A Living Lab for Energy Efficient Public Buildings based on ICT Solutions

Building OU44 at the University of Southern Denmark

Project Goal
The project goal is to establish a living lab for improving the energy efficiency of public buildings based on ICT solutions that account for the behaviour of occupants.

Buildings account for a high energy consumption
As buildings are responsible for around 40 % of the energy consumption in Denmark it is important to improve the energy efficiency of buildings to minimize the total energy consumption.

Occupant behavior is an important parameter
Changes in occupant behaviour can affect a building's energy efficiency with more than 30 %. Therefore occupant behaviour is an important parameter to consider.

Building OU44 as Living Lab
The project will create a living lab in a newly build 8000 m2 office and teaching building at the University of Southern Denmark. The building will be under normal use by its occupants, however additional infrastructure will make it possible to run experiments with intelligent control and diagnostic based on monitoring of occupant behaviour.

New solutions to improve energy efficiency
The creation of the lab will help foster new solutions to improve energy efficiency and education of students within software-based control of buildings. In collaboration with the Municipality of Odense we will disseminate information about the new solutions and results to increase the energy efficiency of their public buildings.

FACTS

Project Period
2015-2016

Budget
241.500 DKK

Funding
EnergiFyn A/S – Udviklingsfond

Partners
University of Southern Denmark
Center for Energy Informatics

Associated Partners
Odense Municipality

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