| BUILD UP Skills GREECE Factsh                         | eet   |  |  |  |
|---|---|--|--|--|
|   |   |  |  |  |
| BUILD UP skills activities of the                     |   |  |  |  |
| BUS Pillar I project title                            |   |  |  |  |
| (contract number)                                     | (IEE/12/BWI/430)  |  |  |  |
| BUS Pillar II project title<br>(contract number)      | UPgrading the construction Sector Workforce tralNing and  |  |  |  |
|   | qualification in Greece (UPSWING)   |  |  |  |
|   | (IEE/13/BWI/715/SI2.680180)   |  |  |  |
| Horizon 2020 Construction                             | MEnS (Meeting of Energy Professional Skills)  |  |  |  |
| skills project title (contract                        | (649773)  |  |  |  |
| number)   |   |  |  |  |
| BUILD UP Skills UPSWING<br>Project coordinator's full |   |  |  |  |
| name  | Centre for Renewable Energy Sources and Saving  |  |  |  |
| Contact person's name                                 | Charalampos Malamatenios  |  |  |  |
| Contact person's phone                                | 0030 210 6603340  |  |  |  |
| Contact person's email                                | malam@cres.gr   |  |  |  |
| Project Partners                                      | <ul> <li>National Technical University of Athens</li> <li>Technical University of Crete</li> <li>Small Enterprises Institute of the Hellenic Confederation of<br/>Professionals, Craftsmen and Merchants</li> <li>Labour Institute of the Greek General Confederation of Labour</li> <li>Technical Chamber of Greece</li> <li>National Organization for the Certification of Qualifications and</li> </ul>  |  |  |  |
|   | Vocational Guidance   |  |  |  |
| Project website                                       | http://skills-upswing.eu  |  |  |  |
| Keywords  | Building, workforce, workforce qualification  |  |  |  |
| Duration  | Start date: 01/09/2014<br>End date: 31/08/2017  |  |  |  |
| Budget  | 551,178 € (EU contribution: 75%)  |  |  |  |
| Context   |   |  |  |  |
| Summary description                                   | BUILD UP Skills UPSWING aims at developing three large scale fully<br>functional training and qualification schemes for 3 professions with<br>substantiated great impact on the energy upgrade of buildings in<br>Greece. Initially, the specific training schemes will be designed<br>according to the identified needs. The relevant occupational profiles<br>will be updated and validated. Next, the training materials and<br>guidelines, and the assessment criteria and tools for the exams<br>leading to certification will be developed, while the "train the<br>trainers" courses will be designed and piloted. Then, the schemes will<br>be tested in pilot courses, to be evaluated and revised before<br>launching to a fully functional large-scale level. In order to ensure the<br>sustainability and enhancement of the training schemes after the |  |  |  |

