

Aim and Objectives

Project's wider aim is to strengthen the relations between higher education system and the wider economic and social environment in Ukraine and to increase the relevance of higher education.

Project's specific objectives are:

1. Development, validation and implementation of the training course "Green Building Technologies" comprising a set of 8 modules that support the implementation of green technologies in architecture and construction in Ukraine.
2. Establishment of 7 energy efficiency testing laboratories in Ukrainian universities
3. Establishment of a virtual Green Building Technology Platform for the construction industry that will:
 - a. Provide online training courses for postgraduate students and existing specialists in the building industry based on the EQF.
 - b. Provide small and medium enterprises with research based solutions on green technologies informed by innovative cases studies.
4. Establishment of an International Network comprising universities-research-centres and enterprises to facilitate the implementation of green technologies in the construction industry.

The need to acquire knowledge, skills and competences in the area of green technology will be fulfilled by developing modules on: Building Information Modelling; Green Building Standards; Integrated Design; Energy modelling; Lifecycle costing; Resiliency and Climate Impact; Post Construction Optimisation; Energy Benchmark and Auditing.

The development and accreditation of the 8 modules on Green Building Technology will create awareness, will provide new knowledge to students and graduates who will work in the building industry in Ukraine. Architects and engineers in building industry will develop the knowledge, skills and competences to implement innovation in this industry from the design stage to the demolition stage. As a result in the coming years green technology solutions will be implemented faster and more efficient. The need for specialised staff in this area will be fulfilled. There will be at least 700 highly trained new specialists entering the job market per year.

The need to acquire practical skills on measuring the energy efficiency of existing and future building solutions will be met by developing 7 energy efficiency testing laboratories in seven Ukrainian universities. As a result, old buildings will be rehabilitated using the latest materials and technologies. New buildings will be designed and erected using sustainable and energy efficient materials. All of these will have a positive impact on the carbon emissions and on beneficiaries' comfort.

By establishing a virtual green technology platform graduates and existing specialists in the building industry will be able to update their knowledge and to access solutions provided by research and experience of companies from other countries that are more advanced in this area. The International Network will facilitate the exchange of experience between universities, enterprises and research centres in building industry in the country and as a result advanced practice will penetrate faster and efficient solutions will be spread more widely.

Impact of the project

The wider aim of the project, which is to radically enhance university-enterprise cooperation in the area of green building by technology in Ukraine, will be achieved through the synergic action of three main outputs of the project; 1. Fully operational Green Building Testing laboratories (GBT Lab) within Ukrainian universities; 2. The training programme "Green Building Technology" (GBT Programme); and 3. The University Enterprise Collaboration Network on Green Building Technology (GBT Network). In a nutshell the GBT Labs within universities will impact the target groups, researchers, Master, PhD, and LLL students by utilising the GBT Programme and the GBT Network portal will be the meeting point of researchers, entrepreneurs and investors for a long lasting impact at Institutional, local and national level.

INSTITUTIONAL. Taking into account the specific character of implementation of engineering projects (need for design, testing, piloting and production etc.) The green building testing laboratories will be established in the 7 Ukrainian universities. These will be equipped with modern equipment and free to use by the students and researchers. Moreover, students will be encouraged to use the facilities provided not only for the day-to-day educational process but also for research projects and consultancy work with local small building enterprises. A framework for collaboration with external partners from the industry will be developed and seeking commercialisation of research results will be organised in line with national regulations. The educational materials will be produced and included into the educational process of the universities as additional learning/teaching tools with further possibility of their inclusion into academic process of respective specialties as elective modules bearing ECTS weighting (normally 3 ECTS each).

LOCAL/REGIONAL. Project results are beneficial for the wider community as well, including researchers, staff, administrative bodies and business representatives. Personnel from other educational institutions will be informed about the project activities via dissemination campaigns organised by the participants. They will be encouraged to participate both in educational and practical activities of the building testing laboratories. Building industry and business representatives will be constantly involved in the GBT Labs activities as mentors and experts and therefore will establish reliable contacts with the educational institutions. It is foreseen that industry and business will be eager to use the GBTL facilities as means for finding solutions for their problems (HR, special technical solutions, rehabilitation of old buildings, new developments etc.)

NATIONAL. The development of the testing infrastructure in the seven beneficiary universities will cover a large territory of the country. Apart from being used for educational purposes the laboratories will constitute centres of excellence as small and medium companies could utilise the facilities and the specialists to enhance the products they offer. In this way, universities will be regarded by the industry as promoters of efficient solutions and it is expected that this will reinforce the role of these universities as promoters of scientific and technological solutions to practical problems.

