



# Funded Projects under Horizon 2020

## Secure, clean and efficient energy

### Energy Efficiency Calls 2014

Source: European Union Open Data Portal

(<https://open-data.europa.eu/en/data/dataset/cordis-h2020projects-under-horizon-2020-2014-2020>)

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This document gives information on calls and funded projects of the EU Framework Programme for Research and Innovation Horizon 2020 for the Societal Challenge – Secure, clean and efficient energy for the year 2014.

The data used in this document was extracted from the tables available at the website of the European Union Open Data Portal. More data is available in those tables.

## List of abbreviations:

Type of Action:

IA: Innovation action

RIA: Research and Innovation action

CSA: Coordination and Support action

## Structure of the document:

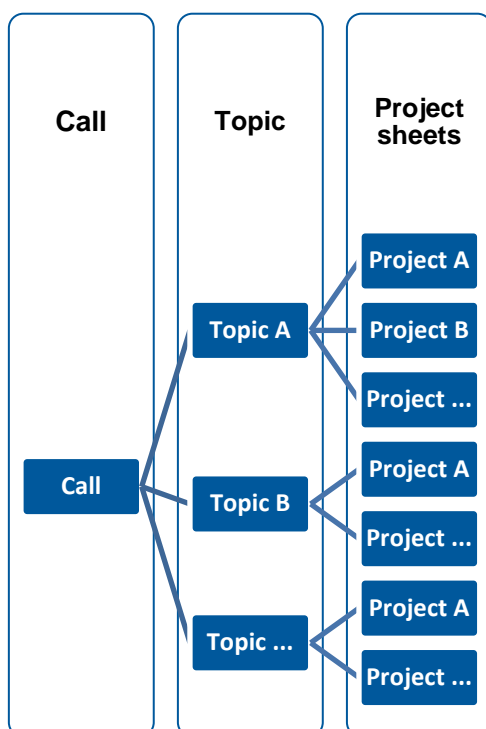
List of Calls

Table: Overview of all Energy Efficiency Calls in 2014

Individual Call:

Table: List of topics

Project sheets of projects belonging to a topic following the structure below:



# Secure, clean and efficient energy

## List of Calls Energy Efficiency

### Work Programme 2014

<b>H2020-EE-2014-1-PPP</b>	
<b>Budget: 21 Mio.€</b>	
<b>Deadline: 20.03.2014</b>	
Topic	Title
EE-01	Manufacturing of prefabricated modules for renovation of building
EE-03	Energy strategies and solutions for deep renovation of historic buildings
EE-18	New technologies for utilization of heat recovery in large industrial systems, considering the whole energy cycle from heat production to transformation, delivery and end use

<b>H2020-EE-2014-2-RIA</b>	
<b>Budget: 17 Mio.€</b>	
<b>Deadline: 05.06.2014</b>	
Topic	Title
EE-11	New ICT-based solutions for energy efficiency
EE-12	Socioeconomic research on energy efficiency
EE-13	Technology for district heating and cooling

<b>H2020-EE-2014-3-MarketUptake</b>	
<b>Budget: 42.5 Mio.€</b>	
<b>Deadline: 05.06.2014</b>	
Topic	Title
EE-04	Construction skills
EE-05	Increasing energy performance of existing buildings through process and organisation innovations and creating a market for deep renovation
EE-07	Enhancing the capacity of public authorities to plan and implement sustainable energy policies and measures
EE-08	Public procurement of innovative sustainable energy solutions
EE-09	Empowering stakeholders to assist public authorities in the definition and implementation of sustainable energy policies and measures

EE-10	Consumer engagement for sustainable energy
EE-14	Removing market barriers to the uptake of efficient heating and cooling solutions
EE-15	Ensuring effective implementation of EU product efficiency legislation
EE-16	Organisational innovation to increase energy efficiency in industry
EE-19	Improving the financeability and attractiveness of sustainable energy investments
EE-21	Development and market roll-out of innovative energy services and financial schemes for sustainable energy

<b>H2020-EE-2014-4-PDA</b>	
<b>Budget: 17 Mio.€</b>	<b>Deadline: 05.06.2014</b>
<b>Topic</b>	<b>Title</b>
EE-20	Project development assistance for innovative bankable and aggregated sustainable energy investment schemes and projects

## CALL: H2020-EE-2014-1-PPP

Topic	Title	Number of funded projects	Total EU-contribution [€]
EE-01	Manufacturing of prefabricated modules for renovation of building	3	13,096,962.35
EE-03	Energy strategies and solutions for deep renovation of historic buildings	1	4,962,375.00
EE-18	New technologies for utilization of heat recovery in large industrial systems, considering the whole energy cycle from heat production to transformation, delivery and end use	1	3,989,247.50
<b>Total</b>		<b>5</b>	<b>22,048,583.85</b>

**Topic EE-01 – Projects:**

<b>Acronym: BERTIM</b>	
<b>Title:</b> Building energy renovation through timber prefabricated modules	
<b>Starting date:</b> 01.06.2015	<b>End date:</b> 01.06.2019
<b>Total cost:</b> 4,995,208.75 €	<b>EU max. contribution:</b> 4,148,435.25 €
<b>Type of Action:</b> IA	
<b>Coordinator:</b> Fundacion Tecnalia Research & Innovation (ES)	
<b>Participants:</b>	
<ul style="list-style-type: none"> <li>▪ Empresa Municipal de la Vivienda y Suelo de Madrid SA;</li> <li>▪ Collage Arkitekter AB</li> <li>▪ Sp Sveriges Tekniska Forskningsinstitut AB;</li> <li>▪ Institut Technologique FCBA (Foretcellulose Bois-Construction Ameublement)</li> </ul>	<ul style="list-style-type: none"> <li>▪ Egoi SA;</li> <li>▪ Martinsons Byggsystem KB;</li> <li>▪ Pobi Structures;</li> <li>▪ Brabrand Boligforening;</li> <li>▪ Asm Centrum Badan I Analiz Rynku SP. Z O O;</li> <li>▪ Technische Universitaet Muenchen;</li> <li>▪ Dietrich's France</li> </ul>
<b>Countries:</b> DE; FR; ES; SE; DK; PL	
<b>Objectives:</b>	
<p>About 40% of the overall energy consumption in Europe is related to the building sector and represents about 1/3 of Europe's CO<sub>2</sub> emissions. The successful accomplishment of the emission reduction target by 2050, involves the need to increase the rate of retrofitting of the inefficient building stock up to 2.9%. In order to increase the renovation rate, more efficient renovation processes from design to manufacturing phase are needed. The use of prefabricated modules for renovation reduces on-site works, installation time, works intrusiveness, minimising the consumption of raw material; however there is a need to define holistic methodologies to adapt prefabrication processes to individual renovation solutions as well as to mass production, linked to computer design tools.</p> <p>Giving answer to the mentioned needs BERTIM will provide: (1) High energy performance prefabricated modules for deep renovation, integrating windows, insulation materials, collective HVAC systems, renewable energy systems and energy supply systems. The modules will be based in timber and recyclable materials for a low carbon foot print. The assembly system will guarantee a very little time in the installation and low disturbance to tenants. (2) An innovative holistic renovation process methodology based on a digital workflow from design to installation phase. In order to support the renovation process, a renovation project design tool oriented to SME integrating BIM with CAD/CAM tools and assuring the interoperability with CNC machines for mass manufacturing processes will be developed and implemented in three industrial settings. (3) Affordable business opportunities for different stakeholders as potential leaders in the launching of the renovation process. The whole renovation process and the developed timber modules will be validated in a full-scale research infrastructure, and then, they will be demonstrated in two real buildings in two different climatic zones (South and North Europe).</p>	

<b>Acronym: IMPRESS</b>	
<b>Title:</b> New Easy to Install and Manufacture PRE-Fabricated Modules Supported by a BIM based Integrated Design ProceSS	
<b>Starting date:</b> 01.06.2015	<b>End date:</b> 01.12.2018
<b>Total cost:</b> 6,072,790 €	<b>EU max. contribution:</b> 4,583,777.50 €
<b>Type of Action:</b> IA	
<b>Coordinator:</b> Integrated Environmental Solutions Limited (UK)	
<b>Participants:</b>	
<ul style="list-style-type: none"> <li>▪ Municipiul Drobeta Turnu Severin;</li> <li>▪ The Queen's University of Belfast;</li> <li>▪ Geonardo Environmental Technologies Ltd;</li> <li>▪ Temperature Limited;</li> <li>▪ CSP SRL;</li> <li>▪ Biessse Tape Solutions SPA;</li> <li>▪ Council of the City of Coventry;</li> <li>▪ Bergamo Technologie Spzoo;</li> <li>▪ Stam SRL</li> </ul>	<ul style="list-style-type: none"> <li>▪ Sviluppo Tecnologie e Ricerca per L'edilizia Sismicamente Sicura ed Ecosostenibile Scarl;</li> <li>▪ Tekla (UK) Limited;</li> <li>▪ Hpucem ERL;Novel Technologies Center SRL;</li> <li>▪ Techrete Ireland Limited;</li> <li>▪ Alonso Hernandez &amp; Asociados Arquitectos SL;</li> </ul>
<b>Countries:</b> RO; UK; HU; IE; IT; ES; PL	
<b>Objectives:</b>	
<p>IMPRESS will develop three different prefabricated panels for buildings: (i) a polyurethane based insulated panel with improved thermal performance and light radiation and (ii) a thin, lightweight pre-cast concrete sandwich panel, with optimum thermal and weathering resistance, both of which are suitable for overcladding; (iii) a lightweight pre-cast concrete sandwich panel incorporating Phase Change Materials (PCM) to adapt the thermo-physical properties of the building envelope and enable optimum passive heating and cooling benefits, suitable for recladding. Innovative nano/micro particle based coatings, suitable for 3D printing, will be also developed to achieve anti-corrosion resistance, high mechanical strength, improved solar reflectance, improved ageing resistance and anti-vandalism properties. To create the panels, an innovative manufacturing process will be created that includes Reconfigurable Moulding (RM) techniques, 3D laser scanning and 3D printed technology. In addition, 3D printed microstructured formworks will be developed as permanent external layer for the polyurethane panel to match the existing building aesthetics and provide solar radiation efficiency. The overall manufacturing process will (i) allow for mass production of panels, which take into account complex architectural and aesthetic issues, (ii) allow for faster production while lowering prefabrication costs and (iii) develop new controlled and cost effective solutions.</p> <p>IMPRESS will also develop a new Iterative Design Methodology, which will incorporate all stages of the Design-Construct-Install-Operate process. This will be integrated with a BIM cloud based database focussing on the interoperability between software tools required for the prefabricated process. Furthermore, new penalty based business models will be investigated. The final result will be demonstrated on two existing buildings where final as-built product performance will be validated against the initial design.</p>	

<b>Acronym: MORE-CONNECT</b>	
<b>Title:</b> Development and advanced prefabrication of innovative, multifunctional building envelope elements for MODular RETrofitting and CONNECTions	
<b>Starting date:</b> 01.12.2014	<b>End date:</b> 01.12.2018
<b>Total cost:</b> 5,557,263 €	<b>EU max. contribution:</b> 4,364,748.60 €
<b>Type of Action:</b> IA	
<b>Coordinator:</b> Huygen Installatie Adviseurs (NL)	
<b>Participants:</b>	
<ul style="list-style-type: none"> <li>▪ Universidade do Minho;</li> <li>▪ Timmerfabriek Webo BV;</li> <li>▪ Stichting Zuyd Hogeschool;</li> <li>▪ Ceske Vysoke Uceni Technicke V Praze;</li> <li>▪ Latvian Wood Construction Cluster;</li> <li>▪ MATEK AS;</li> <li>▪ Tallinna Tehnikaulikool;</li> <li>▪ Innogie APS;</li> </ul>	<ul style="list-style-type: none"> <li>▪ Ref Ehitustood OU;</li> <li>▪ Zemgales Tehnologiskais Centrs;</li> <li>▪ BJW BV;</li> <li>▪ Rd Rymarov SRO;</li> <li>▪ Invela;</li> <li>▪ Darkglobe;</li> <li>▪ Cenergia Energy Consultants APS;</li> <li>▪ Rigas Tehniska Universitate;</li> <li>▪ Econcept AG</li> </ul>
<b>Countries:</b> PT; NL; CZ; LV; EE; DK; CH	
<b>Objectives:</b>	
<p>Objective is to develop and to demonstrate technologies and components for prefabricated modular renovation elements in five geo-clusters in Europe. This includes prefabricated durable, innovative, modular composed building envelope elements for the total building envelop for the renovation market, including the prefab integration of multifunctional components for climate control, energy saving, building physics and aesthetics, with advanced easy to use plug&amp;play connections (mechanical, hydraulic, air, electric, prefab airtight joints). MORE-CONNECT offers tailor-made renovation concepts, from a standardized industrialized manufacturing and assembly process, in a one-shop-stop concept to the end-user, with a nearly zero energy performance of the total modular renovation concepts, a maximum return on investment less than 8 years and with a limitation of the total renovation time of 5 days. The concept offers performance guarantee for individual energy use and the quality of the indoor environment. Product innovation includes the selection of sustainable materials and sustainable detailing. A specific feature is the development of Plug &amp; Play connection of modular components. Smart combinations of components and executions ensure extra performances for NZE concepts, healthy indoor environment, safety, accessibility. Components communicate by integrated (wireless) sensors and control components for performance diagnostics and control. Process innovation will be achieved by the use of advanced geomatics to make inventories of buildings. Web based tools will link building characteristics, building (energy) potentials, and end-users demands to program requirements. This will be processed in BIM systems for the steering industrial process and enhanced quality control. This makes it possible to make tailor-made solutions for individuals, in mass production (n =1 series). Business models and advanced energy services (one-stop-shop) will be developed for each geo cluster.</p>	



**Topic EE-03 – Project:**

<b>Acronym: RIBuild</b>	
<b>Title:</b> Robust Internal Thermal Insulation of Historic Buildings	
<b>Starting date:</b> 01.01.2015	<b>End date:</b> 01.01.2020
<b>Total cost:</b> 5,331,375 €	<b>EU max. contribution:</b> 4,962,375 €
<b>Type of Action:</b> RIA	
<b>Coordinator:</b> Aalborg Universitet (DK)	
<b>Participants:</b> <ul style="list-style-type: none"> <li>▪ Technische Universitaet Dresden;</li> <li>▪ Universita Politecnica Delle Marche;</li> <li>▪ Haute Ecole Specialisee de Suisse Occidentale;</li> <li>▪ SP Sveriges Tekniska Forskningsinstitut AB;</li> <li>▪ Danmarks Tekniske Universitet;</li> <li>▪ Rigas Tehniska Universitate;</li> <li>▪ Intro Flex APS;</li> <li>▪ Erik Moller Arkitekter AS;</li> <li>▪ Katholieke Universiteit Leuven</li> </ul>	
<b>Countries:</b> DE; IT; DK; CH; SE; LV; BE	
<b>Objectives:</b> <p>RIBuild will strengthen the knowledge on how and under what conditions internal thermal insulation is to be implemented in historic buildings, without compromising their architectural and cultural values, with an acceptable safety level against deterioration and collapse of heavy external wall structures. The general objective of RIBuild is to develop effective, comprehensive decision guidelines to optimise the design and implementation of internal thermal insulation in historic buildings across the EU. RIBuild focuses on heavy external walls made of stone, brick and timber framing, as most historic buildings are made of these materials. The general objective is achieved through three main activities</p> <ul style="list-style-type: none"> <li>• To obtain a thorough knowledge level to characterise the eligibility of the building for a deep internal thermal insulation renovation. This knowledge is obtained through screening of historic buildings, investigation of material properties and threshold values for failure</li> <li>• To determine the conditions under which different internal insulation measures are reliable and affordable measures based on probabilistic modelling of the hygrothermal performance, the environmental impact and the cost/benefit</li> <li>• To develop a set of comprehensive decision guidelines, which are demonstrated in a number of buildings. RIBuild addresses the most difficult retrofitting measure of historic buildings: internal thermal insulation. The adaption of knowledge developed by RIBuild contributes to sustainable historic buildings with improved energy efficiency implying an easier conversion of energy supply from inefficient fossil fuels to efficient renewable energy sources. RIBuild also assesses the hygrothermal performance of the building construction, thus no collateral damage occurs; in case of failure an easy roll back of the measures is possible. The guidelines developed in RIBuild strongly support the deep and holistic retrofitting approach which historic buildings face in the coming years.</li> </ul>	

**Topic EE-18 – Project:**

<b>Acronym:</b> TASIO	
<b>Title:</b> Waste Heat Recovery for Power Valorisation with Organic Rankine Cycle Technology in Energy Intensive Industries	
<b>Starting date:</b> 01.12.2014	<b>End date:</b> 01.06.2018
<b>Total cost:</b> 3,989,247.50 €	<b>EU max. contribution:</b> 3,989,247.50 €
<b>Type of Action:</b> RIA	
<b>Coordinator:</b> Fundacion Tecnalia Research & Innovation (ES)	
<b>Participants:</b> <ul style="list-style-type: none"> <li>▪ Vidrala S.A.;</li> <li>▪ Centro Sviluppo Materiali SPA;</li> <li>▪ Turboden SRL;</li> <li>▪ D'appolonia SPA;</li> <li>▪ Gerdau Aceros Especiales Europa SL;</li> <li>▪ Holcim (Romania) SA;</li> <li>▪ Geonardo Environmental Technologies Ltd</li> </ul>	
<b>Countries:</b> ES; IT; RO; HU	
<b>Objectives:</b> <p>The main objective of the project is to develop solutions to recover the waste heat produced in energetic intensive processes of industrial sectors such as cement, glass, steelmaking and petrochemical and transform it into useful energy. These solutions will be designed after an evaluation of the energetic situation of these four industries and will deal with the development of Waste Heat Recovery Systems (WHRS) based on the Organic Rankine Cycle (ORC) technology. This technology is able to recover and transform the thermal energy of the flue gases of EII into electric power for internal or external use. Furthermore, a WHRS will be developed and tested to recover and transform the thermal energy of the flue gases of EII into mechanical energy for internal use (compressors). In order to reach this objective several challenging innovative aspects will have to be approached by the consortium. It is planned to design and develop a multisectorial direct heat exchanger to transfer heat directly from the flue gases to the organic fluid of the ORC system and to develop new heat conductor and anticorrosive materials to be used in parts of the heat exchanger in contact with the flue gases. These aspects will be completed by the design and modelling of a new integrated monitoring and control system for the addressed sectors. The consortium consists of 8 partners from 4 European countries. They cover several relevant sectors of the energy intensive industry, namely cement, steel, glass and petrochemical sectors. The industrial involvement in the project is significant and the project addresses the implementation of a full demonstration of the WHRS for electrical energy generation in one of the industrial partners (HOLCIM) and a semi-validation of the WHRS for air compressors energy supply system at pilot scale.</p>	

## CALL: H2020-EE-2014-2-RIA

Topic	Title	Number of funded projects	Total EU-contribution [€]
EE-11	New ICT-based solutions for energy efficiency	5	9,442,974.25
EE-12	Socioeconomic research on energy efficiency	5	5,097,619.50
EE-13	Technology for district heating and cooling	3	6,071,619.69
<b>Total</b>		<b>13</b>	<b>20,612,213.44</b>

