commercial, etc.
4. What could you suggest to KTF Developers in order to improve the Tool?	- To know clearer the role and the profile - The information should be classified. This needs a deep study. - Include information and future events in the Website. - Newsletter, sent by e-mail, about the news in the contents included in KTF. - Introduce a figure as supervisor of the material. It should be revised. - Possibility to modify comments and descriptions.
5. Would you use the ee-WiSE KTF in the future and recommend it to others?	Yes, and I recommend it to others.
6. Could the Knowledge Transfer Framework be applicable in other sectors of the building industry? Could it be applied in other countries?	Yes, about other fields of renovation of buildings: Acoustic, structural, accessibility…
7. Would you like to add anything else?	It should be interesting to establish differences between climatic zones.

Interview n°19	
1. What did you like most about the ee-WiSE Knowledge Transfer Framework, and what less? Please explain why	More: Very interesting initiative Less: Problems to access the material as receiver.
2. What do you think about the philosophy of work with KTF? It provides information with potential and usual application?	Philosophy: Good impression. High potential.
3. As Knowledge Provider, has been KTF a useful tool from the optimal point of view? As Knowledge Receiver, what do you think about the ICT Tools included in KTF?	Provider: Ok but I can not include material. Receiver: There are problem for detecting the expected material.
4. What could you suggest to KTF Developers in order to improve the Tool?	- No comments
5. Would you use the ee-WiSE KTF in the future and recommend it to others?	Yes, and I recommend it to others.
6. Could the Knowledge Transfer Framework be applicable in other sectors of the building industry? Could it be applied in other countries?	No comments.
7. Would you like to add anything else?	No comments.

Interview n°20	
1. What did you like most about the ee-WiSE Knowledge Transfer Framework, and what less? Please explain why	More: The connection of supply and demand in the market.
2. What do you think about the philosophy of work with KTF? It provides information with potential and usual application?	Philosophy: Good philosophy for the providers, very quick to upload information and big potential as a database of useful information.
3. As Knowledge Provider, has been KTF a useful tool from the optimal point of view? As Knowledge Receiver, what do you think about the ICT Tools included in KTF?	Provider: Quick add of material but different mistakes with the material and the language. Receiver: It is good but there too much steps for getting the material.
4. What could you suggest to KTF Developers in order to improve the Tool?	- Advertisement about the compatible browsers. - Too much "clicks" for a final user. At least, for these agents, should be more direct as receivers.

	- Advertisements about the role, profile, etc. during all the time.
5. Would you use the ee-WiSE KTF in the future and recommend it to others?	Yes, but before the tool should be improved.
6. Could the Knowledge Transfer Framework be applicable in other sectors of the building industry? Could it be applied in other countries?	Yes, for new construction buildings or NZEB.
7. Would you like to add anything else?	I used Safari 7.0.2 and Firefox 27.0.1. There are problems of running in USER AREA.

Interview n°21	
1. What did you like most about the ee-WiSE Knowledge Transfer Framework, and what less? Please explain why	More: Big diversity of issues that can be consulted for transferring knowledge. Less: Problems and mistakes of KTF and the Website.
2. What do you think about the philosophy of work with KTF? It provides information with potential and usual application?	Philosophy: It is possible that, due to the different sections and subsections, the users can be lost and not to find the expected outcomes.
3. As Knowledge Provider, has been KTF a useful tool from the optimal point of view? As Knowledge Receiver, what do you think about the ICT Tools included in KTF?	Provider: It is not very operative because of the mistakes. Receiver: Too difficult to find a concrete material.
4. What could you suggest to KTF Developers in order to improve the Tool?	- Step 3: Multichoice the categories. - The explanation of the category and the solutions should appear clearly. - General explanation of the tools, help on line, advices and comments of the options. - Manual of use. - More description of the steps. - More description in the main page (Step 1).
5. Would you use the ee-WiSE KTF in the future and recommend it to others?	No, too much information and very poor classification. It is not focused on
6. Could the Knowledge Transfer Framework be applicable in other sectors of the building industry? Could it be applied in other countries?	Yes.
7. Would you like to add anything else?	No comments.

