Press Release

Flexible Heat & Power (FHP) will increase the renewable energy in power grids by using the flexibility of power-to-heat resources

EU, 2 May 2017. Flexible Heat & Power (FHP) is a research and innovation project with the aim of connecting heat and power networks by harnessing the complexity in distributed thermal flexibility. The main objective of FHP is to increase the level of renewable energy in power grids by using the flexibility of power-to-heat resources.

FHP will take profit of the inertia of power-to-heat solutions that constitutes an enormous potential for generating electric flexibility. Heat pumps, central heating and cooling installations and forced ventilation systems act as interfaces connecting the flexible inertia of thermal processes to the electrical distribution grid. This can be used to absorb excess renewable generation and to avoid curtailment as well as managing local power congestion, voltage stability and production imbalance.

The project provides a practical framework to harnessing thermal flexibility for renewable energy sources (RES) owners, grid operators, aggregators and actors on the power market, while saving energy in buildings and other thermal processes connected to the grid. It includes two operational test cases in Uden, The Netherlands and Karlshamn, Sweden.

"*At Karlshamn Energi we strive to provide sustainable energy solutions based on renewable sources to our customers throughout the municipality of Karlshamn, Sweden. The Flexible Heat & Power project is important for us since it helps us to innovate our energy systems and to achieve our vision of green and locally generated energy*." explains Christer Karlsson, Power Grid Business Unit Director at Karlshamn Energi.

"*Large-scale digitalisation and operational artificial intelligence are transforming the way our energy systems work. It is exciting to be at the forefront of this transition in a project such as FHP.*" says Dr Christian Johansson, CTO at NODA Intelligent Systems.

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About FHP

FHP project (http://fhp-h2020.eu/) is three-years European Research and Innovation led by Belgian research and innovation institute VITO/Energyville. Theconsorptium consists of a range of research institutes, innovative SME's and industrial actors. The broad industrial experience, research knowledge and innovative potential within the consortium ensures that FHP will generate competitive products and services to the market and to provide solution for practical use of thermal flexibility in power grids.

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FHP consortium