**Topic EE-11 – Projects:**

<b>Acronym: OrbEEt</b>	
<b>Title:</b> ORganizational Behaviour improvement for Energy Efficient adminisTrative public offices	
<b>Starting date:</b> 01.03.2015	<b>End date:</b> 01.03.2018
<b>Total cost:</b> 1,776,625 €	<b>EU max. contribution:</b> 1,776,625 €
<b>Type of Action:</b> RIA	
<b>Coordinator:</b> Solintel M&P SL (ES)	
<b>Participants:</b> <ul style="list-style-type: none"> <li>▪ Coventry University;</li> <li>▪ Ayuntamiento de Asparrena;</li> <li>▪ Municipality of Pernik;</li> <li>▪ Universitätsklinikum Erlangen;</li> <li>▪ Bundesministerium für Familien und Jugend;</li> <li>▪ Hypertech (Chaipertek) Anonymos Viomichaniki Emporiki Etaireia Pliroforikis Kai Neon Technologion;</li> <li>▪ Boc Asset Management GmbH;</li> <li>▪ Grindrop Ltd;</li> <li>▪ Balkanika Energy AD</li> </ul>	
<b>Countries:</b> UK; ES; BG; DE; AT; EL	
<b>Objectives:</b> <p>Tertiary sector buildings sector consume a sizeable proportion of EU total energy consumption and the majority of consumption is directly attributed to the operational phase of the building life-cycle. Occupant behaviour is a major cause of this consumption. OrbEEt proposes an ICT-based framework to induce behaviour change toward energy efficiency by transforming energy measurements into personalized feedback delivered through engaging user interfaces. To achieve this challenge, OrbEEt foresees dynamic, spatially fine-grained extensions of building-level Operational Rating methodologies and Display Energy Certificates to provide a detailed view of energy use in office spaces, business processes and organizational entities rather than entire buildings. The fusion of information from Building Information Models, Business Process Models and real-time energy use measurement via a comprehensive ICT cloud service - the Systemic Enterprise Operational Rating framework - will enable energy use tracking and will establish direct accountability of people, processes and spaces toward overall consumption.</p> <p>Exposing the direct influence of occupant behaviour on energy use enables the design and successful deployment of behavioural change campaigns in public organization buildings. OrbEEt proposes interventions appealing to intrinsic/extrinsic human motivators through intra-organization social competitions and organization-wide social collaboration endeavours. The OrbEEt framework and behavioural change interventions will undergo real-life pilot validation in four EU public buildings that provide the business, cultural and geographical diversity for demonstration of result effectiveness and transferability.</p> <p>Finally, the OrbEEt consortium will use a User Driven Innovation Approach throughout its development, deployment and validation of phases to leverage and actively support Open Innovation and the EU Cleanweb/start-up community toward further exploitation of its outcomes.</p>	

<b>Acronym: ENTROPY</b>	
<b>Title:</b> Design of an innovative energy-aware it ecosystem for motivating behavioural changes towards the adoption of energy efficient lifestyles	
<b>Starting date:</b> 01.09.2015	<b>End date:</b> 01.09.2018
<b>Total cost:</b> 2,439,467.50 €	<b>EU max. contribution:</b> 1,997,592.50 €
<b>Type of Action:</b> RIA	
<b>Coordinator:</b> Universidad de Murcia (ES)	
<b>Participants:</b>	
<ul style="list-style-type: none"> <li>▪ Universitaet Innsbruck;</li> <li>▪ Hyperborea SRL;</li> <li>▪ Haute Ecole Specialisee de Suisse Occidentale;</li> <li>▪ Drustvo Za Konsalting, Razvoj I Implementaciju Informacionih I Komunikacionih Tehnologija Dunavnet DOO;</li> </ul>	<ul style="list-style-type: none"> <li>▪ Gioumpitek Meleti Schediasmos Ylopoiisi Kai Polisi Ergon Pliroforikis Etaireia Periorismenis Efthynis;</li> <li>▪ Polo Navacchio S.p.A.;</li> <li>▪ Athens University of Economics and Business - Research Center;</li> <li>▪ Intelen Services Limited</li> </ul>
<b>Countries:</b> AT; IT; CH; RS; EL; CY	
<b>Objectives:</b>	
<p>Taking into account the fact that buildings constitute the largest end-use energy consuming sector, the design and development of solutions targeted at reducing their energy consumption based on the adoption of energy efficient techniques and the active engagement of citizens/occupants is considered crucial. Innovative solutions have to be implemented upon properly understanding the main energy consuming factors and trends, as well as properly modeling and understanding the citizens' behaviour and the potential for lifestyle changes. The ENTROPY project addresses this challenge by building upon the integration of technologies that facilitate the deployment of innovative energy aware IT ecosystems for motivating end-users' behavioural changes and namely: (1) the Internet of Things that provides the capacity for interconnecting numerous devices and applying energy-efficient communication protocols, (2) the evolvement of advanced Data Modelling and Analysis techniques that support the realization of semantic models and knowledge extraction mechanisms and (3) the Recommendation and Gamification eras that can trigger interaction with relevant users in social networks, increase end users' awareness with regards to ways to achieve energy consumption savings in their daily activities and adopt energy efficient lifestyles as well as provide a set of energy efficient recommendations and motives. Novel practices that fully integrate information collected from a set of sensor networks and mobile crowd sensing activities are going to be exploited along with processes for monitoring, reporting and analysing sets of data with regards to energy consumption and the behavioural profile of citizens. The engagement and inclusion of end users will be strongly supported upon the development of a set of serious games and personalised applications. The designed IT ecosystem is planned to be validated in three pilot sites.</p>	

<b>Acronym:</b> TRIBE	
<b>Title:</b> TRaining Behaviours towards Energy efficiency: Play it!	
<b>Starting date:</b> 01.03.2015	<b>End date:</b> 01.03.2018
<b>Total cost:</b> 2,000,032.50 €	<b>EU max. contribution:</b> 2,000,031.75 €
<b>Type of Action:</b> RIA	
<b>Coordinator:</b> Fundacion Circe Centro de Investigacion de Recursos y Consumos Energeticos (ES)	
<b>Participants:</b> <ul style="list-style-type: none"> <li>▪ Acciona Infraestructuras S.A.;</li> <li>▪ Ozyegin Universitesi;</li> <li>▪ Bio Intelligence Service;</li> <li>▪ Interactive Institute Swedish ICT AB;</li> <li>▪ Sociedad Municipal Zaragoza Vivienda SL;</li> <li>▪ Universitaet Graz</li> </ul>	
<b>Countries:</b> ES; TR; FR; SE; AT	
<b>Objectives:</b> <p>TRIBE project aims to contribute to a citizens' behaviour change towards energy efficiency in public buildings, through their engagement in the experience of playing a social game, linked by ICT to real time data collected from 5 pilot buildings hosting around 1.300 regular users (employees, tenants...) and almost 12.000 eventual users (visitors). The targeted average energy savings in the pilots is 24,8% of the current energy consumption. TRIBE project will carry out serious game aims to engage more than 750.000 players by the end of the project, involving users of the targeted pilot facilities and their social networks.</p> <p>As a result of the analysis and developments accomplished using the pilot cases of the TRIBE project, and in addition to the game that will serve to collect all the relevant information, a whole and very broad number of tools and guidelines named TRIBE pack will be set up to be used by public building tenants and owners. The goal is foster the spread of the public building users behaviour change as well as to support the deployment of ICTs for energy efficiency among public building owners and operators. The content of the final TRIBE pack will include; (1) an initial energy audit and diagnosis, (2) the development of a virtual pilot in conformity with the image of their real buildings, (3) an adapted ICT for energy efficiency deployment plan, (4) a funding scheme merging existing instruments with clean web solutions and (5) a user engagement campaign addressing the specific behaviour change challenges.</p>	

<b>Acronym: EnerGAware</b>	
<b>Title:</b> Energy Game for Awareness of energy efficiency in social housing communities	
<b>Starting date:</b> 01.02.2015	<b>End date:</b> 01.02.2018
<b>Total cost:</b> 1,963,225 €	<b>EU max. contribution:</b> 1,963,225 €
<b>Type of Action:</b> RIA	
<b>Coordinator:</b> Universitat Politecnica de Catalunya (ES)	
<b>Participants:</b>	
<ul style="list-style-type: none"> <li>▪ Advantic Sistemas y Servicios SL;</li> <li>▪ University of Plymouth;</li> <li>▪ EDF Energy R&amp;D UK Centre Limited;</li> </ul>	<ul style="list-style-type: none"> <li>▪ Fremem CORP;</li> <li>▪ Instituto Superior de Engenharia do Porto;</li> <li>▪ Devon And Cornwall Housing Ltd</li> </ul>
<b>Countries:</b> ES; UK; FR; PT	
<b>Objectives:</b>	
<p>The main objective of the EnerGAware project is to achieve a 15-30% energy consumption and emissions reduction in a social housing pilot and increase the social tenants' understanding and engagement in energy efficiency.</p> <p>The EnerGAware project will develop and test, in publically owned social housing, a serious game that will be linked to the actual energy consumption (smart meter data) of the game user's home and embedded in social media and networking tools. The solution fits within all three ICT areas suggested in the topic EE-11 scope: gaming, social networking and personalised data driven applications.</p> <p>The EnerGAware solution will provide an innovative IT ecosystem in which users can design their own virtual home and Avatar and learn about the potential energy savings from installing energy-efficiency measures and changing user behaviour, whilst maintaining the comfort of their Avatar. The user will need to learn to balance the energy consumption, comfort and financial cost of their actions. Energy savings achieved both virtually in the game, calculated by building performance simulation, and in reality, in the users' actual homes, measured through smart meter data, will enable progression in the serious game. The social media features will provide users a platform to share data of their achievements, compete with each other, give energy advice, as well as, join together to form virtual energy communities.</p> <p>The EnerGAware solution will be developed and deployed with the 'cleanweb' philosophy in mind: "Capital light, Quick to market and Quick to scale", therefore the EnerGAware project will aim to go beyond just testing in a social housing pilot, but will seek commercial exploitation of the solution at the end of the project, through our industrial partners, in particular EDF Energy, a global energy provider, with 38 million European energy customers.</p>	

<b>Acronym: GreenPlay</b>	
<b>Title:</b> Game to promote energy efficiency actions	
<b>Starting date:</b> 01.03.2015	<b>End date:</b> 01.03.2018
<b>Total cost:</b> 1,705,500 €	<b>EU max. contribution:</b> 1,705,500 €
<b>Type of Action:</b> RIA	
<b>Coordinator:</b> Chambre de Commerce et D'industrie de Bayonne Pays Basque (FR)	
<b>Participants:</b> <ul style="list-style-type: none"> <li>▪ Egreen;</li> <li>▪ Ikasplay SL;</li> <li>▪ Budapesti Muszaki Es Gazdasagtudomanyi Egyetem;</li> <li>▪ Euroquality SARL;</li> <li>▪ Fundacion Axencia Intermunicipal da Enerxia de Vigo</li> </ul>	
<b>Countries:</b> FR; ES; HU	
<b>Objectives:</b> <p>The GreenPlay project consists in raising awareness among citizens through the implementation of a real time monitoring energy consumption platform and the development of a serious game.</p> <p>This system will consist of four key elements:</p> <ul style="list-style-type: none"> <li>• A monitoring energy consumption in real time</li> <li>• A web-based platform to monitor its consumption</li> <li>• Advice and challenges available for users on the platform to reduce consumption</li> <li>• A serious game to raise awareness of users</li> </ul> <p>The demonstration of this project will take place in three European cities and reach at least 200 homes. These targeted homes located in public buildings will have to fulfil two conditions:</p> <ol style="list-style-type: none"> <li>i. Being heated with electricity</li> <li>ii. Having an internet access</li> </ol> <p>The expected impact of the solution is to decrease by 30% the energy consumption of the testing homes.</p>	



**Topic EE-12 – Projects:**

<b>Acronym: IN-BEE</b>	
<b>Title:</b> Assessing the intangibles: the socioeconomic benefits of improving energy efficiency	
<b>Starting date:</b> 01.03.2015	<b>End date:</b> 01.04.2017
<b>Total cost:</b> 1,020,687.50 €	<b>EU max. contribution:</b> 1,020,687.50 €
<b>Type of Action:</b> RIA	
<b>Coordinator:</b> Universita degli Studi del Piemonte Orientale Amedeo Avogadro (IT)	
<b>Participants:</b> <ul style="list-style-type: none"> <li>▪ Universitaet Graz;</li> <li>▪ Teknologian tutkimuskeskus VTT OY;</li> <li>▪ The Chancellor, Masters And Scholars of the University of Oxford;</li> <li>▪ Deloitte Advisory SL;</li> <li>▪ Teknologian Tutkimuskeskus VTT;</li> <li>▪ Sofia Energy Centre Ltd;</li> <li>▪ Instytut Energetyki</li> </ul>	
<b>Countries:</b> AT; FI; UK; ES; BG; PL	
<b>Objectives:</b> <p>Improving energy efficiency can deliver a range of benefits to the economy and society. However, energy efficiency programmes are often evaluated only on the basis of the energy savings they deliver, without considering the many other socio-economic and environmental intangible benefits delivered. As a result, the full value of energy efficiency improvements in both national and global economies may be significantly underestimated.</p> <p>The main aim of IN-BEE is to address the theme of energy efficiency and to describe and provide evidence for the many intangible benefits of improving energy efficiency through a multi-disciplinary approach, combining methods, datasets, and techniques from cutting edge research in law and economics, humanities and consumer behavior, regulation and environmental sciences, as well as engineering.</p> <p>The overall outcome of IN-BEE is to consolidate a set of policy recommendations for the EU and public/private institutions in charge of promoting energy efficiency, competitiveness and environmental and social sustainability.</p> <p>IN-BEE will impact on both consumers (residential and companies) and policy makers, by:</p> <ul style="list-style-type: none"> <li>• Developing a set of indicators to measure intangible benefits of energy efficiency</li> <li>• Developing Key Performance Indicators to assess the impact of energy efficiency strategies</li> <li>• Studying relevant cases and identifying best practices</li> <li>• Bridging policy makers and researchers through a web platform</li> <li>• Involving a vast audience of stakeholders</li> </ul> <p>IN-BEE combines a strong scientific base with a concrete and focused approach (based on real-life case studies), aiming to involve primarily regional and local stakeholders and to support them in assessing results of previous plans and initiatives on energy efficiency and, above all, in designing new effective strategies.</p>	

<b>Acronym: HERON</b>	
<b>Title:</b> Forward-looking socio-economic research on Energy Efficiency in EU countries.	
<b>Starting date:</b> 01.05.2015	<b>End date:</b> 01.07.2017
<b>Total cost:</b> 958,750 €	<b>EU max. contribution:</b> 958,750 €
<b>Type of Action:</b> RIA	
<b>Coordinator:</b> Ethniko Kai Kapodistriako Panepistimio Athinon (EL)	
<b>Participants:</b>	
<ul style="list-style-type: none"> <li>▪ Universiteit Antwerpen;</li> <li>▪ University of Belgrade - Faculty of Mining and Geology;</li> <li>▪ Wuppertal Institut fuer Klima, Umwelt, Energie GmbH;</li> <li>▪ Sdruzhenie Chernomorski Izsledovatelski Energien Tsentar;</li> </ul>	<ul style="list-style-type: none"> <li>▪ Universita Commerciale Luigi Bocconi;</li> <li>▪ Oxford Brookes University;</li> <li>▪ Estonian Institute for Sustainable Development;</li> <li>▪ Stockholm Environment Institute Tallinn Centre</li> </ul>
<b>Countries:</b> BE; RS; DE; BG; IT; UK; EE	
<b>Objectives:</b> HERON aims at facilitating policy makers of multi-level governance in EU, to develop and monitor energy efficiency policies in building and transport sectors, through forward-looking socio-economic research in seven EU and one candidate countries. The objectives are: i. the impact of socio-economic and institutional factors on implementing energy efficiency policies and measures, ii. the development of energy-efficient pathways to the horizon 2030 and beyond taking into account the socio-economic drivers and the updated energy efficiency measures, iii. the contribution to improving energy modeling by incorporating social, educational and cultural factors so as to reflect the end-user behavior, iv. the establishment of communication channels between researchers, decision makers of different governance levels and social and market stakeholders. These objectives will be achieved through: (1) Mapping of energy efficiency policy instruments, available technologies and social, economic, cultural and educational barriers in transport and buildings, (2) Assessment of the evidenced barriers and the main driving factors, in order to define their weight/importance for the implementation of energy efficiency policies, (3) Determination of linkages between the factors and the energy efficiency, (4) Forward-looking scenario analysis, focusing on macro- and micro-economic impacts of energy efficiency policy options, (5) Policy recommendations through multi-criteria evaluation and feedback mechanisms with policy makers and market stakeholders from EU (member states, Covenant of Mayors) and neighboring countries (Business Council of BSEC). HERON will develop an innovative decision support tool to incorporate non-economic and non-market elements, such as social, educational and cultural, into scenario analysis.	

