

# “Secure, Clean and Efficient Energy” in Horizon-2020

## Work program 2016-2017

Secure, Clean and Efficient Energy makes part of the Societal Challenges defined in Horizon-2020 (H2020) Program. This Program covers the period of time 2014-2020. Secure, Clean and Efficient Energy deals with the following main areas:

- Energy efficiency (EE)
- Competitive Low-Carbon Energy (LCE)
- SME instrument
- Fast-track-to-Innovation pilot
- Other actions

H2020 calls for 2016-2017 were recently launched. The list of forthcoming calls is presented herein below. Total budget foreseen for Secure, Clean and Efficient Energy in 2014-2020 is of 5.93 billion euro.

**Energy efficiency** calls deal with issues of: 1 – Heating and cooling, 2 – Engaging consumers towards sustainable energy, 3 - Buildings, 4 – Industry, services and products, 5 - Innovative financing for energy efficiency investments.

**Competitive Low-Carbon Energy** calls cover issues such as: 1 - Towards and integrated EU energy system, 2 – Renewable energy technologies, 3 – Enabling the decarbonisation of the use of fossil fuels during the transition to a low-carbon economy, 4 – Social, economic and human aspects of the energy system, 5 – Supporting the development of a European research area in the field of energy.

**SME Instrument** and **Fast-track-to-Innovation pilot** and well as **other actions** deal with priority issues as defined in H2020 work program and objectives.

### More info:

**Horizon 2020 Work Programme 2016 – 2017: 10. 'Secure, Clean and Efficient Energy':**

[http://ec.europa.eu/research/participants/data/ref/h2020/wp/2016\\_2017/main/h2020-wp1617-energy\\_en.pdf](http://ec.europa.eu/research/participants/data/ref/h2020/wp/2016_2017/main/h2020-wp1617-energy_en.pdf)

**Horizon 2020 Work Programme 2016 – 2017: 7. Innovation in SMEs:**

[http://ec.europa.eu/research/participants/data/ref/h2020/wp/2016\\_2017/main/h2020-wp1617-sme\\_en.pdf](http://ec.europa.eu/research/participants/data/ref/h2020/wp/2016_2017/main/h2020-wp1617-sme_en.pdf)

**National Contact Points for energy in R. Moldova:** <http://www.h2020.md/en/npc>

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## Work program 2016-2017

	Type of action	Call opening date(s)		Call indicative budget(s), mln €		Call deadline(s)
		2016	2017	2016	2017	
<b>Call - Energy Efficiency Call 2016-2017</b>						
<b>1. Heating and cooling</b>						
EE-01-2017: Waste heat recovery from urban facilities and re-use to increase energy efficiency of district or individual heating and cooling systems	IA	15 Jun 2016		30.00*		19 Jan 2017
EE-02-2017: Improving the performance of inefficient district heating networks	CSA		19 Jan 2017	47.00*		07 Jun 2017
EE-03-2016: Standardised installation packages integrating renewable and energy efficiency solutions for heating, cooling and/or hot water preparation	IA	15 Oct 2015		34.00*		21 Jan 2016
EE-04-2016-2017: New heating and cooling solutions using low grade sources of thermal energy	RIA	15 Oct 2015/ 15 Jun 2016		34.00*	30.00*	21 Jan 2016/ 19 Jan 2017
EE-05-2016: Models and tools for heating and cooling mapping and planning	RIA	15 Oct 2015		34.00*		21 Jan 2016
<b>2. Engaging consumers towards sustainable energy</b>						
EE-06-2016-2017: Engaging private consumers towards sustainable energy	CSA	15 Mar 2016	19 Jan 2017	30.00*	47.00*	15 Sep 2016/ 07 Jun 2017
EE-07-2016-2017: Behavioural change toward energy efficiency through ICT	IA	15 Oct 2015/ 15 Jun 2016		34.00*	30.00*	21 Jan 2016/ 19 Jan 2017
EE-08-2016: Socio-economic research on consumer's behaviour related to energy efficiency	RIA	15 Oct 2015		34.00*		21 Jan 2016
EE-09-2016-2017: Engaging and activating public authorities	CSA	15 Mar 2016	19 Jan 2017	30.00*	47.00*	15 Sep 2016/ 07 Jun 2017

### 3. Buildings

EE-10-2016: Supporting accelerated and cost-effective deep renovation of buildings through Public Private Partnership (EeB PPP)	IA	15 Oct 2015		16.00*		21 Jan 2016
EE-11-2016-2017: Overcoming market barriers and promoting deep renovation of buildings	CSA	15 Mar 2016	19 Jan 2017	30.00*	47.00*	15 Sep 2016/ 07 Jun 2017
EE-12-2017: Integration of Demand Response in Energy Management Systems while ensuring interoperability through Public Private Partnership (EeB PPP)	IA	15 Jun 2016			16.00*	19 Jan 2017
EE-13-2016: Cost reduction of new Nearly Zero-Energy buildings	CSA	15 Mar 2016		30.00*		15 Sep 2016
EE-14-2016-2017: Construction skills	CSA	15 Mar 2016	19 Jan 2017	30.00*	47.00*	15 Sep 2016/ 07 Jun 2017