6. CONCLUSSIONS AND SUGGESTIONS

- The participants represent the value chain as a whole. The absences in this activity (in red in the following table) are not involved in the needs for testing:

PLAN LESSONS		VALUE CHAIN																				
		1				2						3			4			5			6	
		Public Bodies and Finance				Knowledge Providers & Products						Energy Providers			Energy & Retrofitting			Quality			Demand	
		Financial Agents	Public Admin.	GOV	Standardization	Software Developers	Technical Solutions	Manufacturers	Installers	R&D	Climate	Renewable Energy	Energy Dsitributors	Grid Operators	ESCO	Architect. & Engineer.	Audit Firms	Patent Offices	Life Cycle Assessment	Certificate entities	Building Managers	Occupants
Applicability to the end users.	R																				X	X
	P									X												
Increase the Connection between Commercial Advice and EPBD	R	X	X		X										X	X	X					
	P														X	X	X				X	X
Financial Support for Occupants in Retrofit Take-Up	R	X																				X
	P		X	X																X		
Training the Construction Industry Professionals in Retrofitting Technology	R		X	X												X						
	P		X	X			X			X						X						
Exposing Craftsmen to Innovation	R								X							X						
	P					X	X	X		X		X				X						
Agents involved in the Eastern Spanish Validation Workshop *(Producers and/or Receivers)*	R	X	X	X	X				X						X	X	X				X	X
	P		X	X		X	X	X		X		X			X	X	X			X	X	X

- Due to the used methodology, every participant has acted inside the Tool as provider, receiver or both roles. By this, each need has been fully tested from different points of view.

- It was too early for testing all the ICT tools: Nowadays, KTF is not allocating some different tools and the lack of content has been a barrier in order to obtain a useful feedback about this part. In any case, the participants showed confused because of the huge variety of ICT tools which some of them are very similar or related between them.

- There are too much mistakes using the tool: Programming, design problems, etc. This fact difficulties the using of the tool and can suppose a first non-acceptance of the users.

- Interesting suggestions included in the online questionnaire:

  i. New Sections: Highlights or Great Contents and "Recent Contents"

  ii. Better ways for searching the information.

iii. Quick search of content.

iv. Searching process inside of the tool.

v. Improve the classification of the information inside the categories

vi. Make a Guide of Use with practical descriptions among the steps and for uploading the content. Multichoice selection of categories for searching information.

vii. Less technical format, thinking on final users (occupants).

viii. Order the content for each category. Implement a smart searcher with some filters. The information should be more estructured.

ix. To receive the updating of the KTF, about new contents per categories, through the e-mails, in function of the needs of the users.

x. To improve the design of menus and implement search filters.

xi. To allocate the type of ICT tool of the content in a quick view.

xii. To give the chance to the receiver to mark points in function of the quality of the information. Additional category for providers who can not include their information in a concrete category. Advertisement method by users if they find non adequate information. Brief explanation about the bottoms when the mouse is on it.

xiii. To implement a forum. Add a filter and search tool by key words, type of ICT tool, provider, etc.

- Analyzing the results of the interviews, the most suitable suggestions have been:

i. To create a Guide of Use, Tutorial video and practical examples of using KTF. The first view is essential for the success of the tool.

ii. Very important: Develop a powerful searching process of information in each category. There will be too much information. It is capital the creation of filters for searching material using key words, type of ICT tools, etc.

iii. Who guarantees the quality of the contents? KTF should be on risk to have too much information with poor quality or being too difficult to find useful information between lots of non-adequate material.

iv. To improve the running of KTF and solve the mistakes is mandatory for the success of the tool.

v. To facilitate and quick access for occupants and final users. There are too much steps for them.

vi. Online aid, with descriptions of the options and visual definitions. Descriptions of the steps and the current role and type of agent of the user should be visualized all the time.

vii. The providers, from the User Area, should be able to upload material in different categories "at the same time".

Project full title: "Energy Efficiency Knowledge Transfer Framework for Building Retrofitting in the Mediterranean Area

Grant agreement no: 314347

SEVENTH FRAMEWORK PROGRAMME

EeB.NMP.2012-6 - Methodologies for Knowledge transfer within the value chain and particularly to SMEs

COUNTRY-LEVEL VALIDATION WORKSHOP REPORT: SPAIN (West)

Circulation: Confidential
Partners: INTROMAC

Authors: María José Bohórquez Santos (INTROMAC)

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1. INTRODUCTION AND OBJECTIVES

The main purpose of eeWise project is to develop a ***Knowledge Transfer Framework*** (KTF) within the value chain of EE sector in building retrofitting in the Mediterranean, and with special attention to SMEs.

