

EASME

Executive Agency for Small and Medium-sized Enterprises

EU Commission Funded initiatives managed by EASME

Olav Luyckx Project Advisor

4th EURECA Workshop

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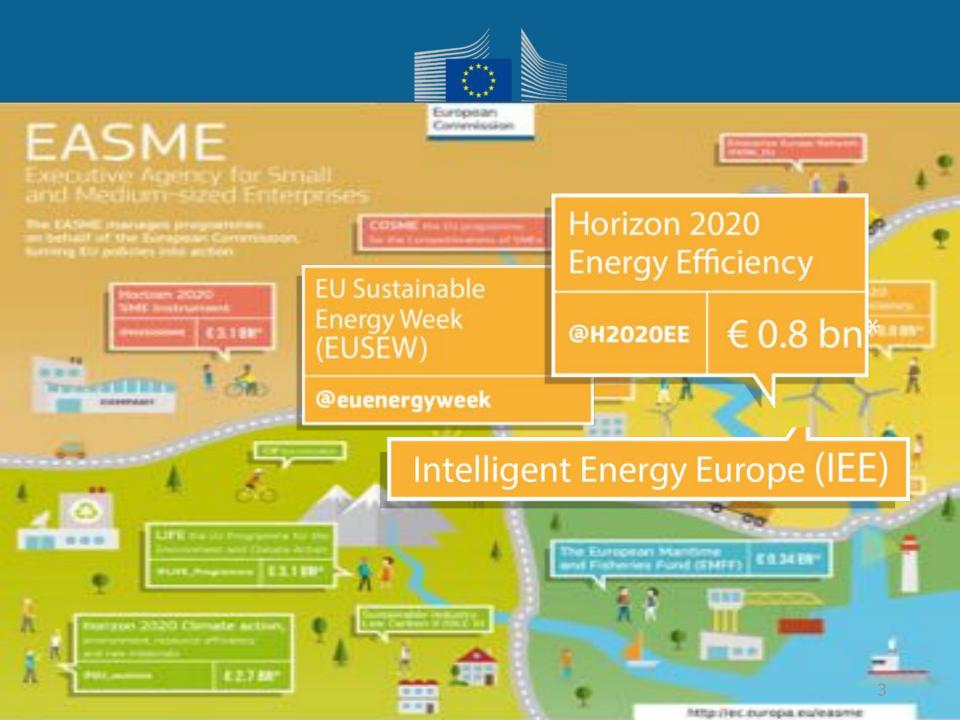




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Horizon 2020's Energy Challenge Secure, clean and efficient energy for Europe

As part of the Horizon 2020 programme, the European Commission is funding projects that support the transition to a reliable, sustainable and competitive energy system.



FUNDING PRIORITIES FOR 2014 AND 2015

Competitive Low-carbon Energy €737m Smart Cities & Communities €199m Energy Efficiency €198m SME innevations for a Low-carbon Energy System C69m Fast Track to Innovation for Energy €14m



Buildings & Consumers



Heating & Cooling



Industry & Products



Finance for Sustainable Energy

WHAT KIND OF PROJECTS ARE WE LOOKING FOR?

Research & Innovation

actions that establish new knowledge or develop more energy efficient technologies and solutions.

EU funding rate: 100%

Innovation

actions that demonstrate the viability of new technologies and solutions or support their first deployment in the market.

EU funding rate: 70%

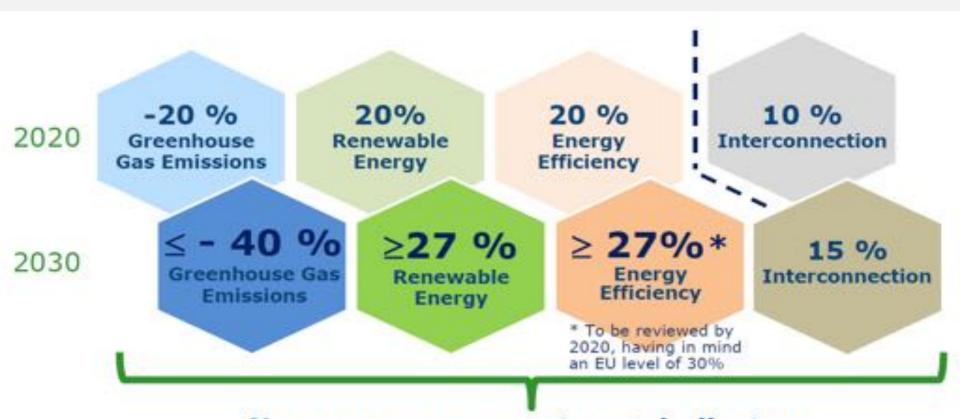
Coordination & support

actions* that improve skills, mobilise large-scale investments or facilitate EU policy implementation.