### 4. Industry, services and products

EE-15-2017: Increasing capacities for actual implementation of energy efficiency measures in industry and services	CSA		19 Jan 2017		47.00*	07 Jun 2017
EE-16-2016-2017: Effective implementation of EU product efficiency legislation	CSA	15 Mar 2016	19 Jan 2017	30.00*	47.00*	15 Sep 2016/ 07 Jun 2017
EE-17-2016-2017: Valorisation of waste heat in industrial systems (SPIRE PPP)	IA	15 Oct 2015/ 15 Jun 2016		16.00*	16.00*	21 Jan 2016/ 19 Jan 2017
EE-18-2017: Energy efficiency of industrial parks through energy cooperation and mutualised energy services	CSA		19 Jan 2017		47.00*	07 Jun 2017
EE-19-2017: Public Procurement of Innovative Solutions for energy efficiency	PPI		19 Jan 2017		47.00*	07 Jun 2017
EE-20-2017: Bringing to market more energy efficient and integrated data centres	IA	15 Jun 2016			30.00*	19 Jan 2017
EE-21-2016: ERA-NET Cofund actions supporting Joint Actions towards increasing energy efficiency in industry and services	ERA-NET Cofund	15 Mar 2016		5.00		15 Sep 2016

### 5. Innovative financing for energy efficiency investments

EE-22-2016-2017: Project Development Assistance	CSA	15 Mar 2016	19 Jan 2017	8.00	8.00	15 Sep 2016/ 07 Jun 2017
EE-23-2017: Innovative financing schemes	CSA		19 Jan 2017		47.00*	07 Jun 2017
EE-24-2016-2017: Making the energy efficiency market investible	CSA	15 Mar 2016	19 Jan 2017	30.00*	47.00*	15 Sep 2016/ 07 Jun 2017
EE-25-2016: Development and roll-out of innovative energy efficiency services	CSA	15 Mar 2016		30.00*		15 Sep 2016

**Overall indicative budget**

**93.00 101.00**

## Call - COMPETITIVE LOW-CARBON ENERGY

### 1. Towards an integrated EU energy system

LCE-01-2016-2017: Next generation innovative technologies enabling smart grids, storage and energy system integration with increasing share of renewables: distribution network	RIA	08 Dec 2015/ 20 Sep 2016		20.00	18.00	05 Apr 2016/ 14 Feb 2017
LCE-02-2016: Demonstration of smart grid, storage and system integration technologies with increasing share of renewables: distribution system	IA	08 Dec 2015		73.46		05 Apr 2016
LCE-03-2016: Support to R&I strategy for smart grid and storage	CSA	08 Dec 2015		4.00		05 Apr 2016
LCE-04-2017: Demonstration of smart transmission grid, storage and system integration technologies with increasing share of renewables	IA	20 Sep 2016		65.12		14 Feb 2017
LCE-05-2017: Tools and technologies for coordination and integration of the European energy system	RIA	20 Sep 2016		28.00		14 Feb 2017

### 2. Renewable energy technologies

#### Developing the next generation of renewable energy technologies

LCE-06-2017: New knowledge and technologies	RIA	20 Sep 2016			20.00	05 Jan 2017
LCE-07-2016-2017: Developing the next generation technologies of renewable electricity and heating/cooling	RIA	27 Oct 2015/ 20 Sep 2016		61.30	66.50	16 Feb 2016/ 05 Jan 2017
LCE-08-2016-2017: Development of next generation biofuel technologies	RIA	27 Oct 2015/ 20 Sep 2016		10.00	10.00	16 Feb 2016/ 05 Jan 2017

#### Demonstrating innovative renewable energy technologies

LCE-09-2016: Increasing the competitiveness of the EU PV manufacturing industry	IA	11 May 2016		25.00		08 Sep 2016
LCE-10-2017: Reducing the cost of PV electricity	IA		11 May 2017		10.00	07 Sep 2017
LCE-11-2017: Near-to-market solutions for reducing the water consumption of CSP Plants	IA		11 May 2017		12.00	07 Sep 2017
LCE-12-2017: Near-to-market solutions for the use of solar heat in industrial processes	IA		11 May 2017		8.00	07 Sep 2017
LCE-13-2016: Solutions for reduced maintenance, increased reliability and extended life-time of off-shore wind turbines/farms	IA	11 May 2016		10.00		08 Sep 2016
LCE-14-2017: Demonstration of large >10MW wind turbine	IA		11 May 2017		25.00	07 Sep 2017
LCE-15-2016: Scaling up in the ocean energy sector to arrays	IA	11 May 2016		15.00		08 Sep 2016
LCE-16-2017: 2nd Generation of design tools for ocean energy devices and arrays development and deployment	IA		11 May 2017		7.00	07 Sep 2017

