Appendix 4. Action plan for trainings to develop skills and knowledge on intelligent energy solutions in buildings for Bulgaria until 2020

The project "Roadmap for Trainings to Develop Skills and Knowledge on Intelligent Energy Solutions in Buildings for Bulgaria until 2020" (BUILD UP Skills Bulgaria), is conducted by a consortium consisting of EnEffect (coordinator), National Agency for Vocational Education and Training and Bulgarian Construction Chamber.

Action plan for implementation of trainings on intelligent solutions for EE and RES in buildings until 2020

Actualization stages: 2016 u 2020; number of planned trainings: 40% until 2016 (incl.), 100% until 2020 (incl.).

	2013	2014-2015	2016	2017 2018 2019	2020
Measures for upgrading the professional skills of construction workers	1.1. Review and evaluation of State Educational Requirements 1.1.3. Proposals for complementing of structural components of the State Educational Requirements 1.1.4. Establishing of working groups 1.5. Framework for organizing short trainings for parts of professions 1.5.2. Provision for practical part of the trainings through the new Law on VET 1.5.3. Provision of actual working places 1.5.4., 1.5.5, 1.5.6. Provision of resources along the national measures for promoting of	1.2. Incorporation of new modules or new themes in the training programmes in the professional high schools for all professions from the professional directions "Civil engineering" and "Electrical engineering and energy sector": *Electrician (Electrical in-house systems);* *Power installer (Electrical in-house systems, Power engineering);* *Technician - energy equipment and systems installer (Thermal energy engineering, renewable energy sources);* *Installer of energy*	1.1. Review and evaluation of State Educational Requirements and new proposals 1.1.4. Analysis and optimization of the activities of the working groups 1.5. Analysis of the implementation of the short trainings for parts of professions 1.6. Monitoring of training demand and motivation factors. Adaptation of the communication strategy (see Priority 6) 1.6.2. Analysis of the administrative barriers for conduction of trainings 1.7. Analysis of the	1.2, 1.3. Incorporation of new modules or new themes in the training programmes on the basis of the optimized State Educational Requirements 1.2.2. Analysis and evaluation of cooperation with employers' and professional organizations and new measures for improvement 1.5. Strengthening of the short trainings for parts of professions and sustained growth of the number of trainees 1.6. Additional measures for support of the trainings	1.1. Analysis of State Educational Requirements on the basis of the introduction of nZEB in the construction practice 1.2, 1.3. Proposals for new modules or new themes 1.6. Evaluation of the qualification gaps and promotion of supply and demand of relevant trainings 1.6 (2) Adaptation and optimization of the of the communication

	employments 1.5.7. Proposals to Employment Agency and Ministry of Labour and Social Policy for regulation of short-term qualification forms 1.6. Information campaign among employers (see priority 6) 1.6.1. Maintaining and improvement of the qualification level for better productivity and higher end product quality 1.6.2. Facilitation of the administration of trainings 1.6.2 (2) Regulation of both employers' and employees' rights 1.7. 3 Legislative regulation of the modality „on-the-job training" 1.7.1. Regulation of the obligations of the tutors 1.7.2. Qualification (initial and follow-up training) of the tutors; 1.7.3. Creation of a set of instruments for on-the-job training 1.7.3 (2) Identification of the inadequate/missing skills, working out of individual training schemes, motivation, evaluation of competences,	*equipment and systems (RES, thermal engineering); Building technician (Civil engineering and architecture, hydro-engineering); Builder (Internal sheathing and flooring, Outdoor sheathing and pavements, Roofing); Building assembler (Door and window frames and glazing, Insulations in construction).* 1.2.2. Coordination with employer associations 1.3. Incorporation of new modules or new themes in the training programmes in the VTCs for all professions from the professional directions "Civil engineering" and "Electrical engineering and energy sector": 1.3.1. Evaluation of the compliance of new programmes with the State Educational Requirements 1.3.2. Proposals for specific changes (incl. by NAVET) 1.4. Introduction of changes in the national examination programmes related to the professional directions "Civil	implementation of the modality „on-the-job training", incl. the legislative framework 1.7.1. Analysis of the qualification of the tutors 1.7.3. Identification of insufficient skills 1.7.4. Process of validation of knowledge, skills and competences acquired on the job – developments in the past two-year period 1.7.5. New institutional capacity built 1.8. New proposals for the admission rates of the vocational high schools 1.8.3. Analysis of the impact of the measures on regional level Compare: Tighten requirements for specific building components and equipment. Make stricter energy performance requirements. Introduce compulsory consideration of renewables.	demand 1.6. (2) Second stage of the communication strategy 1.7. Strengthening of the modality „on-the-job training" and sustained growth of the number of trainees 1.7.4. Strengthening of the practices for validation of knowledge, skills and competences acquired on the job 1.8. Optimization of the admission rates for the vocational high schools Compare: Introduce minimum requirement for public buildings. Proposal: 40-60 kWh/m2/yr primary cons. <5-8 $kgCO_2/m^2/yr$ and >50% renewable share.	strategy on the basis of the introduction of nZEB in the construction practice 1.1-1.8. Additional measures to promote training of construction workers for sustained growth of nZEB as standard construction practice (new measures as a result and consequence of the results and analyses) Compare: Tighten requirements for specific building components and equipment. Make stricter energy performance requirements slightly better than actual practice. Proposal primary cons: 30-50kWh/m2/yr for MFH and SFH. 60-80kWh/m2/yr for offices.