|                              | project's and a number of accompanying measures in support of their  |
|------------------------------|--|
|                              | project's end, a number of accompanying measures in support of their   |
|                              | <ul><li>coordination and operation are planned.</li><li>The deliverance of three fully functional qualification schemes of</li></ul> |
| Objectives                   | the new skills related to energy efficiency for the Greek building   |
|                              | professions.   |
|                              | . Triggering the appropriate certification procedures of these   |
|                              | training schemes.  |
|                              | • Achieve the sustainability of the schemes and their integration in   |
|                              | the Greek continuous vocational system.  |
|                              | . insulation installer   |
|                              | . aluminium and metal constructions craftsmen  |
| Target skills/ professions   |  |
|                              | . installers-maintainers of burners  |
| Project's results and impact |  |
|                              | . Development of three large-scale fully functional qualification  |
|                              | schemes.   |
|                              | . Certification of the 3 qualification schemes.  |
|                              | . Establishment of a pilot qualification system to facilitate the  |
|                              | transition to the fully functional aforementioned qualifications   |
|                              | schemes.   |
|                              | . Proposition of incentives to boost the interest for the building   |
| Results <sup>1</sup>         | sector professions, proposals for funding mechanisms,  |
| Results                      | dissemination activities to reach the targeted stakeholders, etc.  |
|                              | . Establishment of a qualifications/skills "observatory" for the   |
|                              | systematic monitoring and recording of the needs for skills  |
|                              | enhancement and/or acquisition of new skills in matters of green   |
|                              | buildings.   |
|                              | . Accreditation of the bodies that will undertake the training and   |
|                              | those that will implement the examination and certification of   |
|                              | graduates.   |
|                              | . The engagement of all the value chain stakeholders is critical in  |
|                              | order to ensure that the actual needs of the market and of the   |
|                              | building workforce are properly addressed, and that consensus and  |
|                              | support for the establishment and wider adoption of qualification  |
|                              | and training schemes are achieved.   |
| Lessons learnt <sup>2</sup>  | . There is a general lack of awareness amongst building construction   |
|                              | workers of the potential interaction of each different profession to   |
|                              | the final performance of the building. Currently there is no such  |
|                              | understanding and cooperation amongst the different construction   |
|                              | works. It is considered crucial that a basic understanding is built -  |
|                              | across the board- to all construction workers.   |
|                              | . The establishment of a proper qualification scheme is a slow   |
|                              | procedure. In order to develop a trustful scheme a draft plan for  |
|                              |  |

 <sup>&</sup>lt;sup>1</sup> <u>https://ec.europa.eu/energy/intelligent/projects/en/projects/upswing</u>
 <sup>2</sup> Input from Charalampos Malamatenios, April 2017

|                              | the institutionalization of the certification regulations is  |
|------------------------------|---|
|                              | necessary.  |
| Success factors <sup>3</sup> | <ul> <li>This is the first time that a comprehensive approach in the field of specialized training and certification of qualifications is followed in Greece for the three targeted professions by the BUILD UP Skills UPSWING (including - as a first, mandatory step - the update of their Occupational Profiles).</li> <li>The work-plan of methods for achieving the objectives of BUILD UP Skills UPSWING are in full accordance with the outputs (and suggestions as regards further measures to overcome barriers) of the 'National Qualifications Roadmap' for Greece, developed in the frame of the BIULD UP Skills Initiative Pillar I Project BUS-GR.</li> <li>The associations/federations of the targeted professions are in</li> </ul>  |
| Barriers <sup>4</sup>        | <ul> <li>favour of the initiative and they support it with all their means.</li> <li>The main barrier affecting the BUILD UP Skills UPSWING implementation in Greece is related to the institutional framework. As for the time being there is no correlation of the Vocational Education and Training (VET) in Greece with the National Qualifications Framework (NQF).</li> <li>Although the market actors recognise the lack of qualified workers and believe that established quality standards and certification schemes will improve the market function and competitiveness, they are very sceptical for any measure that might add bureaucratic barriers or costs for the workers or the end users.</li> <li>There is a lack of information of the technicians on the advantages and the necessity for the continuous updating of their skills and the certification of their qualifications.</li> <li>The lack of time (especially in certain periods of the year) to participate in such programs and the reduced interest of the technicians themselves for training.</li> </ul> |
| Key needs <sup>5</sup>       | <ul> <li>Identification of incentives that will boost the demand for qualified workers, i.e. to identify, propose and document appropriate actions and incentives to increase the demand of qualified workers, and to demonstrate the added value /profitability of employing qualified workers.</li> <li>Encouragement of technicians/workers to join the training courses and seek for certification, i.e. supporting both employers and employees to invest into new skills. This needs the design and/or implementation of appropriate financing tools/incentives and other supporting measures to challenge the workers of the construction</li> </ul>   |

