





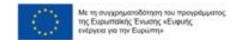
# WE-Qualify «Improving skills and technicians qualifications associated with the energy efficiency of buildings»

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#### **Specific objectives of CEA**















#### What we do..





Information, advice andtraining on renewablesand energy efficiency







Support for the implementation of local regional energy plans





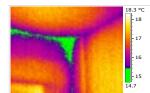


Energy audits of publicand private buildings,Infrarent thermography







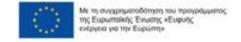


Environmental Impact
 Assessment Studies











#### What we do...





Raising awareness on energy efficiency, renewable energy sources and transport issues



Certification of photovoltaic installations







Participation in National, and medeed **European Projects** 

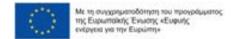














#### **WE-qualify project**





- Number of cooperating bodies: 6 (all from Cyprus)
- Lead partner: Cyprus Energy Agency (CEA)
- **Duration:** 36 months (November 2013 October 2016)
- **Budget:** 268,132 €
- Co-funding: 200,197€ (74.66% from the European Commission through the «Intelligent Energy for Europe» (2007-2013))



#### **Project partners**





LP: Cyprus Energy Agency

**P2:** Cyprus Productivity Centre

P3: Cyprus Organisation for Standardisation

**P4:** Human Resources Development Authority

**P5:** Technical Chamber of Cyprus

**P6:** Energy Service



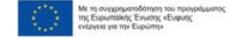












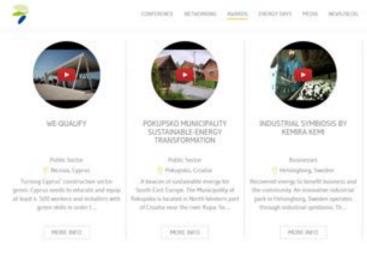


#### **European Distinction (1)**

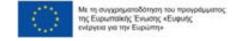




The WE-Qualify project has emerged between the 3 nominations for the most successful European Projects for the year 2016, in the Public Domain category, for the promotion of clean, safe and efficient energy in Europe.









#### **European Distinction (2)**





The ceremony of the European Awards for Sustainable Energy was held in Brussels under the European Sustainable Energy Week 2016.







#### Background



The construction sector in Cyprus is a growing sector which is responsible for 37% of the final energy consumption.

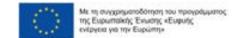
In contrast to this and according to the current National situation and the «Roadmap» that has been developed within the Build Up Skills Pillar I (www.buildupskills.org.cy), a lack of a sufficient number of skilled workforce for the implementation of measures relating to the construction of energy efficient buildings has been identified.

Additionally there is a <u>lack of appropriate training</u> programs for the training of the **workforce**.











#### Build up Skills - Pillar I



In Cyprus, according to the «Roadmap» that has been developed in the framework of the «Build Up Skills - Pillar I», it was estimated that at least <u>4.500</u> employees need to acquire green skills in <u>13</u> different skillsets up to 2020!

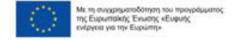














#### **WE-qualify targets**





To assist the Construction sector in Cyprus to address the **skill gaps in the workforce** relating to the construction of **energy efficient buildings**, but also to contribute to the **promotion of renewable energy technologies**.





- 5 pilot training programs for technicians
- **3** Skills
- Training of 125 technicians, certification of 100 technicians



#### Skills





Educational training programs for the development of the following skills:

- Skill 1: Installation of thermal insulation (3)
- Skill 2: Installation of windows and external blinds (1)
- Δεξιότητα 3: Installation and maintenance of Biomass small-scale boilers and stoves (1)

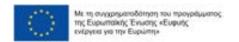












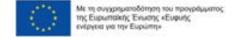


#### **Training Courses (I)**





- Three training courses were completed regarding the installation of thermal insulation systems:
  - 24 hours of theory 9 hours of practical exercise
  - Number of applications: 100
  - Attended: **71**
  - Certified: 69
- One training course was completed regarding the installation of windows and sun protection systems:
  - 24 hours of theory 9 hours of practical exercise
  - Number of applications: 14
  - Attended: 7
  - Certified: 7





