



@H2020EE

#H2020EE

Horizon 2020 Energy Efficiency Call for Proposals 2019

EE-06: Business case for industrial
waste heat/ cold recovery:
Symbiosis in industrial parks and
clusters – non-technological barriers

Bianca-Nicole Lepsa
Project Advisor

EASME B1 - H2020 Energy

Energy

LC-SC3-EE-6-2019: Business case for industrial waste heat/cold recovery

Symbiosis in industrial parks and clusters – non-technological barriers

Specific Challenge:

- Energy and fuels represent an important part of production costs in several Resource and Energy Intensive Industries
- Wide-scale deployment of industrial waste heat/cold recovery in industry hindered by lack of financial/economic justification and by limited industrial applicability
- Sources of heat/cold losses can be a valuable resource

LC-SC3-EE-6-2019: Business case for industrial waste heat/cold recovery

Symbiosis in industrial parks and clusters – non-technological barriers

CSA
100%

Scope (1/2):

Improve energy efficiency of industrial parks districts and clusters by unlocking market potential and supporting demand and offer of high-quality energy services by addressing **at least one of the following:**

- Customer/business level: Development and testing of **instruments facilitating actual implementation of energy cooperation**. Including capacity building of senior and executive management of companies and other related stakeholders.
- Service provider level: Development and testing of **replicable business models and service concepts for joint energy services**. Including capacity building of ESCOs and other 3rd party organisations.



LC-SC3-EE-6-2019: Business case for industrial waste heat/cold recovery

Symbiosis in industrial parks and clusters – non-technological barriers

CSA
100%

Scope (2/2):

Proposals should:

- Address **legal issues** in order to adapt regulatory and legal frameworks
- Take into account **sustainability in time** of the proposed symbiosis
- Ensure **applicability of solutions to other** industrial parks/business sectors
- Strong **communication and dissemination** components needed.

LC-SC3-EE-6-2019: Business case for industrial waste heat/cold recovery

Symbiosis in industrial parks and clusters – non-technological barriers

**EUR 1-2
million**

Expected impact:

- Primary energy savings triggered (GWh/year)
- Investments in sustainable energy triggered (million Euro)
- Number of plant sites (within one industrial park) and number of industrial parks committed to energy cooperation
- Number of relevant stakeholders aware of and/or interested in implementing joint energy services
- Number of policies and legal frameworks created and/or adapted to facilitate energy cooperation

Timeline and budget of the EE-06-2018-2019

	2018	2019
Total budget (M€)	9	5
Opening	<i>25-01-2018</i>	12-03-2019
Deadline	<i>13-09-2018</i>	03-09-2019

The expected EU contribution is between **1 and 2 million €** per proposal

Thank you!

#H2020EE

www.ec.europa.eu/easme/energy





@H2020EE

#H2020EE

Horizon 2020 Energy Efficiency Call for Proposals 2019

EE-08: Capacity building programs to
support implementation of energy audits

Filippo Gasparin

Project Advisor

EASME B1 –H2020 Energy

Energy

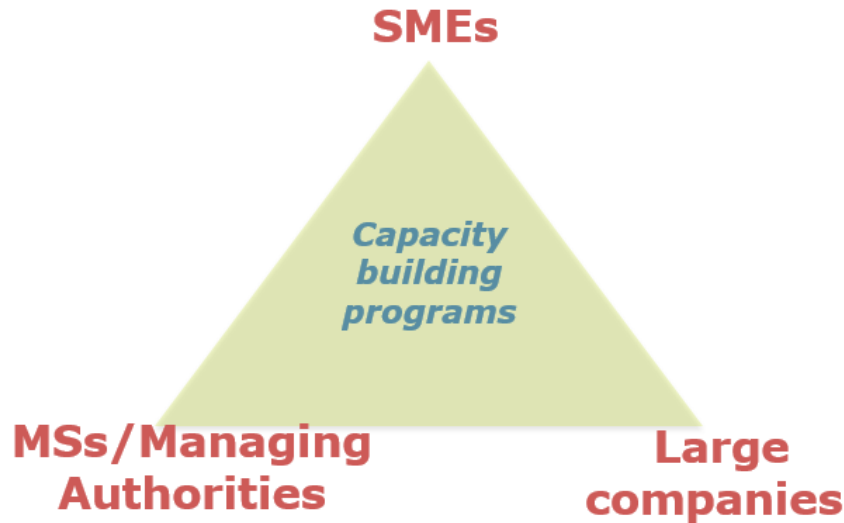
Art. 8 of the Energy Efficiency Directive

- (4) Member States shall ensure that enterprises that are not SMEs are subject to an energy audit carried out in an independent and cost-effective manner by qualified and/or accredited experts or implemented and supervised by independent authorities under national legislation by 5 December 2015 and at least every four years from the date of the previous energy audit.
- (2) Member States shall develop programmes to encourage SMEs to undergo energy audits and the subsequent implementation of the recommendations from these audits.

The specific challenge of the EE-08-2019-2020

- The lack of expertise, time and capital, including energy audit supporting scheme, often prevents SMEs from implementing energy conservation measures [...].
- The effectiveness of energy audit recommendations is also influenced by people's behaviours and the improvement of enterprises' energy cultures [...] in order to support large enterprises to concretely achieve energy savings.
- Member States to develop programmes encouraging SMEs to undergo energy audits and to implement the recommended energy-saving measures.

