



# Funded Projects under Horizon 2020

## Secure, clean and efficient energy

### Smart Cities and Communities Calls 2014

Source: European Union Open Data Portal

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

Status: June 2015

Compilation: NCP Energy Germany

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:

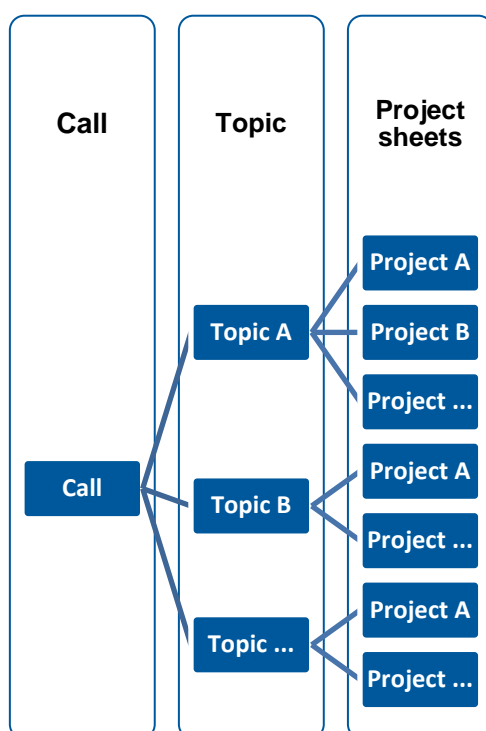
List of Calls

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 Smart Cities and Communities

### Work Programme 2014

H2020-SCC-2014	
Budget: 92,32 Mio.€	
Deadline: 07.05.2014	
Topic	Title
SCC-01	Smart Cities and Communities solutions integrating energy, transport, ICT sectors through lighthouse (large scale demonstration - first of the kind) projects
SCC-02	Developing a framework for common, transparent data collection and performance measurement to allow comparability and replication between solutions and best-practice identification
SCC-04	Establishing networks of public procurers in local administrations on smart city solutions



## CALL: H2020-SCC-2014

Topic	Title	Number of funded projects	Total EU-contribution [€]
SCC-01	Smart Cities and Communities solutions integrating energy, transport, ICT sectors through lighthouse (large scale demonstration - first of the kind) projects	3	71,783,525.81
SCC-02	Developing a framework for common, transparent data collection and performance measurement to allow comparability and replication between solutions and best-practice identification	1	962,846.25
<b>Total</b>		<b>4</b>	<b>72,746,372.06</b>

