

1. Electric heating in Finland

2. What is integrated with DSM

DG

Energy storage

Smart grid technologies

3. What is the level of commercialization

Research project

Demonstration

Field test

Existing practice

4. Where to find more information?

5. Technologies used

Traditional radiator heating (direct resistance heating), floor heating, roof or window heating, heat storages

6. Short description of the electric heating in Finland

Time of use tariffs are applied since beginning of 1970s in Finland.

- Floor heating with storing capacity
- Domestic hot water production in night time (Heat storage)
- Switching off part of heating when sauna (8-12 kW) is switched on
- Disconnection of heating loads by using ripple control (reduced price)
- Development of new technical solutions for systems inside the house
- Efficient insulation in houses, heat recovery

Using these different technologies and practices, electric heating with storing capacity allows heating / loading heat stores when electricity is cheaper (night or weekend). This cuts peak demand and evokes cost savings for customers.

7. Achieved/expected results (operational savings, CO₂, efficiency enhancement)

Reduction of peak demand and cost savings for customers.

8. Lessons learnt