

## Flexibility in the future smart distribution grid

### Objective

***The main objective of the project is contributing to increased flexibility in the future smart distribution grid by demonstration and verification of technical and market based solutions for flexibility, on different grid levels and for different stakeholders.***

The project will promote increased flexibility...

- at active customers, in the interplay between consumption, generation and energy storage, contributing to a more efficient use of energy, reduced costs and new services.
- in the distribution grid by locating energy storages in substations to reduce peak loads, improve the utilization of existing grid capacity, reduce coincidence load and postponement of grid investments.
- in smarter operation of the distribution grid, for example through energy storage, remote control in the grid and voltage control, contributing to reduced grid losses, and improved security of supply and voltage quality.

The project will also:

- contribute to a more efficient handling of IT security events related to monitoring and control in the distribution grid,
- ensure protection of privacy when the amount of information increases due to expanded monitoring and control,
- and evaluate how flexibility can be made available for third party.

Budget : 21 mill. NOK

Project period : 2015 - 2017

### Demonstration activities



Demo Steinkjer: Can flexibility reduce challenges with prosumers located in weak distribution grid?



Demo Bergen: Can monitoring and control contribute to more flexible operation of the distribution grid?




Demo Hvaler: How to ensure interplay between demand response, PV panels and batteries?

### Contact persons

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# FL<sup>E</sup>Xnett

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Project owner: 

Demo:



R&D:



User partners:



agder energi

Enfo AS



Communicate



Eidsiva 



Statnett

Prediktor 



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