Aiming to validate the first version of the ee-WiSE KTF different validation workshops have been designed to undertake testing on the tools and functioning of the framework itself across 8 Mediterranean regions: Bulgaria, Cyprus, Greece, Italy, Malta, Spain-East, Spain-West, and Turkey. This report contains the results of the *Validation Workshop* developed in the region Spain-West.

1.1 The Validation Workshops

The objective of the validation activities is to collect the feedback of the EE retrofitting value chain regarding the adequacy of the developed Knowledge Transfer Framework (KTF) and Tools:

- Increase the awareness of the agents in EE retrofitting value chain regarding the concept, benefits and opportunities of Knowledge Transfer.
- Introduce the developed Knowledge Transfer Framework and some practical examples of Knowledge Transfer Tools.
- Collect the feedback of the agents of the value chain regarding the KTF and Tools and develop recommendations for improvement.
- Encourage the target group to use the ee-WiSE Knowledge Transfer Framework and apply the developed Tools in practice.

The KTF is based on the work done in the previous stages of the project. The KTF is a web-based platform (www.ee-wise.eu) that shares EE building retrofitting material between users, solving Knowledge Transfer problems (Needs) detected in the sector.

As a result, recommendations for potential improvements, in order to ensure the validity of the Framework and its adjustment to the real needs of the sector, will be provided through the ee-WiSE project partners' regions/countries.

The Western Spanish Validation Workshop has been performed by INTROMAC, introducing the developed KTF and Tools to the target audience – agents of the value chain. The feedback has been analyzed through the questionnaires and interviews collected. The results and analysis is presented in this Report and translated into conclusions that will be used to improve the developed Framework and Tools.

2. MAIN FEATURES OF THE WESTERN SPANISH VALIDATION WORKSHOP

Western Spanish Validation Workshop	
Promoter	INTROMAC
Date	Tuesday, 13th of March, 2014
Placement	Cáceres (SPAIN)
Number of Participants	22
Type of Workshop	Multi-agent event. Horizontal Small Workshop. External representative experts of the EE building retrofitting sector.
Workshop Agenda	- Welcome and presentation of the Workshop. - Presentation of ee-WiSE Project: Objectives, methodology and expected results. - Coffee break. - Knowledge Transfer Framework (KTF) Presentation. - KTF Testing: Methodology and Validation. - Evaluation and Discussion. - Event closure.
Knowledge Transfer NEEDS Tested	1. Guidelines for R&D to Address End-User Knowledge Needs 2. Support Occupant in Retrofit Take-Up 3. Exposing Craftsmen to Innovation 4. Real-Life Evaluation of Research Results 5. Applicability to the End User
Material & Resources	- Computer/ Tablet with Internet connection per participant. - Common Wi-Fi Connection. - Screen Projector. - Presentations (slides and online) - Documentation: Participant Guide (instructions and questionnaires). - Conference Room. - Catering - Additional human resources, supporting the activity.
Duration	5 hours