## Topic SCC-01 – Projects:

<b>Acronym: GrowSmarter</b>	
<b>Title:</b> GrowSmarter	
<b>Starting date:</b> 01.01.2015	<b>End date:</b> 01.01.2020
<b>Total cost:</b> 34,498,064.68 €	<b>EU max. contribution:</b> 24,820,974.38 €
<b>Type of Action:</b> IA	
<b>Coordinator:</b> Stockholms Stad (SE)	
<b>Participants:</b>	
<ul style="list-style-type: none"> <li>▪ Endesa SA;</li> <li>▪ Regional Environmental Center for Central and Eastern Europe -REC;</li> <li>▪ Schneider Electric Industries SAS;</li> <li>▪ Polis - Promotion of Operational Links with Integrated Services, Association Internationale;</li> <li>▪ Universidad de Navarra;</li> <li>▪ Info24 AB;</li> <li>▪ Kungliga Tekniska Hoegskolan;</li> <li>▪ Authority for Transport In Malta;</li> <li>▪ Fundacio Institut de Recerca de L'energia de Catalunya;</li> <li>▪ URBISUP Consulting SL;</li> <li>▪ Gas Natural SDG SA;</li> <li>▪ Rheinenergie;</li> <li>▪ Barcelona Supercomputing Center - Centro Nacional de Supercomputacion;</li> <li>▪ IBM Svenska AB;</li> <li>▪ Carrier Transport AB;</li> <li>▪ Consorci Centre D'innovacio del Transport;</li> <li>▪ Philips GmbH;</li> <li>▪ Stattauto Koeln Gesellschaft fuer Car Sharing MbH;</li> <li>▪ Fundacio Privada I2cat, Internet I Innovacio Digital A Catalunya;</li> <li>▪ Insero E-Mobility AS;</li> <li>▪ Dalkia Sverige AB;</li> <li>▪ Ampido GmbH;</li> <li>▪ Agt Group (R&amp;D) GmbH;</li> <li>▪ Municipiul Suceava;</li> <li>▪ Iclei European Secretariat GmbH (Iclei Europasekretariat GmbH)*;</li> <li>▪ Skanska Sverige AB;</li> <li>▪ Institut Municipal D'informatica de Barcelona;</li> <li>▪ Camara Municipal do Porto;</li> <li>▪ Deutsche Wohnungsgesellschaft MbH - Dewog;</li> <li>▪ Stadt Koeln;</li> <li>▪ Stadt Graz;</li> <li>▪ Retevision I, S.A.;</li> <li>▪ Envac AB;</li> <li>▪ Anteverti Consulting SL;</li> <li>▪ Cork City Council;</li> <li>▪ Fortum Power and Heat AB</li> </ul>	
<b>Countries:</b> ES; HU; FR; BE; SE; MT; DE; IE; DK; RO; PT; AT	
<b>Objectives:</b>	
<p>GrowSmarter aims to:</p> <ul style="list-style-type: none"> <li>• Improve the quality of life for European citizens by better mobility, housing and the quality of urban infrastructure while improving the citizens economy by lower energy costs and creating as much as 1500 new jobs (on the demonstration level).</li> <li>• Reduce the environmental impact by lower energy needs by 60 % and increased use of renewable energy thus reducing GHG emissions even more.</li> <li>• Create sustainable economic development by demonstrating and preparing a wider rollout of smart solutions.</li> </ul> <p>GrowSmarter will demonstrate at 3 lighthouse cities 12 smart, integrated solutions as a way of preparing for a wider market rollout. These solutions are integrated in specially chosen sites making demonstration easy to reach and take part of for the 5 follower cities and other European and international study groups. All the smart solutions are fit into the Lighthouse-cities strategic development plans and the follower cities replication plans.</p> <p>The solutions solve common urban challenges such as:</p> <ul style="list-style-type: none"> <li>• Renewal of existing buildings. GrowSmarter demonstrates the cost efficient renewal of 100.000 square meters of Nearly Zero or low energy districts reducing energy demand by 70-90%,</li> </ul>	



- Integrated infrastructures for ICT, street lighting, smart grids district heating and smarter waste handling
  - Sustainable urban mobility for both passenger and goods integrated in smart grids, biofuels from household waste thus reducing local air quality emissions by 60%.
- The integration of Cities, strong group of industrial partners together and quality research organisations guarantee that the solutions will be both validated by independent research organisations and transformed into Smart Business Solutions by industry for the wider rollout to Europe.
- GrowSmarter builds on integrated, close to the market solutions, to form business models for their wider deployment by the industrial partners. The project will help Europe GrowSmarter!