#### **Training Courses (II)**





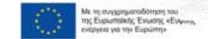
- One training course was completed regarding the installation of Biomass small-scale boilers and stoves:
  - O Approved by the Ministry of Energy, Commerce, Industry and Tourism (Κ.Δ.Π. 374/2015)
  - Cooperation with the Agricultural Research Institute for the practical training

○ 31 hours of theory – 9 hours of practical exercise

Number of applications: 18

○ Attended : **14** 

o Certified: 14

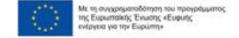




## Overall evaluation of training courses – Level of targets implementation



Target		Implementation	
Training	Certification	Training	Certification
125	100	92 (74%)	76 (76%)



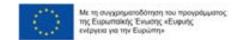


# **Establishment of National Steering Committee**





Organization/stakeholder	Number of representatives	Туре
Cyprus University of Technology	2 representatives	University
University of Cyprus	1 representative	University
Nicosia University	1 representative	University
Ministry of Education and Culture	1 representative	Ministry
Energy Service	1 representative	Ministry
Cyprus Employers and Industrialists Federation	1 representative	Federation





#### **Training material**





- Development of appropriate training material and practical tools (3) for trainees and trainers, providing all the necessary technical information for each addressed skill
- Created **Guides for trainers** for each skill
- Development of **training methodology** for each skill
- **Training presentations** for each skill

Workforce in Cyprus

Εγχειρίδιο για εγκαταστάτες

εξωτερικής και συμβατικής

θερμομόνωσης

Handbook for installers - Skill 1 External Insulation

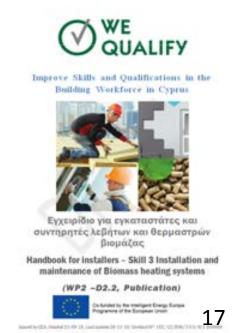
Troubleshooting guide - Skill 1 External Insulation

(WP2 -D2.2, D2.3, D2.4 Publication)

-Anded by the Intelligent Energy Europe ogramme of the European Union.

Available in the project web-site (www.cea.org.cy/we qualify/)







#### **Review of training material**





- Revision of the training material based on the feedback of instructors and trainees (skills 1 & 2)
- Meetings with representatives of organizations, to exchange views on the possible improvements of the initial training material developed for skill 3.









#### **Opinion of trainees**

#### Results from questionnaire

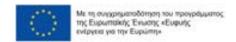


- A dedicated questionnaire was created, which was distributed to the trainees at the end of each training program
- **65 questionnaires** were collected fully completed by the insulation installers
- 7 questionnaires were collected fully completed by the windows and blinds installers
- 14 questionnaires were collected fully completed by the installers of biomass boilers and stoves







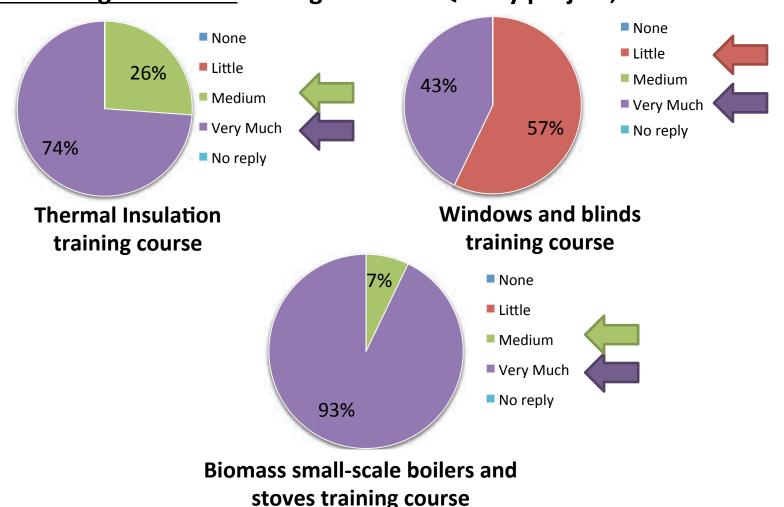




#### **Opinion of trainees (I)**



### Q. A1: To what extent do you think you have <u>improved your</u> <u>knowledge and skills</u> through the WE-Qualify project;

