

Nemzeti Innovációs Hivatal

(1061 Budapest, Andrássy út 12.)

2014. január 20.

H2020 Társadalmi kihívások **Biztonságos, tiszta és hatékony energia**

Pályázati információs workshop

Tartalom:

1. Frissítések, változtatások a Horizon 2020-ban FP7-hez képest
2. Pályázati felhívások és költségvetéseik
3. TRL szintek magyarázata

Hasznos weboldalak:

NIH, Nemzeti Kapcsolattartó Pontok:

<http://www.nih.gov.hunemzetkozi-tevekenyseghorizon2020nemzeti-kapcsolatarto>

NIH, Nemzetközi Tevékenységek, H2020:

<http://www.nih.gov.hu/nemzetkozi-tevekenyseghorizont-2020/mi-horizont-2020>

Partnerkeresés:

<http://cordis.europa.eu/web/guest/home>

Hivatalos Energia Work Program 2014-2015:

http://ec.europa.eu/research/horizon2020/index_en.cfm?pg=h2020-documents

HORIZON 2020 Framework Programme for Research & Innovation [Hivatalos Csoport]

<http://www.linkedin.com/groups/HORIZON-2020-Framework-Programme-Research-3731775/about>

1. Frissítések, változtatások az FP7-hez képest a Horizon 2020-ban

Item	FP7	Horizon 2020	Comments to Horizon 2020
Focus	Research	Research and Innovation	Financial instrument to implement Innovation Union. Check also the other Europe 2020 flagship initiatives
Budget	over 50 billion EUR	ca 70 billion EUR	Not such a significant increase - around 10-15%
Continuation of	FP6	FP7, CIP, EIT	More complex than FP7
Blocks	Cooperation, Capacities, People, Ideas, Euratom, JRC	Excellent Science, Industrial Leadership, Societal challenges, JRC	
New element	ERC (frontier research), Guarantee Fund, Risk Sharing Finance Facility	Financing each stage of innovation, FET scheme logic	
Management	DGs, ERC, REA	DGs, ERC, REA, EIB, EIF	
Guarantee Fund	Set up	Continues	
Funding rate (up to) for research	75%	100%	
Funding rate (up to) for Demonstration - Newly called Innovation projects	50%	70%	
Overhead/indirect costs	Different models (20%, 60% or actual)	25%	
Time-to-grant	12 months in average after submission of proposal	reduced to 8 months	
Ex-ante financial viability check	All beneficiaries exceeding 500,000 EUR EU contribution	Coordinators	
Audit certificates to be submitted	All beneficiaries exceeding 375,000 EUR EU contribution - cumulative in periods	All beneficiaries exceeding 325,000 EUR EU contribution - only one at the end of the project	Ex-post audits will be limited to 7% of the participants, the rule on the extrapolation on systematic errors will change
Interest on pre-financing	Reported by the coordinator	No need to declare	

2. Pályázati felhívások és költségvetéseik

ENERGY EFFICIENCY

Budget 2014: 92.50 MEUR

2015: 98.15 MEUR

A – Buildings and consumers
EE 1 – 2014: Manufacturing of prefabricated modules for renovation of building
EE 2 – 2015: Buildings design for new highly energy performing buildings
EE 3 – 2014: Energy strategies and solutions for deep renovation of historic buildings
EE 4 – 2014: Construction skills
EE 5 – 2014/2015: Increasing energy performance of existing buildings through process and organisation innovations and creating a market for deep renovation
EE 6 – 2015: Demand response in blocks of buildings
EE 7 – 2014/2015: Enhancing the capacity of public authorities to plan and implement sustainable energy policies and measures
EE 8 – 2014: Public procurement of innovative sustainable energy solutions
EE 9 – 2014/2015: Empowering stakeholders to assist public authorities in the definition and implementation of sustainable energy policies and measures
EE 10 – 2014/2015: Consumer engagement for sustainable energy
EE 11 – 2014/2015: New ICT-based solutions for energy efficiency
EE 12 – 2014: Socioeconomic research on energy efficiency