<b>Acronym: REMOURBAN</b>	
<b>Title:</b> REgeneration MOdel for accelerating the smart URBAN transformation	
<b>Starting date:</b> 01.01.2015	<b>End date:</b> 01.01.2020
<b>Total cost:</b> 23,790,404.88 €	<b>EU max. contribution:</b> 21,541,949.13 €
<b>Type of Action:</b> IA	
<b>Coordinator:</b> Fundacion Cartif (ES)	
<b>Participants:</b>	
<ul style="list-style-type: none"> <li>▪ Ayuntamiento de Valladolid;</li> <li>▪ Grupo Mecanica del Vuelo Sistemas S.A.;</li> <li>▪ Nottingham City Council;</li> <li>▪ Infohub Ltd;</li> <li>▪ Steinbeis Innovation GgmbH;</li> <li>▪ The Nottingham Trent University;</li> <li>▪ Tepebasi Municipality;</li> <li>▪ Energon Enerji Verimlilik Danismanligi Hizmeti Ve Ticaret Limited Sirketi;</li> <li>▪ Anadolu University;</li> <li>▪ Association pour Le Redeploiement Economique du Bassin Seresien - Arebs;</li> <li>▪ Demir Caner;</li> </ul>	<ul style="list-style-type: none"> <li>▪ Iberdrola Ingenieria y Construccion SA;</li> <li>▪ Dalkia Energia y Servicios SA;</li> <li>▪ Olcsan Cad Teknolojileri Yazilim Donanim Danismanlik Sanayi Ve Ticaretanonim Sirketi;</li> <li>▪ The Nottingham Energy Partnership LbG;</li> <li>▪ Xeridia S.L.;</li> <li>▪ Youris.Com;</li> <li>▪ Officinae Verdi SPA;</li> <li>▪ Miskolc Holding Önkormányzati Vagyonkezelő Zártkörűen Működő Részvénytársaság;</li> <li>▪ Sasie Ltd;</li> <li>▪ Acciona Infraestructuras S.A.</li> </ul>
<b>Countries:</b> ES; UK; DE; TR; BE; IT; HU	
<b>Objectives:</b>	
<p>REMOURBAN aims at the development and validation in three lighthouse cities (Valladolid-Spain, Nottingham-UK and Tepebasi/Eskisehir-Turkey) of a sustainable urban regeneration model that leverages the convergence area of the energy, mobility and ICT sectors in order to accelerate the deployment of innovative technologies, organisational and economic solutions to significantly increase resource and energy efficiency, improve the sustainability of urban transport and drastically reduce greenhouse gas emissions in urban areas. The urban renovation strategy will be focused on the citizens, because they become the cornerstones to making a smart city a reality and will not only be the most affected by the improvements but also they will be the common factor of each of them.</p> <p>HOW THE OBJECTIVE WILL BE ACHIEVED</p> <ol style="list-style-type: none"> <li>1. Developing a sustainable urban regeneration model, considering a holistic approach, which supports the decision making of the main stakeholders for addressing wide renovation and city transformation processes.</li> <li>2. Validating the urban regeneration model by means of large scale interventions on several cities called lighthouse cities, Valladolid, Nottingham and Tepebasi/Eskisehir (more than 1.000 dwellings retrofitted, more than 190 EV deployed and a total investment higher than 14 M€).</li> <li>3. Guaranteeing the replicability of the model at European level. Two cities will be also involved in the consortium, called follower cities, Seraing (Belgium) and Miskolc (Hungary) and will be developed a procedure for assessing the replicability potential of the model.</li> <li>4. It is planned an intense activity focused on generating exploitation and market deployment strategies to support the commercial exploitation of the project outcomes.</li> <li>5. It will be deployed a powerful communication and dissemination plan. This plan will integrate a citizen engagement strategy and will disseminate the benefits of the project to a wide variety of audiences (more than 11.000 citizens engaged).</li> </ol>	

<b>Acronym:</b> Triangulum	
<b>Title:</b> Triangulum: The Three Point Project / Demonstrate. Disseminate. Replicate.	
<b>Starting date:</b> 01.02.2015	<b>End date:</b> 01.02.2020
<b>Total cost:</b> 29,621,430.98 €	<b>EU max. contribution:</b> 25,420,602.30 €
<b>Type of Action:</b> IA	
<b>Coordinator:</b> Fraunhofer Gesellschaft zur Forderung der Angewandten Forschung eV (DE)	
<b>Participants:</b>	
<ul style="list-style-type: none"> <li>▪ Greater Stavanger Economic Development AS;</li> <li>▪ Stavanger kommune;</li> <li>▪ Ajuntament de Sabadell;</li> <li>▪ Gemeente Eindhoven;</li> <li>▪ Institut Planovani A Rozvoje Hlavniho Mesta Praha;</li> <li>▪ TUV SUD Immowert GmbH;</li> <li>▪ The Manchester Metropolitan University;</li> <li>▪ Universitaet Stuttgart;</li> <li>▪ Rogaland Fylkeskommune;</li> </ul>	<ul style="list-style-type: none"> <li>▪ Siemens Public Limited Company;</li> <li>▪ Stichting Woonbedrijf SWS HHVL;</li> <li>▪ Koninklijke KPN NV;</li> <li>▪ Strijp S Ontwikkeling BV;</li> <li>▪ Stadt Leipzig;</li> <li>▪ Manchester City Council;</li> <li>▪ Steinbeis Innovation GgmbH;</li> <li>▪ The University of Manchester;</li> <li>▪ Lyse Energi AS;</li> <li>▪ Universitetet I Stavanger;</li> <li>▪ Clicks and Links Ltd;</li> <li>▪ Technische Universiteit Eindhoven</li> </ul>
<b>Countries:</b> NO; ES; NL; CZ; DE; UK	
<b>Objectives:</b>	
<p>The Triangulum project will demonstrate how a systems innovation approach based around the European Commission’s SCC Strategic Implementation Plan can drive dynamic smart city development. We will test the SIP across three lighthouse cities: Manchester, Eindhoven and Stavanger, which represent the main typologies of European cities. They will be complemented by our follower cities Prague, Leipzig and Sabadell. This powerful combination reflects an urban population of between 100k and 1,2m inhabitants across six different countries, allowing us to demonstrate successful replication across a wide range of typical urban areas in Europe. Each city has already made significant progress towards the transition of becoming a smart city; developing their own individual approach reflecting specific local circumstances. These inherent strengths will now serve to accelerate the smart city development across proposed demonstration sites within Triangulum. The suite of projects developed will be based around zero/low energy districts, integrated infrastructures and sustainable urban mobility designed to deliver a range of cross-cutting outcomes across different sectors and stakeholders. This will provide the basis to ‘road test’ the SIP and provide recommendations to the Commission on how it could be improved to facilitate wider replication. The Triangulum goals target a series of direct impacts around; reduced energy consumption of buildings, increased use of renewable energies, increased utilisation of electric vehicles, deployment of intelligent energy management technologies and the deployment of an adaptive and dynamic ICT data hub. The design and implementation of innovative Business Models and the activation of citizens as co-creators are core cross-cutting elements to base the technologies in real-world city environments and facilitate replication.</p>	



