



BOOSTEE-CE PILOT ACTION PA2-AUSTRIA

Interreg 
CENTRAL EUROPE European Union
European Regional
Development Fund

BOOSTEE-CE



AUSTRIA

PA2. PA2 in a school complex in Judenburg-Lindfeld

Interreg 
CENTRAL EUROPE European Union
European Regional
Development Fund

BOOSTEE-CE



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 is implemented in the school complex Lindfeld in Judenburg which consists of four separate buildings: **Primary school, Comprehensive school, Polytechnical school and Sports hall** and is supplied with district heating from one central distribution point. The energy class of the buildings is D (average energy-intensive building) with 123 kWh/m²/year and B (energy-saving building) with 74 kWh/m²/year for one newer part.

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

- improvement of the heating 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 **improvement in the hydraulic system of the heating system for better regulation of water flow rates on radiators and room temperature regulation, reconstruction of the hydraulic distribution, pumps and valves, new smart regulation and control for heating and electricity, partly thermal insulation on outside walls and rooftop, improvement of window connections to avoid draft and replacement of lights by new efficient LED lights.** The complementary task is staff training about energy efficient use. In addition, the OnePlace platform is tested.

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.



Reduction of CO₂ emission,
improvement of air quality



Reduction of energy
consumption



Optimization of costs
(financial savings)



Increasing the comfort
of the building use

PA indicators & results

- investment period 2018-2021
- investment cost 250 000 €
- people involved in PA implementation (representatives from Municipality of Judenburg and Energy Agency Upper Styria)
- 3 tools / instruments used (energy audit, energy balancing, thermos images)
- 2 trainings, meetings, seminars
- 250 000 kWh annual reduction of energy consumption
- 30 000 € annual cost savings
- change in people's behavior by raising awareness

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.


The case of the pilot action in Judenburg is an example for many Austrian small and medium cities because many school buildings were built in the 1960s and '70s and have the same energy standard as in Judenburg.

Contact

Helfried Kreiter
Environmental department
Municipality of Judenburg
h.kreiter@judenburg.at
Josef Bärnthaler
Managing director
Energy Agency Upper Styria
josef.baerenthaler@eao.st

DISCOVER MORE ABOUT BOOSTEE-CE

Contact us!

 **Project website:** www.interreg-central.eu/Content.Node/BOOSTEE-CE.html

 **Project on Facebook:** www.facebook.com/BOOSTEECE/

OnePlace Platform OnePlace website: oneplace.fbk.eu/