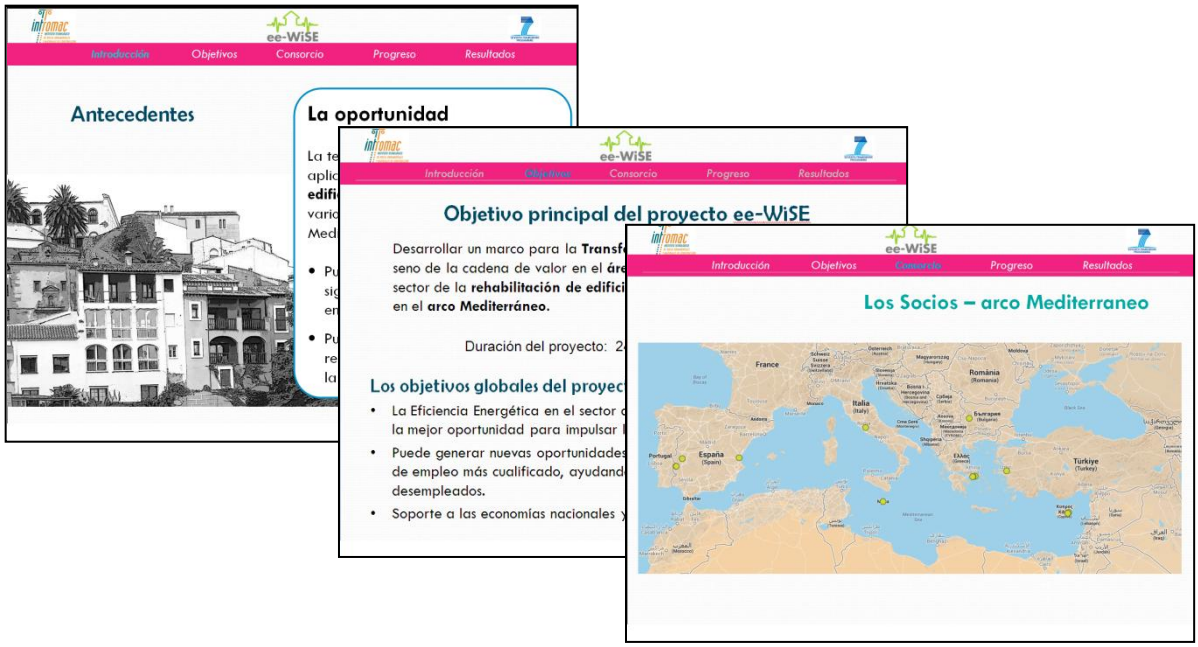
For the validation workshop, some guiding material was developed for the participants:

- ee-WiSE general presentation
- Knowledge Transfer Framework presentation
- Participant Guide

3. OVERVIEW OF THE WESTERN SPANISH VALIDATION WORKSHOP

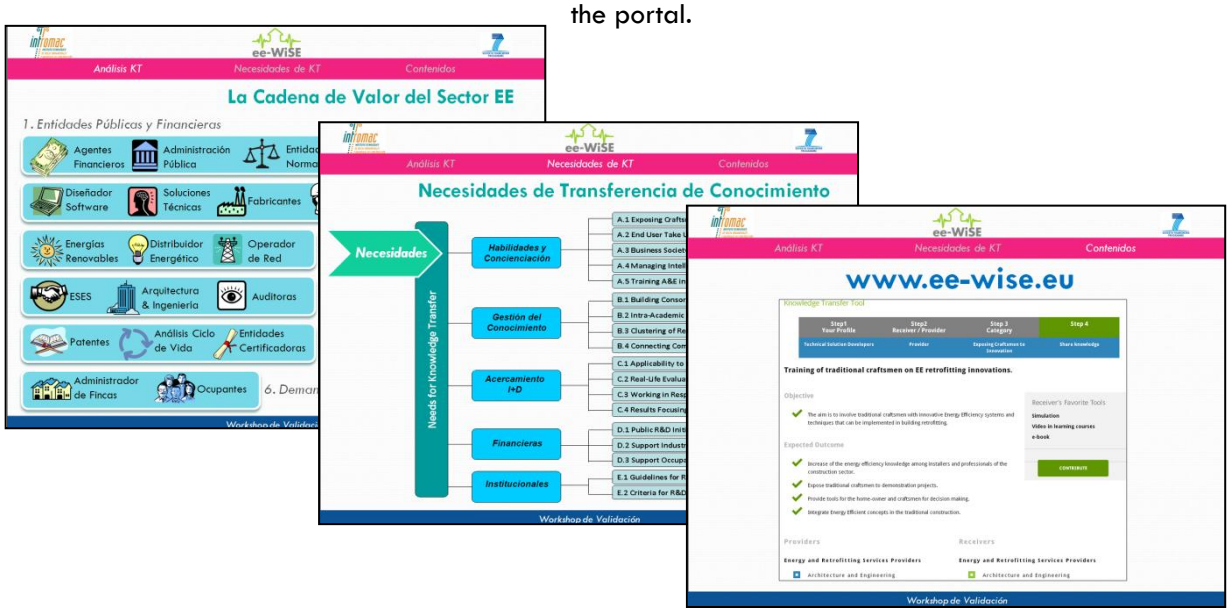
3.1 ee-WiSE general presentation

The Workshop started with a general presentation and introduction to the ee-WiSE project and objectives. Only the most general aspects of the project were presented in this stage. Only questions regarding partnership, funding and timeline aroused here.

