EBC

Energy in Buildings and Communities Programme

Factsheet

Demand Management of Buildings in Thermal Networks

EBC ANNEX 84

The project has provided comprehensive knowledge and tools for successful activation of the demand management of buildings in thermal networks. It investigated both the social and technical challenges and how these can be overcome for various building typologies, climate zones and local conditions, as well as how digitalisation of heating demand (real-time data from smart meters) can speed up the activation process and contribute to unfolding the dynamic building characteristics.

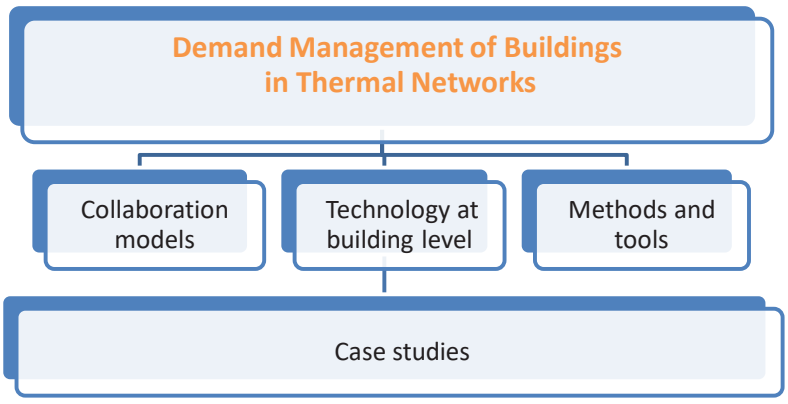
ACHIEVEMENTS

The completed official deliverables are as follows:

- a technical report on collaboration models, including an overview of the actors involved, existing practices, potential barriers and limitations, and recommendations for promising solutions for different building typologies and local contexts;

PROJECT OBJECTIVES

1. provide knowledge on partners / actors involved in the energy chain and on collaboration models / instruments for successful demand management
2. evaluate and provide design solutions for new and existing building heating and cooling substations and installations for successful demand management
3. develop methods and tools to utilize the smart heat meter data for real-time data modelling and identification of dynamic building characteristics
4. provide knowledge from and drive adaptation and visualization of project results through case studies



The structure and aim of the project tasks.
Source: EBC ANNEX 84

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INTERNATIONAL ENERGY AGENCY

The International Energy Agency (IEA) was established as an autonomous body within the Organisation for Economic Co-operation and Development (OECD) in 1974, with the purpose of strengthening co-operation in the vital area of energy policy. As one element of this programme, member countries take part in various energy research, development and demonstration activities. The Energy in Buildings and Communities Programme has co-ordinated various research projects associated with energy prediction, monitoring and energy efficiency measures in both new and existing buildings. The results have provided much valuable information about the state of the art of building analysis and have led to further IEA co-ordinated research.

EBC VISION

By 2030, near-zero primary energy use and carbon dioxide emissions solutions have been adopted in new buildings and communities, and a wide range of reliable technical solutions have been made available for the existing building stock.

EBC MISSION

To accelerate the transformation of the built environment towards more energy efficient and sustainable buildings and communities, by the development and dissemination of knowledge and technologies through international collaborative research and innovation.

- a technical report on building technology for activation of the demand response in thermal networks, including status, classification and development guidelines;
- a technical report on smart algorithms that realise the thermal demand response potential in buildings by manipulating thermal actuators for heating and cooling systems in buildings;
- a technical report on case studies of demand management of buildings in thermal networks.

Project duration

Completed (2020 - 2025)

Operating Agents

Dr Anna Marszal-Pomianowska
Associate Professor
Aalborg University
Division of Architectural Engineering, Department of the Built Environment
Thomas Manns Vej 23
DK-9220 Aalborg
DENMARK

Participating countries

Austria, Belgium, Denmark, Germany, Italy, Netherlands, Singapore, Spain, Sweden, Switzerland, Türkiye, United Kingdom

Further information

www.iea-ebc.org

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