

BUILD UP Skills FYROM Factsheet	
BUILD UP skills activities of the country	
BUS Pillar I project title (contract number)	BUILD UP SKILLS MK IEE/12/BWI 425. SI2.623225
BUS Pillar II project title (contract number)	BUILD UP Skills Builders' Energy Efficiency Training (BUILD UP Skills BEET) IEE/13/BWI/682/SI2.680171
Horizon 2020 Construction skills project title (contract number)	N/A
BUILD UP Skills BEET	
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Project Partners ¹	Economic Chamber of Macedonia (<i>Consortium Coordinator</i>) Ss. Cyril and Methodius University - Faculty of electrical engineering and information technologies Adult Education Centre - Skopje Association of Business and Consultancy - ZBK Kreacija Center for Promotion of Sustainable Agricultural Practices and Rural Development - CeProSARD Integrated Business Faculty
Project website	http://beet.mk
Keywords	training schemes in Macedonia, qualification schemes in Macedonia, certification , RPL, recognition of previous learning
Duration	Start date: 18/07/2014 End date: 18/03/2016
Budget ²	EUR 409.026 (EU contribution 75%)
Context	
Summary description	The project aimed at introducing voluntary qualification schemes and 5 different training programmes to build up the energy efficiency skills of building sector workers. The aim was to ensure coverage of all occupational fields identified and prioritized in the national Roadmap established under Pillar I of the BUILD UP Skills initiative.
Objectives	1) Developing "large scale" training schemes by upgrading the national education system with voluntary qualification schemes and by ensuring recognition of skills obtained through previous experience

¹ <https://ec.europa.eu/energy/intelligent/projects/en/projects/build-skills-beet>

² <https://ec.europa.eu/energy/intelligent/projects/en/projects/build-skills-beet>

	<p>and/or through corresponding training activities in non-formal education for 1.000 building sector workers.</p> <p>2) Building capacity of trainers and training providers to implement voluntary qualification schemes through the development of training curriculums based on the identified needs (including learning objectives and outcomes, content, methods and material).</p> <p>3) Designing incentives to boost the demand for EE and RES qualified /skilled workers on national level.</p>
Target skills/ professions	building envelope, glassing, roofing, energy infrastructures/electrical installations and HVAC systems.
Project's results and impact	
Results	<p>The project had the following objectives:</p> <ul style="list-style-type: none"> • 200 trainers (40 per prioritized skill) trained and certified for energy efficiency programs; • 10 training providers (construction companies) for delivering practical classes; • 1000 certified workers with recognition of previous experience in energy efficiency after passing the process of recognition; 50 on-site workers trained for energy efficiency (pilot programme). <p>Major achieved results:</p> <ul style="list-style-type: none"> • Development of voluntary qualifications schemes and deployment of "large scale" training schemes for the 5 prioritized skills; • Preparation of training programs for trainers and workers including examination for obtaining energy efficiency qualifications in the following fields: building envelope (facade/plastery, roof construction, outdoor and indoor carpentry), HVAC systems and electrical installations; • Design of training forms and criteria for trainers according to predefined national standards; • Organized 20 courses for trainers (4 courses for each training programme) resulting in 197 trainers certified; • Organised 5 training courses for workers (1 training course per training programme) and 50 sessions for recognition of previous non-formal education, resulting in 967 certified workers; • Designed incentives to boost demand for qualified workers and proposals to establish relevant financial schemes (paritarian fund and IPA operational program); • Organized 20 courses for trainers (4 courses for each training programme), 5 training courses for workers (1 training course per training programme) and 50 sessions for recognition of previous non-formal education.

	<ul style="list-style-type: none"> • Drafted manual for recognition of previous learning and clear procedures, which provided successful certification of energy efficiency skills for 967 blue collar workers.
Lessons learnt ³	<ul style="list-style-type: none"> • Involvement of the relevant governmental institutions in the project was a great asset because of the guidance and early warning of incompatibility between project activities and national legislation related to occupations, qualifications and education standards; • The selection process for trainers should be implemented very carefully as some candidates are applying to all training programs only to obtain skills certificate even when they are not fully eligible. The process could have been allocated more time to try having candidates from all over the country; • Engagement of the construction sector in the certification process for blue collar workers requires more on-site than office work. • Training providers need more incentives and motivation to continue with organizing the already prepared trainings for construction workers for energy efficiency up-skilling. More public awareness is needed as well; • The initiative for Public procurement criteria for certified workers was difficult to accept by construction companies because of different opinions between large and small companies. The large companies required higher minimum number of certified workers which is not acceptable for smaller construction companies; • Engagement of companies with long-term experience on the market with building materials and energy efficiency services was a great success. Candidates for trainers have had full trust and high engagement in the training.
Barriers ⁴	<ul style="list-style-type: none"> • Engaging companies to let their workers on a 3-month training. • Training providers need more motivation/financial incentives to continue with training, organizing and pursuing construction companies. • During the public procurement, there is no obligation to request certified or trained construction workers. • Low public awareness for the need of trained construction workers with skills in energy efficiency. • Low EE and RES demand on the market.
Key needs ⁵	<ul style="list-style-type: none"> • Competent trainers in delivering training; • More hands-on experience for the workers; • Public procurement calls to include criteria for qualified/certified workers;

³ Input from Jadranka Arizankovska, February 2017

⁴ Input from Jadranka Arizankovska, February 2017

⁵ Input from Jadranka Arizankovska, February 2017

	<ul style="list-style-type: none"> Companies and workers also requested skills in installation of renewable energies.
Recommendations ⁶	<ul style="list-style-type: none"> Development of training programmes for experienced employees (engineers & technicians) from building sectors as they can deliver training to on-site workers; Deployment of specific programmes for practical training that provides more hands-on experience and practice for the workers; Enforcement of public private dialogue for inclusion of criteria for qualified/certified workers in Public procurement calls; Development and promotion of training programmes for skills in installation of renewable energies among companies and workers.
Replicability ⁷	<ul style="list-style-type: none"> Developed training schemes can be replicated to other workers in Macedonia by co-financing training costs from Governmental employment measures. The methodology for recognition of previous learning can be upgraded to technicians and occupations related to other on-site building workers; The procedures for development of voluntary qualification schemes can be replicated to other occupations encompassed by the Roadmap.

Project indicators				
Common Performance Indicators	Ex ante target	Interim results ⁸	Final result ⁹	Target 2020
Number of training courses triggered by the action	25 (5 pilot courses for workers, 20 for trainers)	20	27	300 trainings (60 trainings for each of the 5 skills developed)
Number of people that will be trained	250 (50 + 200)	200	265	4.600
Number of hours taught in the frame of the courses triggered	2000	1600	2026	24.000
Estimated specific cost to qualify each trainee	1070 Euro/trainee	1070	980	300 Euro/trainee
Renewable Energy production triggered (toe/year)	NA*	NA*	NA*	NA*
Primary energy savings compared to projections (toe/year)	4332	35	5140	21660
Reduction of greenhouse gas emissions	34592	277	41004	172960

⁶ Input from Jadranka Arizankovska, February 2017

⁷ Input from Jadranka Arizankovska, February 2017

⁸ Input from Jadranka Arizankovska, February 2017

⁹ Input from Jadranka Arizankovska, February 2017

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*The scope of the project did not tackle workers or developing curricula in renewable energy sources. Project call explicitly mentioned that training or any kind of involvement of renewable energy will be ineligible for funding.