## Project Fact Sheet

**Roadmap for Trainings to Develop Skills and Knowledge on Intelligent Energy Solutions in Buildings for Bulgaria until 2020 (BUILD UP Skills Bulgaria)**

Please note that a factsheet on your project is available at [http://www.eaci-projects.eu/iee/](http://www.eaci-projects.eu/iee/)

You are invited to verify the information and to update where appropriate and necessary.

### Main information

Please, fill out only these columns that need to be updated. Tick all other fields.

<table>
<thead>
<tr>
<th></th>
<th>Key Action:</th>
<th>BUILD UP Skills: National Qualification Platforms and Roadmaps to 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>Project coordinator</td>
<td>EnEffect Consult SP LTD (EnEffect)</td>
</tr>
<tr>
<td>X</td>
<td>Contact person name:</td>
<td>Dragomir Tzanev</td>
</tr>
<tr>
<td>X</td>
<td>Contact person phone:</td>
<td>+359 2 9631714</td>
</tr>
<tr>
<td>X</td>
<td>Contact person email:</td>
<td><a href="mailto:dtzanev@eneffect.bg">dtzanev@eneffect.bg</a></td>
</tr>
<tr>
<td>X</td>
<td>Project’s Partners</td>
<td>Bulgarian Construction Chamber (BCC)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>National Agency for Vocational Education and Training (NAVET)</td>
</tr>
<tr>
<td>X</td>
<td>Project’s website:</td>
<td><a href="http://www.buildupskillsbg.com">www.buildupskillsbg.com</a></td>
</tr>
<tr>
<td></td>
<td>Benefits:</td>
<td>National roadmap for trainings on EE and RES in buildings to be implemented in national strategic documents and guide all stakeholders in construction &amp; vocational education.</td>
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<tr>
<td></td>
<td>Keywords:</td>
<td>Energy efficiency in buildings, vocational training in construction, National roadmap for trainings in EE &amp; RES</td>
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<tr>
<td>X</td>
<td>Duration:</td>
<td>01.11.2011 – 30.04.2013</td>
</tr>
<tr>
<td>X</td>
<td>Budget:</td>
<td>BUILD UP Skills: National Qualification Platforms and Roadmaps to 2020</td>
</tr>
<tr>
<td>X</td>
<td>Contract number:</td>
<td>IEE/11/BWI/415/SI2.604347</td>
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</table>
Summary

Reaching the 2020 energy and climate change targets represents a major challenge to the construction sector, which needs to be ready to deliver high energy performing renovations and nearly zero energy buildings. This goal requires a major effort to increase the number of qualified workers, which is directly related to the quality of the educational programmes and the inclusion of trainings on EE and RE solutions in buildings. The project is designed to:

- Establish a National Qualification Platform, engaging all relevant stakeholders in support of the action based on informed discussions;
- Perform an analysis of the situation in the building sector, review of the statistical information, description and analysis of the national vocational training system, legislative framework, market demand for skilled workers, skills needs and gaps, and existing barriers;
- Develop a Roadmap and Action Plan for Trainings on Intelligent Energy Solutions in Buildings to pave the way for overcoming of the identified barriers and gaps;
- Undertake targeted endorsement campaign involving the relevant state authorities, vocational training establishments, business associations, social partners, etc.

Project’s results

<table>
<thead>
<tr>
<th>Result 1</th>
<th>BUILD UP Skills Bulgaria was the first project to combine the efforts of all relevant groups of stakeholders involved in the qualification of the building workforce nationwide. Except for giving a ready-made solutions to the national authorities, training institutions, market actors and social partners for their current and future decisions, BUS Bulgaria had shown that activities and results gained in a purely bottom-up approach could significantly impact both policy making and the actual training and construction practice.</th>
</tr>
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<tbody>
<tr>
<td>Result 2</td>
<td><strong>National qualification platform.</strong> The National qualification platform developed by BUILD UP Skills Bulgaria project was designed and organized to establish a process for consultation and participation of all relevant stakeholders in construction and education/training sectors (relevant public authorities, representatives of industry associations, vocational training establishments, business entities, social partners, etc.). It now consists of more than 30 organizations and institutions. <strong>National qualification platform and stakeholder engagement:</strong> Total number of organisations participating in the platform: 42 - from the vocational training sector: 15 - from the building sector: 14 - from the energy sector: 8 <strong>Number of meetings organised:</strong> 4 major Platform meetings, 3 extended consortium meetings with Platform members, 6 working meetings with selected Platform members on specific topics</td>
</tr>
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</table>
| Result 3 | **Analysis of the national status quo.** The national Status Quo Analysis has been prepared on the basis of statistical data and forecasts for the future development of the building sector and more specifically as related to energy efficiency and the qualification of building workforce. The emphasis was put
on secondary vocational education in the vocational high schools and to the vocational training centers. It has been compiled in compliance with the requirements of the EACI.