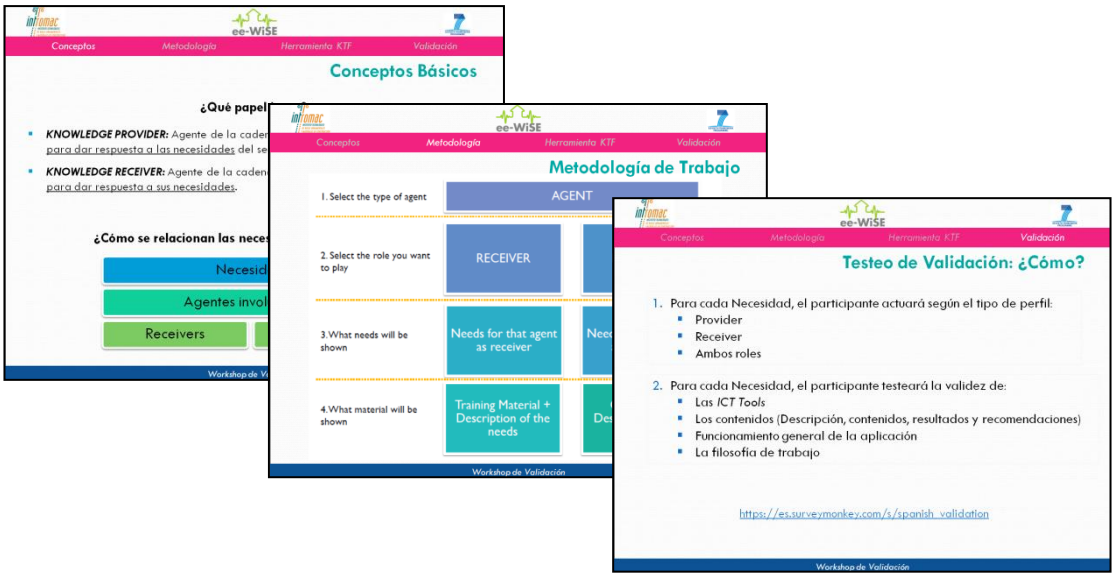


3.2 Knowledge Transfer Framework presentation

In the next section of the Workshop, the Knowledge Transfer Framework (KTF) was presented in terms of ***How the Content was developed.*** This easily conducted the participants to understand the way the KTF Tool was organized and presented in the portal.