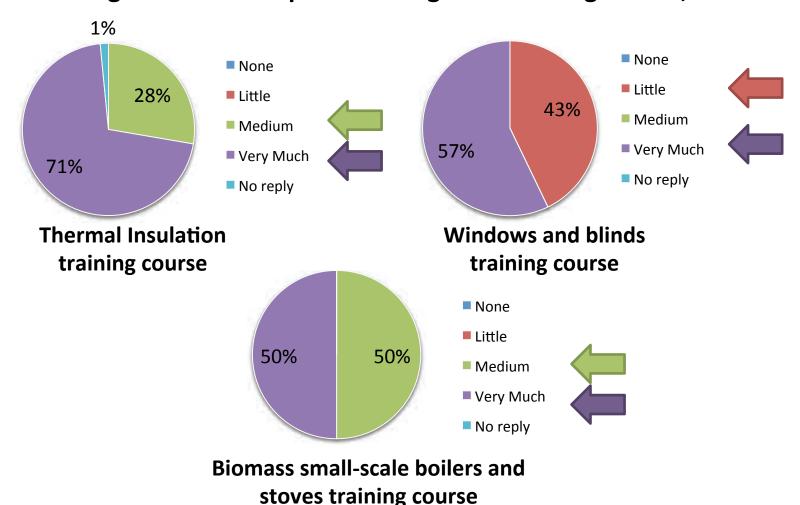




#### **Opinion of trainees (II)**



Q. A2: To what extent do you think you will <u>use in your work</u> the knowledge and skills acquired through the training course;

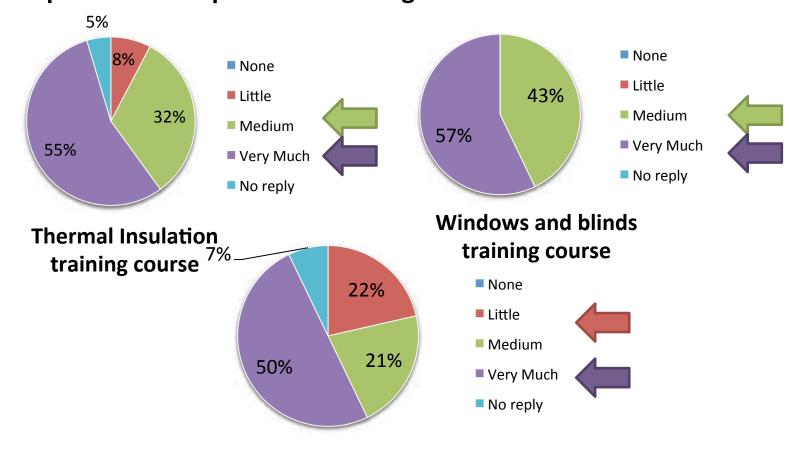




#### **Opinion of trainees (III)**



Q. A3: To what extent do you think that the WE-Qualify certificate can provide a competitive advantage in the market?



Biomass small-scale boilers and stoves training course



### Results from the opinions of the trainees





- A large proportion of the respondents indicated that the WE-Qualify project has improved their knowledge and skills.
- The majority of the respondents believe that the certificate acquired will give them a competitive advantage in their work.
- The training courses in general left the insulation installers satisfied, however a number of them suggested longer time of practical training.
- The majority of the respondents were satisfied with the timetable and the overall duration of the program.



#### **Training providers(I)**





(laboratory for thermal insulation and installation of windows and blinds)







