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## External evaluation report - part 1.2

**WP 3:** Identification of good practices and training pathways

### Synoptic report on

**Task 1: Identifying the range of practices employed and**

**Task 2: Good practices of self-evaluation and training**

### General

The evaluated **Synoptic report is a deliverable of BUGS WP3** » Identification of good practices and training pathways« and it covers the outcomes of Task 1 and Task 2.

The evaluation refers to a pdf document from 9 Dec. 2015, the report is dated in August 2015.

The document contains 54 pages, it is written in English, and it contains the project logo, the EU logo and the information on the EU Programme for Employment and Social Solidarity - PROGRESS (2007-2013), by which BUGS project was co-funded.

The responsible project partner for elaboration of this report is Europaisches Zentrum fuer Eneubare Energie Gussing GmbH (PP10).

**The content of the document** is structured in 3 chapters (Task 1, Task 2 and Bibliography), the 1<sup>st</sup> chapter is divided in 4 sub-chapters, the 2<sup>nd</sup> chapter also contains 4 sub-chapters. The report also contains 25 tables and 21 figures.

**The chapter 1** is related to Task 1 – Identifying the range of practices employed – framework for good practice. It aims at identification of education baseline (EB) and the understanding of green building standards as well as corresponding skills gaps, in order to evaluate how far or close the EB is in comparison to the target line. The chapter gives an overview of VET systems in participating countries (AT, IT, CRO, SLO), limited to construction sector related education. Differences and similarities of the national VET systems are pointed out. The baseline of green skills in existing VET curricula is presented for participating countries along with four (common) construction activity groups.

The part of report on building standards and green building funds in Ch. 1.2 prepared a comparison per countries in status of energy indicators' values, advanced green buildings certification and green building funds. Chapter 1.3 is dedicated to VET funds and funding sources. Finally, the chapter 1.4



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summarized the targets of national RES action plans (NREAP), where the relevant measures (buildings, training of RES installers) are summarized.

**The Chapter 2** is related to Task 2 on Identification and collection of good practice example. The focus is on practices in the VET sector designed to bridge the gap between the skills imparted in regular VET and the required green building skills needed to meet the EE and RES ambitious targets in buildings as planned by EU-regulation. Three information sources groups are defined: VET institutes, VET trainers and representatives of interest of the building sector – normally the chambers of commerce. Methodology of identification and criteria for best practice is comprehensively described. The sub-chapter 2.4 gives the results on best practice examples in a number of interesting diagrams. However as short comment to the values presented in the pictures would be helpful, besides the explanation in the text, i.e. how the scoring of responds was done.

**The Chapter 3** summarized the bibliography, unfortunately the references are a bit weak and mostly originate only from one source.

**The description of BUGS WP3 “Identification of good practice and training pathways” in the application form** covers: deliverables scheduled for the particular activity, deliverable specifications and the necessary activity description.

**This evaluation** is focused on the deliverable: a. Good practices of self evaluation and training.

**The following deliverable specifications were listed in BUGS application** for the WP3 Synoptic report: a. A study will be carried out in order to identify good or success practices of industry self made evaluation and self training measures adopted to face green skills gaps

The necessary activities for successful carrying out of the deliverable are defined in the BUGS application form – WP3.

Below, this project output is evaluated against the four main criteria:

- relevance,
- usability,
- transferability and territorial awareness.

## Relevance

BUGS project is based on the fact that renewable energies and energy efficiency in construction have a high potential for green jobs. The project overall objective of the BUGS project is to contribute to the removal of “bugs”, namely green skills gaps, which cause an incorrect result in the economic development and professional growth in the Construction Sector.

The main objectives and the targets of the BU.G.S project, as presented on the project web site (<http://www.bugsproject.eu/>), are:

- to foster partnership between public and private sector on the labour market to **boost the job creation potential of green skills;**



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- **to fill in the gap** between labour market **demand and supply of green Construction skills**, namely green skills for energy efficiency, renewable energies, energy performance of buildings, energy diagnosis, eco-design, lifecycle analysis, energy management systems;
- to disseminate and **exploit, throughout the EU**, tools and methods to manage and **detect green skills bottlenecks, that can be identified as “bugs” in the Construction field.**

Sub-elements of criterion	Evaluation
- appropriateness to the objectives and the target of the BU.G.S.project	The synoptic report for WP3 Task1 and Task 2 corresponds to the defined objectives and targets of BUGS project, as it identifies the green skills gaps and points out energy efficiency targets in EE buildings.
- consistence with goals and policies with reference to the transition towards a green, low carbon and resource efficient economy	The synoptic report describes the link to national renewable energy action plans (NREAPs), Directives RES and EPBD as well as national minimum requirements of EE buildings and renovation.
- Provision of competitive advantage for SMEs and job potential for workers	The survey in the report covers the stakeholders from construction sector and the training institutions/trainers. It presents the current status of integration of green skills in SMEs and reveals the understanding of the need for new up-skilled workers.
- consistence with the labour market green skill needs in the Construction sector	The report on the framework for good practice and the evaluation of good practice self-evaluation is structured according to main construction activity groups and gives the baseline in green skills trainings and the needs. Data on best practice in the construction sector and the identified needs are consistent with the national situation on the labour market.
<b>Overall evaluation:                      Relevance</b>	<b>Very good</b>

