## BUILD UP Skills ROMANIA Factsheet

### BUILD UP skills activities of the country

| BUS Pillar I project title (contract number) | Qualification platform and roadmap for the building workforce on energy-efficiency and renewable energy to meet 2020 Targets (ROBUST) | IEE/11/BWI/464/ROBUST |
| BUS Pillar II project title (contract number) | National Qualification Scheme for Construction Workers to Ensure High Performance Building Envelopes (BUILD UP Skills QualiShell) | IEE/12/BWI/344/SI2. 659731 |
| Horizon 2020 Construction skills project title (contract number) | Train-to-NZEB: the Building Knowledge Hubs (Train-to-NZEB) | Project ID: 649810 |

### BUILD UP Skills QualiShell

| Project coordinator’s full name | Horia Petran |
| Contact person’s name | Horia Petran |
| Contact person’s phone | +40 212550270  
+40 212550835 |
| Contact person’s email | hp@incerc2004.ro |

### Project Partners

- Institutul Național de Cercetare - Dezvoltare în Construcții și Economia Construcțiilor - Buc (INCERC) *(Consortium coordinator)*
- Patronatul Producătorilor de Tamplarie Termodizolanta (PPTT)
- PSC (Patronatul Societăților din Constructii)
- Business Development Group (BDG)
- Autoritatea Naționala pentru Calificari (ANC)
- Centrul National De Dezvoltare a Invatamantului Profesional si Tehnic (CNDIPT)
- Comitetul Sectorial in Constructii (CSCon)
- Ministerul Dezvoltarii Regionale si Administratiei Publice (MDRAP)
- Asociația grupul pentru calitatea sistemelor termoizolante
- Grupul pentru calitatea sistemelor de termoizolatie

### Project website


### Keywords

- Building, workforce, workforce qualification

### Duration

- Start date: 01/10/2013  
End date: 30/07/2015

### Budget

- EUR 477464 (EU contribution: 75%)

### Context

### Summary description

The project developed and supported the implementation of national qualification schemes for installers of thermal insulating systems and high efficiency windows systems. The focus of the proposed approach was to ensure high performance building envelopes by developing effective tools to embed adequate knowledge and skills in the relevant occupations, fostering evolution in the national qualification system and in the vision of key stakeholders in construction sector, moving towards the actual implementation of nZEB in Romania.

### Objectives

1. To activate the relevant stakeholders in the National Qualification Platform and to use an extended National Consultation Committee to validating, implementing and monitoring the proposed qualification schemes.
2. To substantiate the development of the qualification schemes for building envelope insulators and window system fitters.
3. To develop and validate two national qualification schemes for building envelope insulators and window system fitters.
4. To raise awareness and to ensure an effective communication process between different major stakeholders.
5. To develop effective mechanisms to support a large scale implementation of the developed schemes until 2020 and beyond.

### Target skills/ professions

Insulation installers, glazier/window installer

### Project’s results and impact

1. Continuing the involvement of relevant stakeholders within the Romanian Qualification Platform.
2. Detailed occupational analysis for clear definition of relevant competences for thermal insulators (ETICS installers) and insulation windows systems installers.
3. Substantiation of flexible mechanisms to ensure continuous revision of the occupational framework for the addressed qualification schemes.
5. National qualification scheme for window system fitters (installers of thermal insulation carpentry and efficient glazing).
6. Effective mechanisms to ensure a large-scale and long lasting implementation of the two developed qualification schemes.

---

### Lessons learnt

- The national qualification system is under major changes in the evolution towards European framework and requirements.
- Similarities with other systems have been identified (e.g. Spain) and some models could be successfully applied in Romania (e.g. special fund for training/ qualification managed by tripartite body) if adequately promoted at political level.
- Drivers for qualifications are: An updated legal framework and procedures for tendering process in public funded energy renovation programs + enforcing compliance are drivers for qualifications, dedicated financing sources and mechanisms for training, authorities’ involvement in stimulating partnerships between EDU and IND.
- There is a need to change current practices and mentalities in the construction sector both of managers of construction companies as well as of employees so that they understand the importance of upskilling.