#### **Training providers (II)**





### Cyprus Energy Agency (Collaboration with Agricultural Research Institute)





#### **Training for Instructors**







#### **Theoretical training**

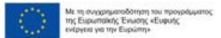








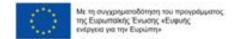








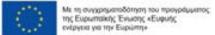
















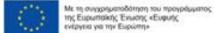










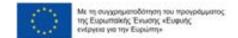










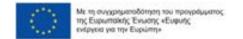




#### **Materials preparation**





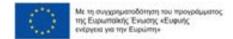




#### Wall thermal insulation





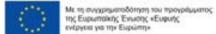




#### Wall thermal insulation



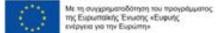






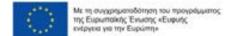








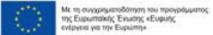
















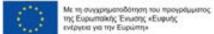














### **Installation of windows**





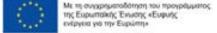




### **Installation of window frames**





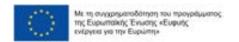




### **Installation of window frames**









### **Educational visits**







### **Educational visits**





































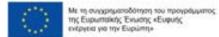




### **Theoretical examination**





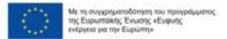




### **Practical examination**









### **Certified installers**









#### Certification





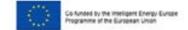
- A questionnaire was prepared and was sent to organizations and institutions across Europe. The questionnaire was associated with existing systems of professional qualification for the 3 skills carried out be the project.
- List of criteria and requirements to be met by the trainers, trainees and the training centre.
- Certification Rules of the educational program WE-QUALIFY.



tools

D4.4 WE-Qualify's Qualification Handbook for the national assessor

(WP4 -D4.4, Document)



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#### Round table discussion

### «Certified professionals in the fields of energy and construction» (22<sup>nd</sup> June 2016)



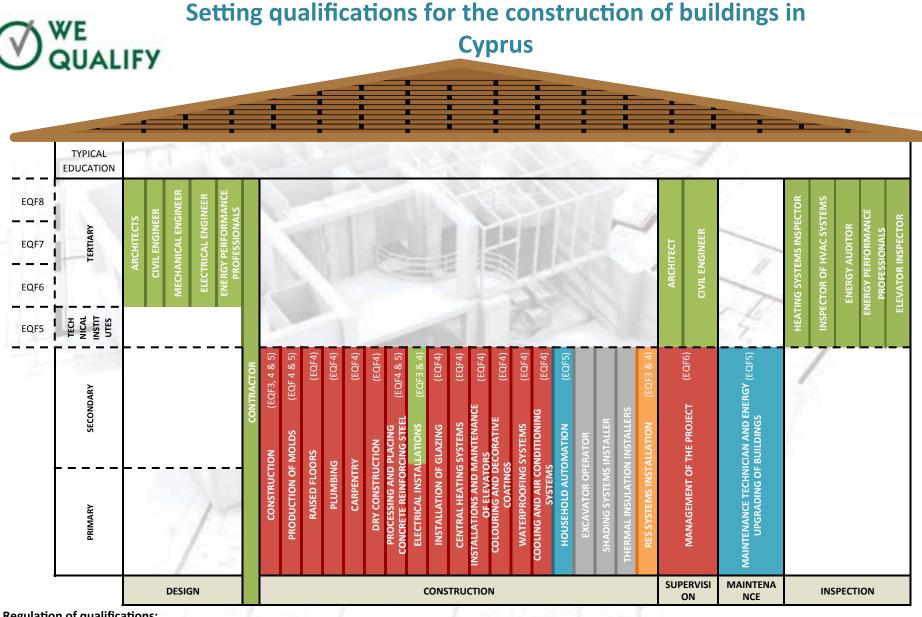
#### Main conclusions:

- Education, lifelong learning and the creation of certification schemes for craftsmen qualifications provide quality assurance in the construction and refurbishment of buildings, helps increase the technical knowledge of the installers as well as, increase in trustworthiness.
- The legally regulation of professions must be handled with care and it is done where there is an imperative public interest.
- There is a necessity of a common reference point for the whole effort or alternatively the use of the Qualifications system by the Human Resources Development Authority.
- Need of updating or creating new Qualification Standards which will incorporate issues of energy efficiency in construction.
- Need for cooperation of all stakeholders in order to provide the appropriate reference framework for the training and certification of installers for energy efficient buildings.









#### Regulation of qualifications:

Compulsory and regulated by laws and other regulations

Voluntarily carried

Post-secondary Educational and Training Institutes(MIEEK)

Voluntary Regulations No legal regulation





### Thank you for your attention!





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**WE-qualify website:** 

http://www.cea.org.cy/we\_qualify/