<b>Acronym: COMBI</b>	
<b>Title:</b> Calculating and Operationalising the Multiple Benefits of Energy Efficiency Improvements in Europe	
<b>Starting date:</b> 01.03.2015	<b>End date:</b> 01.03.2018
<b>Total cost:</b> 996,548.75 €	<b>EU max. contribution:</b> 996,548.75 €
<b>Type of Action:</b> RIA	
<b>Coordinator:</b> Wuppertal Institut für Klima, Umwelt, Energie GmbH (DE)	
<b>Participants:</b>	
<ul style="list-style-type: none"> <li>▪ Abud Mernokiroda Kft;</li> <li>▪ The University of Manchester;</li> </ul>	<ul style="list-style-type: none"> <li>▪ Copenhagen Economics AS;</li> <li>▪ Universiteit Antwerpen</li> </ul>
<b>Countries:</b> HU; UK; DK; BE	
<b>Objectives:</b>	
<p>In recent years, research has shown that energy savings resulting from energy efficiency improvements have wider benefits for the economy and society such as increases in employment, GDP, energy security, positive impacts on health, ecosystems and crops or resource consumption. In order to develop more cost-effective energy efficiency policies and optimised long-term strategies in the EU, these multiple benefits have to be accounted for more comprehensively in the future.</p> <p>Although this field of research is growing, the findings are disperse and mostly have important gaps regarding geographic, sectorial or technical measure coverage and findings vary largely. This makes a consideration of multiple benefits in policy making and policy evaluation difficult today.</p> <p>The proposed project addresses these issues and aims at closing the identified gaps by five central research innovations: 1) data gathering on energy savings and technology costs per EU country for the most relevant 20 to 30 energy efficiency measures in the residential, commercial, industrial and transport sectors, 2) developing adequate methodologies for benefit quantification, monetisation and aggregation, 3) quantifying the most important multiple benefits and where adequate, monetising, 4) developing an openly available calculation tool that greatly simplifies the evaluation of co-impacts for specific energy efficiency measures to enable decision-making and 5) developing a simple online visualisation tool for customisable graphical analysis and assessment of multiple benefits and data exportation. Project outcomes can thus directly be used by stakeholders and will help to define cost-effective policies and support policy-makers and evaluators in the development and monitoring of energy efficiency strategies and policies in the future.</p>	

<b>Acronym: EUFORIE</b>	
<b>Title:</b> European Futures for Energy Efficiency	
<b>Starting date:</b> 01.03.2015	<b>End date:</b> 01.02.2018
<b>Total cost:</b> 1,092,500 €	<b>EU max. contribution:</b> 1,092,500 €
<b>Type of Action:</b> RIA	
<b>Coordinator:</b> Turun Yliopisto (FI)	
<b>Participants:</b> <ul style="list-style-type: none"> <li>▪ Universitat Autònoma de Barcelona;</li> <li>▪ Universita degli Studi di Napoli Parthenope;</li> <li>▪ Sustainable Europe Research Institute SERI Deutschland e.V.</li> </ul>	
<b>Countries:</b> ES; IT; DE	
<b>Objectives:</b> <p>The EUFORIE project studies energy efficiency at macro level (EU as a whole and comparison to China), national level (EU-28 Member States), sectoral/company level (selected energy-intensive sectors and companies) and household level, taking into account the perspectives of energy production and consumption. The project uses also participatory foresight workshops to provide new information for energy policy preparation in selected EU Member States. The project has nine Work Packages, the Research/Innovation WPs focus on (1) macro-level analysis on energy efficiency (EU as a Whole and EU-28 Member States; WP2), (2) regional and sectoral case studies on energy efficiency (WP3), and (3) energy efficiency metabolism in socio-economic systems (WP4) by using innovative analysis tools developed by the EUFORIE consortium beneficiaries in previous projects financed by the European Commission. Moreover, the project analyses energy efficiency from the consumer perspective (WP5) and energy efficiency development in selected energy-intensive companies by using the previously developed analysis tools (WP6). Last but not least, the project implements a participatory foresight process for energy efficiency stakeholders in selected countries (WP7) and a comparison of energy efficiency in the EU and China (WP8).</p>	

<b>Acronym: BRISKEE</b>	
<b>Title:</b> Behavioural Response to Investment Risks in Energy Efficiency	
<b>Starting date:</b> 01.03.2015	<b>End date:</b> 01.09.2017
<b>Total cost:</b> 1,029,133.25 €	<b>EU max. contribution:</b> 1,029,133.25 €
<b>Type of Action:</b> RIA	
<b>Coordinator:</b> Fraunhofer Gesellschaft zur Forderung der Angewandten Forschung eV (DE)	
<b>Participants:</b> <ul style="list-style-type: none"> <li>▪ Chambre de Commerce et d'Industrie de Grenoble;</li> <li>▪ Cardiff University;</li> <li>▪ European Council for an Energy Efficient Economy Forening - ECEEE;</li> <li>▪ Technische Universitaet Wien</li> </ul>	
<b>Countries:</b> FR; UK; SE; AT	
<b>Objectives:</b> <p>Investments in energy efficiency in the residential sector (27% of EU final energy demand) may also provide economic benefits at different levels of the economy. These benefits may not be realized because of barriers, which are typically reflected in implied discount rates. BRISKEE (Behavioural Response to Investment Risks in Energy Efficiency) provides evidence-based input to energy efficiency policy design and evaluation, thereby supporting the market uptake of energy efficiency technologies in the EU residential sector. It contributes to the work programme by addressing the interrelations between microeconomic factors, sectoral energy demand and macroeconomic effects, relying on a consistent methodological framework implemented in 5 work packages:</p> <ul style="list-style-type: none"> <li>• Provide empirical evidence for the magnitudes of discount rates accounting for differences across households, technologies and countries, and assess their effects on the diffusion of efficiency technologies in the EU (micro-level). A multi-country survey (1000 interviews per country) will be carried out and analyzed econometrically.</li> <li>• Explore the impact of time discounting and risk preferences (and of policies affecting those factors) on the diffusion of energy efficient technology and energy demand in the EU residential sector until 2030 (meso-level). Established bottom-up vintage stock models will be employed for appliances (FORECAST-Residential) and for buildings (Invert/EE-Lab).</li> <li>• Explore the macro-level impacts of changes in microeconomic decision-making and of energy efficiency policy on employment, GDP and exports in the EU until 2030. This involves simulations with an established macro-economic model for the EU (ASTRA).</li> <li>• Provide evidence-based recommendations for key energy efficiency policies and input for impact assessments and policy analysis at the three levels of analysis.</li> <li>• Communicate and disseminate empirical findings to policy makers, national experts, the research community and the general public.</li> </ul>	

**Topic EE-13 – Projects:**

<b>Acronym: OPTi</b>	
<b>Title:</b> OPTiOptimisation of District Heating Cooling systems	
<b>Starting date:</b> 01.03.2015	<b>End date:</b> 01.11.2017
<b>Total cost:</b> 2,100,130 €	<b>EU max. contribution:</b> 2,100,130 €
<b>Type of Action:</b> RIA	
<b>Coordinator:</b> Lulea Tekniska Universitet (SE)	
<b>Participants:</b> <ul style="list-style-type: none"> <li>▪ Sampol Ingenieria y Obras S.A.;</li> <li>▪ Rheinisch-Westfaelische Technische Hochschule Aachen;</li> <li>▪ TWT GmbH Science &amp; Innovation;</li> <li>▪ Optimation AB;</li> <li>▪ Athens University of Economics and Business - Research Center;</li> <li>▪ IBM India Private Limited;</li> <li>▪ LULEA Energi AB</li> </ul>	
<b>Countries:</b> ES; DE; EL; IN; SE	
<b>Objectives:</b> <p>“With a user-centric design, we will contribute to next-generation District Heating &amp; Cooling systems”</p> <p>The OPTi project aspires to create a long-lasting impact by rethinking the way DHC systems are architected and controlled. The overarching goal is to create business benefit for the industry as well as to ensure optimal end-consumer satisfaction.</p> <p>OPTi will deliver methodologies and tools that will enable accurate modelling, analysis and control of current and envisioned DHC systems. The methodology will be deployed both on a complete system level, and on the level of a building(s).</p> <p>OPTi will treat the DHC system as a system subject to dynamic control, and will treat thermal energy as a resource to be controlled for DHC systems towards saving energy and reducing peak loads. This will lead to the most environmentally-friendly way of utilizing energy sources, thus reducing the reliance on additional boilers running on oil and/or electricity and overall providing a socio-economically sustainable environment.</p> <p>OPTi will help energy companies to operate both today’s and future DHC systems in an optimal way:</p> <ul style="list-style-type: none"> <li>• System level: We envision opportunities for SMEs to provide new services/solutions</li> <li>• House level: More intelligent home DHC control systems like remote control and the consumer “virtual knob”</li> <li>• General: We foresee that the OPTi framework will enable engineers to design and plan DHC</li> </ul> <p>Luleå Energi AB invests 45 MEUR (2014-2018) in their DHC to meet the requirements from the expanding Luleå City. This will enhance the system and allow for new solutions to be deployed and is directly beneficial for this project.</p> <ul style="list-style-type: none"> <li>• Saving 30% of energy for water and heating on a system level</li> <li>• Saving 30-40% of peak consumption on houses/clusters of houses</li> <li>• Promote ways of operating today’s and future DH/DC systems in more optimized and environmentally friendly way including alternative energy sources and energy storage methods</li> </ul>	

<b>Acronym: STORM</b>	
<b>Title:</b> Self-organising Thermal Operational Resource Management	
<b>Starting date:</b> 01.03.2015	<b>End date:</b> 01.09.2018
<b>Total cost:</b> 1,972,125.94 €	<b>EU max. contribution:</b> 1,972,125.94 €
<b>Type of Action:</b> RIA	
<b>Coordinator:</b> Vlaamse Instelling Voor Technologisch Onderzoek N.V.(BE)	
<b>Participants:</b> <ul style="list-style-type: none"> <li>▪ Stichting Zuyd Hogeschool;</li> <li>▪ Vaxjo Energi AB;</li> <li>▪ Mijnwater BV;</li> <li>▪ Nodais AB;</li> <li>▪ Sigma Orionis SA</li> </ul>	
<b>Countries:</b> NL; SE; FR	
<b>Objectives:</b> <p>In STORM a generic district heating and cooling (DHC) network controller will be development and demonstration, with the ambition to increase the use of waste heat and renewable energy sources in the DHC network.</p> <p>The general applicability will be guaranteed by the following measures:</p> <ul style="list-style-type: none"> <li>- Applying self-learning control techniques instead of model-based control approaches, will make the controller easy to implement in different configuration and generations of DHC networks.</li> <li>- Three control strategies are included in the controller (peak shaving, market interaction, cell balancing). Dependent of the network, one or more of these strategies can be activated.</li> <li>- The controller will be an add-on to many existing DHC network controllers and SCADA systems.</li> </ul> <p>To present this general applicability, the controller will be demonstrated in two existing grids: one highly innovative low-temperature DHC network In the Netherlands and a more common medium-temperature district heating grid in Sweden.</p> <p>Since additional value is created by applying the control strategies in the controller, innovative business models should be developed to distribute this value amongst the different market players (producers, transporters, consumers of energy). This will also be addressed in the project.</p> <p>Also a plan will be developed on how the developed controller can be replicated to other countries than the ones of the demonstrators, taking into account different market organizations and legal framework.</p> <p>With respect to dissemination two levels of dissemination will be applied. A international dissemination will address the international research community, DHN network controller suppliers, international energy companies etc... Besides that, an additional local level will be implemented where two local dissemination platforms will be installed integrating all local stakeholders (the energy company, users, local educational institutions, local politicians...). Special attention is foreseen for education.</p>	

<b>Acronym: FLEXYNETS</b>	
<b>Title:</b> Fifth generation, Low temperature, high EXergY district heating and cooling NETworkS	
<b>Starting date:</b> 01.07.2015	<b>End date:</b> 01.07.2018
<b>Total cost:</b> 1,999,363.75 €	<b>EU max. contribution:</b> 1,999,363.75 €
<b>Type of Action:</b> RIA	
<b>Coordinator:</b> Accademia Europea per La Ricerca Applicata ed Il Perfezionamento Professionale Bolzano (Accademia Europea Bolzano) (IT)	
<b>Participants:</b>	
<ul style="list-style-type: none"> <li>• Acciona Infraestructuras S.A.;</li> <li>• Planenergi Fond;</li> <li>• Laterizi Gambettola SRL;</li> </ul>	<ul style="list-style-type: none"> <li>• Hochschule für Technik Stuttgart;</li> <li>• Solid Automation GmbH</li> </ul>
<b>Countries:</b> ES; DK; IT; DE	
<b>Objectives:</b>	
<p>District Heating and Cooling networks distribute energy from a centralized generation plant to a number of remote customers. As such, actual DHC systems suffer from</p> <ul style="list-style-type: none"> <li>• significant heat losses</li> <li>• highly unexplored integration potential of different available energy sources (e.g. renewables and waste heat) into the network</li> <li>• high installation costs.</li> </ul> <p>FLEXYNETS will develop, demonstrate and deploy a new generation of intelligent district heating and cooling networks that reduce energy transportation losses by working at “neutral” temperature levels. Reversible heat pumps and chillers will be used to exchange heat with the DHC network on the demand side. In this way, the same network can provide contemporary heating and cooling.</p> <p>FLEXYNETS solutions will integrate effectively multiple generation sources (including high- and low-temperature solar thermal, biomass, PV, cogeneration and waste heat) where they are available along the DHC network, by managing energy at different temperature levels and assuring optimized exergy exploitation.</p> <p>Together with storages, control strategies that optimize the harvest of renewable energy sources are key from the technical and economic points of view. On the one hand, strategies will be assessed that assure a thermal balance among diffused heat generation, storage and utilization. On the other, policies will be elaborated to decide when energy is to be gathered locally or exchanged (both purchased and sold) with the electricity and gas networks.</p> <p>The optimal management of such new generation networks will lead to a synergic effect on primary energy savings (hence on the reduction of the CO2 emissions), assuring at the same time investment and operation profitability. As such, FLEXYNETS will contribute to a higher penetration of smart DHC networks on the heating and cooling market, and will contribute to the European recovery plan.</p>	



## CALL: H2020-EE-2014-3-MarketUptake

Topic	Title	Number of funded projects	Total EU-contribution [€]
EE-04	Construction skills	5	7,196,550.22
EE-05	Increasing energy performance of existing buildings through process and organisation	1	2,074,875.00
EE-07	Enhancing the capacity of public authorities to plan and implement sustainable energy policies	4	7,233,567.25
EE-08	Public procurement of innovative sustainable energy solutions	4	5,817,191.83
EE-09	Empowering stakeholders to assist public authorities in the definition and implementation of	2	3,329,744.25
EE-10	Consumer engagement for sustainable energy	4	5,363,561.00
EE-14	Removing market barriers to the uptake of efficient heating and cooling solutions	1	1,385,797.50
EE-15	Ensuring effective implementation of EU product efficiency legislation	1	2,499,872.50
EE-16	Organisational innovation to increase energy efficiency in industry	2	3,259,741.50
EE-19	Improving the financeability and attractiveness of sustainable energy investments	7	12,757,408.00
EE-21	Development and market roll-out of innovative energy services and financial schemes for	3	4,921,821.85
<b>Total</b>		<b>34</b>	<b>55,840,130.90</b>

**Topic EE-04 – Projects:**

<b>Acronym: Train-to-NZEB</b>	
<b>Title:</b> Train-to-NZEB: The Building Knowledge Hubs	
<b>Starting date:</b> 01.06.2015	<b>End date:</b> 01.06.2018
<b>Total cost:</b> 1,426,333.75 €	<b>EU max. contribution:</b> 1,426,333.75 €
<b>Type of Action:</b> CSA	
<b>Coordinator:</b> Energy Efficiency Center – Eneffectfoundation (BG)	
<b>Participants:</b>	
<ul style="list-style-type: none"> <li>▪ Seven Stredisko pro Efektivni Vyuzivani Energie O.P.S.;</li> <li>▪ Wolfgang Feist;</li> <li>▪ Business Development Group SRL;</li> <li>▪ Institutul National de Cercetare-Dezvoltare in Constructii Urbanism Si Dezvoltare Teritoriala Durabila Urban-Incerc;</li> <li>▪ Limerick Institute of Technology;</li> </ul>	<ul style="list-style-type: none"> <li>▪ B SYS;</li> <li>▪ Bulgarian Construction Chamber;</li> <li>▪ Ege Universitesi;</li> <li>▪ Mosart Landscape, Architecture, Research Limited;</li> <li>▪ "All-Ukrainian Charitable Organization" "Municipal Development Institute"</li> <li>▪ Fundatia Pentru Formare Profesionala Si Invatamant Preuniversitar-Viitor;</li> </ul>
<b>Countries:</b> CZ; DE; RO; IE; BG; TR; UA	
<b>Objectives:</b>	
<p>The Train-to-NZEB project is designed to establish a functioning network of training and consultation centres (Building Knowledge Hubs, BKHs), providing practical trainings, demonstrations and complex consulting services for the implementation of nearly-zero energy buildings (NZEB). Using the improved training facilities, the BKHs will provide enhanced capacity for conduction of trainings on curricula developed on BUILD UP Skills II, thus reaching a significant number of workers not covered by the initiative. Additionally, BKHs will offer trainings for highly-qualified building professionals and demonstrations for non-specialists with decision-making authority, which, combined with administrative and financial consultancy service, will result in increased capacity for implementation of NZEB projects in the involved countries.</p> <p>In order to reach this goal, the following objectives are set:</p> <ol style="list-style-type: none"> <li>1. Development of publicly available Terms of Reference for the setting up of the BKHs;</li> <li>2. Adaptation of existing and development of new training programs;</li> <li>3. Actual setting up of 4 training and consultation centres (BKHs) according to the Terms of Reference;</li> <li>4. Building of internal capacity through train-the-trainer activities, targeting at least 90 qualified trainers;</li> <li>5. Actual training courses according to annual training plans, resulting in:             <ol style="list-style-type: none"> <li>(a) 120 training courses for construction workers, targeting additional qualification of 2400 trainees;</li> <li>(b) 24 training courses for highly-qualified building specialists, targeting additional qualification of 480 trainees;</li> <li>(c) 36 training courses for non-specialists, targeting additional qualification of 720 trainees;</li> </ol> </li> <li>6. Strict monitoring and evaluation for constant improvement of the offered services.</li> <li>7. Setting up of a web-based networking platform providing facilities for knowledge sharing and exchange between the BKHs;</li> <li>8. Conduction of a targeted dissemination and communication campaign to increase the market demand for NZEB projects.</li> </ol>	

<b>Acronym:</b> BUStoB	
<b>Title:</b> BUILD UP Skills to Business	
<b>Starting date:</b> 01.03.2015	<b>End date:</b> 01.03.2018
<b>Total cost:</b> 1,392,562.50 €	<b>EU max. contribution:</b> 1,392,562.50 €
<b>Type of Action:</b> CSA	
<b>Coordinator:</b> Stichting Opleidings- En Ontwikkelingsfonds Voor Het Technisch Installatiebedrijf*St.Pol.- En Ontwikk.Fonds Tech Install.Bedr Otib (NL)	
<b>Participants:</b>	
<ul style="list-style-type: none"> <li>▪ Mbo Raad;</li> <li>▪ Stichting Instituut Voor Studie Enstimulering Van Onderzoek Op Hetgebied Van Gebouwinstallaties</li> </ul>	<ul style="list-style-type: none"> <li>▪ Stichting Kenteq, Kenniscentrum Beroepsonderwijs Bedrijfsleven Voor Techniek;</li> <li>▪ Stichting Sbrcurnet</li> </ul>
<b>Countries:</b> NL	
<b>Objectives:</b>	
<p>This project is directed towards establishing and upgrading large-scale qualification and training schemes in the Netherlands for craftsmen and other on-site workers, in the continuation of the BUILD Up Skills Initiative. The proposed project uses the results of the IEE-projects and is a necessary step towards closing the gap between existing and needed skills for craftsmen and building workers in the Netherlands in the respect of meeting the 2020 energy objectives. The main objective of the project is to develop and pilot missing training materials on EQF-levels 2 - 4 based on the future-ready qualification schemes developed in BUILD UP Skills Pillar II. Secondary objective is to construct short skill measurement tests which enables the prevention of mistakes made by unconsciously incompetent workers, the detection of skills gaps and supply of industry relevant upskilling advice to craftsmen and building workers. Tertiary objective is to organise regional pilots in which we focus on implementation and evaluation of the developed materials and regional capacity building. We will support regional training partnerships with train-the-trainer sessions, regional labour market intelligence and implementing the developed trainings and assessments in practice in regional building and/or renovation projects. As results of the project the following will be achieved:</p> <ul style="list-style-type: none"> <li>• Increase the skills of 3000 craftsmen by the end of year 2018</li> <li>• Increase in RES-production of 11 GWh/year</li> <li>• Decrease of energy consumption of 69 GWh/year (EE)</li> <li>• Increase the employability of the building workforce with 3000 of which at least 5% women</li> <li>• Increase in investments in innovative sustainable energy technologies with €42.7 million</li> <li>• Acquired additional funding of €1.000.000,- to sustain the action</li> </ul>	