	certification 1.7.4. Validation of knowledge, skills and competences acquired on the job 1.7.5. Setting up of a dedicated governmental institution (3 years) 1.8. Linking of the scheduled admission rates to the vocational high schools with the demand of the business entities	engineering" and "Electricity engineering and energy sector" 1.4.1. Changes are done on the basis of the confirmed State Educational Requirements 1.5.7. Regulation of short-term training courses and actual start of trainings						Tighten the renewables requirements. Proposal: >40% renewable share or at least one renewable measure to be used.
	2013	**2014 - 2015**	**2016**	**2017**	**2018**	**2019**	**2020**	
Training of trainers: new or upgraded systems for qualification and requalification	2.1. Raising the quality of baseline knowledge and capacity of trainers on professional training 2.1.1. Changes in the curricula of the higher schools in the direction of enhancement of the practical orientation of education 2.1.2. Building of long-term strategic partnerships between the higher schools, science and the business community 2.2. Updating of the qualification of the trainers on professional training 2.2.1. Creation of opportunities for upgrading/updating of the qualification of the teachers in their subject field from their higher education and in connection with the training content, which they teach	2.1.2. Defining of the strategic objectives, responsibilities and specific commitments of long-term strategic partnerships between the higher schools, science and the business community. Laboration and implementation of annual action plans 2.1.1 Proposals for specific changes in the curricula of the higher schools in the direction of enhancement of the practical orientation of education with the engagement of the business community 2.2.1. First projects and courses for upgrading/updating of the	2.1. Susequent analysis of the quality of baseline knowledge and capacity of trainers on professional training; identification of barriers, gaps and problem areas 2.1.2. Intermediate analysis of the strategic partnerships and optimization of the activities 2.1.1. First outcomes from the changed curricula and proposals for further developments 2.2. Reporting and analysis of the first results of the measures for updating of the qualification of the trainers on professional training 2.2.2 New incentives for involved employers and/or actualization of the existing ones	2.1. Measures for changes in the curricula of the higher education establishments resulting from identified problem areas and new legislative framework 2.1.2. Ongoing optimization of the activities of the strategic partnerships in relation to the strategic goals and annual action plans 2.2. Sustained growth of the number of the trainers on professional training updating their qualification 2.2 (2) Additional qualification and requalification of practicing specialists aiming at their involvement in the VET system			2.1. Analysis of the introduction of nZEB in the construction practice and respective optimization of trainers qualification 2.2. Elaboration of new measures for training of trainers according to the identified barriers and problem areas	