**National Report on training needs and gaps (status quo report):**
Number of workers involved in the (construction/building/craftsmen and other on-site workers): 131 000 (employed in the construction sector (F)
Number of workers requiring training: 63195
Number of workers currently trained: 8319
Professions with the highest needs:
- Technician / Installer in energy equipment and systems – RES
- Technician / Installer in energy equipment and systems – Thermal engineering
- Electrician / Electrician-installer – Electrical wiring systems
- Construction – Builder – Indoor sheathings and surfaces

**Result 4**

**National Roadmap.** The "Roadmap for Trainings on Intelligent Energy Solutions in Buildings in Bulgaria until 2020" is discussed, accepted by the National Qualification Platform and published. It includes 6 priority areas of improvement with specific measures listed for each of them. The Roadmap ends with an **Action Plan** of the activities and the number of workers to be trained / re-qualified in each profession until 2020.

3 top priority measures:
- Changes in state educational requirements, training plans and programs
- Professional training of trainers in the vocational education system
- Upgrading of existing training facilities, more practical trainings and trainings on building sites

**Result 5**

**Endorsement.** Despite the political crisis in Bulgaria in 2013, an active endorsement campaign was undertaken, involving the relevant state authorities, industry associations, vocational training establishments, business entities, social partners, etc. The Roadmap was forwarded for official inclusion in strategic documents. About 20 letters of coordination/endorsement were received by major representatives of all target groups.

**Lessons learnt**

<table>
<thead>
<tr>
<th>Lesson</th>
<th>Description</th>
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<tbody>
<tr>
<td>Lesson 1</td>
<td>Preliminary study of available statistical data and strategies for overcoming of existing gaps are crucial. Sufficient resources have to be allocated for the necessary research work.</td>
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<tr>
<td>Lesson 2</td>
<td>Early involvement of key actors should be targeted, based on both official institutional communication and personal contacts. Regular communication has to be maintained throughout project development.</td>
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<tr>
<td>Lesson 3</td>
<td>Qualitative research methods should not be underestimated as they provide in-depth understanding of the problems and generate valuable ideas and solutions.</td>
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**Testimonials from key participating stakeholders (New!)**
Please present quotes from important BUILD UP Stakeholders in your country. You may use extracts of the video testimonials developed by the project. *None of these should exceed 500 characters.*

**Testimonial 1**

Onik Pilibosian, M. Sc. Eng., Initiative Committee of the Managers of the Condominiums in Sofia, expert in EE and retrofitting of the residential building stock:
“Very positive evaluation of the project must be shared. The specialised training on EE and RES is absolutely important, of high urgency, where
both initial and further VET have to be carried out. Special attention to the highest standards applied is needed towards windows systems, heating and ventilation. We must focus on overall renovation and structure renovation.
We have to go on from pilot projects to large-scale refurbishment process, ensuring high quality comfort of living environment, energy and financial savings and 2020 Energy Strategy goals achieving.”

**Testimonial 2**

*Petya Ivanova, Director, Vocational High School of Construction and Architecture – Pazardzhik:*

“No one can ever be confident that with the existing skills levels of the building workforce we will be able to construct nearly zero energy buildings on a mass scale just a few years from now. This initiative, although well executed, is even a little bit late. We have to take really fast measures in order to bring the existing skills to completely new levels if we are to meet the national goals for the building sector.”