<b>Acronym:</b> MEnS	
<b>Title:</b> Meeting of Energy Professional Skills	
<b>Starting date:</b> 01.03.2015	<b>End date:</b> 01.09.2017
<b>Total cost:</b> 1,478,160 €	<b>EU max. contribution:</b> 1,478,160 €
<b>Type of Action:</b> CSA	
<b>Coordinator:</b> Energia-Da SRL (IT)	
<b>Participants:</b> <ul style="list-style-type: none"> <li>▪ Universite Libre de Bruxelles;</li> <li>▪ Universitatea Tehnica Cluj-Napoca;</li> <li>▪ Dublin Institute of Technology;</li> <li>▪ University of Cyprus;</li> <li>▪ Universitaet Kassel;</li> <li>▪ Radio-Television Belge de La Communaute Francaise;</li> <li>▪ Universitat Politecnica de Valencia;</li> <li>▪ Brunel University London;</li> <li>▪ Knowledge Transfer Network Limited;</li> <li>▪ Aristotelio Panepistimio Thessalonikis;</li> <li>▪ Energy Consulting Network APS;</li> <li>▪ Ss. Cyril and Methodius University in Skopje</li> </ul>	
<b>Countries:</b> BE; RO; IE; CY; DE; ES; UK; EL; DK; MK	
<b>Objectives:</b> <p>MENS is a project conceived in order to provide an enhance the NZEB skills of building managers such as engineers and architect through a series of accredited training activities developed by 9 universities and 3 market players. MENS aims:</p> <ul style="list-style-type: none"> <li>- To increase the knowledge and skills of at least 1800 building managers (engineers, architects) 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 program for such professionals in 10 countries, under the European Qualifications Framework provisions and based on desired and common learning outcomes of Level 7.</li> <li>- To create and implement an innovative, interdisciplinary education and training program with an integrated approach, focusing on real case studies</li> <li>- To accredit courses using the formal procedure in each country and assign ECTS credits.</li> <li>- To enhance and support the development of a professional network in Europe specifically focused on retrofitting of housing stocks towards NZEB. A connection with over 250,000 stakeholders and market players.</li> <li>- To provide working opportunities to unemployed professionals, by bringing them closer to possible employers and improving their qualifications, at a percentage of 30% of those attending.</li> <li>- To continue the education and training courses for at least 5 years after the end of the project based on concrete sustainability plans agreed by University partners.</li> <li>- To result in energy savings and/or increased use of renewables of at least 28,96 GWh/year.</li> </ul> <p>MENS is developed through 3 sets of training activities: national accreditation professional courses; e- learning and webinars: and case studies experiences around Europe and it involves major universities and stakeholders either directly or as Associated Partners engaged with LOS. MENS finally benefits from a strong media promotional activity through a wide network of local TVs and RTBF.</p>	

<b>Acronym: PROF-TRAC</b>	
<b>Title:</b> PROFessional multi-disciplinary TRAIning and Continuing development in skills for NZEB principles	
<b>Starting date:</b> 01.03.2015	<b>End date:</b> 01.03.2018
<b>Total cost:</b> 1,499,871.25 €	<b>EU max. contribution:</b> 1,499,871.25 €
<b>Type of Action:</b> CSA	
<b>Coordinator:</b> Huygen Installatie Adviseurs (NL)	
<b>Participants:</b> <ul style="list-style-type: none"> <li>▪ Cae Services Geie;</li> <li>▪ Instituto Valenciano de La Edificacion;</li> <li>▪ Zbornica Za Arhitekturo In Prostorslovenije;</li> <li>▪ Danvak APS;</li> <li>▪ Ceska Komora Autorizovanych Inzeyru A Techniku;</li> <li>▪ Stichting Instituut Voor Studie Enstimulering Van Onderzoek Op Hetgebied Van Gebouwinstallaties;</li> <li>▪ TVVL;</li> <li>▪ Fundatecyr</li> <li>▪ Comite Europeen de Coordination de L'habitat Social Aisbl;</li> <li>▪ Consiglio Nazionale degli Architetti Pianificatori Paesaggisti e Conservatori;</li> <li>▪ Federatie Van Verenigenen Voor Verwarming en Luchtbehandeling In Europa Vereniging;</li> <li>▪ Hrvatska Komora Inzenjera Strojarstva;</li> <li>▪ Aalborg Universitet;</li> <li>▪ Ceske Vysoke Ucení Technické V Praze;</li> </ul>	
<b>Countries:</b> LU; ES; SI; DK; CZ; NL; BE; IT; HR	
<b>Objectives:</b> <p>A successful design and construction process for NZE buildings and renovation requires to follow an integrated design approach and to work in multi-disciplinary teams. However, this approach is still not common PROF-TRAC offers a solution for this barrier by developing and maintaining an education platform for dedicated trainings and continuous development for professionals, i.e., both technical experts as architects, in integrated multi-disciplinary approach for nZEB principles, in a Post Graduate qualification/curriculum. PROF-TRAC has the following objectives:</p> <ol style="list-style-type: none"> <li>1. Mapping of the required skills and current skills gap of professionals in NZEB.</li> <li>2. Development of an open training platform including methods for a systematic and sustainable access to knowledge.</li> <li>3. Development of a Train the Trainers programme for the developed curriculum and/or qualification scheme This training programme will be tested on a national scale in six national pilots and on an international scale by a train-the-trainer program provided by two EU umbrella organisations representing engineers (REHVA) and architects (ACE).</li> <li>4. Development of a repository of the training material for use in education and post-initial education</li> </ol> <p>PROF-TRAC is specifically targeting the need to train architects, engineers, building managers and other building professionals in the necessary skills for designing, constructing, managing and operating NZE construction and retrofitting. The proposed approach will lead to a substantial reduction of skills mismatch for professionals, Increased managerial capacity to support innovation and sustainable energy use in buildings through new leadership, design, construction and management skills for professionals at middle and senior level and fostering of a better cooperation between disciplines. PROF-TRAC is building upon previous IEE projects (BuildUpSkills, IDES-EDU etc.) and is initiated by the largest European associations for the sector (REHVA, ACE, CECODHAS).</p>	

<b>Acronym: ingREeS</b>	
<b>Title:</b> Setting up Qualification and Continuing Education and Training Scheme for Middle and Senior Level Professionals on Energy Efficiency and Use of Renewable Energy Sources in Buildings	
<b>Starting date:</b> 01.03.2015	<b>End date:</b> 01.03.2018
<b>Total cost:</b> 1,399,622.72 €	<b>EU max. contribution:</b> 1,399,622.72 €
<b>Type of Action:</b> CSA	
<b>Coordinator:</b> Slovenska Komora Stavebnych Inzinierov (SK)	
<b>Participants:</b> <ul style="list-style-type: none"> <li>▪ Seven Stredisko Pro Efektivni Vyuzivani Energie O.P.S.;</li> <li>▪ Zvaz Stavebnych Podnikatelov Slovenska;</li> <li>▪ Narodny Ustav Celozivotneho Vzdelavania;</li> <li>▪ Svaz Podnikatelu Ve Stavebnictvi V Ceske Republice Sdruzeni;</li> <li>▪ Technische Universitaet Graz;</li> <li>▪ Viaeuropa Competence Centre Sro;</li> <li>▪ Slovenska Technicka Univerzita V Bratislave;</li> <li>▪ Universitaet fuer Bodenkultur Wien</li> </ul>	
<b>Countries:</b> CZ; SK; AT	
<b>Objectives:</b> <p>The Project will extend the implementation of the Roadmap established and endorsed under Pillar I Build Up Skills project in Slovakia and the Czech Republic to middle and senior level professionals. These Roadmaps identified key measures for setting up a national qualification and training scheme and other measures for ensuring development of skills essential for the field of buildings to contribute to the fulfillment of the Europe 2020 energy targets. The project will particularly focus on key measure 1.3 and facilitate implementation of key measures 1.1, 1.2, 1.5 and 2.2 of the Roadmap endorsed in Slovakia, and on priority 4.3.1 and measures 1, 2 and 4 of the Roadmap endorsed in the Czech Republic.</p> <p>This will strengthen the qualification of professionals identified as target group in the Roadmaps. The project will facilitate further investments in the skills anticipated in the EU Roadmap to a Resource Efficient Europe.</p> <p>Particularly the project will lead to:</p> <ul style="list-style-type: none"> <li>• Development of 5 education and training programmes for further education and training of middle and senior professionals in the field of buildings;</li> <li>• Setting up permanent network of trainers delivering the training programmes developed under the project;</li> <li>• Training of trainers for delivery of the programmes;</li> <li>• Proposal for financial measures to be established to facilitate and motivate middle and senior level professionals in participating to training programmes and SMEs to invest into further education;</li> <li>• Proposals to Slovak Government for incentives boosting demand for highly qualified professionals;</li> <li>• Reaching financing agreements using ESF for dissemination of training programmes.</li> </ul> <p>The project will establish necessary resources and prepare technical, organizational and financial conditions for training and re-training on energy efficiency and use of renewable energy sources for middle and senior level professionals in the field of buildings.</p>	

**Topic EE-05 – Project:**

<b>Acronym: REFURB</b>	
<b>Title:</b> REgional process innovations FOR Building renovation packages opening markets to zero energy renovations	
<b>Starting date:</b> 01.04.2015	<b>End date:</b> 01.04.2018
<b>Total cost:</b> 2,074,875 €	<b>EU max. contribution:</b> 2,074,875 €
<b>Type of Action:</b> CSA	
<b>Coordinator:</b> Vlaamse Instelling Voor Technologisch Onderzoek N.V. (BE)	
<b>Participants:</b> <ul style="list-style-type: none"> <li>▪ Recticel BV;</li> <li>▪ Mittetulundusuhing Tartu Regiooni Energiaagentuur;</li> <li>▪ Intercommunale Leiedal;</li> <li>▪ Bauverein Halle &amp; Leuna EG;</li> <li>▪ Bouw Francis Bostoen NV;</li> <li>▪ Aalborg Universitet;</li> <li>▪ Isw Institut fuer Strukturpolitik und Wirtschaftsforderung Gem GmbH;</li> <li>▪ Clean;</li> <li>▪ Fudura BV;</li> <li>▪ Bsc, Poslovno Podporni Center, Doo;</li> <li>▪ Project Zero A/S;</li> <li>▪ Provincie Fryslan</li> </ul>	
<b>Countries:</b> NL; EE; BE; DE; DK; SI	
<b>Objectives:</b> <p>As stated by the EC, renovation by the private housing sector towards increased energy efficiency is seriously lagging behind. As more than sufficient technological solutions are available, focus must be on removing non-technological barriers. The main barriers relate to fragmentation of the renovation offers, resulting in inefficient or only partial solutions. In addition to financial restrictions and unclear benefits, house-owners do not have a structured way to obtain all the necessary information related to renovation measures. One of the ways to solve this, is the use of '1-stop shop concept.' Many initiatives have already been put into practice. Some of these projects were successful, but several were not. They often lack an understanding of the concerns and demands of the house-owners. REFURB 2.0 will tackle the complex interplay of these barriers through coordinated process organisation, innovation and optimization. REFURB 2.0 will bridge the gap between supply and demand side by:</p> <ul style="list-style-type: none"> <li>• developing a holistic approach to the renovation process in which technology combinations trigger step-by-step deep energy renovation of existing, private residential buildings towards NZEB-standards.</li> <li>• accommodating the technology solutions to the decision-making psychology and 'language' of residential house-owners; this will provide the drivers for empowerment and mobilisation of house-owners for deep renovation.</li> <li>• developing a quality and performance protocol to build trust on the demand side.</li> </ul> <p>The above mentioned activities will result in dedicated renovation packages for different market segments and regions in Europe, starting with the private residential sector. A small scale pilot will be carried out in order to validate and demonstrate the REFURB 2.0 solution. This will be followed by a roll-out plan to stimulate EU wide uptake. In addition, a transferability plan will be established for other sectors, whereas the social housing sector will be the first 'follower'.</p>	

**Topic EE-07 – Projects:**

<b>Acronym: FosterREG</b>	
<b>Title:</b> Fostering public capacity to plan, finance and manage integrated urban REGeneration for sustainable energy uptake	
<b>Starting date:</b> 01.06.2015	<b>End date:</b> 01.06.2017
<b>Total cost:</b> 1,401,921 €	<b>EU max. contribution:</b> 1,401,921 €
<b>Type of Action:</b> CSA	
<b>Coordinator:</b> Fundacion Tecnalia Research & Innovation (ES)	
<b>Participants:</b> <ul style="list-style-type: none"> <li>▪ Gemeente Utrecht;</li> <li>▪ Medunarodni Centar Za Odrzivi Razvoj Energetike Voda I Okolisa;</li> <li>▪ Bilboko Berregokipenerako Hirigintza Elkarte Sa - Surbisa;</li> <li>▪ Vivienda y Suelo De Euskadi, S.A.;</li> <li>▪ Agencija Za Pravni Promet I Posredovanje Nekretninama;</li> <li>▪ Asm Centrum Badan I Analiz Rynku Sp. Z O O;</li> <li>▪ Ente Vasco de La Energia;</li> <li>▪ Grad Osijek;</li> <li>▪ Nederlandse Organisatie Voor Toegepast Natuurwetenschappelijk Onderzoek TNO</li> </ul>	
<b>Countries:</b> NL; HR; ES; PL	
<b>Objectives:</b> <p>The lack of proper coordination of aspects related to regulation, financing and management of energy efficiency measures within urban regeneration initiatives, as well as the frequent misalignment of public stakeholders at different levels, are hindering the potential benefits of addressing these processes from an integrated perspective.</p> <p>FosterREG aims at enhancing public capacity at local, regional and national levels to plan, finance and manage integrated urban regeneration for sustainable energy uptake, through capacity building, promotion and articulation of effective multilevel coordination, and national as well as European network strengthening. These objectives will be achieved through public stakeholders' engagement in joint analysis and knowledge development activities, as well as creation and dissemination of targeted training materials and activities across Europe.</p> <p>FosterREG relates to the Work Programme objectives by:</p> <ol style="list-style-type: none"> <li>1) Focusing on the integration of energy efficiency measures within urban regeneration plans, with especial emphasis on building retrofitting while promoting synergies with other sectors such as transport and land-use planning.</li> <li>2) Enhancing multilevel coordination (European, national, regional and local) of public authorities in the reduction of EU energy consumption.</li> <li>3) Building capacity for civil servants at national, regional and local level in relation with policy design, planning, financing and management of energy efficiency measures within urban regeneration plans.</li> <li>4) Fostering the implementation of the Energy Efficiency Directive, in particular Articles 4 and 7.</li> </ol>	



<b>Acronym: URBAN LEARNING</b>	
<b>Title:</b> Integrative energy planning of urban areas: collective learning for improved governance	
<b>Starting date:</b> 01.03.2015	<b>End date:</b> 01.09.2017
<b>Total cost:</b> 1,850,062.50 €	<b>EU max. contribution:</b> 1,850,062.50 €
<b>Type of Action:</b> CSA	
<b>Coordinator:</b> Tina Vienna Urban Technologies and Strategies GmbH (AT)	
<b>Participants:</b> <ul style="list-style-type: none"> <li>▪ Grad Zagreb;</li> <li>▪ Agence Parisienne du Climat Association;</li> <li>▪ Energetski Institut Hrvoje Pozar;</li> <li>▪ Energieagentur Gesellschaft mit beschränkter Haftung;</li> <li>▪ Gemeente Amsterdam;</li> <li>▪ Magistrat der Stadt Wien;</li> <li>▪ Stockholms Stad;</li> <li>▪ Ville de Paris</li> <li>▪ Miasto Stołeczne Warszawa;</li> <li>▪ Gemeente Zaanstad;</li> </ul>	
<b>Countries:</b> HR; FR; PL; NL; DE; AT; SE	
<b>Objectives:</b> <p>URBAN LEARNING gathers capitals and other large cities across Europe facing the common challenge of considerable population growth while being committed to significantly reduce fossil energy consumption and CO<sub>2</sub> emissions. E.g. Stockholm grew by more than 12.000 people / a (1.5%); in the next 10 years Vienna has to build for 200.000 new people. Efficient and effective planning processes will be crucial for climbing this mountain.</p> <p>Vienna, Berlin, Paris, Stockholm, Amsterdam/Zaanstad, Warsaw and Zagreb aim to enhance the capacity of their local authorities on integrative urban energy planning, as response to new challenges from EU EPBD and RES directives as well as to changes of technologies and market conditions and the pressure to provide sufficient, affordable homes. The focus is put on the governance processes related to the (re-)development of concrete sites. While some cities already started ambitious urban development projects, the institutionalisation of these experiences is missing - despite awareness and willingness, due to lack of knowledge, lack of time and the need for collaboration across departments, which is not a common practice in many administrations in Europe. External stimulus is needed to overcome these barriers, and to address these issues collectively with external key stakeholders, such as DNOs and energy suppliers, and across cities.</p> <p>Focus will be on multi-disciplinary learning – concentrating on innovative technological solutions, instruments and tools as well as on innovative governance elements - and to capitalise this learning to institutionalise integrative urban energy planning.</p> <p>Improving the governance processes is expected to have significant energy impacts on homes and workplaces to be built and refurbished for over 3 million more people in the participating cities in the next 20 years: more than 1.700 GWh/a of energy savings and over 2.000 GWh/a renewable energy produced. Special emphasis is put on knowledge transfer to 150 more cities.</p>	

<b>Acronym:</b> multEE	
<b>Title:</b> Facilitating Multi-level governance for energy efficiency	
<b>Starting date:</b> 01.03.2015	<b>End date:</b> 01.09.2017
<b>Total cost:</b> 1,981,743.75 €	<b>EU max. contribution:</b> 1,981,743.75 €
<b>Type of Action:</b> CSA	
<b>Coordinator:</b> Deutsche Gesellschaft fuer Internationale Zusammenarbeit (Giz) GmbH (DE)	
<b>Participants:</b>	
<ul style="list-style-type: none"> <li>▪ Centar Za Energetska Efikasnost na Makedonija;</li> <li>▪ Ecologic Institut Gemeinnützige GmbH;</li> <li>▪ Roskilde Universitet;</li> <li>▪ Lietuvos Energetikos Institutas;</li> <li>▪ Fizikalas Energetikas Instituts;</li> </ul>	<ul style="list-style-type: none"> <li>▪ Energetski Institut Hrvoje Pozar;</li> <li>▪ Slovenska Inovacna a Energeticka Agentura;</li> <li>▪ Osterreichische Energieagentur Austrian Energy Agency;</li> <li>▪ Centre for Renewable Energy Sources and Saving Foundation</li> </ul>
<b>Countries:</b> MK; DE; DK; LT; HR; SK; AT; LV; EL	
<b>Objectives:</b>	
<p>MultEE aims to improve the ease and quality of energy efficiency (EE) policy planning and implementation in the project's partner countries and beyond, addressing the challenges of evidence-based policy-making in a multi-level governance setting. It contributes to making EE and sustainable energy planning vertically consistent between the national, regional and local level, to facilitating horizontal coordination between policy levels and to improving the quality of monitoring energy efficiency.</p> <p>The project pursues a two-faceted, yet integrated, approach in order to reach this objective: (1) building on a mapping of European best practices and experience from a pilot project carried out by the lead partner, country-specific solutions for effective monitoring and verification (M&amp;V) based on bottom-up data will be developed and their implementation supported; (2) the implementation of innovative M&amp;V schemes will be facilitated via coordination mechanisms developed and introduced together with the partners, aimed at spurring on exchange and cooperation between policy levels. The project pays particular attention to providing opportunities for peer learning between old and new EU Members States and neighbouring countries from Southeast Europe to partner countries from the EU and its South-Eastern neighbourhood as well as to disseminating results beyond partner countries and to other policy areas. One of the specificities of multEE is that its activities target the interplay between administrative levels rather than focusing on a single one of them. Particular focus will be put on capacity-building for the entities and officials involved with EE planning in the partner countries. MultEE will be put in practice by experienced partners within a strong consortium led by GIZ, drawing upon solid experience and a well-established network of contacts to ensure dissemination and high impacts within and beyond the project.</p>	