	2.2.2. Creation of opportunities for motivation of employers, who have introduced new production technologies, new equipment and/or new materials, to support the training of trainers in its practical aspect	qualification of teachers/trainers. Establishing of capacities for training of trainers 2.2.2. Application of actual incentives for employers, supporting practical trainings for trainers			
	2013	**2014 - 2015**	**2016**	**2017 2018 2019**	**2020**
Improvement of the training facilities	3.1. Participation in different programmes and projects for improvement of the training facilities and equipment of the institutions from the VET system 3.1.1. National Programme "Modernization of the vocational education system" 3.1.2. A project for joint information platform facilitating links between training institutions and the business community 3.2. Project for building of educational parks 3.2.1. Municipalities lend a building or premises, the employers work out curricula jointly with the training institutions, which provide trainers and orient persons seeking for training. Equipment is provided by sponsors and/or	3.1.1. Active implementation of measures on National Programme "Modernization of the vocational education system". Monitoring activities 3.1.2. Establishing of a joint information platform facilitating links between training institutions and the business community. Attracting of participants and data gathering 3.2. Launch of at least two educational parks 3.2.1. MoUs with municipalities, employers, producers/distributors of materials and VET establishments	3.1. System analysis of the available programmes and projects for improvement of the facilities and support for participation of VET establishments 3.1. (2) Analysis for the implementation of measures in the previous period. Options for improvement 3.1.2. Proposals for improvement of the information platform 3.2. First results from the activities in the educational parks. Discussions on need for establishing of new parks or improvement of the work in the existing ones. 3.2.2. Optimization of the legal framework	3.1. Sustained growth of the number of projects for improvement of the training facilities and equipment, approved for financing on national and EU projects. 3.2. Enhancing the territorial outreach of the educational parks so that they cover the six planning regions. Provision of easy access for VET establishments,, employers and other stakeholders	3.1. Evaluation of the new needs for improvement of the training facilities and equipment related to the introduction of nZEB in the regular construction practice. Identification of specific programmes and measures and updating of the informational platform 3.2. Improvement of the equipment of the existing educational parks. If deemed necessary, elaboration of new projects for enlarging the

	through national/international programmes 3.2.2. Legal regulation of this type of training 3.2.3. Regulation and promotion of a legal framework for PPPs	3.2.3. Provision of additional financing sources. Promotion of PPPs, sustainable cooperation models and best practices			network of such parks.
	2013	**2014**	**2015**	**2016**	**2017-2020**
Structural measures for monitoring of the processes	4.1. Forecast of the demand of workforce possessing specific characteristics in connection with the introduction of energy efficient solutions 4.1.1. Setting in place of a "National unit for forecasting of the development of the labour market in Bulgaria" 4.1.2. Conducting of studies for identification of employers' needs in a short-term and medium-term aspect 4.1.3. Preparation and testing of macro-economic model for forecasting of the development of the labour market in a medium-term and long-term aspect 4.1.4. Improving the process of planning in the sphere of the educational system and the system for providing training for acquiring of qualification in a long-term and medium-term horizon. 4.1.5. Improving the opportunities for professional	4.1.1. Start of the activities of the "National unit for forecasting of the development of the labour market in Bulgaria" 4.1.2. Actual forecasts for the demand of workforce in short-term and medium-term aspect 4.1.5. Increased capacity for professional orientation and carrier development for employed and unemployed workers	4.1.3. Available macro-economic model for forecasting of the development of the labour market in a medium-term and long-term aspect 4.1.4. System analysis of the planning process in the sphere of the educational system and the system for providing training for acquiring of qualification (see also p. 1.8) 4.1.6. Additional capacity in the area of EE and RES of the institutions related to the labour market established	4.1.1. Analysis and optimization of the activities of the "National unit for forecasting of the development of the labour market in Bulgaria".	4.1.2. Evaluation of the reliability of the forecasts for the demand of workforce possessing specific characteristics in connection to the actual implementation of nZEB 4.1.4. Optimization of training plans and programmes (see also p. 1.8.) 4.1.5. The system for for professional orientation and carrier development encompasses the whole territory of the country 4.1.6. Regular updating of the capacity of labour market institutions in the area of low-energy building

	orientation and carrier development through effective support of unemployed and employed persons in connection with the selection of profession, orientation for qualification, additional qualification and requalification. 4.1.6. Building the capacity of the institutions related to the labour market 4.2. Preparation of "Annual analyses of the activities of the licensed VETs" in professional directions "Civil engineering" and "Electrical engineering and energy sector" 4.2.1. Preparation of proposals measures at sector level for improvement of the qualification of employed and unemployed workers 4.3. Project "Working out and introduction of an information system for assessment of competences" 4.3.2. Information system for assessment of competences for sectors and regions	4.2. Analyses of the activities of the licensed VTCs, identification of information gaps and barriers (according to p. 3.1.2 – annually until 2020) 4.2.1. Presentation of a set of measures at sector level according to the analyses performed (annually until 2020) 4.3.1. Competence models for the sector available	4.3.2. Analysis of the impact and optimization of the Information system for assessment of competences for sectors and regions	4.3. Next stage of the project	4.3.1. Actualization of the competence models for the sector according to the implementation of nZEB in the regular construction practice
	2013	**2014 - 2015**	**2016**	**2017 2018 2019**	**2020**
Interactions among stakeholders	5.1. Building a network with the participation of training institutions, enterprises and branch organizations, related to the activities and professions	5.2. Linkage of the network of institutions in Bulgaria, which offer training and employ persons possessing the required qualification	5.1. Analysis of the activities in the network and promotion of interactions (see p. 3.1.2, priority 6, etc) 5.4. Evaluation of the regulations	5.1. Sustained growth of the number of actually engaged organizations in the efforts for improvement of the	5.4. Subsequent evaluation of the regulations for the right to practice professions related