**Topic SCC-02 – Project:**

<b>Acronym: CITYKEYS</b>	
<b>Title:</b> Smart City performance measurement system	
<b>Starting date:</b> 01.02.2015	<b>End date:</b> 01.02.2017
<b>Total cost:</b> 962,846.25 €	<b>EU max. contribution:</b> 962,846.25 €
<b>Type of Action:</b> CSA	
<b>Coordinator:</b> Teknologian Tutkimuskeskus VTT (FI)	
<b>Participants:</b> <ul style="list-style-type: none"> <li>▪ Eurocities ASBL;</li> <li>▪ Grad Zagreb;</li> <li>▪ Nederlandse Organisatie Voor Toegepast Natuurwetenschappelijk Onderzoek TNO;</li> <li>▪ AIT Austrian Institute of Technology GmbH;</li> <li>▪ Tampereen Kaupunki;</li> <li>▪ Ayuntamiento de Zaragoza;</li> <li>▪ Gemeente Rotterdam;</li> <li>▪ Magistrat der Stadt Wien</li> </ul>	
<b>Countries:</b> BE; HR; NL; AT; FI; ES	
<b>Objectives:</b> <p>The European Commission has developed two parallel approaches to support the implementation of smart urban technologies: the creation of 'lighthouse projects' (large scale demonstration of technology in cities and communities) and 'horizontal activities' to address specific challenges (e.g. regulatory barriers, in standardisation, public procurement and performance monitoring). CITYKEYS project is within the context of these horizontal activities. The mission of CITYKEYS is to develop, and validate, a holistic performance measurement framework for future harmonized and transparent monitoring and comparability of the European cities activities during the implementation of Smart City solutions. The work methodology will be based on the following key factors:</p> <ul style="list-style-type: none"> <li>• Extensive collaboration and communication with European cities.</li> <li>• Establish a baseline by analysis and integration of existing results from previous initiatives.</li> <li>• Develop a set of KPIs specific for Smart Cities initiatives evaluation and comparability</li> <li>• Smart solutions for transparent and open data collection and processing.</li> </ul> <p>The tangible objectives of the CITYKEYS project are to:</p> <ol style="list-style-type: none"> <li>1) Develop and validate a transparent performance evaluation framework: including KPIs definition, guidelines for data collections, performance system prototype and testing in case-cities.</li> <li>2) Develop recommendations for the implementation of the performance system into the cities decision-making process and recommendations for the development of new business.</li> <li>3) Engage stakeholders in identifying and exploiting opportunities for synergy and replicability; and establish a collaboration platform for European cities.</li> </ol> <p>The consortium includes 3 multidisciplinary research organizations, 1 cities association and 5 partner cities covering different geographical regions in Europe and different urban realities. In addition to the 5 partner cities, 15 others shown their commitment to join the project stakeholders advisory group.</p>	