EU funding rate: 100%



The EU's 2020 and 2030 climate and energy goals



New governance system + indicators





EE-19-2017: Public Procurement of Innovative Solutions for energy efficiency

19 January 2017 - 7 June 2017 / Info Day 19 September 2016

The challenge

- Public sector constitute an important driver to stimulate market transformation towards more sustainable energy-related products and services;
- The Energy Efficiency Directive requires that central governments purchase only products, services and buildings with high energyefficiency performance;
- Public Procurement of Innovative solutions (PPI) is not sufficiently developed in the field of energy efficiency although it could support the market up-take of energy efficient goods, services or buildings.





The scope

- Actions enabling **local authorities** to undertake one joint PPI procurement of innovative solutions for products, services or buildings (NZEB, renovation), which are not yet available on a large-scale commercial basis, and which have energy performance levels that are better than the best levels available on the market;
- Actions should deploy commercial volumes of the innovative solution, in order to assure its market uptake;
- Where appropriate, proposals should **build upon** the outputs of on-going projects (including the Project Development Assistance projects), networks, guides, tools, and rely on the use of cost benefit analysis (e.g. using a life- cycle approach);
- The procurement of innovation process should be associated with coordination and networking activities that embed the PPI into a wider set of demand side activities, including the removal of marked barriers (e.g. lack of knowledge, practical training, tailored guidelines and legal uncertainties) and awareness and knowledge sharing activities;
- Actions should involve large multipliers such as central purchasing organizations.





Type of Action: Public Procurement of Innovative solutions

- EU Contribution 1.0 2.0 Mio EUR (this does not preclude submission and selection of proposals requesting other amounts);
- 20% funding rate (exceptionally **35%** for EE-19-2017) to leverage cofinancing from the procurers;
- At least 3 legal entities from 3 different MS/AC of which at least 2 legal entities from 2 different MS/AC that are public procurers.

General Annex D & E to the GA "Specific requirements for innovation procurement (PCP/PPI) supported by Horizon 2020 grants"





35% of direct eligible costs covered

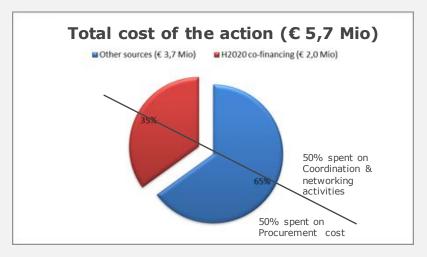
Preparation and implementation of the joint PPI

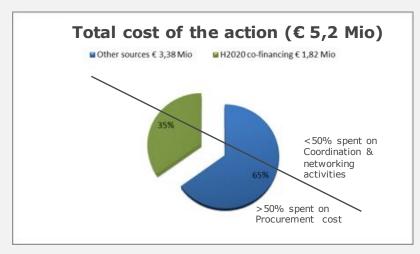
- The *price of the PPI procurement* (called the PPI subcontracting cost in the budget table in the submission system) *and*
- The costs for related *coordination and networking activities* to prepare, manage and follow-up the PPI procurement:
 - preparation of tender specifications and open market consultation, monitoring of on-going R&D, validation and testing of solutions at the procurer's premises, dissemination activities, travel for networking activities etc.;
 - but also coordination & networking activities related to contribution to standardisation, certification, regulation, preparation of follow-up PPI procurements to deploy the innovative solutions even more widely;
- Coordination & networking = max 50% of the requested grant;

Indirect costs = flat rate of 25% of the direct costs.









35% H2020 co-financing <u>can</u> be distributed as follows (theoretical example):

- Maximum allowed amount for coordination and networking (50%) = € 1,0 Mio
- 50% for actual procurement = € 1,0 Mio

Own contribution also contributes then

- 50% to coord & network cost = € 1,85 Mio
- 50% to procurement cost = € 1,85 Mio

35% H2020 co-financing <u>can</u> also be distributed as follows (theoretical example):

- Less than 50% (43,9%) for coordination and networking i.e. € 0,8 Mio
- Leaving € 1,02 Mio for actual procurement

Own contribution also contributes then

- <50% to coord & network cost = € 1,48 Mio
- >50% to procurement cost = € 1,9 Mio

H2020 co-financing reduces your risk, by taking on board part of the coordination and networking costs and the actual procurement costs of the innovative solution





Expected Impact

- Energy performance levels of **new buildings** should be at least 25% better than current regulations or reach NZEB performance levels;
- For **existing buildings**, energy savings of at least 60% compared to the existing building should be reached, using innovative solutions;
- **Products and services**, should demonstrate at least 25% better performance in terms of energy efficiency than best available solutions on the market;
- **Exploitation & dissemination strategy** assuring the deployment of commercial volumes of the innovative solution and reaching out to considerable numbers of relevant stakeholders.