<b>Acronym:</b> R4E	
<b>Title:</b> Roadmaps for Energy	
<b>Starting date:</b> 01.03.2015	<b>End date:</b> 01.03.2018
<b>Total cost:</b> 1,999,840.25 €	<b>EU max. contribution:</b> 1,999,840 €
<b>Type of Action:</b> CSA	
<b>Coordinator:</b> Gemeente Eindhoven (NL)	
<b>Participants:</b> <ul style="list-style-type: none"> <li>▪ Technische Universiteit Eindhoven;</li> <li>▪ Comune di Forli;</li> <li>▪ Ajuntamiento de Sant Cugat del Valles;</li> <li>▪ Universitat Politecnica de Catalunya;</li> <li>▪ Newcastle City Council;</li> <li>▪ Tallinna Keskkonnaamet;</li> <li>▪ Istanbul Metropolitan Municipality;</li> <li>▪ Comune di Palermo;</li> <li>▪ Ayuntamiento de Murcia</li> </ul>	
<b>Countries:</b> NL; IT; ES; UK; EE; TR	
<b>Objectives:</b> <p>Within the Roadmaps for Energy (R4E) project the partners will work together to develop a new type of energy strategy through visions and roadmaps for the 8 partner cities, in co-creation with local stakeholders. The stakeholders include the benefactors of the strategy, such as citizens, as well as relevant research and industry partners, to offer a clear picture of the future potential of the city.</p> <p>In the R4E project a four step process is applied. The FIRST step sets the ambitions for the project. The ambitions of the participating cities on sustainable energy and Smart Cities in general are set, as well as the partner cities' choice for 2 focus areas within Smart Energy Savings: 1. Smart Buildings, 2. Smart Mobility or 3. Smart Urban Spaces. The SECOND step is to develop desired scenarios for the cities for the selected focus areas. During the THIRD step the roadmap will be created, existing and future technologies and other developments will be identified, which enable the realization of the desired future scenarios. Opportunities and developments will be plotted on a timeline to provide insight in the required steps and milestones towards the favoured scenarios. The roadmaps will contain generic parts that are common for the partner cities, as well as specific parts that cater for the specific context of the cities. During the final and FOURTH step a project portfolio will be generated with new projects and initiatives to reach the ambitions, visions and roadmaps of the cities. This portfolio provides an overview of individual and joint projects and includes a cross-city learning plan and a financial plan.</p> <p>At the end of the project each partner city will each have 2 future scenarios, 2 roadmaps and a portfolio of individual and joint projects to implement sustainable energy policies and measures. Also the visioning and roadmapping capacities within the municipalities are developed to spur future development and implementation of innovative energy solutions.</p>	

**Topic EE-08 – Projects:**

<b>Acronym: GreenS</b>	
<b>Title:</b> GreenS – Green public procurement supporters for innovative and sustainable institutional change	
<b>Starting date:</b> 01.06.2015	<b>End date:</b> 01.06.2018
<b>Total cost:</b> 1,489,540.33 €	<b>EU max. contribution:</b> 1,489,540.33 €
<b>Type of Action:</b> CSA	
<b>Coordinator:</b> Agenzia Locale per L'energia e Lo Sviluppo Sostenibile della Provincia di Cosenza Srl (IT)	
<b>Participants:</b> <ul style="list-style-type: none"> <li>▪ Skupnost Obcin Slovenije;</li> <li>▪ Fundacion Medio Ambiente, Energia y Sostenibilidad Provincia de Cadiz;</li> <li>▪ Calabria Regione;</li> <li>▪ Rigas Dome;</li> <li>▪ Rigas Planosanas Regions;</li> <li>▪ Iclei European Secretariat GmbH (Iclei Europasekretariat GmbH)*;</li> <li>▪ Federacion Andaluza de Municipios y Provincias;</li> <li>▪ National Association of Municipalities in The Republic of Bulgaria;</li> <li>▪ Ministry of Agriculture, Natural Resources and Environment of Cyprus;</li> <li>▪ Energeiako Grafeio Kypriou Politou (Cyprus Energy Agency);</li> <li>▪ Lokalna Energetska Agencija Za Pomurje Zavod Za Promocijo In Pospevanje Trajnostnega Energetskega Razvoja Martjanci;</li> <li>▪ Norrbottens Energikontor AB;</li> <li>▪ Chernomorska Regionalna Agenzia Za Upravljenje Na Energijata</li> </ul>	
<b>Countries:</b> SI; ES; IT; LV; DE; BG; CY; SE	
<b>Objectives:</b> <p>The main goal is to strengthen capacity of public authorities to successfully apply GPP with priority, enhancing their ability and capacity to save energy, reduce CO2 emissions and costs by applying innovative solutions on GPP. By the establishment of “supporting permanent structures”, called G.PP.S. – Green Public Procurement Supporters (Supporting Units) within the participating Energy Agencies, the project implementation provides long-term support and technical assistance on GPP to the public authorities, and multi-level cooperation among different actors at national, regional and local level on GPP. The project objectives are to address the obstacles to the uptake of GPP that have been identified by the partners in their own country (context analysis) and which come from the WP2 – Institutional needs on GPP and Good and bad practices analysis in each participating country. The implementation of pilot projects, by aiming to intensively consult public administrations in the implementation of pilot green procurement process, have the scope to test on the field that are the most efficient and effective actions to provide GPP implementation and up-take. More concretely, the project aims at achieving the specific objectives, by implementing the following actions:</p> <ul style="list-style-type: none"> <li>• analysing in each participating country the existing bad and good practices on GPP;</li> <li>• analyzing the SEAPs in each participant country. By the SEAPs’ analysis, the consortium will find where local authorities need support for “Green” products and services (energy related);</li> <li>• establishing so-called G.PP.S. in Energy Agencies in 7 EU participating countries.</li> <li>• giving support on GPP instruments and tools</li> <li>• setting up and supporting sustainable training programmes (including how to finance them) and finding long-term solutions by the institutionalisation of GPP training</li> <li>• testing GPP application and innovation</li> <li>• at least 21 PA will be invited to experiment the technical support by the G.PP.S</li> </ul>	

<b>Acronym: CEPPI 2</b>	
<b>Title:</b> Coordinated energy-related PPIs actions for cities (CEPPI)	
<b>Starting date:</b> 01.04.2015	<b>End date:</b> 01.04.2018
<b>Total cost:</b> 1,294,808 €	<b>EU max. contribution:</b> 1,294,808 €
<b>Type of Action:</b> CSA	
<b>Coordinator:</b> Birmingham City Council (UK)	
<b>Participants:</b>	
<ul style="list-style-type: none"> <li>▪ Wroclawskie Centrum Badan EIT+ SP Z O.O;</li> <li>▪ Ayuntamiento de Castellon de La Plana;</li> <li>▪ Iclei European Secretariat GmbH (Iclei Europasekretariat GmbH)*;</li> <li>▪ Steinbeis GmbH &amp; Co. KG fuer Technologietransfer</li> </ul>	<ul style="list-style-type: none"> <li>▪ Fundacion de la Comunitat Valenciana para la Promocion Estrategica el Desarrollo y La Innovacion Urbana;</li> <li>▪ Jera Consulting Limited;</li> <li>▪ Optimat Limited;</li> <li>▪ Budapest Fovaros Onkormanyzata</li> </ul>
<b>Countries:</b> PL; ES; DE; UK; HU	
<b>Objectives:</b>	
<p>CEPPI aims to build capacity in cities on how to achieve more sustainable energy solutions through a pro-innovation procurement approach (PPI) &amp; to demonstrate this by selectively intervening in scheduled public tenders. The interventions will involve 5 cities with different economic &amp; political situations &amp; provide the case-based evidence for replication by others. The scale of energy demand in European cities is huge &amp; as an ever greater percentage of citizens are living in urban areas. Some of the biggest city authorities consume over 1000GWh of energy every year to run their operations &amp; it is estimated that the energy consumption of the whole city (the wider sphere of influence) could be at least 50 times that of the city authorities alone. Much of the investment in energy efficiency &amp; renewable energy production has been based on project funding &amp; there is an underexploited opportunity to achieve more systematic and progressive improvements through embedding PPI methodologies within the ongoing processes for the procurement of energy-intensive goods &amp; services. CEPPI will demonstrate, through an action learning process, how forthcoming public tenders can be influenced to achieve a more sustainable energy outcome &amp; build capacity amongst management &amp; procurement professionals.</p> <p>The project will build on established relationships that have been developed between the five participating cities (Birmingham, Budapest, Castellon, Valencia, Wroclaw) through the Climate KIC. They will be mentored (by leading PPI and sustainable energy experts) through an action learning process that will build the short term knowledge and PPI capacity to reduce annual energy consumption by at least 33GWh. Energy &amp; procurement foresight activities will provide the strategic direction to become both procurement &amp; technological leaders for sustainable, energy-efficient cities. At least 80 individuals across the 5 cities will be introduced to innovation procurement methods.</p>	

<b>Acronym: SPP Regions</b>	
<b>Title:</b> SPP Regions	
<b>Starting date:</b> 01.04.2015	<b>End date:</b> 01.04.2018
<b>Total cost:</b> 1,498,738.75 €	<b>EU max. contribution:</b> 1,498,738 €
<b>Type of Action:</b> CSA	
<b>Coordinator:</b> Iclei European Secretariat GmbH (Iclei Europasekretariat GmbH)* (DE)	
<b>Participants:</b>	
<ul style="list-style-type: none"> <li>▪ Diputació de Barcelona;</li> <li>▪ Bristol City Council;</li> <li>▪ Agenzia Regionale per La Protezione Ambientale del Piemonte;</li> <li>▪ The Danish Environmental Agency;</li> <li>▪ Municipal Energy Efficiency Networkcoenergy Association;</li> <li>▪ Region Hovedstaden;</li> </ul>	<ul style="list-style-type: none"> <li>▪ Ecoinstitut SCCL S.Coop;</li> <li>▪ Municipality of Gabrovo;</li> <li>▪ Citta Metropolitana di Torino;</li> <li>▪ University of The West of England, Bristol;</li> <li>▪ Association du Reseau Grand Ouest Developpement Durable et Commande Publique;</li> <li>▪ Gemeente Rotterdam</li> </ul>
<b>Countries:</b> ES; UK; IT; DK; BG; FR; NL	
<b>Objectives:</b>	
<p>The SPP Regions project is aimed at promoting strong networking and collaboration at both the European and sub-national regional level on sustainable and innovative procurement (SPP/PPI), to help promote and embed capacity building and knowledge transfer.</p> <p>At the regional level networking will be promoted to build capacities and transfer skills in sustainable and innovative procurement implementation, and to collaborate directly on tendering for eco-innovative solutions. New networks will be established, or existing networks strengthened in 7 European regions (Copenhagen, Rotterdam, Torino, Bristol, Barcelona, West France and Gabrovo). Networking activities will include an intensive capacity building programme and collaboration on at least 6 tenders per region - 42 in total.</p> <p>At the European level a Sustainable Procurement and Innovation Network will be launched, expanding on the existing Procura\ Campaign. In-depth research will be conducted into European best practice relating to a series of key SPP/PPI topics (market engagement, life cycle costing, output/performance-based specifications, circular procurement) by a series of experts in consultation with network participants. A series of European seminars and expert workshops will be organised, together with an ongoing webinar series, and the annual presentation of a PPI award for European best practice.</p>	

<b>Acronym: EURECA</b>	
<b>Title:</b> Datacenter EURECA Project	
<b>Starting date:</b> 01.03.2015	<b>End date:</b> 01.09.2017
<b>Total cost:</b> 1,534,055.50 €	<b>EU max. contribution:</b> 1,534,055.50 €
<b>Type of Action:</b> CSA	
<b>Coordinator:</b> University of East London (UK)	
<b>Participants:</b> <ul style="list-style-type: none"> <li>▪ Norland Managed Services (Ireland) Limited;</li> <li>▪ Data Centre Alliance Limited;</li> <li>▪ Telecitygroup Germany GmbH;</li> <li>▪ Wolf Marc-Andree;</li> <li>▪ Stichting Green It Consortium Regio Amsterdam;</li> <li>▪ Carbon3it Ltd;</li> <li>▪ Cerios Green BV</li> </ul>	
<b>Countries:</b> IE; UK; DE; NL	
<b>Objectives:</b> <p>The EURECA project tackles the lack of knowledge and awareness of how to identify and procure environmentally sound and greener data centres. The work will encompass solutions for pre-commercial procurement (PCP) and procurement of innovative solutions (PPI). This will be achieved by consolidating recognised and emerging benchmark criteria into an easy-to-use tool that can be deployed by non-experts. EURECA will recommend an improvement roadmap indicating the procurement options(s) to reduce energy consumption, make efficiencies and minimise the environmental footprint. Key criteria will be presenting the Cost-Benefit analysis, covering the life cycle of the datacentre and the environmental impact. The project will strengthen business cases by presenting training and advisory resources on how to establish the options with both technical and commercially neutral information, without prejudice. These options include, as appropriate, to perform detailed studies on investing in existing staff, refitting facilities, consolidation actions, new builds, or outsourcing – or specific combinations or subsets of these. The resources include RFI, ITT or RFP templates, technical &amp; environmental data directories and a case study catalogue, structured along the procurement workflow. The ultimate goal is to enable procurement teams to choose environmentally sound buying options whilst producing true and robust cost-benefit visibility to enable successful triggering of tenders. To ensure efficient use of the project's developments, we will deliver a coherent set of targeted and efficient training components, developed throughout the project that supports the use of the EURECA tool and its resources. The consortium's existing comprehensive liaisons to European and international standards committees and industry groups will ensure the EURECA programme is a "living" resource that is sustainable, interactive and able to reflect the latest developments.</p>	

**Topic EE-09 – Projects:**

<b>Acronym: ProCold</b>	
<b>Title:</b> ProCold: Empowering stakeholders to deliver highly energy efficient professional cold products	
<b>Starting date:</b> 01.02.2015	<b>End date:</b> 01.02.2018
<b>Total cost:</b> 1,181,780 €	<b>EU max. contribution:</b> 978,181.25 €
<b>Type of Action:</b> CSA	
<b>Coordinator:</b> Agence de L'environnement et de La Maitrise de L'energie (FR)	
<b>Participants:</b>	
<ul style="list-style-type: none"> <li>▪ Quercus - Associação Nacional de Conservação da Natureza;</li> <li>▪ Guide Topten Sarl;</li> <li>▪ Politecnico di Milano;</li> <li>▪ Seven Stredisko Pro Efektivni Vyuzivani Energie O.P.S.;</li> </ul>	<ul style="list-style-type: none"> <li>▪ Osterreichische Energieagentur Austrian Energy Agency;</li> <li>▪ Oeko-Institut e.V. - Institut fuer Angewandte Oekologie;</li> <li>▪ Svenska Naturskyddsforeningen I;</li> <li>▪ Bush Energie GmbH</li> </ul>
<b>Countries:</b> PT; FR; IT; CZ; AT; DE; SE; CH	
<b>Objectives:</b>	
<p>The general objective of the project is to empower private stakeholders and public authorities in adapting and enforcing EU and national energy efficiency policies in the sector of professional cold products.</p> <p>A specific objective is to ensure more energy efficient professional cold products enter the EU market and increase their market shares, thereby contributing to the EU's energy efficiency goals and policies.</p> <p>The product groups concerned relate to products cooling, refrigerating or freezing foodstuff and drinks in professional premises – from public buildings, to hotels, retailers, and canteens. These represent significant energy consumption, important differences exist between various models of the same product category, but, due to lack of clear regulation and lack of information, the potential for more energy efficient models remains untapped.</p> <p>The specific legislation concerned is the one regulating the minimum energy performance standards (Ecodesign) and energy labelling, as well as public procurement activities. The project benefits from ideal timing, since a number of the above mentioned product groups do not have an energy efficiency regulation in place, but these are planned to be developed and the project would therefore contribute to the knowledge of public authorities and policy makers on the specific performance characteristics of these product groups, based on which an effective legislation could be implemented and monitored.</p> <p>Target groups of this project are threefold: empowering public authorities in implementing effective policies on energy efficiency of professional cold products; motivating product manufacturers and suppliers in delivering more efficient models to the market; and working with the food industry, retailers, building operators and other stakeholders in demanding and procuring more efficient professional cold products.</p>	



<b>Acronym: BUILD UPON</b>	
<b>Title:</b> A multi-stakeholder Regional Action Network as a living structural base to effectively help define and implement deep energy efficient building renovation at local, national and European level.	
<b>Starting date:</b> 01.03.2015	<b>End date:</b> 01.03.2017
<b>Total cost:</b> 2,351,567.50 €	<b>EU max. contribution:</b> 2,351,563 €
<b>Type of Action:</b> CSA	
<b>Coordinator:</b> Green Building Council-Espana Consejo para La Edificacion Sostenible-Espana (ES)	
<b>Participants:</b> <ul style="list-style-type: none"> <li>▪ Building Green in Sweden AB;</li> <li>▪ Ceska Rada Pro Setrne Budovy;</li> <li>▪ Green Building Council Italia;</li> <li>▪ Gbc Suomi RY;</li> <li>▪ Cevre Dostu Yesil Binalar Dernegi Iktisadi Isletmesi;</li> <li>▪ Slovenska Rada Pre Zelene Budovy;</li> <li>▪ Latvijas Ilgtspējīgas Būvniecības Padome;</li> <li>▪ UKGBC Limited;</li> <li>▪ Bulgarian Green Building Council;</li> <li>▪ Hrvatski Savjet Za Zelenu Gradnju;</li> <li>▪ Asociatia Romania Green Building Council;</li> <li>▪ Slovensko Zdruzenje Za Trajnostno Grandjo;</li> <li>▪ Irish Green Building Council Limited LBG-IGBC</li> </ul>	
<b>Countries:</b> SE; CZ; IT; FI; TR; SK; LV; UK; BG; HR; RO; SI; IE	
<b>Objectives:</b> BUILD UPON: Empower stakeholders to assist public authorities. <ol style="list-style-type: none"> <li>1. Provide large-scale capacity building or engagement activities: The key objective is to engage and empower a 'critical mass' of over 1,000 stakeholders with the process of defining and implementing their long-term national renovation strategy (Article 4, Energy Efficiency Directive). Process carried out by an important organisational innovation, 'Green Building Councils' (GBCs), in BG,CZ,ES, HR, IT, IE, FI, LV, RO, SE, SI, SK and TR. GBCs are multi-stakeholder platforms, formalising a 'Regional Action Network' of connected actors who will ensure the continuation of the activities beyond the project's duration.</li> <li>2. Target specific actors among a wide spectrum of stakeholders: The renovation stakeholder ecosystem will be mapped across the Project countries, to understand precisely which organisations will be needed to define and implement Article 4 and how this system functions. BUILD UPON has received over 100 letters of support across all its target groups.</li> <li>3. Demonstrate a strong European added value: The complex landscape of renovation initiatives (both public policy and market driven) will be compressed in a living 'RenoWiki' resource, to enable stakeholder understanding and dialogue, and ensure all stakeholders are 'on the same page'. The stakeholder 'community' will be developed through a series of nearly 80 workshops across the region at local, national and European level. These will explore collaborative and solution focused working methods to deliver the stakeholder buy-in required by government to define and implement ambitious and viable Article 4 strategies. Experts involved with the design and management of identified best practice renovation initiatives will help stakeholders assess feasibility for implementing these in other countries, to move best practice sharing beyond information to action, and an incubator for new concepts will help launch further implementation orientated projects.</li> </ol>	