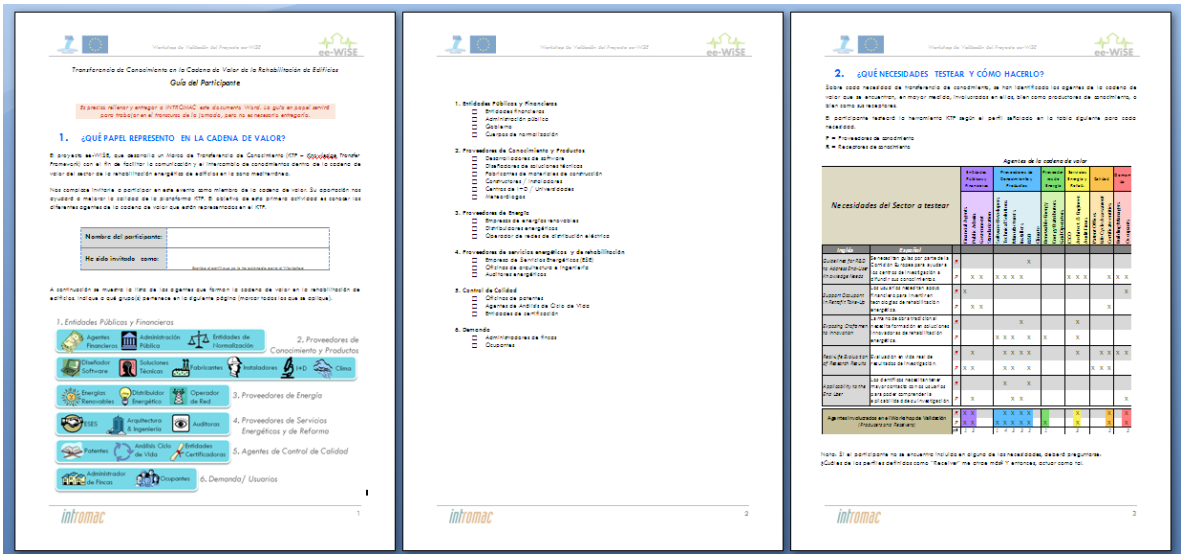


The information presented was far away from being too technical and connected the content developed in each one of the Project's Work Packages with the Tool itself. At the end of this section a short demonstration of the activities to undertake the validation and test the tool were included.



3.3 Participant Guide

A Participant Guide was provided in Word and paper format, which included a step by step helping process to assist the participant during the examination of the tool and to provide feedback properly.



3.4 Overview of the Validation Process

1) *THE VALUE CHAIN AGENT PROFILE*

The identification of the different agents that fit with each one of the participants was the first step required.

2) *THE NEEDS TO TEST AND ROLE TO PLAY*

In the second step the 5 needs to be tested were presented in the matrix identifying the Receiver and Provider role involved.

Agentes de la cadena de valor

Necesidades del Sector a testear			**Entidades Públicas y Financieras**				**Proveedores de Conocimiento y Productos**							**Proveedo-res de Energía**			**Servicios Energía y Rehab.**			**Calidad**			**Deman-da**	
			Financial Agents	Public Admin.	Government	Standarization	Software Developers	Technical Solutions	Manufacturers	Installers	R&D	Climate		Renewable Energy	Energy Dsitributors	Grid Operators	ESCO	Architect. & Engineer.	Audit Firms	Patent Offices	Life Cycle Assessment	Certificate entities	Building Managers	Occupants
Inglés	***Español***																							
Guidelines for R&D to Address End-User Knowledge Needs	Se necesitan guías por parte de la Comisión Europea para ayudar a los centros de investigación a difundir sus conocimientos.	*R*									X													
		P		X	X		X	X	X	X							X	X	X			X	X	X
Support Occupant in Retrofit Take-Up	Los usuarios necesitan apoyo financiero para invertir en tecnologías de rehabilitación energética.	*R*	X																					X
		P		X	X																X			
Exposing Craftsmen to Innovation	La mano de obra tradicional necesita formación en soluciones innovadoras de rehabilitación energética.	*R*								X								X						
		P					X	X	X		X			X				X						
Real-Life Evaluation of Research Results	Evaluación en vida real de resultados de investigación.	*R*		X				X	X	X	X							X			X	X	X	X
		P	X	X				X	X		X									X	X	X		
Applicability to the End User	Los científicos necesitan tener mayor contacto con os usuarios para poder comprender la aplicabilidad de su investigación.	*R*						X			X													
		P		X					X	X														X
Agentes involucrados en el Workshop de Validación *(Producers and Receivers)*		*R*	X	X				X	X	X	X							X				X		X
		P	X	X			X	X	X	X	X			X				X				X		X
		nº	*1*	*3*			*1*	*4*	*3*	*3*	*2*			*1*				*3*				*2*		*2*

Table 1: Needs and agents matrix

3) *PROVIDING FEEDBACK*

In this section a small table is provided to remember the participoants choice after the testing. Here, the participants were required to test at least 4 of the needs as a receiver or as a provider, and the agent selected had to be indicated in a table like the one below. An optional column was proposed to test the need as a different receiver.

NECESIDADES	PERFILES		
	PROVIDER	*RECEIVER 1*	*RECEIVER 2*
Se necesitan guías por parte de la Comisión Europea para ayudar a los centros de investigación a difundir sus conocimientos. *(Guidelines for R&D to Address End-User Knowledge Needs)*	SOLUCIONES TECNICAS		
Los usuarios necesitan apoyo financiero para invertir en tecnologías de rehabilitación energética. *(Support Occupant in Retrofit Take-Up)*			
La mano de obra tradicional necesita formación en soluciones innovadoras de rehabilitación energética. *(Exposing Craftsmen to Innovation)*	FABRICANTE		
Evaluación en vida real de resultados de investigación. *(Real-Life Evaluation of Research Results)*		FABRICANTE	
Los científicos necesitan tener mayor contacto con os usuarios para poder comprender la aplicabilidad de su investigación. *(Applicability to the End User)*		USUARIO	

Table 2: Example of a filled needs table for the validation workshop.

