



Low-Carbon Energy (LCE) Calls WP 2016-2017

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Strategy for research in the area of SHC

- The cost competitiveness and acceptability of solar heating systems need to be improved.
- Significant impact is expected in terms of increasing the reliability while decreasing operation and maintenance costs
- **LCE07 in 2016:** Innovative components for solar compact hybrid systems (systems combining a solar system and a backup-heater):
- **LCE07 in 2017:** Development of components for residential single-family solar-active houses (solar heat share > 60%)

Strategy for innovation actions in the area of SHC

- The contribution of SHC in the industrial sector is still marginal despite the clear potential for the application of this technology.
- Solutions that achieve TRL 7 will stimulate the attractiveness of SHC and therefore the market uptake of this technology.
- **LCE12 in 2017:** Near-to-market solutions for the use of solar heat in industrial processes
- Expected EU contribution: EUR 5 to 8 million

Strategy for research in the area of CHP/bioenergy

- To increase the technology performance, feedstock basis and resource efficiency with the aim to improve cost effectiveness and reduce emissions
- To develop energy intermediates as storable renewable energy source in integrated systems
- **LCE07 in 2016:** Development of medium- and large-scale biomass-based CHP systems with high thermal and electrical efficiency and increased high-temperature heat potential
- **LCE07 in 2017:** Transforming renewable energy into intermediates from biomass and other renewable and waste carbon sources

Strategy in the area of geothermal energy (deep geothermal)

- To improve materials to increase the longevity and efficiency of deep geothermal systems therefore making them more reliable and cost-competitive: **LCE-07-2017** Materials for geothermal installations.
- To demonstrate the cost-effectiveness, the viability and the efficiency of geothermal energy sources to produce electricity, heat or a combination of both: **LCE-18-2017** EGS in different geological conditions (expected EU contribution: EUR 6 to 10 million)
- International cooperation with Mexico. To apply and further develop methodologies and technologies in the field of EGS and of superhot systems to reduce technological, environmental and social risks: **LCE-23-2016**.

Topic	Opening	Deadline
LCE07	27 October 2015	16 February 2016
	20 September 2016	5 January 2017
LCE23	27 October 2015	16 February 2016
LCE12, LCE18	9 May 2017	7 September 2017

Overall RES :

- Budget: 258,1M€ in 2016 and 256,5M€ in 2017
- Single stage evaluation



Further opportunities with regard to H&C:

- Tools and technologies for coordination and integration of the European energy system: **LCE-05-2017** Development of technologies, tools and systems to support synergies between electricity, gas and heat networks
- Horizon prize for a Combined Heat and Power (CHP) Installation in a hospital using 100% Renewable Energy Sources: **Other actions**
- InnovFin Energy Demonstration Projects (EDP): **Other actions**



**Thank you
for your attention**