**Topic EE-10 – Projects:**

<b>Acronym: TOPTEN ACT</b>	
<b>Title:</b> Enabling consumer action towards top energy-efficient products	
<b>Starting date:</b> 01.03.2015	<b>End date:</b> 01.03.2018
<b>Total cost:</b> 1,933,671.50 €	<b>EU max. contribution:</b> 1,793,866.50 €
<b>Type of Action:</b> CSA	
<b>Coordinator:</b> Agence de L'environnement et de La Maitrise de L'energie (FR)	
<b>Participants:</b> <ul style="list-style-type: none"> <li>▪ Svenska Naturskyddsforeningen I;</li> <li>▪ Oeko-Institut e.V. - Institut fuer Angewandte Oekologie;</li> <li>▪ The Energy Saving Trust Ltd By Guarantee;</li> <li>▪ Seven Stredisko Pro Efektivni Vyuzivani Energie O.P.S.;</li> <li>▪ Quercus - Associação Nacional de Conservação da Natureza;</li> <li>▪ Societa Cooperativa Sociale Eliante Onlus;</li> <li>▪ Institutul National de Cercetare-Dezvoltare Pentru Energie Icemenerg-Bucuresti;</li> <li>▪ Guide Topten Sarl;</li> <li>▪ Asociacion para La Defensa de La Naturaleza;</li> <li>▪ Oekozenner Pafendall Asbl;</li> <li>▪ Fundacja Na Rzecz Efektywnego Wykorzystania Energii;</li> <li>▪ Lietuvos Nacionaline Vartotoju Federacija Asociacija;</li> <li>▪ Bond Beter Leefmilieu Vlaanderen;</li> <li>▪ Norges Naturvernforbund;</li> <li>▪ Osterreichische Energieagentur Austrian Energy Agency;</li> <li>▪ Bush Energie GmbH</li> </ul>	
<b>Countries:</b> SE; DE; UK; CZ; CH; PT; IT; FR; ES; LU; PL; LT; BE; RO; NO; AT	
<b>Objectives:</b> <p>TOPTEN ACT aims at empowering consumers to ACT: to purchase top energy-efficient products that will save energy over their lifetime.</p> <p>TOPTEN ACT develops a comprehensive market transformation strategy targeting consumers, manufacturers, retailers, large buyers, consumer associations and other key actors in 16 European countries, covering a combined population of 447 Mio inhabitants. It works with these actors to help them embrace and promote energy-efficient products, so that they become the natural choice for consumers. Project partners will:</p> <ul style="list-style-type: none"> <li>- Manage 16 Topten websites presenting up-to-date, consumer-oriented information to 2 Mio visitors per year. These websites will showcase top energy-efficient models in a number of product groups: domestic appliances, cooling and lighting equipment, consumer electronics, vehicles etc. They build on independent and reliable market surveys selecting the best available technologies (BATs) amongst hundreds of thousands of products. → Consumers identify top products, compare costs and understand the benefits of energy performance on their electricity bills and for the environment.</li> <li>- 'Push' this information to consumers through extensive use of the media, communications and partnerships with key organisations acting as multipliers. → Impartial information reaches consumers.</li> <li>- Work with retailers, leveraging on their unique market position, directly in contact with consumers about to ACT, to further increase purchases of energy-efficient product. → In just one click, consumers will find and buy top efficient products.</li> </ul> <p>TOPTEN ACT impacts are both quantitative —savings of 331 GWh/year triggered per million € invested— and qualitative: markets are more transparent, media report on top efficient products, multipliers relay the Topten message to their target groups, consumers change their using and purchasing behaviour, retailers change their range and highlight BAT products, manufacturers shift their production lines.</p>	

<b>Acronym: Save at Work</b>	
<b>Title:</b> save@work - The Energy Saving Contest for Public Authorities	
<b>Starting date:</b> 01.02.2015	<b>End date:</b> 01.10.2017
<b>Total cost:</b> 1,408,990 €	<b>EU max. contribution:</b> 1,408,990 €
<b>Type of Action:</b> CSA	
<b>Coordinator:</b> B. & S.U. Beratungs- und Service-Gesellschaft Umwelt MbH (DE)	
<b>Participants:</b> <ul style="list-style-type: none"> <li>▪ Ekodoma;</li> <li>▪ Severn Wye Energy Agency Ltd;</li> <li>▪ Energikontor Sydost AB;</li> <li>▪ Greendependent Intezet Nonprofit Kozhasznu Korlatolt Felelossegu Tarsasag;</li> <li>▪ Prioriterre;</li> <li>▪ Agenzia per L'energia e Lo Sviluppo Sostenibile Associazione;</li> <li>▪ Grazer Energieagentur GmbH;</li> <li>▪ Arbeid &amp; Milieu VZW</li> </ul>	
<b>Countries:</b> LV; UK; SE; BE; HU; FR; IT; AT	
<b>Objectives:</b> <p>save@work focusses on overcoming the barriers to energy saving practices in public office buildings and changing the behaviour of public sector employees at work place. A minimum of 9000 employees in at least 180 public office buildings (administrative buildings - municipal/regional or federal state operated) from nine countries will compete in a year-long energy saving contest to achieve the highest energy savings possible compared to the previous year. Throughout the competition participants will benefit from expert knowledge provided by the partners; a web-based Energy Saving Online Tool (feedback system) which helps to visualise actual energy consumption and savings made by each building; tailor made information and campaign materials and the exchange of experience with other participants. The energy saving competition between public office buildings is embedded in an energy quality management system: Analysis – Development of Measures – Implementation – Monitoring and Continuation, which ensures an individual, professional goal-oriented and sustainable approach for realising energy savings.</p> <p>It is projected that the project will lead to 13 GWh primary energy saved and 3,100 t of CO<sub>2</sub> avoided in public buildings across Europe.</p> <p>Support from behavioural change experts and an accompanying evaluation of the implemented measures and results will help provide important insights useful for both project implementation as well as future initiatives in this field. Factors of success, barriers and the impact of the project in respect to mid- and long-term changes will be analysed.</p> <p>Project activities and results will be disseminated through a wide communication campaign to the public, as well as other stakeholders in public administrations and academic institutions. By providing a complete set of strategies and materials needed to replicate this project, our goal is to inspire others to follow our lead and develop energy efficient offices of the future.</p>	

<b>Acronym: SMART-UP</b>	
<b>Title:</b> Vulnerable consumer empowerment in a smart meter world	
<b>Starting date:</b> 01.03.2015	<b>End date:</b> 01.03.2018
<b>Total cost:</b> 791,493 €	<b>EU max. contribution:</b> 791,493 €
<b>Type of Action:</b> CSA	
<b>Coordinator:</b> ALPHEEIS SAS (FR)	
<b>Participants:</b>	
<ul style="list-style-type: none"> <li>▪ Aisfor SRL;</li> <li>▪ Projects In Motion Limited;</li> </ul>	<ul style="list-style-type: none"> <li>▪ Asociacion Ecoserveis;</li> <li>▪ National Energy Action LbG</li> </ul>
<b>Countries:</b> IT; MT; ES; UK	
<p><b>Objectives:</b></p> <p>The overarching aim of SMART-UP is to encourage the active use of Smart Meters and In-House Displays by vulnerable customers, in those Member States where the roll-out of Smart Meters has been embarked upon. Indeed, previous studies have shown that Smart Meters do not lead to energy savings in the residential sector unless households actively use them and are encouraged to modify their everyday practices. Our project intends to fill in this gap, while also raising awareness on demand response services.</p> <p>The way we intend to do so is by developing a training program for installers, social workers and other frontline staff in contact with vulnerable people, so that they can inform vulnerable consumers about the benefits brought about by smart metering and advise them on how to use their Smart Meter and In Home Display (IHD) units (where fitted) to best effect, each time they are in contact with them. Indeed, most vulnerable and low-income householders require a one-to-one and on-going support.</p> <p>The training packages will be tested and improved before getting disseminated towards the major actors involved in smart meters deployment (DSOs, energy utilities, installers...). From 50 to 100 installers or other frontline staff will be trained in each project partner's country. Each of them will deliver face-to-face advice to 10 to 20 households, so as to reach 1,000 households in each country. DSO and energy utilities (depending on the national context) will be involved to provide the necessary support for this experiment and to ensure further dissemination of the training packages.</p> <p>Besides empowering vulnerable consumers, the project will serve to get some feedback on their specific needs and on the ways to appropriately communicate with them and help them take profit of smart metering. The project will also help consolidate data on how much energy can be saved if vulnerable householders are empowered to make best use of the opportunities that Smart Metering offers.</p>	

<b>Acronym:</b> STEP_BY_STEP	
<b>Title:</b> Step by step commitments for energy saving	
<b>Starting date:</b> 01.03.2015	<b>End date:</b> 01.09.2017
<b>Total cost:</b> 1,369,211.50 €	<b>EU max. contribution:</b> 1,369,211.50 €
<b>Type of Action:</b> CSA	
<b>Coordinator:</b> E3D-Environnement (FR)	
<b>Participants:</b>	
<ul style="list-style-type: none"> <li>▪ Zentrum fuer Europaeische Wirtschaftsforschung GmbH;</li> <li>▪ Centrum Badan I Innowacji Pro-Akademia Stowarzyszenie;</li> <li>▪ Cesie;</li> </ul>	<ul style="list-style-type: none"> <li>▪ Stad Gent;</li> <li>▪ Comune di Cefalu;</li> <li>▪ Miasto Stołeczne Warszawa;</li> <li>▪ Universiteit Gent;</li> <li>▪ Agencia Energetica de La Ribera</li> </ul>
<b>Countries:</b> DE; PL; IT; BE; ES	
<b>Objectives:</b>	
<p>At present, energy conservation campaigns provide households with a general awareness but do not provoke large scale behavior changes.</p> <p>The main goal of the STEP_BY_STEP is to maximize the number of households in a given area that significantly change their behaviour at home. Desired behaviour change includes reduced electricity consumption and the investment in energy efficient products and/or high quality renewable energy products.</p> <p>Communication strategies involving direct contact are typically more effective on behavioural change than mass media campaigns. Thus, a system will be put into place to make individual door-to-door contact with 80% of the households in a given area.</p> <p>Contrary to traditional door-to-door canvassing, often seen as a one-shot deal, our project solicits targeted households regularly through email or by phone and accompanies them over a 20 month period towards the adoption of energy-saving practices.</p> <p>To reduce the attitude-behaviour gap, our system uses proven communication techniques that push towards action. Households are regularly encouraged to try new ecological gestures adapted to their level of motivation. Feedback is given and social norms are used.</p> <p>Community-based social marketing strategies will be used to encourage energy-related investment decisions. Households likely to take individual investment decisions will be motivated to take such decisions benefiting from economies of scale and facilitated by other households' experience. Institutional partners will launch their energy saving interventions amongst 9000 households in 4 European areas that represent diverse populations and communities. French SME E3D will provide a behavioral strategy along with a web based system for behavioral change developed within a research project. Partnered laboratories will analyze household energy saving behavior patterns based on profiles and will define the environmental and economic impact of the project. Power Link will ensure the dissemination.</p>	

**Topic EE-14 – Project:**

<b>Acronym:</b> LabelPack Aplus	
<b>Title:</b> Promotion and support to the implementation of the energy labelling for Space, Combi Heaters and Water Heaters with a focus on the “Package label”	
<b>Starting date:</b> 01.03.2015	<b>End date:</b> 01.03.2018
<b>Total cost:</b> 1,385,797.50 €	<b>EU max. contribution:</b> 1,385,797.50 €
<b>Type of Action:</b> CSA	
<b>Coordinator:</b> European Solar Thermal Industry Federation (BE)	
<b>Participants:</b> <ul style="list-style-type: none"> <li>▪ Legambiente Associazione Onlus;</li> <li>▪ Eclareon GmbH;</li> <li>▪ DECO -Associação Portuguesa para a Defesa do Consumidor;</li> <li>▪ Enerplan;</li> <li>▪ Solar Trade Association Limited;</li> <li>▪ Associação Portuguesa da Indústria Solar;</li> <li>▪ Austria Solar;</li> <li>▪ Adene - Agência para a Energia;</li> <li>▪ Assolterm;</li> <li>▪ Bundesverband Solarwirtschaft e.V.</li> </ul>	
<b>Countries:</b> IT; DE; PT; FR; UK; AT	
<b>Objectives:</b> <p>The ‘Label Pack A\’ project aims at supporting the implementation of the energy labelling of heating appliances while boosting its impact, the focus being on the “package label” and its potential to push for the uptake of renewable technologies, in particular solar thermal, in combination with more efficient conventional technologies.</p> <p>The project will address one of the main challenges related to this particular energy labelling process in relation to other Energy-related Products: the issuing of the package label by installers. This challenge involves the preparation of the industry, retailers and installers to this process, including the communication to the final consumer.</p> <p>Therefore, the main objectives of the project are to:</p> <ul style="list-style-type: none"> <li>- Provide guidelines, as well as standardized answers to clarify the responsibility of each actor in the supply chain. These activities will, in particular, focus on installers and SMEs, who might be facing specific implementation challenges;</li> <li>-&gt; Facilitate the exchange of product fiches and product related information on the format of equipment’s databases, available to all the actors in the energy labelling process;</li> <li>-&gt; Apply the energy labelling calculation methodology and make it available to all the actors in the supply chain in the form of a user-friendly online calculation tool;</li> <li>-&gt; Develop and provide industry specific training material, especially focusing on the responsibilities’ and roles of installers in the energy labelling process;</li> <li>-&gt; Provide tailor-made information for end consumers, which will either be directly accessible by them, or used by dealers to explain the significance and added value of the “package label”;</li> <li>-&gt; Provide consolidated expertise on the energy labelling process to the Commission and national authorities, based on the experiences gathered on the pilot implementation in the participating countries.</li> </ul>	

**Topic EE-15 – Project:**

<b>Acronym: EEPLIANT</b>	
<b>Title:</b> Energy Efficiency Complaint Products 2014	
<b>Starting date:</b> 01.03.2015	<b>End date:</b> 01.07.2017
<b>Total cost:</b> 2,499,872.50 €	<b>EU max. contribution:</b> 2,499,872.50 €
<b>Type of Action:</b> CSA	
<b>Coordinator:</b> Stichting Prosafe (The Product Safety Enforcement Forum of Europe) (NL)	
<b>Participants:</b> <ul style="list-style-type: none"> <li>▪ State Agency for Metrological and Technical Surveillance;</li> <li>▪ Energistyrelsen;</li> <li>▪ Commission for Consumer Protection;</li> <li>▪ Statens Energimyndighet;</li> <li>▪ National Measurement Office;</li> <li>▪ Trzni Inspektorat RS;</li> <li>▪ Osterreichische Energieagentur Austrian Energy Agency;</li> <li>▪ Hessische Eichdirektion;</li> <li>▪ Federale Overheidsdienst Economie, Kmo, Middenstand En Energie;</li> <li>▪ Malta Competition and Consumer Affairs Authority;</li> <li>▪ Valstybine Ne Maisto Produktu Inspekcija Prie Ukio Ministerijos;</li> <li>▪ Nederlandse Voedsel En Warenautoriteit;</li> <li>▪ Bundesministerium fuer Wissenschaft, Forschung und Wirtschaft;</li> <li>▪ Ochrony Konkurencji I Konsumentow</li> </ul>	
<b>Countries:</b> BG; DK; SE; UK; SI; AT; BE; MT; LT; NL; DE; PL	
<b>Objectives:</b> <p>The objective of EEPLIANT 2014 (Energy Efficiency Compliant Products 2014) is to help deliver the intended economic and environmental benefits of the Ecodesign Directive 2009/125/EC and the Energy Labelling Directive 2010/30/EU by strengthening market surveillance and increasing compliance with the Directives and the relevant implementing measures. EEPLIANT 2014 will achieve this by:</p> <ul style="list-style-type: none"> <li>-Implementing systems that coordinate, in the most cost-effective manner, the monitoring, verification and enforcement of ecodesign and energy labelling requirements across the European Single Market;</li> <li>-Increasing the adoption of best practice amongst Market Surveillance Authorities (MSAs). The Consortium (13 MSAs and PROSAFE) will design, carry out and evaluate coordinated market surveillance actions across three different product sectors over the next two years. It will deliver a higher level of surveillance activities that go beyond testing and will target products that represent the highest energy saving potential. The consortium will work closely with other non-participating MSAs across the EEA through its liaison with the Energy Labelling and the Ecodesign ADCOs. Additionally, the Consortium will work together with a Steering Board comprising of business, consumer organisations and environmental NGOs to draw on their knowledge and experience and to communicate through them with all stakeholders about the progress and results of the project.</li> </ul> <p>The expected results are:</p> <ul style="list-style-type: none"> <li>-Adoption by Member States of best practices on how to conduct market surveillance most effectively.</li> <li>-Greater compliance due to increased market surveillance of products in the EEA with the Implementing Measures of the Energy Labelling and Ecodesign Directives.</li> <li>-Increased awareness of (and respect for) market surveillance by industry and amongst users.</li> <li>-Market surveillance being undertaken in a more cost effective and consistent manner across the EEA with an overall greater impact in the product sectors investigated.</li> </ul>	

**Topic EE-16 – Projects:**

<b>Acronym: ENERWATER</b>	
<b>Title:</b> Standard method and online tool for assessing and improving the energy efficiency of wastewater treatment plants	
<b>Starting date:</b> 01.03.2015	<b>End date:</b> 01.03.2018
<b>Total cost:</b> 1,731,087 €	<b>EU max. contribution:</b> 1,731,087 €
<b>Type of Action:</b> CSA	
<b>Coordinator:</b> Universidad de Santiago de Compostela (ES)	
<b>Participants:</b> <ul style="list-style-type: none"> <li>▪ Asociacion Española de Normalizacion y Certificacion;</li> <li>▪ Fachhochschule Koeln;</li> <li>▪ Energia Territorio Risorse Ambientali - ETRA SPA;</li> <li>▪ Universita Degli Studi di Verona;</li> <li>▪ Espina &amp; Delfin SL;</li> <li>▪ Wellness Smart Cities SLU;</li> <li>▪ Cranfield University</li> <li>▪ Aggerverband</li> </ul>	
<b>Countries:</b> ES; DE; IT; UK	
<b>Objectives:</b> <p>Waste Water Treatment Plants (WWTPs) is one of the most expensive public industries in terms of energy requirements accounting for more than 1% of consumption of electricity in Europe. EU Water Framework Directive (WFD) 91/271/CEE made obligatory waste water treatment for cities and towns. Now within the EU-27, the total number of WWTPs is estimated as 22.558, for which we can estimate a total energy consumption of 15,021 GWh/year. Although most of the objectives of the WFD in relation to water protection have been achieved, most of these aging plants show unsustainable energy consumption and must be optimized to the maximum and renovated accordingly. However, in Europe there is no legislation, norms or standards to be followed, and as consequence, a gigantic opportunity for reducing the public electric expense remains unregulated.</p> <p>The main objective of ENERWATER is to develop, validate and disseminate an innovative standard methodology for continuously assessing, labelling and improving the overall energy performance of WWTPs. For that purpose a collaboration framework in the waste water treatment sector including research groups, SMEs, utilities, city councils, authorities and industry will be set up. ENERWATER will devote important efforts to ensure that the method is widely adopted. Subsequent objectives are to impulse dialogue towards the creation of a specific European legislation following the example of recently approved EU directives, to achieve EU energy reductions objectives for 2020, ensuring effluent water quality, environmental protection and compliance with the WFD.</p> <p>These actions should bring European Water Industry a competitive advantage in new products development and a faster access to markets by facilitating evidence of reduction therefore fostering adoption on new technologies.</p>	



