

SNUKR

Increasing the benefit of small, biomass-fired CHPs through demand-oriented control

Key Facts



Funding Agency

German Federal Ministry for Economic Affairs and Energy (BMWi)



Project Call

Nutzung von Biomasse im Strom- und Wärmemarkt „Energetische Biomassenutzung“



Duration

07/2017 - 12/2020



Coordinator

Deutsches Biomasseforschungszentrum (DBFZ)



Partners

- ÖkoFEN Heiztechnik GmbH

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Supported by:



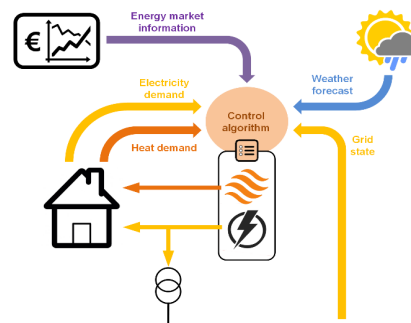
Federal Ministry
for Economic Affairs
and Energy

on the basis of a decision
by the German Bundestag

Project Objectives

The basic idea of the project is to develop and demonstrate a decentralised controller, which enables small biomass fired CHP systems, installed in domestic and small commercial applications (approx. 5 to 50 kWel), creating additional benefit to the customer, operator and local grid.

SNUKR aims for improving the benefits, by controlling the operation of the system in a way increasing on one hand the share of own electricity consumption at the site of installation and on the other hand, supporting the local distribution grid by feeding in, during times of high electricity demand. The controller developed in SNUKR is a decentralised device. It is installed directly at the CHP system and does only rely on information, which is available at the site (such as weather forecast, grid measurements, heat demand forecast). The main function is to shift the operation of the system; by a smart use of the thermal storages onsite, which are usually part of a small CHP system.



Possible input parameters for the control algorithm

EIFER's Contribution

- Monitoring of the demonstration site including a wood pellet fired Stirling CHP system
- Lab testing of a wood pellet fired CHP system
- Development of a controller platform which operates the control algorithm
- Study on framework conditions (operator's interests, use cases, technical restrictions, legal framework)

Contact

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