**Testimonial 3**

*Stefka Limanska, Head of ”Professional Qualification” Department, Ministry of Labour and Social Policy:*

“Although the general decline in the construction sector is a fact, we know from our own projects that there is already a demand for high skilled construction works. We believe that public spending and quality buildings together will bring back the building sector to the levels from 2007-2008 and the high rates of employment; but in order for this to happen, new and improved skills are needed. This is why we need actions now, and the Roadmap gives a solid basis not only to the training institutions, but also to the state authorities and the social partners so that we can fight the crisis together.”

**Key endorsers and commitment (New!)**

Please limit yourself to **three most important** endorsers and their commitment. None of these should exceed **500 characters**.

<table>
<thead>
<tr>
<th>Endorser 1</th>
<th>National Employment Agency: The Agency will take part in the future activities on Priority 1 of the National Roadmap “Measures for improvement of the professional qualification”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Endorser 2</td>
<td>Bulgarian Industrial Association: BIA states its support for the proposed measures and its will to participate in concrete actions in Priority 1 “Measures for improvement of the professional qualification”, Priority 2 “Training of Trainers” and Priority 5 “Cooperation between the different stakeholders”.</td>
</tr>
<tr>
<td>Endorser 3</td>
<td>Bulgarian Chamber of Commerce and Industry: BCCI and the National Vocational Training Center at BCCI agree with the proposed measures and activities and declare their intention to take part in Priority 1 “Measures for improvement of the professional qualification”, Priority 3 “Improvement of the facilities” and Priority 6 “Awareness raising activities”</td>
</tr>
</tbody>
</table>
BUILD UP Skills Country data (New!)
Please fill in the table below from the status quo report. You can use the data provided to fill in the EU overview table. Please use the last column to provide comments, explain assumptions and to quote the relevant page of the Status quo report or other references.

<table>
<thead>
<tr>
<th>Country Data</th>
<th>Comments + Reference to Status Quo report (page)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BULGARIA</strong></td>
<td></td>
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<tr>
<td>Number of building on-site workers and craftsmen (+ data year)</td>
<td>131 000 (09.2013)</td>
</tr>
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<td></td>
<td><em>The data refers to employed in the construction sector (F)</em> (Status quo report page: 68 and below )</td>
</tr>
<tr>
<td>Number of on-site workers and craftsmen trained per year through Initial education (IVET) (+data year)</td>
<td>1547 (II and III class) (2010)</td>
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<td><em>(Status quo report page: 72 )</em></td>
</tr>
<tr>
<td>Number of on-site workers and craftsmen trained per year through Continuing education (CVET) (+data year)</td>
<td>6772 (Construction and Electrical engineering and energy sector combined, data available for each profession) (2010)</td>
</tr>
<tr>
<td></td>
<td><em>(Status quo report page: 73 )</em></td>
</tr>
<tr>
<td>Estimates of additional building on-site workers and craftsmen needed in the sector by 2020</td>
<td>0</td>
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<tr>
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<td><em>(Status quo report page: 66-67 )</em></td>
</tr>
<tr>
<td>Number of building on-site workers and craftsmen requiring up-skilling on EE and RES by 2020</td>
<td>63195</td>
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<tr>
<td></td>
<td><em>Total number of trainings, in limited cases one worker could pass through more than one training (National Roadmap, Appendix 4, page 12: )</em></td>
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</table>
| 3-5 occupations with the highest numbers of workers requiring up-skilling on Energy Efficiency and Renewable Energy Sources amongst building on-site workers and craftsmen | Technician / Installer in energy equipment and systems – RES  
Technician / Installer in energy equipment and systems – Thermal engineering  
Electrician / Electrician-installer – Electrical wiring systems  
Construction – Builder – Indoor sheathings and surfaces |
|                                                                             | *(National Roadmap, Appendix 4, page 9-12)*        |
|                                                                             | *(Status quo report page: 82-90 )*                  |
| Number of additional trainers needed                                        | 1000                                              |
|                                                                             | *(Status quo report page: 9 )*                     |

Last updated: 30.06.2013.