<b>Acronym: STEAM-UP</b>	
<b>Title:</b> STEam And Management Under Pressure	
<b>Starting date:</b> 01.03.2015	<b>End date:</b> 01.03.2018
<b>Total cost:</b> 1,528,655 €	<b>EU max. contribution:</b> 1,528,654.50 €
<b>Type of Action:</b> CSA	
<b>Coordinator:</b> Energy Experts International (NL)	
<b>Participants:</b>	
<ul style="list-style-type: none"> <li>▪ Osterreichische Energieagentur Austrian Energy Agency;</li> <li>▪ Centre for Renewable Energy Sources and Saving Foundation;</li> <li>▪ Aura Radgivning AS;</li> <li>▪ Ministerie Van Economische Zaken;</li> </ul>	<ul style="list-style-type: none"> <li>▪ Isnova Istituto per La Promozione Dell' Innovazione Tecnologica Scarl;</li> <li>▪ Adelphi Research GgmbH;</li> <li>▪ Enviros S.R.O.;</li> <li>▪ Consul System SPA;</li> <li>▪ Escan SL</li> </ul>
<b>Countries:</b> AT; EL; DK; NL; IT; DE; CZ; ES	
<b>Objectives:</b>	
<p>The industrial sector could reduce its energy use by at least 13%. 75% of the potential savings can be found in steam and electric motor systems. Actions to tap the full potential in steam systems have been taken in the past but without success since findings from energy audits were not, or partly, implemented.</p> <p>The following barriers have been identified:</p> <ul style="list-style-type: none"> <li>- There is no business case for steam saving measures for enterprise decision makers;</li> <li>- There is a lack of technical (steam) expertise of energy auditors and within enterprises generally;</li> <li>- There is no formal organisational structure for dealing with energy efficiency (energy management).</li> </ul> <p>The objectives and goals of the STEAM-UP proposal are:</p> <ul style="list-style-type: none"> <li>• Bridging the gap between audit results and implementation by developing an in-depth steam audit covering:           <ul style="list-style-type: none"> <li>- state of the art steam expertise;</li> <li>- involvement of all stakeholders in the enterprise;</li> <li>- identification of non-energy benefits to strengthen business cases;</li> <li>- energy management to secure prolongation.</li> </ul> </li> <li>• Reducing the effort for measure implementation by developing an integrated solution for business case reporting and energy management implementation.</li> <li>• Achieve energy savings during this action of 55,6 GWh/a through piloting 75 of the in-depth steam audits.</li> <li>• Building capacity amongst 400 energy auditors for the use of the in-depth steam audit methodology in their daily practise.</li> <li>• Building capacity amongst stakeholders in 75 enterprises on steam and the business benefits to increase steam efficiency.</li> <li>• Building capacity amongst 40 energy management training providers to enable integration of the in-depth steam audit methodology in regular energy training programmes.</li> <li>• Promote knowledge transfer on steam and the benefits to increase steam efficiency.</li> </ul> <p>This project focuses on the large, energy-intensive industry but the methodology will also be applicable for SMEs. The developed methodology can be made applicable for a wide range of utilities and processes.</p>	

**Topic EE-19 – Projects:**

<b>Acronym: REVALUE</b>	
<b>Title:</b> Recognising Energy Efficiency Value in Residential Buildings	
<b>Starting date:</b> 01.03.2015	<b>End date:</b> 01.03.2018
<b>Total cost:</b> 1,568,750 €	<b>EU max. contribution:</b> 1,568,750 €
<b>Type of Action:</b> CSA	
<b>Coordinator:</b> Bax & Willems (ES)	
<b>Participants:</b> <ul style="list-style-type: none"> <li>▪ Universiteit Maastricht;</li> <li>▪ Royal Institution of Chartered Surveyors;</li> <li>▪ Luwoge Consult GmbH;</li> <li>▪ Savills (UK) Ltd;</li> <li>▪ Vanhier BV</li> </ul>	
<b>Countries:</b> NL; UK; DE	
<b>Objectives:</b> <p>ReValue aims to lead the development of appraisal norms and standards that REcognise Energy Efficiency Value in social and private residential real estate. Financing decisions in real estate are often based on formal appraisals of value. Current norms on valuation, such as RICS', recognise Energy Efficiency (EE) as a potential source of value, but do not require taking this into account in appraisals, nor provide clear guidance on how to do so. As a result, investors are not provided with the formal basis to invest in or to provide financing (eg through mortgages) for EE components. For a standard renovation of a residential unit, up to 10k Euro in EE could be made 'bankable' if valuation norms and standards would better reflect long term EE value. At EU level, this could potentially unlock 20Bn Euro per year in financing of EE measures. Since 26% of EUs energy is consumed in homes, increasing investment on EE could significantly contribute to H2020 targets.</p> <p>Specific ReValue objectives are:</p> <ol style="list-style-type: none"> <li>1 develop and propose a set of norms and policies in the valuation of residential property that recognise EE</li> <li>2 align valuation techniques with such norms</li> <li>3 validate the framework in 4 pilot projects across Europe</li> <li>4 Stimulate uptake of the framework through widely recognised norms and support from key industry stakeholders</li> </ol> <p>ReValue's consortium is industry-lead, including RICS, one of the globally recognised standardisation bodies, and Savills, a leading valuer, and academic and professional experts in accounting, economics and EE design. Through observer roles, the project collaborates with building owners across Europe, investors and a range of entities that support exploitation and dissemination of project results</p> <p>In doing so, ReValue will contribute to reaching EE19's expected impact, by aligning valuation norms for optimal levels of investment of energy efficiency, and by increasing trust of investors and financiers in the financial viability of energy efficient measures</p>	

<b>Acronym: TRUST-EPC-SOUTH</b>	
<b>Title:</b> Building TRUST in Energy Performance Contracting for tertiary sector energy efficiency and sustainable energy projects in Southern European Countries	
<b>Starting date:</b> 01.03.2015	<b>End date:</b> 01.03.2018
<b>Total cost:</b> 1,936,975 €	<b>EU max. contribution:</b> 1,936,975 €
<b>Type of Action:</b> CSA	
<b>Coordinator:</b> Creara Consultores SL (ES)	
<b>Participants:</b> <ul style="list-style-type: none"> <li>▪ Officinae Verdi SPA;</li> <li>▪ Bureau Veritas Iberia SL;</li> <li>▪ The Research Committee of the Technical University of Crete;</li> <li>▪ Energia Propria SA;</li> <li>▪ Ambiente Italia S.R.L.;</li> <li>▪ Lifegate SPA;</li> <li>▪ Energies 2050;</li> <li>▪ Association Green Rating Alliance;</li> <li>▪ Energetski Institut Hrvoje Pozar</li> </ul>	
<b>Countries:</b> IT; ES; EL; PT; FR; HR	
<b>Objectives:</b> <p>The overall objective of TRUST-EPC-SOUTH is to scale up investments on Energy Efficiency (EE) and other Sustainable Energy (SE) in the tertiary sector of southern European countries, with particular focus on Energy Performance Contracts (EPC) projects. This objective will be achieved through the development of an ad hoc investment standardization and benchmarking framework and supported with the organisation of tailored capacity building activities that will allow project developers (including ESCOs, ESPCs and other EPC providers), project sponsors and tertiary sector actors to more easily access third party financing, thus unlocking the large tertiary sector EE/SE market potential.</p> <p>Geographically, the project will be carried out in the following 6 countries: Portugal, Spain, France, Italy, Croatia and Greece, in which we both see a need to improve the situation and a large untapped market potential in the tertiary sector.</p>	

<b>Acronym: RentalCal</b>	
<b>Title:</b> Incentives through Transparency: European Rental Housing Framework for Profitability Calculation of Energetic Retrofitting Investments	
<b>Starting date:</b> 01.03.2015	<b>End date:</b> 01.03.2018
<b>Total cost:</b> 1,996,766.25 €	<b>EU max. contribution:</b> 1,996,765.75 €
<b>Type of Action:</b> CSA	
<b>Coordinator:</b> Institut Wohnen und Umwelt GmbH (DE)	
<b>Participants:</b>	
<ul style="list-style-type: none"> <li>▪ European Green Cities APS;</li> <li>▪ Delphis Developpement Etudes Pour Le Logement La Promotion de L'habitat'innovation et Le Social Association;</li> <li>▪ Narodowa Agencje Poszanowania Energii SA;</li> <li>▪ STU-K AS;</li> </ul>	<ul style="list-style-type: none"> <li>▪ Universitaet Regensburg;</li> <li>▪ Tiasnimbas Business School B.V.;</li> <li>▪ Karlsruher Institut fuer Technologie;</li> <li>▪ Universidad de Alicante;</li> <li>▪ Aalborg Universitet;</li> <li>▪ The Chancellor, Masters and Scholars of The University of Cambridge</li> </ul>
<b>Countries:</b> DK; FR; PL; CZ; DE; NL; ES; UK	
<b>Objectives:</b>	
<p>The current level of energy efficiency investments in the rental housing sector is in danger of missing EU policy targets. RentalCal aims to develop models and tools for assessing the commercial viability of energy efficiency retrofitting in the rental housing stock. This will reduce split incentive barriers, price in green added value and show a clear road map towards a sustainable housing stock. In particular, RentalCal seeks to make the following key contributions:</p> <ol style="list-style-type: none"> <li>1. Develop the first commercial viability assessment framework for energy efficiency refurbishments specifically for rental housing Although rental housing represents the majority of Europe's multifamily housing stock, current viability calculation methods for energy efficiency retrofits are geared towards owner occupiers and ignore some inherent characteristics of the specific national rental market such as split incentives, rental regulations, tax regimes etc. RentalCal will develop an innovative standardised methodology for assessing retrofits in the private rental housing sector.</li> <li>2. Increase the transparency of investment conditions in the EU housing industry RentalCal will provide transparent information on the viability of energy efficiency investments based on legal, technical and financial conditions in eight participating member states. The standardised framework will allow for a transparent comparison of investment conditions in the EU, help to remove investment barriers in national housing markets and stimulate cross-border investment activity.</li> <li>3. Disseminate key insights into the 'Green Value' proposition to specific target groups RentalCal will provide rental property investors with target group specific information regarding the viability of a proposed retrofit investment. This includes the valuation benefits of energy-efficient buildings as well as other indirect financial benefits. All information will be available on RentalCal's web based calculation and information platform.</li> </ol>	

<b>Acronym: Solar Bankability</b>	
<b>Title:</b> Improving the Financeability and Attractiveness of Sustainable Energy Investments in Photovoltaics: Quantifying and Managing the Technical Risk for Current and New Business Models	
<b>Starting date:</b> 01.03.2015	<b>End date:</b> 01.03.2017
<b>Total cost:</b> 1,355,106 €	<b>EU max. contribution:</b> 1,355,106 €
<b>Type of Action:</b> CSA	
<b>Coordinator:</b> Accademia Europea per La Ricerca Applicata ed il Perfezionamento Professionale Bolzano (Accademia Europea Bolzano) (IT)	
<b>Participants:</b> <ul style="list-style-type: none"> <li>▪ TUV Rheinland Energie und Umwelt GmbH;</li> <li>▪ Accelios Solar GmbH;</li> <li>▪ 3E NV;</li> <li>▪ European Photovoltaic Industry Association</li> </ul>	
<b>Countries:</b> DE; BE	
<b>Objectives:</b> <p>The overall objective of this proposal is to reduce the risk associated with investments in sustainable energy projects. The project results should increase trust from investors, financiers and insurance companies. The project aims to establish a common practice for professional risk assessment based on technical and financial due diligence. The focus is on photovoltaic (PV) installations, with emphasis on projects on buildings or at the customer side of the electricity consumption meter and financed by professional investors.</p> <p>The project pursues the following specific objectives:</p> <ul style="list-style-type: none"> <li>- To develop, document and establish practices for evaluating and mitigating the technical risks associated with investments in photovoltaics</li> <li>- To develop, document and establish practices for valuing such risks when modeling the costs of a PV investment as investors do when evaluating the life cycle costs of such projects</li> <li>- To evaluate how these risks affect the electricity production and the expected return on investment in different business models</li> <li>- To enable the key actors, and particularly the financial market actors, to widely adopt the project results as best practices for the mitigation of risk of sustainable energy investments with current and new business models.</li> </ul> <p>The project will be based on large amount of empirical data available within the consortium and from other projects, allowing to formulate recommendations that are statistically significant and based on a large evidence base.</p> <p>The project will involve all relevant stakeholders being financial market actors, valuation and standardization entities, building and PV plant owners, industry, energy prosumers and policy makers. The impacts to be achieved are reduced uncertainty, increased investors' confidence and trust, valuation methodologies agreed by the market, standardized descriptions of investments, labelling schemes or harmonized frameworks for investment, and support to national strategies for financing.</p>	

<b>Acronym: ICPEU</b>	
<b>Title:</b> Developing Protocols to standardize the development and documentation of energy efficiency projects in the built environment and accelerate their financing.	
<b>Starting date:</b> 01.02.2015	<b>End date:</b> 01.02.2018
<b>Total cost:</b> 1,912,187.50 €	<b>EU max. contribution:</b> 1,912,187.50 €
<b>Type of Action:</b> CSA	
<b>Coordinator:</b> Energypro Limited (UK)	
<b>Participants:</b> <ul style="list-style-type: none"> <li>▪ DNV Kema Limited;</li> <li>▪ The Ecofin Research Foundation;</li> <li>▪ RDA - Climate Solutions Unipessoal Lda;</li> <li>▪ Plus Ultra Asset Management GmbH;</li> <li>▪ Verco Advisory Services Limited;</li> <li>▪ Denkstatt GmbH</li> </ul>	
<b>Countries:</b> UK; DE; PT; AT	
<b>Objectives:</b> <p>The importance of increasing investor confidence in energy efficiency as an asset class was stressed in a recent EU chartered Energy Efficiency Financial Institutions Group report which also highlighted the US based Investor Confidence Project as “a relevant model” and recommended “an EU Investor Confidence Project”. This project will deliver that Investor Confidence Project (ICP) to the EU.</p> <p>Several studies document the potential energy savings for efficiency investments as well as the scale of the investment needed. BPIE estimated EUR937bn investment would be necessary in their Deep Scenario to achieve 78% energy savings and 90% CO2 savings. Despite evidence of the potential attractiveness of investments, the flow of finance into energy efficiency remains much lower than required. Analysis reveals several barriers that hold private capital back but especially a lack of standardised processes and documentation, analogous to those used in the oil &amp; gas and renewables industries. All financial markets are enabled by buyers and sellers agreeing standards. Scaling up investment in efficiency will require standardisation and greatly increased capacity in the financing market – ICP Europe addresses these issues.</p> <p>The project will work with key stakeholders to develop open source Protocols and apply them to real projects. The project has measurable KPIs but the real aim is to get commitment from investors that they will specify the use of the Protocols by project developers seeking finance – making them standards.</p> <p>The advantages of standardization, the adoption of the ICP in the US, and the high level of interest from EU investors that this pan-European multi-disciplinary consortium has already demonstrated lead us to believe that this is realisable objective within the 36 month project. A few key early financial adopters in each market will lead to wider adoption. We have already identified and engaged with a significant number of potential early adopters.</p>	

<b>Acronym: RESFARM</b>	
<b>Title:</b> Developing and implementing financial instruments for the mobilisation of investments in renewable energy in the agrarian sector	
<b>Starting date:</b> 01.03.2015	<b>End date:</b> 01.06.2017
<b>Total cost:</b> 1,625,250 €	<b>EU max. contribution:</b> 1,625,245 €
<b>Type of Action:</b> CSA	
<b>Coordinator:</b> Unions Agrarias UPA (ES)	
<b>Participants:</b>	
<ul style="list-style-type: none"> <li>▪ Banco de Sabadell;</li> <li>▪ Asociacion de Cooperativas Agrarias de Galicia;</li> <li>▪ Biomass Research BV;</li> <li>▪ Sindicato Labrego Galego - Comisions Labregas;</li> <li>▪ Asociacion Agraria Jovenes Agricultores-Asaja Galicia;</li> </ul>	<ul style="list-style-type: none"> <li>▪ Ela, Ingenieria y Medio Ambiente SL;</li> <li>▪ Universidade da Coruna;</li> <li>▪ Instituto Energetico de Galicia - Inega - Instituto Energetico de Galicia;</li> <li>▪ Panhellenic Confederation of Unions of Agricultural Cooperatives Somateio;</li> <li>▪ Agricultura e Vita - Associazione</li> </ul>
<b>Countries:</b> ES; NL; EL; IT	
<b>Objectives:</b>	
<p>On-farm Renewable Energy Systems (RES) can provide agrarian communities with an extra source of stable income, while guaranteeing long term clean energy supply for society. Despite their enormous potential for RES, in practice many farmers are not capable of accessing the financial, technical and administrative resources required for installing RES capacity on their farms. This is caused by RES investments generally being restricted to project finance for large installations while RES types that can be installed on farms require bank loans. This limitation greatly restricts capital supply while raising overall cost. Most farms in the targeted countries have a low credit profile that disqualifies them for loans. To overcome this limitation and fully take advantage of the last few years' cost reductions and performance advancements in RES, a tailored investment instrument is needed that can attract capital from capital markets and especially from institutional investors to on-farm RES. The recent appearance of innovative investment schemes, addressed to overcome similar challenges in other sectors, demonstrates that, by creating pools of RES, access to capital market resources can be realized. The proposed action is designed to initiate a structured dialogue among farmers, financiers and other relevant experts and stakeholders in order to develop and promote such an investment instrument, tailored for on-farm RES. The consortium that presents this proposal includes, among other key stakeholders, a leading European financial institution, a university as well as the largest farmers' associations of Spain, Italy and Greece. The quality of the consortium and the relevance of the expected results mean that this proposal is a unique opportunity to increase the financeability of on-farm RES in Europe.</p>	