### Barriers

The main barriers and bottlenecks encountered by the qualification of the labour force in the construction sector in Romania, which could hamper the application of the developed qualification scheme, are:

1. lack of sufficient financing sources open to construction companies to qualify their workers,
2. poor recognition of high quality works in constructions,
3. no mandatory requirements for certified qualified workers.

### Key needs

In order to develop the qualification market to support the large scale and long lasting attributes and to ensure the necessary increase in the overall qualification level in the construction sector, drivers are needed, e.g.:

- updated legal framework and procedures for the tendering process of investing in high energy performance buildings (new and renovation) with public money (to set up quality levels and requirements for certified qualification)
- control enforcement (‘sticks’),
- dedicated financing sources and instruments for training and qualification on the construction sector (‘carrots’),
- authorities’ involvement in stimulating partnerships between the education system and the construction sector.

### Recommendations

The definition and promotion of the ‘Local partnerships for qualification’ concept and the intense consultation and
‘matchmaking’ of relevant stakeholders represent adequate tools and mechanisms to enable effective implementation of the developed qualification schemes in order to produce qualified workers. The concept is based on the creation of local or regional (geographical focus) voluntary partnerships between a training centre (or a vocational training school), a producer/supplier of construction materials/technology/system and a construction company, with the support of local authorities, starting from ‘natural drivers’ consisting in matched offers and needs of implied actors (partners), e.g. specialised trainers and adequate accommodation for trainings, construction sites for practical lessons (including safety equipment and supervision), consumable materials etc.

The QualiShell approach is basically transferable to other countries and other technologies (trades in the construction sector), both at local/regional level or national level, depending on the applicable legal framework for education/qualification in each country. The main requirement for the application of QualiShell approach is the existence of a coherent qualification framework for the relevant trades in construction sector, which should contain a detailed definition of competences for each occupation and provide recognised certification documents for qualified persons.

### Project Indicators

<table>
<thead>
<tr>
<th>Common Performance Indicators</th>
<th>Ex ante target</th>
<th>Interim results</th>
<th>Final result</th>
<th>Target 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of training courses triggered by the action</td>
<td>2 courses (pilot / trial)</td>
<td>n/a</td>
<td>2 courses (pilot / trial); 1 course for each qualification (I-OTIS and I-TIFS)</td>
<td>950 courses</td>
</tr>
<tr>
<td>Number of people that will be trained</td>
<td>32 people</td>
<td>n/a</td>
<td>28 people (12 for I-OTIS; 16 for I-TIFS)</td>
<td>26500 people</td>
</tr>
<tr>
<td>Number of hours taught in the frame of the courses triggered</td>
<td>1.440 hours</td>
<td>n/a</td>
<td>1.110 hours</td>
<td>684.000 hours</td>
</tr>
<tr>
<td>Estimated specific cost to qualify each trainee</td>
<td>16.100 Euro/trainee</td>
<td>n/a</td>
<td>969 Euro/trainee</td>
<td>600 Euro/trainee</td>
</tr>
<tr>
<td>Renewable Energy production triggered</td>
<td>0</td>
<td>n/a</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

---

9 Input from Horia Petran, January 2017  
10 Final Technical Implementation Report
| Primary energy savings compared to projections | 100,5 toe/year | n/a | 1955 toe/year | 703,5 toe |
| Reduction of greenhouse gas emissions | 225 Ton CO2e/year | n/a | 4357 tCO2e/year | 1.575 Ton CO2e |

**Train-to-NZEB**

**Role in the project**

The three Romanian organisations involved will cover the whole range of activities foreseen in the project, contributing to providing training and consulting on nZEB for construction workers, specialists and decision makers.