The Scope of the EE-08: *the three issues*



Addressing them all do not necessarily mean to be successful

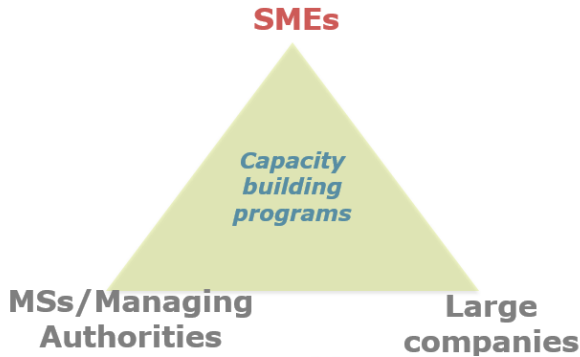
Scope (1/3)

Staff trainings and capacity building programs facilitating SMEs to undergo energy audits and to implement the recommended energy-saving measures.

Programs shall focus on:

- SMEs specificities (size, lifetime of the company, national/local conditions, sectors, etc.)
- Highlighting the financial aspects of energy audits
- Bridge the gap between Demand and supply side (SMEs, energy auditors, financial institutions, technology and service providers)
- Behavioural changes can also be addressed

Target Group: SMEs (operational and managerial staff). The involvement of relevant stakeholders is also encouraged (e.g. multiplier organisations, financial institutions).



Scope (2/3)

Capacity building programs supporting the take-up of audits recommendations and undertake the actions necessary to reduce energy consumption.

Programs shall focus on:

- Boosting investment in sustainable energy (maintenance or investments in new equipment)
- Development of corporate policy measures
- Fostering behavioural change and enhancing energy corporate culture
- Building investments, in terms of financial, environmental and health impact (multiple benefits)

Target Group: Large companies (managerial and operational staff) along with decision makers (e.g. board member) and different departments.



Scope (3/3)

Initiatives supporting Member States in empowering or establishing national supporting schemes for SMEs providing appropriate incentives to undergo energy audits and/or to implement the recommended energy-saving measures.



Programs shall focus on:

- Facilitating peer to peer review and fostering cross border collaboration among MSs
- Fostering best practices exchange and knowledge-sharing on supporting schemes for SMEs
- Development of financial tools (rotating funds/synergies with structural funds)

Target Group: Member States, Managing Authorities (located at national, regional and local level).

Impacts of the EE-08-2019-2020

CSA
100%

- **Primary energy savings** triggered by the project (in GWh/year);
- **Investments in sustainable energy** triggered by the project (in mln€);
- **Market stakeholders with increased skills** and **long-lasting training schemes**;
- **Number of people/enterprises with enhanced energy culture** as well in terms of the sustainability of the behavioural change;
- **Policies and strategies taken to improve/create audit supporting schemes** and/or number of SMEs supported in the implementation of energy audit.

Timeline and budget of the EE-08-2018-2019

	2018	2019
Total budget (M€)	<i>10</i>	5
Opening	<i>25-01-2018</i>	12-03-2019
Deadline	<i>13-09-2018</i>	03-09-2019

The expected EU contribution is between **1 and 2 million €** per proposal

Lessons Learnt from the EE-08-2018 evaluation

- **Be focused** (*targeting specific aspects of the topic*)
- Develop a **credible Work Plan**
- Involve **relevant stakeholders** (*e.g. Financial Institutions to foster follow-up energy audits*)
- Develop a **credible sustainability plan** (*preliminary business models and business plan shall be already envisaged within the proposal*).
- **Do not replicate previous actions** - *build on them!*

EE-16-2014 (CSA)**EE-16-2015 (CSA)****ENERWATER****Universidade de Santiago de Compostela**www.enerwater.eu/*To develop an innovative methodology for assessing, labelling and improving the energy performance of Wastewater Treatment Plants .***EE-METAL****Asociación De La Industria Navarra**www.ee-metal.com/*To increase energy efficiency and savings in SMEs of Metal and Metalworking industry.***STEAM-UP****INDUSTRIAL ENERGY EXPERTS BV**www.steam-up.eu/*To assess the substantial and easy to reach energy-saving potential of steam systems in heavy industries***WaterWatt****DECHEMA e.V.**www.waterwatt.eu/*To improve energy efficiency in industrial water circuits using gamification.***SCOoPE****Cooperativas Agro-Alimentarias De Espana**www.scoope.eu/*To reduce energy consumption in the crop drying, meat & poultry, dairy, fruit & vegetables transformation sectors.***EnergyWater****The Technological Institute of Castilla y León**www.energywater-project.eu/*To provide support to manufacturing industries by enabling energy efficient water processing***EE-15-2017 (CSA)****INDUCE****Fundación CIRCE***To increase the energy efficiency through behavioural and organizational change models targeting the food and beverage sector. <https://www.induce2020.eu/>***M-Benefits****Fraunhofer Institute***To include the Multiple Benefits of energy efficiency in investment decisions of companies. www.m-benefits.eu***EUREMnext****Nuremberg Chamber of Commerce and Industry***To increase the quality of energy audit results through training programs. www.eurem-next.eu***IMPAWATT****PLANAIR SA***To develop staff trainings and capacity building programmes to enhance corporate policy towards energy efficiency, energy culture and sustainable supply-chain initiatives. www.impawatt.com*

Thank you!

#H2020EE

www.ec.europa.eu/easme/energy

