



AUSTRIA

PA2. PA2 in a school complex in Judenburg-Lindfeld

Introduction

The **BOOSTEE-CE** (*Boosting Energy Efficiency in Central European Cities through Smart Energy Management*) project will develop and implement technical solutions, strategies, management approaches & financing schemes to achieve higher Energy Efficiency (EE) in public buildings. This will be achieved through a transnational cooperation and using geospatial data, smart energy management tools and energy audit to facilitate the implementation of EE buildings. The final aim is to improve the governance of EE in existing public buildings (within Pilot Actions) and ultimately reduce energy consumption.



Aims

The pilot action to improve energy efficiency is implemented in 4 buildings. The school complex Lindfeld in Judenburg: **Primary school, Comprehensive school, Polytechnical school and Sports hall** buildings were built between 1969 and 1971, annex 2004. Municipality of Judenburg is the owner of the buildings and will retain ownership and management responsibilities after the project lifetime. The energy class of the buildings has been identified as: D average energy-intensive building with $123 \text{ kWh/m}^2/\text{year}$ and B energy-saving building with $74 \text{ kWh/m}^2/\text{year}$.

The following objectives have been agreed as part of the pilot:

- improvement of energy system
- monitoring buildings data
- increasing the comfort of the buildings use
- easier operation of the buildings
- promoting and disseminating knowledge about energy efficiency measures in buildings

Solutions

The pilot action includes an investment in **automatization of heating control system**, implementation innovative **smart metering for electricity and heat consumption** with detailed load curves and the **“3D Energy Management System (EMS)”** as a part of OnePlace platform and staff training about energy efficient use.



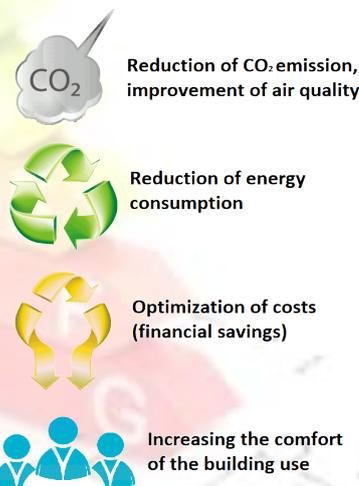
PA idea (MONITOR -> CONTROL -> MANAGE -> SAVE)

The implementation of the energy consumption **monitoring and management** system contributes to a significant reduction in the value of energy bills. The data collected by the system, which constantly **controls** the level of energy consumption, allow to optimize the level of contracted capacity, which in turn generates **annual savings**. The system constantly monitors the level of energy consumption, provides information about where it is distributed, where it is lost. The tools provided by the system allow to easily analyze this data and draw conclusions about ways to reduce the costs associated with the use of energy. Energy **management** allows to optimize the contracted capacity, selection of a cost-effective tariff, energy monitoring and provides knowledge about energy flows in the building.



PA indicators & results

- _ investment period
- _ investment cost
- _ people involved in PA implementation
- _ tools / instruments used
- _ trainings, meetings, seminars etc.
- _ reduction of energy consumption
- _ annual cost savings
- _ reduction of CO₂ emission
- change in people's behavior



Added values for replication and dissemination

The activities can be transferable and replicated in other cases and regions. Information about the pilot action is promoted and disseminated in the region and beyond.

Contact

Eva Volkar

E.Volkar@judenburg.at

Helfried Kreiter

H.Kreiter@judenburg.at

Municipality of Judenburg