4) KTF EVALUATION

The Evaluation section is intended to collect the opinions / impressions of the participants of the Workshop about the KTF in order to facilitate the improvement of the tool. The evaluation consists of 2 parts: a satisfaction questionnaire (online questionnaire), and a questionnaire of opinion and improvements.

5) KNOWLEDGE TRANSFER ESTRATEGY FOR CROSS-SECTORIAL COOPERATION

Additionally a final section with quick opinion questions was included to gather the participant's imprssions regarding the Cross-sectorial cooperation in the EE Retrofitting sector. These answers will provide a guidance for th development of Task 6.3 "*Recommendations and Guidelines for Knowledge Transfer Regarding cross-sectorial cooperation enhancing development*".

6) DISCUSSION

At the end of the workshop, a discussion was held to gather the participants' impressions in the tools and on the Knowledge Transfer amongst the Building Retrofitting professionals in general.

4. ANALYSIS OF PARTICIPATION AND FEEDBACK RECEIVED

4.1 Participants

Despite participants played different roles, all of them were capable to fully understand the methodology of the KTF. The selection of the participants was very strict regarding value chain profiles in order to achieve this. Regarding the Occupant profiles, the participants selected were graduated Building Engineers that have never worked in the building sector and specialized in other non-related activities.

SPAIN WEST WORKSHOP

Necesidades del Sector a testear			**Entidades Públicas y Financieras**				**Proveedores de Conocimiento y Productos**						**Proveedo-res de Energía**			**Servicios Energía y Rehab.**			**Calidad**			**Deman-da**	
			Financial Agents	Public Admin.	Government	Standarization	Software Developers	Technical Solutions	Manufacturers	Installers	R&D	Climate	Renewable Energy	Energy Dsitributors	Grid Operators	ESCO	Architect. & Engineer.	Audit Firms	Patent Offices	Life Cycle Assessment	Certificate entities	Building Managers	Occupants
English	***Español***																						
Guidelines for R&D to Address End-User Knowledge Needs	Se necesitan guías por parte de la Comisión Europea para ayudar a los centros de investigación a difundir sus conocimientos.	*R*									X												
		P		X	X		X	X	X	X						X	X	X			X	X	X
Support Occupant in Retrofit Take-Up	Los usuarios necesitan apoyo financiero para invertir en tecnologías de rehabilitación energética.	*R*	X																				X
		P		X	X															X			
Exposing Craftsmen to Innovation	La mano de obra tradicional necesita formación en soluciones innovadoras de rehabilitación energética.	*R*								X							X						
		P					X	X	X		X		X				X						
Real-Life Evaluation of Research Results	Evaluación en vida real de resultados de investigación.	*R*		X				X	X	X	X						X			X	X	X	X
		P	X	X				X	X		X								X	X	X		
Applicability to the End User	Los científicos necesitan tener mayor contacto con os usuarios para poder comprender la aplicabilidad de su investigación.	*R*						X			X												
		P		X					X	X													X
Agentes involucrados en el Workshop de Validación *(Producers and Receivers)*		*R*	X	X				X	X	X	X						X			X		X	
		P	X	X			X	X	X	X	X						X			X		X	
		nº	*1*	*3*			*1*	*4*	*2*	*2*	*2*						*3*			*2*		*2*	

22

Different agents related to the needs to validate, were contacted to participate in the validation event. The final number of agents that assisted to the event and tested the KTF providing feedback on it were 22. Other 2 agents invited, one representing Manufacturers and other

representing Renewable Energy, didn't stay for the validation stage so no feedback was provided from them.