 <sup>&</sup>lt;sup>3</sup> Input from Charalampos Malamatenios, April 2017
 <sup>4</sup> Input from Charalampos Malamatenios, April 2017
 <sup>5</sup> Input from Charalampos Malamatenios, April 2017

|                                  | sector to upg<br>qualification  |   | participating to  | o suitable training /                                       |
|----------------------------------|---|---|---|---|
| Recommendations <sup>6</sup>     | <ul> <li>This is an esse</li> <li>wide acknowl</li> <li>A cross craft lend</li> <li>order to build</li> <li>of each differ</li> <li>building.</li> <li>Well elaborat</li> <li>certification rest</li> </ul>   | edgement and sus<br>pasic training to a<br>a basic understa<br>ent profession to<br>ed plan for the in<br>regulations is nece | training and qu<br>stainability.<br>Il construction v<br>nding about pot<br>the final perfor<br>stitutionalizatio | workers is needed in<br>ential interactions<br>mance of the |
| Replicability <sup>7</sup>       | <ul> <li>certification regulations is necessary in order to establish a proper qualification scheme.</li> <li>BUILD UP Skills UPSWING can support the national strategy and relevant framework, the initial setting up of appropriate schemes and to trigger interest and motivation of the market actors, the construction workforce and end users through its activities.</li> <li>One of the main objectives of BUILD UP Skills UPSWING is to take all necessary provisions in order to developed 3 new training and qualification schemes (for the 3 targeted professions / specialities of the construction sector) to be further applied in a large - national - scale, to cover all the workforce of these 3 specialities all over the country. In other words, to hand over to future training providers and certification of qualifications bodies a well-functioning and ready to be applied scheme.</li> <li>The incentives for the employment of qualified staff (i.e. incentives boosting the demand for qualified workers) and the appropriate financing tools/incentives and other supporting measures to encourage the participation of workers to the training courses that will be identified and discussed with the relevant policy makers in order to be institutionalized, will be of help to all professions / specialities involved in the energy upgrade of existing and/or the construction of new near zero energy buildings (nZEB) to challenge their workforce to upgrade their skills participating to suitable training/qualification schemes.</li> </ul> |   |   |   |
| Project indicators               |   |   |   |   |
| Common Performance<br>Indicators | Ex ante<br>target   | Interim<br>results  | Final result  | Target 2020   |
|                                  |   |   |   |   |
|                                  | 9 pilot courses   | 3 Train of the  |   | 1,685 for   |
| Number of training courses       | and 3   | Trainers  | N/A   | workers/craftsmen   |
| triggered by the action          | Train the<br>Trainers   | courses were<br>held  |   | and 19 for trainers   |
|                                  | I I I AIIIEI S  | netu  | 1   | 1   |

 <sup>&</sup>lt;sup>6</sup> Input from Charalampos Malamatenios, April 2017
 <sup>7</sup> Input from Charalampos Malamatenios, April 2017

| Number of people that will be<br>trained                           | 135 trainees<br>and 45<br>trainers  | 59 Trainers<br>have been<br>trained<br>appropriately                            | N/A | 25,280<br>workers/craftsmen<br>and 280 trainers                                       |
|--|---|---|-----|---|
| Number of hours taught in the<br>frame of the courses<br>triggered | 270 hours for<br>the pilot<br>courses and 45<br>for the<br>train the<br>trainers<br>courses | 45 hours<br>taught in the<br>frame of the<br>'Train the<br>trainers'<br>courses | N/A | 50,550 for<br>workers/<br>craftsmen and 285<br>for the<br>training of the<br>trainers |
| Estimated specific cost to qualify each trainee                    | 200<br>Euro/trainee   | Not calculated<br>yet*  | N/A | 100 Euro/trainee  |
| Renewable Energy production<br>triggered                           | 44,742<br>toe/year  | Not calculated<br>yet*  | N/A | 268,452 Toe   |
| Primary energy savings compared to projections                     | 53,165<br>toe/year  | Not calculated<br>yet*  | N/A | 318,994 Toe   |
| Reduction of greenhouse gas<br>emissions                           | 292,865<br>tCO2e/year   | Not calculated<br>yet*  | N/A | 1,757,190 tCO2e   |