<b>Acronym: SEI Metrics</b>	
<b>Title:</b> Developing Sustainable Energy Investment (SEI) metrics, benchmarks, and assessment tools for the financial sector	
<b>Starting date:</b> 01.03.2015	<b>End date:</b> 01.03.2018
<b>Total cost:</b> 2,511,253.75 €	<b>EU max. contribution:</b> 2,362,378.75 €
<b>Type of Action:</b> CSA	
<b>Coordinator:</b> Association 2 Investing Initiative (FR)	
<b>Participants:</b> <ul style="list-style-type: none"> <li>▪ Societe de Mathematiques Appliquees et de Sciences Humaines;</li> <li>▪ Frankfurt School of Finance &amp; Management Gemeinnutzige GmbH;</li> <li>▪ Universitaet Zuerich;</li> <li>▪ Carbon Disclosure Project Gemeinnutzige GmbH;</li> <li>▪ Kepler Capital Markets SA;</li> <li>▪ WWF Deutschland;</li> <li>▪ Climate Bonds Initiative;</li> <li>▪ Wwf European Policy Programme Aisbl</li> </ul>	
<b>Countries:</b> FR; DE; CH; UK; BE	
<b>Objectives:</b> <p>The challenge we aim to address in this project is the lack of investment in sustainable energy and energy-efficient assets from public and private financial institutions. The core approach of the project is to define what a sustainable asset and a sustainable investment portfolio is, and to develop an assessment framework in order to allow financial institution to measure their 'performance' and set progress targets vis-à-vis energy-climate goals. This approach builds on the research done over the past few years by various organizations. The project will develop an assessment framework allowing investors to measure and manage their 'climate performance' (i.e. their exposure to sustainable energy and energy efficiency investments). This framework will include a translation of climate-energy investment roadmaps into targets for the finance sector, an assessment methodology for assets (e.g. equity shares in companies), and an assessment methodology for investment portfolios. The project will embed the framework into the standard toolbox used by investors to inform their asset allocation strategy, which will include an upgrade of databases used by investors; the integration of Sustainable Energy Investment performance metrics into portfolio optimisation tools, in order to allow investors to optimize climate and financial performance at the same time; and SEI benchmark indices in order to allow asset owners to integrate climate goals in the mandates of asset managers. The project will lead to several publications and a series of workshops with practitioners on Sustainable Energy Investment Metrics including a study on the risk-adjusted returns of SEI strategies; a study dealing with the implications of SEI metrics for financial policy-makers; and various workshops across Europe involving experts and financial institutions, to discuss methodological options, train practitioners on the assessment frameworks, and get feedbacks from road tests.</p>	



**Topic EE-21 – Projects:**

<b>Acronym: CITYinvest</b>	
<b>Title:</b> Increasing Capacities in Cities for Innovative Financing in Energy Efficiency	
<b>Starting date:</b> 01.02.2015	<b>End date:</b> 01.02.2018
<b>Total cost:</b> 1,512,938.75 €	<b>EU max. contribution:</b> 1,512,937 €
<b>Type of Action:</b> CSA	
<b>Coordinator:</b> Climate Alliance - Klima-Buendnis - Alianza del Clima e.V. (DE)	
<b>Participants:</b> <ul style="list-style-type: none"> <li>▪ Rescoop Eu Asbl;</li> <li>▪ Instituto de Fomento de La Region de Murcia;</li> <li>▪ Conseil Des Communes et Regions D'europe-Association;</li> <li>▪ Energinvest;</li> <li>▪ Groupement de Redeploiement Economique du Pays de Liege;</li> <li>▪ Sofia Energy Centre Ltd</li> </ul>	
<b>Countries:</b> BE; ES; BG	
<b>Objectives:</b> <p>CITYinvest strives to introduce innovative financing models (revolving funds, EPC, TPF, cooperative models, etc.) in 3 Pilot Regions (partners Liège (BE), Rhodope (BG) and Murcia (ES)) and conduct a wide-scale capacity building programme in 10 focus countries concerning specific financial instruments/business models. The assessment of innovative financial models is integral to discovering opportunities and identifying and overcoming barriers that specifically local and regional levels face. The project aims to develop a web-based portal that provides diverse practical guidance and match-makes experienced forerunners with less-experienced first-timer authorities. CITYinvest will spread the under-utilized financing models that enable project bundling and aggregation by mobilising the entire value chain at the regional/local level towards Horizon 2020's energy efficiency goals.</p> <p>To succeed, the project will first tackle public authorities' lack of understanding and knowledge on innovative financing models for sustainable energy services, especially retrofitting the building stock. Second, CITYinvest's concrete guidance will ensure in-depth capacity building and training. Third, close collaboration with authorities will trigger innovative financing schemes implementation and mobilise finance for energy efficiency services. Organization of consistent follow-up will monitor progress towards the objective of 37,5 GWh savings/year and other commitments. Finally, the national structures (of CEMR and CA) and invited experts will liaise with the participating public authorities in the capacity building programs to achieve CITYinvest's goal of ensuring long-term engagement.</p> <p>CITYinvest partners liaise with an Advisory Expert Group and pool of experts to provide the expertise and guidance/training. CITYinvest will further create synergies with other wide-spread initiatives, such as the Covenant of Mayors, linking SEAPS to innovative financing models for energy efficiency.</p>	

<b>Acronym: EPC_PLUS</b>	
<b>Title:</b> Energy Performance Contracting Plus	
<b>Starting date:</b> 01.03.2015	<b>End date:</b> 01.03.2018
<b>Total cost:</b> 1,486,015 €	<b>EU max. contribution:</b> 1,486,014.75 €
<b>Type of Action:</b> CSA	
<b>Coordinator:</b> Centre for Renewable Energy Sources and Saving Foundation (EL)	
<b>Participants:</b> <ul style="list-style-type: none"> <li>▪ Helesco Energy Services SA;</li> <li>▪ Institut Jozef Stefan;</li> <li>▪ Grazer Energieagentur GmbH;</li> <li>▪ Escan SL;</li> <li>▪ Instituto de Sistemas e Robotica-Associacao;</li> <li>▪ Sdruzhenie Chernomorski Izsledovatel'ski Energien Tsentar;</li> <li>▪ E7 Energie Markt Analyse;</li> <li>▪ Arbeitsgemeinschaft Asew C/O VKU;</li> <li>▪ Tipperary Energy Agency LBG;</li> <li>▪ Seven Stredisko Pro Efektivni Vyuzivani Energie O.P.S.;</li> <li>▪ Esco Italia SRL;</li> <li>▪ Factor 4 BVBA</li> </ul>	
<b>Countries:</b> EL; SI; AT; ES; PT; BG; DE; IE; CZ; IT; BE	
<b>Objectives:</b> <p>Energy Performance Contracting (EPC) is generally looked upon favourably, but its implementation can be complicated and lengthy. The reason lies mainly in the procurement law provisions and the long-term and complex contracts, which impede a real breakthrough in the spread of the EPC methodology. The other main barriers for the implementation of EPC in SMEs are:</p> <ul style="list-style-type: none"> <li>• The transaction costs for procuring energy services are too high</li> <li>• Investments and project sizes are too small</li> <li>• It is difficult to obtain financing for such small projects</li> <li>• High costs for guarantees, measurement and verification procedures</li> </ul> <p>The ultimate goal of the EPC\ project is to reduce transaction costs of energy service packages drastically so that smaller investments and projects in SMEs become possible for companies offering energy services. This can only happen if both the technical solutions as well as the contractual issues of energy services are highly standardized. The energy services offered can be either partly or wholly financed with innovative financing solutions, or may be more service-oriented solutions with guaranteed energy performances.</p> <p>The major outputs of the project include: (1) the development of commercial, standardized energy service packages for SMEs in each participant country. Each participant country will develop energy service packages that suit the specific and particular requirements of their country. These will include a standardized technical solution for a specific market sector, a model contract and, where possible, a financing solution. (2) the implementation of pilot projects for the EPC\ packages in each participant country (3) the set-up and management of clusters of companies (SPINS) in each participant countries. These clusters will offer energy services to the SME market, (4) the training of these clusters of companies in each participant country and (4) the development of an international e-market for energy service providers.</p>	

<b>Acronym: EnPC-INTRANS</b>	
<b>Title:</b> Capacity Building on Energy Performance Contracting in European Markets in Transition	
<b>Starting date:</b> 01.03.2015	<b>End date:</b> 01.03.2017
<b>Total cost:</b> 1,922,870.85 €	<b>EU max. contribution:</b> 1,922,870.10 €
<b>Type of Action:</b> CSA	
<b>Coordinator:</b> Deutsche Gesellschaft fuer Internationale Zusammenarbeit (GIZ) GmbH (DE)	
<b>Participants:</b> <ul style="list-style-type: none"> <li>▪ Energetski Institut Hrvoje Pozar;</li> <li>▪ Biedriba Zemgales Regionala Energetikas Agentura;</li> <li>▪ Centre for Renewable Energy Sources and Saving Foundation;</li> <li>▪ Fiatu;</li> <li>▪ Zavod Energetska Agencija Za Savinjsko Salesko In Korosko;</li> <li>▪ KEA Klimaschutz- und Energieagentur Baden-Wuerttemberg GmbH;</li> <li>▪ Stalna Konferencija Gradova I Opstina;</li> <li>▪ Agentia Pentru Eficienta Energeticasii Energii Regenerabile Ploiesti-Prahova Asociatie;</li> <li>▪ E-Code</li> </ul>	
<b>Countries:</b> HR; LV; EL; UA; SI; DE; RS; RO; SK	
<b>Objectives:</b> <p>A project proposed by Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH in cooperation with the Climate Protection and Energy Agency of Baden-Württemberg/Germany and European competence centres on Energy Performance Contracting (EnPC) in Croatia, Greece and Slovenia, a competence centre for e-learning in Slovakia, and key actors for the promotion of EnPC at the local level in Latvia, Serbia, Romania and Ukraine.</p> <p>Objective of EnPC-INTRANS is to increase the market uptake of technologies for the improvement of energy efficiency (EE) in public buildings and services by means of fostering private sector participation in innovative financing schemes for EE investments. This will be achieved by means of implementing large-scale capacity building for local public authorities and SMEs to jointly set-up and use adapted EnPC models for EE services (topic 3 in the scope of the EE21 call).</p> <p>European best practices in EnPC are adapted to local conditions (WP2) and presented to relevant target groups in the partner countries (WP3). Training needs of local public authorities and SMEs are assessed in intensive stakeholder dialogue, providing the basis for design and implementation of efficient training concepts and tools making use of advanced on-line technologies for European-wide capacity development (WP3). Trainers are trained throughout the partners' networks (WP4) and the developed training concepts and tools are demonstrated in national and international cooperation seminars (WP5). The achieved impact of large-scale capacity development on the European market for EnPC projects is continuously monitored and evaluated (WP6), and the project results are disseminated to all EU28 member states (WP7). At least 50 trained trainers and 3,000 trained experts will directly benefit from the project and cater for the initiation and development of EnPC projects in partner countries and beyond, providing for energy savings of more than 60 GWh per year when implemented. (The lead Partner) GIZ has been commissioned by the German Federal Ministry of Economic Cooperation and Development (BMZ) with the implementation of the project 'Energy Efficiency in Municipalities' in the Ukraine. The EC through this Horizon 2020 project thus contributes complementarily to achieving the overall objectives of the BMZ-funded project as the BMZ-funded project supports the implementation of the EU Horizon project. None of the activities covered by this work programme are funded by any other funding.</p>	

**CALL: H2020-EE-2014-4-PDA**

Topic	Title	Number of funded projects	Total EU-contribution [€]
EE-20	Project development assistance for innovative bankable and aggregated sustainable energy investment schemes and projects	4	5,161,547
<b>Total</b>		<b>4</b>	<b>5,161,547</b>

**Topic EE-20 – Projects:**

<b>Acronym: BEenerGI</b>	
<b>Title:</b> Bundling sustainable energy investments for Girona´s municipalities	
<b>Starting date:</b> 01.04.2015	<b>End date:</b> 01.04.2018
<b>Total cost:</b> 1,024,887.50 €	<b>EU max. contribution:</b> 922,398.75 €
<b>Type of Action:</b> CSA	
<b>Coordinator:</b> Diputacion de Gerona (ES)	
<b>Participants:</b>	
<b>Countries:</b>	
<p><b>Objectives:</b></p> <p>Girona's municipalities are mainly small so lack the technical or financial capacity to carry out ISE on their own. BEenerGI will support these municipalities from technical, legal and financial points of view. So in the next three years 6.48 MEUR of investments will be mobilized to increase energy efficiency in street lighting in 65 municipalities and 9.40 MEUR will be mobilized in energy efficiency investments in 85 public buildings. BEenerGI specific objectives are: launching sustainable energy investments to strengthen innovative organisational models, establishing and promoting a new funding scheme, capacity building among all key actors involved and final beneficiaries, opening access to energy consumption data and communication of results across Europe. BEenerGI is innovative both for the organisation of project development assistance (PDA) and for its proposed financial engineering. Regarding PDA innovation, the project will join investments in at least 15 packages in order to make them bankable. Regarding the innovation of the proposed financing engineering, BEenerGI will encourage contracts between municipalities and ESCOs or Small and Medium Enterprises-Micro-ESCOs Local energy sector SMEs (local maintainers, local energy suppliers,..). In some cases, Ddgi will give a subsidy of 2 MEUR to municipalities (during the whole period) to make the planned investments in public buildings bankable and to decrease the payback of these investments. BEenerGI foresees using the monitoring system for energetic consumption already installed in Covenant municipalities as a monitoring tool to evaluate the impact and results of the project. BEenerGI will disseminate its results among Covenant Coordinators or other local authorities that want to replicate these innovative organizational models to mobilize bankable bundled IES.</p>	

<b>Acronym: RESCOOP MECISE</b>	
<b>Title:</b> RESCOOPs Mobilizing European Citizens to Invest in Sustainable Energy	
<b>Starting date:</b> 01.03.2015	<b>End date:</b> 01.03.2019
<b>Total cost:</b> 2,185,000 €	<b>EU max. contribution:</b> 2,185,000 €
<b>Type of Action:</b> CSA	
<b>Coordinator:</b> Ecopower (BE)	
<b>Participants:</b> <ul style="list-style-type: none"> <li>▪ Courant D Air SCRL FS;</li> <li>▪ Som Energia SCCL;</li> <li>▪ Enercoop;</li> <li>▪ Rescoop Eu Asbl;</li> <li>▪ Energy4all Ltd</li> </ul>	
<b>Countries:</b> BE; ES; FR; UK	
<b>Objectives:</b> RESCOOP MECISE is short for Renewable Energy Sources COOPERatives Mobilizing European Citizens to Invest in Sustainable Energy. As European citizens and local authorities often lack time, financial means and technical expertise to initiate the necessary energy renovations of their houses and public buildings, the potential for energy efficiency projects remains largely untapped. RESCOOP MECISE will develop an integrated and innovative approach that gives answer to this impeding challenge. By integrating both renewable energy and energy efficiency projects into one innovative investment scheme RESCOOP MECISE will elaborate a completely new financing format. The financing scheme will make European citizens, REScoops, local authorities, the European Investment Bank and other related investment funds partners into the transition towards a more sustainable society. Moreover RESCOOP MECISE will encourage citizens and local authorities to initiate deep energy renovation projects by providing them with personal assistance and technical expertise that now remains with the REScoops. The RESCOOP MECISE project will also provide a clear cut solution for the financing problem that REScoops face when they want to start up with their first project. By means of setting up a European fund for both renewable energy and energy efficiency projects or through the development of a financial facilitation service for REScoops the REScoop MECISE project will enhance the potential for more successful energy efficiency projects throughout Europe.	

<b>Acronym: SUNShINE</b>	
<b>Title:</b> Save your bUildiNg by SavlNg Energy – towards 202020m2 of deeply renovated multifamily residential buildings	
<b>Starting date:</b> 01.03.2015	<b>End date:</b> 01.03.2018
<b>Total cost:</b> 1,555,991.25 €	<b>EU max. contribution:</b> 1,555,991.25 €
<b>Type of Action:</b> CSA	
<b>Coordinator:</b> Rigas Tehniska Universitate (LV)	
<b>Participants:</b> <ul style="list-style-type: none"> <li>▪ SIA Salaspils Siltums;</li> <li>▪ Eco.Nrg SIA;</li> <li>▪ Eku Saglabasanas Un Energotaupibas Birojs;</li> <li>▪ Ekodoma;</li> <li>▪ Renesco SIA;</li> <li>▪ Funding for Future BV</li> </ul>	
<b>Countries:</b> LV; NL	
<b>Objectives:</b> <p>Deep renovation – the idea of capturing the full economic energy efficiency potential of existing buildings with focus on building envelopes – leads to remarkable energy savings. As nearly all of Latvia’s stock of multifamily residential buildings continues to rapidly deteriorate due to harsh weather conditions and lack of proper maintenance, the idea is attractive. Realizing this potential requires designing, financing and implementing complex energy efficiency investments, but today nearly all apartments in Latvia are privately owned. Practice shows that individual owners are inadequately organized to manage their collective property. Combined with a lack of awareness and technical knowledge, limited availability of funding, high risk perception and reluctance for debt financing, the barriers overwhelm most people. A concept that addresses these constraints is Energy Performance Contracting (EPC). A key feature of EPC is that the provider, an energy service company (ESCO), guarantees energy savings.</p> <p>SUNShINE supports public and private ESCO's and leads to an innovative investment scheme with a pipeline of projects worth €30m, guaranteed savings over 26GWh/year, and 202020m2 of deeply renovated buildings. A major objective is to demonstrate the financial viability of deep renovation via suitable financial engineering of public funds and private capitals.</p> <p>The proposed approach is simple, yet very innovative: most ESCOs have limited balance sheet capacity and are not able to support much long term debt. So re-financing is usually achieved by selling future cash flows (receivables) by a forfaiting transaction. After this transaction the ESCO continues to guarantee energy savings for the entire EPC term (15-20 years). Unfortunately, in emerging EPC markets like Latvia, there are not enough track records, so banks are not yet ready to offer these services to ESCOs. The project delivers the same service by establishing a special purpose fund for EPC.</p>	

<b>Acronym: FESTA</b>	
<b>Title:</b> Fostering local energy investments in the Province of Matera	
<b>Starting date:</b> 01.03.2015	<b>End date:</b> 01.09.2017
<b>Total cost:</b> 498,157 €	<b>EU max. contribution:</b> 498,157 €
<b>Type of Action:</b> CSA	
<b>Coordinator:</b> Provincia di Matera (IT)	
<b>Participants:</b>	
<ul style="list-style-type: none"> <li>▪ Azienda Sanitaria Locale di Matera;</li> <li>▪ Università degli Studi della Basilicata</li> </ul>	
<b>Countries:</b> IT	
<p><b>Objectives:</b></p> <p>FESTA has the overall objective to foster local energy investments on public buildings (primarily in schools, a significant target in Italy for energy efficiency) and to spread the PPP approach also through the innovative, for the context, Energy Performance Contracts (EPC) in convergence regions.</p> <p>The main specific objectives of the proposed action are:</p> <ol style="list-style-type: none"> <li>1. to define technical, financial, legal and administrative specifications of a package of investments that are economically sustainable and attractive for private investors;</li> <li>2. to assess a PPP scheme and to define an EPC model for the energy efficiency of public buildings, also to create better condition to renewal this aged (&gt; 30 years) buildings;</li> <li>3. to publish the call for tender and to procure the bundled investments through EPC and sign the investment contracts;</li> <li>4. to become a best practice for the mobilisation of local energy investments of the area where municipalities are preparing the SEAPs (Province of Matera – leader of this project – is the coordinator);</li> <li>5. to share all this advances with local actors and other MLEI European partners.</li> </ol> <p>Specifically, the project (regarding a complex of schools in Matera and in Policoro with the neighboring hospital) aims to experiment, with technological and method approaches, the achievement of the objective that all schools in the area become “climate neutral” by 2020. The project also aim to generate capacity building in the field of renewable energy and energy saving through:</p> <ul style="list-style-type: none"> <li>• the inter-institutional collaboration between different public authorities to increase the interventions scale (that is very important considering both the small average size of the local administrations and the low population density);</li> <li>• the development of approaches that pay special attention to the potential of the PPP in the field of energy;</li> <li>• better understanding of the features that this kind of projects should have in order to be attractive to both lenders and ESCOs.</li> </ul>	