LCE-17-2017: Easier to install and more efficient geothermal systems for retrofitting buildings	IA		11 May 2017		8.00	07 Sep 2017
LCE-18-2017: EGS in different geological conditions	IA		11 May 2017		10.00	07 Sep 2017
LCE-19-2016-2017: Demonstration of the most promising advanced biofuel pathways	IA	11 May 2016	11 May 2017	15.00	15.00	08 Sep 2016/ 07 Sep 2017
LCE-20-2016-2017: Enabling pre-commercial production of advanced aviation biofuel	IA	11 May 2016	11 May 2017	15.00	10.00	08 Sep 2016/ 07 Sep 2017
<b>Supporting the market uptake of renewable energy technologies</b>						
LCE-21-2017: Market uptake of renewable energy technologies	CSA	20 Sep 2016			15.00	05 Jan 2017
<b>Fostering international cooperation in the area of renewable energy</b>						
LCE-22-2016: International Cooperation with Brazil on advanced lignocellulosic biofuels	RIA	11 May 2016		5.00		08 Sep 2016
LCE-23-2016: International Cooperation with Mexico on geothermal energy	RIA	27 Oct 2015		10.00		16 Feb 2016
<b>3. Enabling the decarbonisation of the use of fossil fuels during the transition to a low-carbon economy</b>						
LCE-24-2016: International Cooperation with South Korea on new generation high-efficiency capture processes	RIA	27 Oct 2015		17.00		16 Feb 2016
LCE-25-2016: Utilisation of captured CO2 as feedstock for the process industry	RIA	27 Oct 2015		10.00		16 Feb 2016
LCE-26-2016: Cross-thematic ERA-NET on Applied Geosciences	ERA-NET-Cofund	08 Dec 2015		10.00		05 Apr 2016
LCE-27-2017: Measuring, monitoring and controlling the risks of CCS, EGS and unconventional hydrocarbons in the subsurface	RIA	20 Sep 2016		15.00		05 Jan 2017
LCE-28-2017: Highly flexible and efficient fossil fuel power plants	RIA	20 Sep 2016		15.00*		05 Jan 2017
LCE-29-2017: CCS in industry, including Bio-CCS	RIA	20 Sep 2016		15.00*		05 Jan 2017
LCE-30-2017: Geological storage pilots	RIA	20 Sep 2016		15.00*		05 Jan 2017
<b>4. Social, economic and human aspects of the energy system</b>						
LCE-31-2016-2017: Social Sciences and Humanities Support for the Energy Union	RIA	27 Oct 2015/ 20 Sep 2016		10.00	10.00	16 Feb 2016/ 05 Jan 2017
LCE-32-2016: European Platform for energy-related Social Sciences and Humanities research	CSA	08 Dec 2015		1.70		05 Apr 2016
<b>5. Supporting the development of a European research area in the field of energy</b>						
LCE-33-2016: European Common Research and Innovation Agendas (ECRIAs) in support of the implementation of the SET Action Plan	RIA	08 Dec 2015		10.00		05 Apr 2016
LCE-34-2016: Joint Actions towards the demonstration and validation of innovative energy solutions	ERA-NET-Cofund	08 Dec 2015		30.80		05 Apr 2016

LCE-35-2016: Framework Partnership Agreement supporting Joint Actions towards the demonstration and validation of innovative energy solutions	FPA	14 Apr 2016		08 Sep 2016
LCE-36-2016: Support to the energy stakeholders to contribute to the SET-Plan	CSA	27 Oct 2015	2.40	16 Feb 2016

**Overall indicative budget**

**355.66 367.62**

**SME instrument**

<b>SME-1</b>		26 Nov 2015	10 Nov 2016	24 Feb 2016, 03 May 2016, 07 Sep 2016, 09 Nov 2016 / 15 Feb 2017, 03 May 2017, 06 Sep 2017, 08 Nov 2017
<b>SME-2</b>		26 Nov 2015	10 Nov 2016	03 Feb 2016, 14 Apr 2016, 15 Jun 2016, 13 Oct 2016 / 18 Jan 2017, 06 Apr 2017, 01 Jun 2017, 18 Oct 2017

**Fast-track-to-Innovation pilot**

**Other actions**

*\* indicative budget shared with other calls*

**IA** - Innovation action, **CSA** - Coordination and support action, **RIA** - Research and Innovation action, **PPI** - Public Procurement of Innovative solutions