The list of participants and roles played during the validation is shown in the next table:

Workshop West-Spain Participants

	Agent	Participant	Financial Agents	Public Admin.	Government	Standarization	Software Developers	Technical Solutions	Manufacturers	Installers	R&D	Climate	Renewable Energy	Energy Dsitributors	Grid Operators	ESCO	Architect. & Engineer.	Audit Firms	Patent Offices	Life Cycle Assessment	Certificate entities	Building Managers	Occupants
			other roles played																				
2	Occupants	Joaquín Paredes Piris																					X
		Antonio Campos Casares																					X
2	Certificate entities	Pedro Martinez															X				X		X
		Luis Vicente Méndez Vega															X				X		X
3	Architect. & Engineer.	Elena Gil Fernández															X						X
		Héctor Hernández Flores															X						X
		Alfonso Canal Hernández															X						X
2	R&D	Beatriz Montalbán Pozas									X												X
		Carolina Grau Ferrando									X												
2	Installers	Elena del Amo Sánchez								X													X
		Jorge Peña Sánchez								X							X						
2	Manufacturers	Santos Parra Cotallo						X	X														X
		Javier García Andreu							X														X
4	Technical Solutions	Jesús Martín Castizo						X															X
		Silvia de Aguirre Prieto						X															
		Francisco Canosa Sanchez						X															X
		Tomás Vega Roucher						X									X						X
1	Software	Manuel Barrena Garcia					X				X												X
3	Public Admin.	Miguel Angel Ruiz		X																			
		José Guillermo Cobos Rodriguez		X				X															X
		Francisco Javier Lemus Gallego		X																			
1	Financial	Luis Alberto Horrillo Horrillo	X								X												X
22			*1*	*3*			*1*	*6*	*2*	*2*	*4*						*7*				*2*		*17*

5. SUMMARY OF MAIN RESULTS

5.1 The most liked features

- Meeting point with the whole value chain: receivers and providers.
- The main idea: knowledge transfer and sharing for building retrofitting
- Dynamic and simple format to share knowledge and identify knowledge seekers.
- The multi-regional nature that allows understanding the reality in other countries.
- The integration of all the sectors related to the EE building retrofitting in a geographical approach.
- The potential of the tool with a correct management.
- The option that the tool provides to share knowledge in different ICT formats.
- Easy to contribute with any sort of material.
- The chance to create a community of knowledge sharing, in a Mediterranean approach.

5.2 The less liked features

- Doesn't looks like a good source for the demand users.
- Very restrictive and unclear access to share or browse material.
- The reliability of the material uploaded.
- The tool itself, it's a bit complicated.
- The uncertain "origin" of the tool, and the need to classify the material in a geographical approach.
- The necessary distinction between receivers and providers results a bit rambling, as you don't know what you will see in the next steps so you can't know which role you want to play.
- There is no discrimination in case you upload duplicated material.
- There is no way you can certify your Agent profile.
- There is no advanced search engine for material easy to use.
- It is not easy to filter the material results.
- There is a long way to the material. It is very difficult to find the information you are looking for.
- English only.
- Interface needs to be more attractive
- The web functioning experienced some errors loading and redirecting out of the tool.

5.3 Suggestions for the KTF and tools

- Control the quality of each material indentifying the provider and the date so the receiver can choose a trusted source.
- Be able to see each provider "profile" as a social network and see the history of his/her uploads and likes.
- The platform should give a ranking label to the providers to qualify them in the tool (advanced user, etc).
- Material should have a better classification. The material need to be correctly presented: title, abstract, keywords to direct the user rapidly to its interests.
- Include help menu, help in other languages.
- The KTF is actually just working as knowledge base but is not assisting agents to interact between each other.
- Disseminate the tool and undertake more workshops.
- Translations that ease its use at any knowledge level.
- Include advanced search filters and possibility to index/ categorize the material.
- Forum
- Establish suggestions to select your type of agent (e.g. if you belong to a bussinesses cluster you don't have a clear idea which hat to wear).
- It is necessary to insist on a "visual language" for the tool as it goes across different languages and it's easier to navigate this way.
- Include "Other" as an option for the ICT tools when uploading material or links that do not belong to any of the available ICT tools.
- There should be some existing "specific folders" where you can choose directly where to upload your material.
- The process needs to be more intuitive at the end of the guideline.
- Explain and provide a clear layout that allows you understand how to use the profiles at the first step.
- Improve and ease the way to identify yourself in the platform, like registering through LinkedIn or creating a professional profile.