	dealt with in the analysis, NGOs, governmental bodies. 5.4. Legislative provisions concerning the right to practice professions related to installation, maintenance and repair of RES systems by virtue of an ordinance worked out in partnership between the state and the business community Compare: Introduce stricter enforcement criteria on energy performance of buildings and components, penalties and fines. Increase the compliance check at the design and construction phase of the building.	for introduction of EE and RES solutions, with similar networks in other countries or at the EU level. 5.3. Creation of electronic platform with a possibility for provision of information concerning existing energy efficient solutions (see also 3.1.2, priority 6, etc.) 5.5. Establishing of modern educational structures (see p. 3.2.)	for the right to practice professions related to installation, maintenance and repair of RES systems, analysis of the results and correction of discrepancies Compare: Tighten requirements for specific building components and equipment. Make stricter energy performance requirements. Introduce compulsory consideration of renewables.	qualification of the construction workers (see 3.1.2 and elsewhere.) 5.5. Enhancing the territorial outreach of the educational parks so that they cover the territory of the country (see p. 3.2.) Compare: Introduce minimum requirement for public buildings. Proposal: 40-60 kWh/m2/yr primary cons. <5-8 $kgCO_2/m^2/yr$ and >50% renewable share.	to installation, maintenance and repair of RES systems 5.5. Improvement of the equipment of the existing educational parks. If deemed necessary, elaboration of new projects for enlarging the network of such parks (see p. 3.2.)
	2013	**2014 - 2015**	**2016**	**2017 2018 2019**	**2020**
Establishing of new civil culture on EE, RES and climate change issues	6.1. Incorporation of themes related to energy efficiency in the elementary education programmes 6.2. Identification of subjects and incorporation of themes, oriented towards acquiring of skills for possible approaches to and potential benefits from the use of energy efficient solutions in existing and new buildings, in the secondary education. 6.3. Elaboration of a communication strategy, oriented towards raising the citizens' awareness about the	6.1. identification of adequate subjects for the individual grades of the elementary education and formulation of themes; 6.1 (2). working out of training content and adequate teaching methods 6.2. Incorporation of the learning content in the respective manual/teaching aids 6.3. Implementation of the communication strategy	6.1., 6.2. Incorporation of new themes in the learning content of the respective manual/teaching aids 6.3. Review and actualization of the communication strategy	6.1, 6.2. Actual implementation of topics related to EE and RES in the educational system 6.3. Continuing implementation and actualization of the communication strategy	6.1., 6.2. Analysis of the results and updating of the themes and training materials/aids 6.3. Continuing implementation and actualization of the communication

	energy efficiency measures, which may be applied in everyday life, and the measures for improvement of the energy efficiency of the existing building stock or new buildings				strategy in respect to the implementation of nZEB in the building practice
Compare: Policy recommendations	Introduce appropriate and predictable long-term support measures, tailored-made for consumers' categories and building types: Preferential loans. Grants. Fiscal incentives, feed-in-tariffs for renewables in buildings. Use of national. EU and IFI financing, build on the existing support programmes. Integrate buildings policies with other related policies and strategies for maximizing the effectiveness and coherence, i.e. with district heating policies, sustainable communities, and energy and environment policies. Particular attention given to integrate buildings and renewable district heating policies as well as to decarbonisation of energy supply. Support local industry and technology: schemes for developing local supply chain industry. A strong local industry for energy efficient materials and renewables will multiply the macro-economic benefits of the support measures (increase job creation effect. more revenues from taxes to the public budget etc) and for minimizing the life cycle energy and CO2 emissions. Remove market barriers for energy efficiency and renewable energy in buildings.				
	Public procurement: all new building purchased/built by the public sector should be very low energy buildings. Proposal: at least below 40-60 kWh/m2/yr from 2018/2019 onwards and moving towards 15kWh/m2/yr.			Adapt and revise periodically public procurement rules.	
	Create information points (one-stop-shop) at city halls and at other relevant bodies (i.e. Chambers of Commerce, Energy Agencies) where citizens and companies may find appropriate information and advice concerning existing support schemes, procedures and benefits.			Permanent support to the info-points (incl. materials. guidelines etc.)	

