Flexi-Sync

Flexible energy system integration using concept development, demonstration and replication

> *A better understanding of how flexibility in the district energy system can be optimized is crucial for the decarbonization and efficiency gains of the whole energy system.*

Flexi-Sync aims to optimize the flexibility in the district energy sector, a sector with untapped potential to balance the energy system.

The integration of more variable renewables in the energy system is creating challenges to balance energy production and demand. By increasing the flexibility, the heat and electricity sectors can complement each other in order to facilitate a more efficient use of renewables and waste heat in the energy system.

The Flexi-Sync project is an ERA-Net SES financed project focusing on flexible energy system integration using concept development, demonstration and replication. The project gathers 16 partners from four EU Member States: Austria, Germany, Spain and Sweden. Six demo sites in the countries will participate.

Project Duration

01.08.2019 - 15.10.2022

Project Budget

Total Budget: € 4,230,000.-

Funding: € 2,580,000.-

Project Coordinator

IVL Swedish Environmental Research Institute (SWE)

Project Partners

- Austrian Institute of Technology (AUT)
- Chalmers (SWE)
- IVL (SWE)
- LTU (SWE)
- RISE (SWE)
- NODA Intelligent Systems (SWE)
- Utilifeed (SWE)
- Eskilstuna Kommunfastigheter (SWE)
- Mölndalsbostäder (SWE)
- Willhem (SWE)
- Agrar Plus (AUT)
- Vattenfall Wärme Berlin (GER)
- Sampol (ESP)
- Borås Energi & Miljö (SWE)
- Eskilstuna Energi & Miljö (SWE)
- Mölndal Energi (SWE)

Project Website

www.flexisync.eu

Contact

www.flexisync.eu

ERA-Net Smart Energy Systems

Smart Energy Systems ERA-Net

ERA-Net Smart Energy Systems Joint Call 2018

This project has been awarded funding within the ERA-Net SES Joint Call 2018 for transnational research, development and demonstration projects. EUR 33.4 Mio of funding have been granted to 23 projects from 16 regions and countries.

This project has received funding in the framework of the joint programming initiative ERA-Net Smart Energy Systems. The initiative has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreements no. 646039 and no. 755970.

Joint Programming for Flourishing Innovation from Local and Regional Trials towards a Transnational Knowledge Community

www.eranet-smartenergysystems.eu

Main Objectives

The project objective is to identify how flexibility in district energy can be optimized and, thereby, contribute to the management of the existing mismatch between weather dependent, electricity production and variable demand.

Expected Main Results

- Identification of the flexibility potential of the district energy systems in the demo sites.
- Estimation of the cost efficient flexibility potential in the local or regional energy systems of the demo sites.
- Knowledge of the adjustments needed to the cost efficient solutions to be climate resilient.
- Implementation of the flexibility at the demo sites.
- An understanding of the business implications from increased flexibility.