



THE EU FRAMEWORK PROGRAMME
FOR RESEARCH AND INNOVATION

HORIZON 2020

Perspective on the new WP "Energy" 2016-2017

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Low Carbon Energy Outcomes (553,8M€)

Fields	2014	2015	Total
Alternative fuels	6	4,5	10,5
Biofuels/Bioenergy (CHP)	56,1	26,6	82,7
CSP	27,1	11,5	38,6
Geothermal	24,1	45,6	69,6
Ocean Energy	17	41,4	58,4
Photovoltaic	9,5	8,8	18,3
Solar Heating & Cooling	0,0	4,4	4,4
Wind	21,3	34	55,3
New Knowledge Technology	18,3	0,0	18,3
SSH	13,6	7,7	21,3
Market Uptake measures	20,3	18,5	38,8
Decarbonisation of the use of fossil fuels	33,3	34,3	67,6
MS Joint Actions (ERANET&CSA)	33,8	36,1	69,9
Total	280,4	273,4	553,8

In 2014-2015 DHC was targeted:

- **under Topic EE13 (Technology for district heating and cooling) and Topic EE14 (Removing market barriers to the uptake of efficient heating and cooling solutions) of the "Energy" Work Programme**
- **under Topic "Stimulating the innovation potential of SMEs for a low carbon energy system" of the SME Instrument**

Total funding awarded until now (2014 Call): 8,45 M€

The Integrated Roadmap of the SET-Plan addresses DHC under the following Headings:

- **"Increasing Energy Efficiency in Heating and Cooling (for Industrial and Consumer Uses), in Combination with Renewables Energy Use"**
- **"Increasing Energy Efficiency of Energy-related Products and Systems"**
- **"Ensuring Energy System Integration"**
- **"Promoting Sustainable Districts and Built Environment"**
- **"Developing Integrated Infrastructures and Processes"**



Energy Union [COM(2015)80]:

- **Energy security, solidarity and trust**
- **A fully integrated energy market**
- **Energy efficiency**
- **Decarbonising the economy**
- **Research and Innovation:**
 - **World leader in developing the next generation of renewable energy technologies,**
 - **Participation of consumers**
 - **Efficient energy systems**
 - **Sustainable transport systems**
 - **A forward-looking approach to carbon capture and storage (CCS) and carbon capture and use (CCU)**
 - **Nuclear energy**

H&C Strategy under preparation (expected beginning 2016)



Energy Union - "*Number 1 in RES*"

Priority actions:

- **Sustain technological leadership by developing highly performant renewable technologies and their integration in the EU energy system**
- **Reduce the cost of key technologies**

Next step:

Agreement with stakeholders on targets to be achieved (by 2020, by 2030) in terms of performance and cost



With regard to H&C, WP 2016-2017 aims to:

- **Continue the development and demonstration of H&C generation based on renewable sources (solar, geothermal, biomass)**
- **Demonstrate solutions for waste heat recovery**
- **Demonstrate and support market uptake of DHC and energy efficiency solutions**
- **Demonstrate fully integrated H&C units**
- **Develop H&C solutions based on low grade sources of thermal energy**



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**Thank you
for your attention!**

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