**Country organisations involved**

- Energy Efficiency Center - EnEffect
- Limerick Institute of Technology (Ireland) [www.lit.ie](http://www.lit.ie)
- Passive House Academy / MosArt (Ireland) [www.passivehouseacademy.com](http://www.passivehouseacademy.com)
- Passive House Institute (Germany) [www.passiv.de](http://www.passiv.de)
- National Institute for Research and Development in Construction, Urban Planning and Sustainable Spatial Development (Romania) [www.incd.ro](http://www.incd.ro)
- Business Development Group (Romania) [www.bdgroup.ro](http://www.bdgroup.ro)
- Pre-University Education Foundation - Future (Romania) [www.calificat.ro](http://www.calificat.ro)
- Bulgarian Construction Chamber [www.ksb.bg](http://www.ksb.bg)
- BSYS (Bulgaria) [www.bsys.bg](http://www.bsys.bg)
- SEVEn (Czech Republic) [www.svn.cz](http://www.svn.cz)
- Department of Civil Engineering at Ege University (Turkey) [www.ege.edu.tr](http://www.ege.edu.tr)
- Municipal Development Institute (Ukraine) [www mdi.org.ua](http://www mdi.org.ua)

**Contact person’s name**

Dragomir Tzanev (EnEffect, Bulgaria)

**Contact person’s email**

dtzanev@eneffect.bg

**Project’s website**


**Keywords**

Building, nZEB, training, certification, qualification

**Duration**

Start date: 2015/06/01
End date: 2018/06/01

**Budget**

EUR 1,426,333,75 (EU Contribution)

---


<table>
<thead>
<tr>
<th>Summary description(^{13})</th>
<th>The main tasks of the project include:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>. The design and equipment of 4 fully active training centers (in Bulgaria, Romania, Turkey and the Czech Republic) and 1 pilot center (in Ukraine);</td>
</tr>
<tr>
<td></td>
<td>. The adaptation of existing and the development of new curricula for training of building professionals;</td>
</tr>
<tr>
<td></td>
<td>. Training and certification for a total of 90 trainers, 2,400 construction workers, 480 designers and 720 non-specialists (representatives of public authorities, business managers, NGOs, consumer groups, media, etc).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Context</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Objectives(^{14})</td>
<td>1. Development of publicly available Terms of Reference for the setting up of the BKHs;</td>
</tr>
<tr>
<td></td>
<td>2. Adaptation of existing and development of new training programs;</td>
</tr>
<tr>
<td></td>
<td>3. Actual setting up of 4 training and consultation centres (BKHs) according to the Terms of Reference;</td>
</tr>
<tr>
<td></td>
<td>4. Building of internal capacity through train-the-trainer activities, targeting at least 90 qualified trainers;</td>
</tr>
<tr>
<td></td>
<td>5. Actual training courses according to annual training plans, resulting in:</td>
</tr>
<tr>
<td></td>
<td>(a) 120 training courses for construction workers, targeting additional qualification of 2400 trainees;</td>
</tr>
<tr>
<td></td>
<td>(b) 24 training courses for highly-qualified building specialists, targeting additional qualification of 480 trainees;</td>
</tr>
<tr>
<td></td>
<td>(c) 36 training courses for non-specialists, targeting additional qualification of 720 trainees;</td>
</tr>
<tr>
<td></td>
<td>6. Strict monitoring and evaluation for constant improvement of the offered services.</td>
</tr>
<tr>
<td></td>
<td>7. Setting up of a web-based networking platform providing facilities for knowledge sharing and exchange between the BKHs;</td>
</tr>
<tr>
<td></td>
<td>8. Conduction of a targeted dissemination and communication campaign to increase the market demand for NZEB projects.</td>
</tr>
</tbody>
</table>

| Target skills/ professions | Trainers, construction workers, building professionals and relevant representatives including public authorities, business managers, NGOs, consumer groups, media. |

\(^{13}\) [http://www.train-to-nzeb.com/about.html](http://www.train-to-nzeb.com/about.html)  