Comparison extracts: ROADMAP 2020 FOR MOVING TOWARDS NZEB IN BULGARIA. IMPLEMENTING NEARLY ZERO-ENERGY BUILDINGS (NZEB) IN BULGARIA – TOWARDS A DEFINITION AND ROADMAP. EXECUTIVE SUMMARY (2012) BUILDING PERFORMANCE INSTITUTE EUROPE (BPIE). AVAILABLE AT WWW.BPIE.EU. ANALYSES PERFORMED BY ENEFFECT.

Profession	Training (profession or part of profession)	2013-2015	2016	2017-2019	2020
Electrician – Electrical wiring systems - 5220109 (3rd Level of professional qualification); Electrician-installer – Electrical wiring systems – 5220210 (2nd Level of professional qualification); Electrician-installer – Power engineering - 5220212 (2nd Level of professional qualification) Employed: 11167	PV (rooftop and facade); Solar cooling systems (~40% more qualified specialists ~**560/ year**	**1344 (~448/ year)**	**Target 2013-2016 (incl.): 1792**	**2016 (~672/year)**	**Total number of trainings: 4480**
	Brine/water heat pumps, Water/water heat pumps, Air/water heat pumps (10-15%); **~140/ year**	**335 (~112/ year)**	**Target 2013-2016 (incl.): 447**	**503 (~168/ year)**	**Total number of trainings: 1117**
	Biomass CHP or trigeneration (5%) **~70/ year**	**168 (~56/ year)**	**Target 2013-2016 (incl.): 224**	**252 (~84/ year)**	**Total number of trainings: 560**
	LED Lighting; Automatic lighting controls (20-25%);**~280/ year**	**672 (~224/ year)**	**Target 2013-2016 (incl.): 896**	**1008 (~336/ year)**	**Total number of trainings: 2240**
Technician in energy equipment and systems – RES - 5220308 (3rd Level of professional qualification); Installer of energy equipment and systems – RES - 5220408 (2nd Level of professional qualification)Employed: 1101	All trainings should include modules for: *Solar thermal for DHW, PV (rooftop and facade), Solar cooling systems; Brine/water heat pumps, Water/water heat pumps, Air/water heat pumps; Pellet boiler; Biomass CHP or trigeneration; Balanced ventilation with heat recovery (>80 %).* **~131/ year**	**314 (~104/ year)**	**Target 2013-2016 (incl.): 418**	**471 (~157/ year)**	**Total number of trainings: 1046**

Technician in energy equipment and systems – Thermal engineering - 5220309 (3rd Level of professional qualification); Installer of energy equipment and systems – Thermal engineering - 5220409 (2nd Level of professional qualification) Employed: 9871	Solar thermal for DHW, Solar cooling systems (~40% more qualified specialists)**~437/ year**	**1185 (~395/ year)**	**Target 2013-2016 (incl.): 1580**	**1776 (~592/ year)**	**Total number of trainings: 3948**
	Brine/water heat pumps, Water/water heat pumps, Air/water heat pumps (10-15%); **~185/ year**	**444 (~148/ year)**	**Target 2013-2016 (incl.): 592**	**666 (~222/ year)**	**Total number of trainings: 1480**
	Pellet boiler (20%); **~247/ year**	**593 (~198/ year)**	**Target 2013-2016 (incl.): 790**	**888 (~296/ year)**	**Total number of trainings: 1974**
	Biomass CHP or trigeneration (5%); **~62/ year**	**150 (~50/ year)**	**Target 2013-2016 (incl.): 198**	**222 (~74/ year)**	**Total number of trainings: 494**
	Balanced ventilation with heat recovery (>80 %) (15%); **~185/ year**	**444 (~148/ year)**	**Target 2013-2016 (incl.): 592**	**666 (~222/ year)**	**Total number of trainings: 1480**
	Gas boiler, oil boiler (identified need of up to 60% better qualified specialists); **~740/ year**	**1777 (~592/ year)**	**Target 2013-2016 (incl.): 2369**	**2665 (~888/ year)**	**Total number of trainings: 5922**
	Air handling units and filters (identified need of up to 47% better qualified specialists); **~580/ year**	**1392 (~464/ year)**	**Target 2013-2016 (incl.): 1856**	**2088 (~696/ year)**	**Total number of trainings: 4639**
	Cooling/air conditioning systems (identified need of up to 62% better qualified specialists); **~765/ year**	**1836 (~612/ year)**	**Target 2013-2016 (incl.): 2448**	**2754 (~918/ year)**	**Total number of trainings: 6120**
	Radiators (identified need of up to 30% better qualified specialists); **~370/ year**	**888 (~296/ year)**	**Target 2013-2016 (incl.): 1184**	**1332 (~444/ year)**	**Total number of trainings: 2961**