wherever possible, use quantified indicators and targets





EE-20-2017: Bringing to market more energy efficient and integrated data centres

26 Jul 2016 - 19 Jan 2017 / Info Day 19 September 2016

The challenge

- Demand for ICT processing is expected to grow exponentially in the coming years, because of increasing demand for cloud computing, big data, Internet of Things, dematerialization of documents and other ICT services;
- Need for data centres to become more energy efficient and maximise integration of renewable energy sources;

"Intermittent renewable energy sources need to be combined with energy storage (electricity or cold/heat) to ensure efficient and secure energy management in data centres. In addition, existing and new data centres should be better integrated into the various energy grids (electricity and/or heat) in order to turn their energy use and waste into a benefit for the whole energy system"





The scope

- Proposals should cover several following areas: innovative and energy efficient cooling solutions, waste heat reuse, geographical and temporal workload balance, integration of local and remote renewable energy sources, integration in smart grids, integration with district heating/cooling networks, integration of power backup system in the grid and use of heat pumps for efficient use of waste heat etc.;
- Proposals should include the development of business models to trade heat, cold, electricity or energy security and storage;
- Proposals should build upon the results of previous projects such as the ones funded under the FP7-Smartcities Call 2013 (namely RenewIT, DC4Cities, Dolfin, Genic, GreenDataNet, GEYSER);
- Proposals should focus on new and existing data centres (indicatively from 500 kW to 1 MW IT load).





Type of Action: Innovation Action (70% funding)

• EU Contribution 2.0 – 3.0 Mio EUR (does not preclude submission and selection of proposals requesting other amounts);

Expected Impact:

- Bring data centre specific innovative energy efficiency technologies and solutions, already developed by research projects, to market faster and cheaper;
- Reaching a Power Usage Effectiveness of up to 1.2;
- Achieve a high share of the data centre energy consumption covered by sustainable energy resources.

wherever possible, use quantified indicators and targets





EACI / EASME long tradition in energy- efficient (public) procurement...













procurement for a low-carbon economy





















EURECA (649972) Support public procurers in identifying and optimizing potential energy savings in the procurement of data centres and server room facilities;

- Develop common practices and procedures for Public Procurement of Innovation (PPI) and Pre-commercial Procurement (PCP) for procurement of Green Data Centres;
- Assistance to 100 data centre facilities and 500 public procurers trained.
 50 data centres participate in benchmarking activities during the project lifetime and 10 data centres will perform piloting activities leading to 10 tenders by the end of the project lifetime (M30);
- More than 37.5 GWh per year in energy savings and/or renewable energy production.





Relevant initiatives

- CEPPI 2 (649720)
 - Capacity building for city authorities to embed (PPI) principles within the normal procurement processes of cities;
 - Five peer learning workshops open to interested cities;
 - http://www.ceppi.eu/home/

SPP Regions (649718)

- Promote networking and collaboration at European and subnational regional level on sustainable and innovative procurement (SPP/PPI);
- Establish a Sustainable Procurement and Innovation Network;
- http://www.sppregions.eu/home/





• E-SERVER (2007 - 2009)

- Stimulate market uptake of energy efficient servers;
- Contributed to the development of the first energy efficiency criteria for servers in the US/EU Energy Star programme;
- Best practice case studies in small, medium size and large enterprises, confirm an average energy saving potential of about 60% & guidelines for procurement and management of energy efficient servers.

PRIMEENERGYIT (2010 – 2012)

- Support market uptake of central IT equipment (server, data storage, network and cooling equipment);
- Guidelines on energy efficient equipment technology for servers, data storage, network equipment and cooling;
- Education seminars for 500 IT and infrastructure managers and consultants;
- Guidelines for procurement of energy efficient IT equipment to public services in the different countries;





National Contact Points (NCPs)

NCPs are in the front line for providing specialist advice and on-the-ground guidance to potential applicants

Main services:

- Guidance on choosing relevant H2020 topics and types of action;
- Advice on administrative procedures and contractual issues;
- Training and assistance on proposal writing;
- Assistance in partner search.

Find your national NCP:

http://ec.europa.eu/research/participants/portal/desktop/en/support/natio nal contact points.html

Network of Energy NCPs: www.C-energy2020.eu





More Information



http://ec.europa.eu/research/participants/portal/desktop/en/home.html

Research Enquiry Service: http://ec.europa.eu/research/index.cfm?pg=enquiries

EASME H2020 Energy Efficiency Home Page:

https://ec.europa.eu/easme/en/horizon-2020-energy-efficiency

Horizon 2020 Homepage:

http://ec.europa.eu/programmes/horizon2020/

Energy Efficiency Call 2017 Info Day 19 September 2016:

https://ec.europa.eu/easme/en/horizon-2020-energy-efficiency





EASME

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THANK YOU FOR YOUR ATTENTION

Olav Luyckx

Project advisor / Department B - LIFE and H2020 Energy, Environment, Resources / Sector - Public Authorities, Energy Services and Financing

olav.luyckx@ec.europa.eu





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