Notes: \* - Respective task is planned to start at a later time during the project development (actually, in the next reporting period).

| Meeting of Energy professional Skills (MEnS) |  |  |
|--|--|--|
|  | . ENERGIA-DA SRL (Project Coordinator)                   |  |
|  | . Knowledge Transfer Network Limited (UK)                |  |
|  | . Aristotle University of Thessaloniki (EL)              |  |
|  | . Brunel University London (UK)                          |  |
|  | . University of Cyprus (CY)                              |  |
|  | . Technical University of Cluj-Napoca (RO)               |  |
| Country organisations involved               | . Dublin Institute of Technology (IE)                    |  |
|  | . Energy Consulting Network APS (DK)                     |  |
|  | . Radio-television belge de la Communaute francaise (BE) |  |
|  | . Ss. Cyril and Methodius University in Scopje (MK)      |  |
|  | . Université Libre de Bruxelles (BE)                     |  |
|  | . University of Kassel (DE)                              |  |
|  | . Universitat Politecnica de Valencia (ES)               |  |
| Contact person's name                        | Daniela Melandri   |  |
|  | Agnese Riccetti  |  |
| Contact person's email                       | d.melandri@energiada.it                                  |  |
| Contact person's emait                       | a.riccetti@energiada.it                                  |  |
| Project's website                            | http://www.mens-nzeb.eu/en/                              |  |