B – Heating and cooling
EE 13 – 2014/2015: Technology for district heating and cooling
EE 14 - 2014/2015: Removing market barriers to the uptake of efficient heating and cooling Solutions

C - Industry and products
EE 15 – 2014/2015: Ensuring effective implementation of EU product efficiency legislation
EE 16 – 2014/2015: Organisational innovation to increase energy efficiency in industry
EE 17 – 2015: Driving energy innovation through large buyer groups
EE 18 – 2014/2015: 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

D - Finance for sustainable energy
EE 19 – 2014/2015: Improving the financeability and attractiveness of sustainable energy investments
EE 20 – 2014/2015: Project development assistance for innovative bankable and aggregated sustainable energy investment schemes and projects
EE 21 – 2014/2015: Development and market roll-out of innovative energy services and financial schemes for sustainable energy

COMPETITIVE LOW-CARBON ENERGY

Budget 2014: 361.80 MEUR
2015: 374.73 MEUR

LCE 1	2014: New knowledge and technologies
Renewable electricity and heating/cooling	
LCE 2 – 2014/2015: Developing the next generation technologies of renewable electricity and heating/cooling	
LCE 3 – 2014/2015: Demonstration of renewable electricity and heating/cooling technologies	
LCE 4 – 2014/2015: Market uptake of existing and emerging renewable electricity, heating and cooling technologies	
Modernising the European electricity grid	
LCE 5 – 2015: Innovation and technologies for the deployment of meshed off-shore grids	
LCE 6 – 2015: Transmission grid and wholesale market	
LCE 7 – 2014: Distribution grid and retail market	
Providing the energy system with flexibility through enhanced energy storage technologies	
LCE 8 – 2014: Local / small-scale storage	
LCE 9 – 2015: Large scale energy storage	
LCE 10 – 2014: Next generation technologies for energy storage	
Sustainable biofuels and alternative fuels for the European transport fuel mix	
LCE 11 – 2014/2015: Developing next generation technologies for biofuels and sustainable alternative fuels	
LCE 12 – 2014/2015: Demonstrating advanced biofuel technologies	
LCE 13 – 2015: Partnering with Brazil on advanced biofuels	
LCE 14 – 2014/2015: Market uptake of existing and emerging sustainable bioenergy	
Enabling the decarbonisation of the use of fossil fuels during the transition to a lowcarbon economy	
LCE 15 – 2014/2015: Enabling decarbonisation of the fossil fuel-based power sector and energy intensive industry through CCS	
LCE 16 – 2014: Understanding, preventing and mitigating the potential environmental impacts and risks of shale gas exploration and exploitation	
LCE 17 – 2015: Highly flexible and efficient fossil fuel power plants	
Supporting the development of a European research area in the field of energy	
LCE 18 – 2014/2015: Supporting Joint Actions on demonstration and validation of innovative energy solutions	
LCE 19 – 2014/2015: Supporting coordination of national R&D activities	
Social, environmental and economic aspects of the energy system	
LCE 20 – 2014: The human factor in the energy system	
LCE 21 – 2015: Modelling and analysing the energy system, its transformation and impacts	
Cross-cutting issues	
LCE 22 – 2014: Fostering the network of National Contact Points	

SMART CITIES AND COMMUNITIES

Budget 2014: 73.82 MEUR

2015: 86.68 MEUR

SCC 1 – 2014/2015: Smart Cities and Communities solutions integrating energy, transport, ICT sectors through lighthouse (large scale demonstration - first of the kind) projects
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Enhancing the roll-out of Smart Cities and Communities solutions by stimulating the market demand

SCC 2 – 2014: Developing a framework for common, transparent data collection and performance measurement to allow comparability and replication between solutions and bestpractice identification

SCC 3 – 2015: Development of system standards for smart cities and communities solutions
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SCC 4 – 2014: Establishing networks of public procurers in local administrations on smart city solutions
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SCC 5 – 2015: Smart solutions for creating better cities and communities – assistance for a prize competition