Proposed activities within the work-packages for each partner

Work Package Ref.nr	Part nr	Partner acronym	Country	Number of staff days ¹					Role and tasks in the work package
				Cat 1	Cat 2	Cat 3	Cat 4	Total	
PREPAEATION	P1	BUCKS	UK		2			2	Collect data on existing experience in the UK
	P2	EMU	EE		12		4	16	Leader wp1 OP1.1 Responsible Contr.op1.3
	P3	TEIATH	GR		8		4	12	Collect experience in GR, Train the PC admin
	P4	ULL	E		2			2	Existing experience in Spanish universities; OP1.2
	P5	EVM	E		2			2	Existing experience in Spanish enterprises:Op1.2
	P6	KUL	BE		12		4	12	Existing experience in BE OP1.1 TrainOp1.2
	P7	USGM	IT		2			2	Existing experience in Italy OP1.1 Contr.op1.3
	P8	DoNACEA	UA		20		2	22	Existing experience in DoNACEA Op1.2
	P9	PSACEA	UA		20		2	22	Existing experience in PSACEA Contr.op1.3
	P10	IFNTUOG	UA		20		2	22	Existing experience in IFNTUOG; OP1.2
	P11	CNUT	UA		20		2	22	Existing experience in CNUT; Op1.2
	P12	KNUCEA	UA		20	10	4	34	Existing experience in KNUCEA Op1.2 Contr.op1.3
	P13	KNU	UA		20		2	22	Existing experience in KNU Op1.1 and OP1.2
	P14	DonNTU	UA		20		2	22	Existing experience in DonNTU op1.2 and op1.2
	P15	SPIV	UA		20		2	22	Existing experience in enterprises in UA
	P16	EECU	UA		20	20	8	48	Leader wp1 OP1.3 responsible
SUBTOTAL				0	210	30	38	288	

¹ Please see Programme Guide, Part B for your action, Table A – Project Implementation (amounts in Euro per day) Programme Countries and Table B - Project Implementation (amounts in Euro per day) Partner Countries.

Work Package Ref.nr	Part nr	Partner acronym	Country	Number of staff days ²					Role and tasks in the work package
				Cat 1	Cat 2	Cat 3	Cat 4	Total	
DEVELOPMENT 1	P1	BUCKS	UK		20		4	24	Op 2.1, Op3.1, op3
	P2	EMU	EE		20		4	24	Op3.1, op3.3, op3.4
	P3	TEIATH	GR		30		4	34	Op3.1, op3.2,
	P4	ULL	E		20		4	24	Op2.1, op3.1
	P5	EVM	E		20		4	24	Op2.1, op3.1
	P6	KUL	BE		40		16	56	Op2.1, op3.1, op3.2, op3.3
	P7	USGM	IT		20		4	24	Op2.1, op3.1, op3.2
	P8	DoNACEA	UA		164	6	16	186	Op 2.1, op2.2, op3.2, op3.3, op3.4
	P9	PSACEA	UA		184	6	16	206	Leader wp3 op2.1, op2.2, op3.1, op3.2
	P10	IFNTUOG	UA		164	6	16	186	Op 2.1, op2.2, op3.2, op3.3, op3.4
	P11	CNUT	UA		184	6	16	206	Leader wp2 op2.1, op2.2, op3.1, op3.2
	P12	KNUCEA	UA		164	6	16	186	Op 2.1, op2.2, op3.2, op3.3, op3.4
	P13	KNU	UA		164	6	16	186	Op 2.1, op2.2, op3.2, op3.3, op3.4
	P14	DonNTU	UA		164	6	16	186	Op 2.1, op2.2, op3.2, op3.3, op3.4
	P15	SPIV	UA		88		4	92	Op2.1, op3.2,op3.3
	P16	EECU	UA		88		4	92	Op2.1, op3.2,op3.3
SUBTOTAL				0	1534	42	160	1736	

² Please see Programme Guide, Part B for your action, Table A – Project Implementation (amounts in Euro per day) Programme Countries and Table B - Project Implementation (amounts in Euro per day) Partner Countries.

Work Package Ref.nr	Part nr	Partner acronym	Country	Number of staff days ³					Role and tasks in the work package
				Cat 1	Cat 2	Cat 3	Cat 4	Total	
QUALITY PLAN	P1	BUCKS	UK		6			6	Op4.2
	P2	EMU	EE		6			6	Op4.2
	P3	TEIATH	GR		6			6	Op4.2
	P4	ULL	E		6			6	Op4.2
	P5	EVM	E		6			6	Op4.2
	P6	KUL	BE		10		4	14	Op4.1 op4.2
	P7	USGM	IT		6			6	Op4.2
	P8	DoNACEA	UA		18			18	Op4.1, op4.2
	P9	PSACEA	UA		18			18	Op4.1, op4.2
	P10	IFNTUOG	UA		18			18	Op4.1, op4.2
	P11	CNUT	UA		18			18	Op4.1, op4.2
	P12	KNUCEA	UA		36		8	44	Leader wp4 op4.1
	P13	KNU	UA		18			18	Op4.1, op4.2
	P14	DonNTU	UA		18			18	Op4.1, op4.2
	P15	SPIV	UA		18			18	Op4.2
	P16	EECU	UA		18			18	Op4.2
SUBTOTAL				0	226		12	338	

³ Please see Programme Guide, Part B for your action, Table A – Project Implementation (amounts in Euro per day) Programme Countries and Table B - Project Implementation (amounts in Euro per day) Partner Countries.