|                                  | Training with accreditation for building managers, architects  |
|----------------------------------|--|
| Keywords                         | and engineers; NZEB; women in building environment;  |
|                                  | employability; educational integrated approach   |
|                                  | Start date: 2015/03/01   |
| Duration                         | End date: 2017/08/31   |
| Budget                           | EUR 1,478,160 (EU contribution 100%)   |
|                                  | The idea of MEnS project is to provide and enhance the NZEB  |
|                                  | skills of building managers, engineers and architect through a   |
|                                  | series of accredited training activities developed by 9  |
|                                  | universities and 3 market players. The strategic target is to  |
|                                  | accelerate the NZEB culture in existing professional and market  |
|                                  | experts, in order to reduce the gap in the current knowledge   |
|                                  | on the technical implementation of NZEB solutions in the   |
| Summary description <sup>8</sup> | existing building stock. MEnS project is to the forefront in   |
|                                  | tackling the implementation of the NZEB, covering the lack of  |
|                                  | professionals' expertise and helping the unemployed and  |
|                                  | women in the Built Environment. MENS is developed through 3  |
|                                  | sets of training activities: national accreditation professional   |
|                                  | courses; e- learning and webinars; and case studies from across  |
|                                  | Europe.  |
| Context                          |  |
| Context                          |  |
|                                  | To increase the knowledge and skills of at least 1800 building   |
|                                  | . To increase the knowledge and skills of at least 1800 building   |
|                                  | professionals in NZEB design and construction, out of which  |
|                                  | professionals in NZEB design and construction, out of which 50% would be women or unemployed.  |
|                                  | professionals in NZEB design and construction, out of which 50% would be women or unemployed.<br>. To create and implement a new education and training  |
|                                  | <ul><li>professionals in NZEB design and construction, out of which 50% would be women or unemployed.</li><li>To create and implement a new education and training programme, focusing on real case studies of buildings, in 10</li></ul>  |
|                                  | <ul> <li>professionals in NZEB design and construction, out of which 50% would be women or unemployed.</li> <li>To create and implement a new education and training programme, focusing on real case studies of buildings, in 10 countries, under the EQF provisions and based on desired and</li> </ul>  |
|                                  | <ul> <li>professionals in NZEB design and construction, out of which 50% would be women or unemployed.</li> <li>To create and implement a new education and training programme, focusing on real case studies of buildings, in 10 countries, under the EQF provisions and based on desired and common learning outcomes of Level 7.</li> </ul>   |
|                                  | <ul> <li>professionals in NZEB design and construction, out of which 50% would be women or unemployed.</li> <li>To create and implement a new education and training programme, focusing on real case studies of buildings, in 10 countries, under the EQF provisions and based on desired and common learning outcomes of Level 7.</li> <li>To accredit these courses using the formal procedure in each</li> </ul>   |
|                                  | <ul> <li>professionals in NZEB design and construction, out of which 50% would be women or unemployed.</li> <li>To create and implement a new education and training programme, focusing on real case studies of buildings, in 10 countries, under the EQF provisions and based on desired and common learning outcomes of Level 7.</li> <li>To accredit these courses using the formal procedure in each country and assign ECTS credits.</li> </ul>  |
| Objectives <sup>9</sup>          | <ul> <li>professionals in NZEB design and construction, out of which 50% would be women or unemployed.</li> <li>To create and implement a new education and training programme, focusing on real case studies of buildings, in 10 countries, under the EQF provisions and based on desired and common learning outcomes of Level 7.</li> <li>To accredit these courses using the formal procedure in each country and assign ECTS credits.</li> <li>To develop an online E-Learning platform that will enhance</li> </ul>  |
| Objectives <sup>9</sup>          | <ul> <li>professionals in NZEB design and construction, out of which 50% would be women or unemployed.</li> <li>To create and implement a new education and training programme, focusing on real case studies of buildings, in 10 countries, under the EQF provisions and based on desired and common learning outcomes of Level 7.</li> <li>To accredit these courses using the formal procedure in each country and assign ECTS credits.</li> <li>To develop an online E-Learning platform that will enhance the learning process, enable international cooperation and</li> </ul>   |
| Objectives <sup>9</sup>          | <ul> <li>professionals in NZEB design and construction, out of which 50% would be women or unemployed.</li> <li>To create and implement a new education and training programme, focusing on real case studies of buildings, in 10 countries, under the EQF provisions and based on desired and common learning outcomes of Level 7.</li> <li>To accredit these courses using the formal procedure in each country and assign ECTS credits.</li> <li>To develop an online E-Learning platform that will enhance the learning process, enable international cooperation and communication between participants and built on top of the</li> </ul>  |
| Objectives <sup>9</sup>          | <ul> <li>professionals in NZEB design and construction, out of which 50% would be women or unemployed.</li> <li>To create and implement a new education and training programme, focusing on real case studies of buildings, in 10 countries, under the EQF provisions and based on desired and common learning outcomes of Level 7.</li> <li>To accredit these courses using the formal procedure in each country and assign ECTS credits.</li> <li>To develop an online E-Learning platform that will enhance the learning process, enable international cooperation and communication between participants and built on top of the Build-Up portal.</li> </ul>   |