## Usability

Sub-elements of criterion	Evaluation
- adaptable, feasible and user friendly for trainers and SMEs	The Task 2 of the deliverable gives an excellent starting point for creation of the training pathways in terms of training institutions / trainers and SMEs in construction sector.
<b>Overall evaluation:                      Usability</b>	<b>Excellent</b>



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## Transferability and Territorial Awareness

Sub-elements of criterion	Evaluation
- adaptive to changes in the Construction environment	The report reflects the territorial differences and gives the country specific and comparable results on the investigation of green skills gaps and best practice in trainings. The methodology of self-evolution is adaptive to changes in construction environment as they are described on country relevant framework for good practice and later in the part addressing the best practice training per particular green skills resulting from the framework priorities.
- sustainable of added value	Broad definition of the framework for good practice allows an update of the study in case of changed EU targets in the domain. Thus the sustainability of the study is achieved. The presented results – best practice in countries and construction activity fields give an added value to deployment of focused trainings in participating countries.
- useful for exploitation and transfer actions: Potential for transferring and applying the project results and materials in other regions, countries or in other contexts (such as construction products, building material industry)	The report with its methodological approach has the replication potential in other sectors and countries, as it is independent from country specific solutions. According to the project objectives and task this report (on the project results) is dedicated to IT, AT, CRO and SI, and can be used as information on green skills in VET trainings in the considered region and in the considered construction sector.
<b>Overall evaluation:</b>	<b>Transferability</b>
	<b>Very good</b>

## Evaluation Summary

### Minor comments:

Comment: Page 2: Small formatting changes needed in the Table of contents

Comment: Page 6: What is meant with “*optional*” *education level*, please check also the compatibility of the wording with terminology in

[http://www.euvetsupport.eu/index.php?id=127&tx\\_felogin\\_pi1%5Bforgot%5D=1](http://www.euvetsupport.eu/index.php?id=127&tx_felogin_pi1%5Bforgot%5D=1)

<https://ec.europa.eu/esco/portal/home?resetLanguage=true&newLanguage=en>



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<http://www.ecvet-toolkit.eu/site/toolsexamplesmore/glossary>

Comment: Page 12. Ch. 1.2. line 3 – please correct – in Slovenia minimum requirements for energy efficient buildings are climate dependent (not defined for the whole area). The same text is in the page 19.

Comment: Page 35 and later: Please indicate the legend of Y axis in the figures 2 to 21 to clarify what is given on vertical axis of the diagram or at least add the explanation in the Caption of the figures.

Comment: Page 47-50. Figures 16 to 21 are accompanied by the statement on ranking of data in the figures, where the reader is invited to look up for more information in “Scoring\_by\_skills\_ALL.xlsx” file. Please clarify who is the target group of this deliverable and if the readers will have the access to the above mentioned file. Either enable the access to the file or move the file in the references or confidential part of the report.

### **Recommendations:**

Page 7. Table 2,3,4,5 – please describe the methodology of data collection for Table (who provided the information, any QA of information provided?). For instance in Table 3 it is stated that IT and SI are missing skills on heat pump technology in HVAC part of curricula. Or for instance in the Table 6 in construction activity group physical building construction it is stated that SI is missing the skills of thermal insulation (incl. calculations)?

Page 16-19. References – links to green building funds would be useful, also for additional reading.

Page 20, Table 13. The report stated that green building funds offer the funded consultancy only in Austria, Slovenia and Croatia are missing, at least for Slovenia the free energy advisory for new builders and owners of existing buildings under renovation is available since 90-ties. Please explain what was meant with “funded consultancy”, please confirm also other entries in the table.

Page 22. The overview of the national energy efficiency action plans (NEEAP) may be of equal importance for identification of green skills as NREAPs. Please check the benefits of investigating the relevant measures planned in NEEAPs for BUGS project and justify your decision for including/excluding summary of NEEAPs in this report.

Page 31: RES (2009/28/EC) and EPBD (2010/31/EU) directives are given as the reference for good practice. Please justify why EED (2012/27/EU) is not included or if necessary cover also EED.

Page 54: Bibliography mostly refer to one source of information. EC for instance supported BUILD UP Skills initiative where 28 national Pillar I projects resulted in the Status Quo report and Roadmap for upskilling of blue-collar workers in energy efficient buildings.

### **Conclusion:**

The structure and the content of the **BUGS WP3 Synoptic report** on the outcomes of Task 1 and Task 2 correspond to the given title and the aims defined in WP3 deliverable specification and related activity description. Minor comments of mostly technical character are listed and few recommendations are given for further considerations of the project partners.



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**The WP3 Synoptic report on Task 1: Identifying the range of practices employed and Task 2: Good practices of self-evaluation and training complies with the deliverable specifications listed in BUGS application.**

Detailed evaluation of the report against the objectives of BUGS project was done along the four main criteria: this part of the evaluation can be summarized as: **very good relevance to the project targets, excellent usability and very good transferability potentials as well as territorial awareness.**

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Date and time:

Ljubljana, 29 January 2016