Work Package Ref.nr	Part nr	Partner acronym	Country	Number of staff days ⁴					Role and tasks in the work package
				Cat 1	Cat 2	Cat 3	Cat 4	Total	
DISSEMINATION & EXPLOITATION	P1	BUCKS	UK		12			12	Dis&expl events in PC OP5.2 Network Op5.3
	P2	EMU	EE		10			10	Diss events in KNUCEA Op5.2 Network OP5.3
	P3	TEIATH	GR		10			10	Diss events DonNACEA, PSACEA Network OP5.3
	P4	ULL	E		10			10	Diss Events IFNTOG, CNUT, Network Op5.3
	P5	EVM	E		10			10	Dis Events KNU, DonNTU, Netwok Op5.3
	P6	KUL	BE		10			10	Diss events KNUCEA, KNU Network OP5.3
	P7	USGM	IT		10			10	Diss events IFNTOG, CNUT Network OP5.3
	P8	DoNACEA	UA		48		12	60	D&S PlanOp5.1, D&S eventsOp5.2, NetworkOp5.3
	P9	PSACEA	UA		48		12	60	D&S PlanOp5.1, D&S eventsOp5.2, NetworkOp5.3
	P10	IFNTUOG	UA		48		12	60	D&S PlanOp5.1, D&S eventsOp5.2, NetworkOp5.3
	P11	CNUT	UA		48		12	60	D&S PlanOp5.1, D&S eventsOp5.2, NetworkOp5.3
	P12	KNUCEA	UA		48		12	60	D&S PlanOp5.1, D&S eventsOp5.2, NetworkOp5.3
	P13	KNU	UA		48		12	60	D&S PlanOp5.1, D&S eventsOp5.2, NetworkOp5.3
	P14	DonNTU	UA		48		12	60	D&S PlanOp5.1, D&S eventsOp5.2, NetworkOp5.3
	P15	SPIV	UA		48		12	60	D&S events Op5.2, NetworkOp5.3
	P16	EECU	UA		54		16	70	Leader WP5 OP5.1, Op5.2, OP5.3
SUBTOTAL				0	510		112	622	

⁴ Please see Programme Guide, Part B for your action, Table A – Project Implementation (amounts in Euro per day) Programme Countries and Table B - Project Implementation (amounts in Euro per day) Partner Countries.

Work Package Ref.nr	Part nr	Partner acronym	Country	Number of staff days ⁵					Role and tasks in the work package
				Cat 1	Cat 2	Cat 3	Cat 4	Total	
MANAGEMENT	P1	BUCKS	UK	60			260	320	Leader wp6 Academic and financial management and reporting OP6.1 and OP6.2
	P2	EMU	EE	9			24	33	Quarterly reports Op6.1 and OP6.2,attend meetings
	P3	TEIATH	GR	9			24	33	Quarterly reports Op6.1 and OP6.2,attend meetings
	P4	ULL	E	9			24	33	Quarterly reports Op6.1 and OP6.2,attend meetings
	P5	EVM	E	9			24	33	Quarterly reports Op6.1 and OP6.2,attend meetings
	P6	KUL	BE	9			24	33	Quarterly reports Op6.1 and OP6.2,attend meetings
	P7	USGM	IT	9			24	33	Quarterly reports Op6.1 and OP6.2,attend meetings
	P8	DoNACEA	UA	18			48	66	Quarterly reports Op6.1 and OP6.2,attend meetings
	P9	PSACEA	UA	18			48	66	Quarterly reports Op6.1 and OP6.2,attend meetings
	P10	IFNTUOG	UA	18			48	66	Quarterly reports Op6.1 and OP6.2,attend meetings
	P11	CNUT	UA	18			48	66	Quarterly reports Op6.1 and OP6.2,attend meetings
	P12	KNUCEA	UA	18			48	66	Quarterly reports Op6.1 and OP6.2,attend meetings
	P13	KNU	UA	18			48	66	Quarterly reports Op6.1 and OP6.2,attend meetings
	P14	DonNTU	UA	18			48	66	Quarterly reports Op6.1 and OP6.2,attend meetings
	P15	SPIV	UA	12			36	48	Quarterly reports Op6.1 and OP6.2,attend meetings
	P16	EECU	UA	12			36	48	Quarterly reports Op6.1 and OP6.2,attend meetings
SUBTOTAL				264			812	1076	
TOTAL				264	2490	72	1134	3960	

⁵ Please see Programme Guide, Part B for your action, Table A – Project Implementation (amounts in Euro per day) Programme Countries and Table B - Project Implementation (amounts in Euro per day) Partner Countries.