| Objectives <sup>9</sup>          | <ul> <li>professionals in NZEB design and construction, out of which 50% would be women or unemployed.</li> <li>To create and implement a new education and training programme, focusing on real case studies of buildings, in 10 countries, under the EQF provisions and based on desired and common learning outcomes of Level 7.</li> <li>To accredit these courses using the formal procedure in each country and assign ECTS credits.</li> <li>To develop an online E-Learning platform that will enhance the learning process, enable international cooperation and communication between participants and built on top of the Build-Up portal.</li> <li>To enhance and support the development of a professional</li> </ul>   |
| Objectives9                      | <ul> <li>professionals in NZEB design and construction, out of which 50% would be women or unemployed.</li> <li>To create and implement a new education and training programme, focusing on real case studies of buildings, in 10 countries, under the EQF provisions and based on desired and common learning outcomes of Level 7.</li> <li>To accredit these courses using the formal procedure in each country and assign ECTS credits.</li> <li>To develop an online E-Learning platform that will enhance the learning process, enable international cooperation and communication between participants and built on top of the Build-Up portal.</li> <li>To enhance and support the development of a professional network in Europe specifically focused on the retrofitting of</li> </ul>   |
| Objectives9                      | <ul> <li>professionals in NZEB design and construction, out of which 50% would be women or unemployed.</li> <li>To create and implement a new education and training programme, focusing on real case studies of buildings, in 10 countries, under the EQF provisions and based on desired and common learning outcomes of Level 7.</li> <li>To accredit these courses using the formal procedure in each country and assign ECTS credits.</li> <li>To develop an online E-Learning platform that will enhance the learning process, enable international cooperation and communication between participants and built on top of the Build-Up portal.</li> <li>To enhance and support the development of a professional network in Europe specifically focused on the retrofitting of housing stocks towards NZEB. A connection with over 250,000</li> </ul>   |
| Objectives9                      | <ul> <li>professionals in NZEB design and construction, out of which 50% would be women or unemployed.</li> <li>To create and implement a new education and training programme, focusing on real case studies of buildings, in 10 countries, under the EQF provisions and based on desired and common learning outcomes of Level 7.</li> <li>To accredit these courses using the formal procedure in each country and assign ECTS credits.</li> <li>To develop an online E-Learning platform that will enhance the learning process, enable international cooperation and communication between participants and built on top of the Build-Up portal.</li> <li>To enhance and support the development of a professional network in Europe specifically focused on the retrofitting of housing stocks towards NZEB. A connection with over 250,000 stakeholders and market players is envisaged.</li> </ul>   |
| Objectives <sup>9</sup>          | <ul> <li>professionals in NZEB design and construction, out of which 50% would be women or unemployed.</li> <li>To create and implement a new education and training programme, focusing on real case studies of buildings, in 10 countries, under the EQF provisions and based on desired and common learning outcomes of Level 7.</li> <li>To accredit these courses using the formal procedure in each country and assign ECTS credits.</li> <li>To develop an online E-Learning platform that will enhance the learning process, enable international cooperation and communication between participants and built on top of the Build-Up portal.</li> <li>To enhance and support the development of a professional network in Europe specifically focused on the retrofitting of housing stocks towards NZEB. A connection with over 250,000 stakeholders and market players is envisaged.</li> <li>To develop and deliver 5 webinars through the E-Learning</li> </ul> |
| Objectives9                      | <ul> <li>professionals in NZEB design and construction, out of which 50% would be women or unemployed.</li> <li>To create and implement a new education and training programme, focusing on real case studies of buildings, in 10 countries, under the EQF provisions and based on desired and common learning outcomes of Level 7.</li> <li>To accredit these courses using the formal procedure in each country and assign ECTS credits.</li> <li>To develop an online E-Learning platform that will enhance the learning process, enable international cooperation and communication between participants and built on top of the Build-Up portal.</li> <li>To enhance and support the development of a professional network in Europe specifically focused on the retrofitting of housing stocks towards NZEB. A connection with over 250,000 stakeholders and market players is envisaged.</li> </ul>   |

<sup>&</sup>lt;sup>8</sup> <u>http://cordis.europa.eu/project/rcn/194619\_en.html</u> 9 <u>http://cordis.europa.eu/result/rcn/194993\_en.html</u>

|                            | . To provide working opportunities to unemployed                        |
|----------------------------|---|
|                            | . To provide working opportunities to unemployed                        |
|                            | professionals, by bringing them closer to possible employers            |
|                            | and improving their qualifications.                                     |
|                            | . Initiate a wide media promotion of education and training             |
|                            | activities impacting more than 1 million viewers.                       |
|                            | . To continue the education and training courses for at least ${\bf 5}$ |
|                            | years after the end of the project based on concrete                    |
|                            | sustainability plans agreed by University partners.                     |
|                            | . To result in energy savings and/or increased use of                   |
|                            | renewables of at least 28,96 GWh/year.                                  |
| Target skills/ professions | building managers, engineers and architects                             |