Construction – Civil engineering technician – Civil engineering and architecture – 5820101 (3rd Level of professional qualification) Employed: 4725	General trainings (technological core) for EE and RES in buildings (100%), including modules for: *Solar thermal for DHW, PV (rooftop and facade), Solar cooling systems; Brine/water heat pumps, Water/water heat pumps, Air/water heat pumps; Biomass CHP or trigeneration; Balanced ventilation with heat recovery (>80 %); High insulation standard (< 0,18 W/m²K); Automatic controlled external shading, etc.* **~591/year**	**1418 (~473/ year)**	**Target 2013-2016 (incl.): 1890**	**2126 (~709/ year)**	**Total number of trainings:: 4725**
Construction – Civil engineering technician – Hydro-engineering - 5820103 (3rd Level of professional qualification) Employed: 4283	*Water/water heat pumps; Brine/water heat pumps (10-15%)* **~80/ year**	**193 (~64/ year)**	**Target 2013-2016 (incl.): 257**	**289 (~96/ year)**	**Total number of trainings: 642**
Construction – Builder – Indoor sheathings and surfaces - 5820306 (2nd Level of professional qualification) Employed: 5166	General trainings (technological core) for EE and RES in buildings (100%), including modules for correct installation of *Balanced ventilation with heat recovery (>80 %);, Underfloor heating systems; Cooling /air conditioning systems*; **~646/ year**	**1550 (~516/ year)**	**Target 2013-2016 (incl.): 2066**	**2325 (~775/ year)**	**Total number of trainings: 5166**
Construction – Builder – Outdoor sheathings and surfaces - 5820307	High insulation standard (< 0,18 W/m²K) (~40% more qualified specialists); **~216/ year**	**519 (~173/ year)**	**Target 2013-2016 (incl.): 690**	**776 (~259/ year)**	**Total number of trainings: 1725**

(2nd Level of professional qualification) Employed: 4312					
Construction – Builder – Roofing - 5820312 (2nd Level of professional qualification) Employed: 5177	General trainings (technological core) for EE and RES in buildings (100%), including modules *in Solar thermal for DHW; PV (rooftop and facade); Solar cooling systems; Air/water heat pumps; High insulation standard (< 0,18 W/m²K); high quality hydro insulation*; **~647/ year**	**1553 (~518/ year)**	**Target 2013-2016 (incl.): 2071**	**2339 (~777/ year)**	**Total number of trainings: 5177**
Construction – Builder – Assembler-installer – Window frames and glazing - 5820404 (2nd Level of professional qualification) Employed: 5447	*Triple glazing (15% more qualified specialists (realistic case);* **~102/ year**	**245 (~82/ year)**	**Target 2013-2016 (incl.): 327**	**368 (~123/ year)**	**Total number of trainings: 817**
	Automatic controlled external shading (10%); **~68/ year**	**164 (~55/ year)**	**Target 2013-2016 (incl.): 218**	**245 (~82/ year)**	**Total number of trainings: 545**
	Window installers (identified need of up to 69% better qualified specialists); **~470/ year**	**1128 (~376/ year)**	**Target 2013-2016 (incl.): 1503**	**1691 (~564/ year)**	**Total number of trainings: 3758**
Construction – Builder - Assembler–installer – Building insulations - 5820405 (2nd Level of professional qualification) Employed: 5447	*High insulation standard (< 0,18 W/m²K); hydro insulation (~40% more qualified specialists)*; **~272/ year**	**654 (~218/ year)**	**Target 2013-2016 (incl.): 872**	**981 (~327/ year)**	**Total number of trainings: 2179**
Total number of trainings					**63195**