SMEs AND FAST TRACK TO INNOVATION FOR ENERGY

Budget 2014: 33.95 MEUR

2015: 37.26 MEUR

SIE 1 – 2014/2015: Stimulating the innovation potential of SMEs for a low carbon and efficient energy system
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SIE 2 – 2015: Fast track to Innovation Topic – Pilot
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OTHER ACTIONS

Budget 2014: 640.02 MEUR

2015: 657.77 MEUR

B.1. Energy efficiency

B.1.1: Buildings and consumers

B.1.2: Heating and cooling

B.1.3: Industry and products

B.1.4: Innovative financing for sustainable energy
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B.2.: Competitive low-carbon energy technologies
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B.2.1.: Support to policy development and implementation of the Renewable Energy
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Directive

B.2.2.: Coordination of Renewable Energy policies development and implementation through concerted actions with Member States

B.2.3.: Support to Research and Innovation Policy in the areas of Renewable Energy, Carbon
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Capture and Storage and Clean Coal

B.2.4.: JRC's assistance, through a specific Administrative Arrangement, for Research and Innovation policy

B.2.5.: Engine tests with new types of biofuels and development of biofuel standards under Framework Partnership Agreement with CEN-CENELEC

B.2.6.: Realization of a reliable and stable energy supply systems integrating increasing share of variable renewable energy and storage
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B.2.7.: Energy Storage Mapping and Planning

B.2.8.: Energy Policy support on CCS

B.2.9.: Energy Policy support on unconventional gas and oil

B.2.10.: Innovative Financial Instruments for First-of-a-kind Commercial Demonstration Projects in the field of Energy
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B.2.11.: Supporting first-of-a-kind, commercial-scale industrial demonstration projects in the field of competitive low carbon energy
B.2.12.: Studies to support the Internal Energy Market
B.2.13.: Mapping and analyses of the current and future (2020 - 2030) heating/cooling fuel deployment (fossil/renewables), including the economic/environmental and social aspects
B.2.14.: Support to key activities of the European Technology Platform on Renewable Heating and Cooling
B.2.15.: Support to key activities of the European Wind Energy Technology Platform (TP Wind)
B.2.16.: Support to R&D strategy in the area of SET Plan activities in smart grids and energy Storage
B.2.17.: Contribution to Implementing Agreements (IA) of the International Energy Agency (IEA)
B.2.18.: Contribution to the International Renewable Energy Agency (IRENA)
B.3. Smart Cities and Communities
B.3.1.: Studies to support Smart Cities and Communities
B.3.2.: Support Services for the Covenant of Mayors Initiative
B.3.3.: Support the coordination of cities' activities via the Green Digital Charter
B.3.4.: Administrative arrangement with the JRC on measurement methodologies in the context of the International telecommunications Union (ITU)
B.4. Cross-cutting issues
B.4.1: Contribution to the IEA Energy Policy Review
B.4.2: Modelling and analysing energy policy, system transformation and climate change measures
B.4.3.: Support to the Italian Presidency Conference on the European Strategic Energy Technology Plan (SET Plan) 2014
B.4.4.: Support to the Luxembourg Presidency Conference on the European Strategic Energy Technology Plan (SET Plan) 2015
B.4.5.: Communication activities
B.4.6.: Evaluation, monitoring, review, audit and other external expertise

3. TRLszintek magyarázata

Where a topic description refers to a TRL, the following definitions apply:

- TRL 1 – basic principles observed
- TRL 2 – technology concept formulated
- TRL 3 – experimental proof of concept
- TRL 4 – technology validated in lab
- TRL 5 – technology validated in relevant environment (industrial environment in the case of key enabling technologies)
- TRL 6 – technology demonstrated in relevant environment (industrial environment in the case of key enabling technologies)
- TRL 7 – system prototype demonstration in operational environment
- TRL 8 – system complete and qualified
- TRL 9 – actual system proven in operational environment (competitive manufacturing in the case of key enabling technologies; or in space)