

Interreg

CENTRAL EUROPE



European Union
European Regional
Development Fund

PROSPECT2030

TAKING
COOPERATION
FORWARD



Macroregional Cooperation On Promoting Green Economic Transition | 6 December 2021



Implementation of TARGET-CE project in Mazovia Region



PROSPECT2030 | MAE | Mateusz Kruk

TARGET-CE PROJECT



- ❑ **Consortium:** 8 project partners (PP), 9 associated partners (AP)
- ❑ **5 countries** in Central Europe (Austria, Croatia, Italy, Poland, Slovenia)
- ❑ **Priority 2:** Cooperating on low-carbon cities and regions
- ❑ **Specific Obj:** 2.1 To develop and implement solutions for increasing energy efficiency and renewable energy usage in public infrastructures
- ❑ **Duration:** 1 April 2020 - 31 March 2022 (24 months)
- ❑ **Website:** <https://www.interreg-central.eu/Content.Node/TARGET-CE.html>



TARGET-CE CONSORTIUM

<i>Number</i>	<i>Partner name in English</i>	<i>Country</i>	<i>Abbreviation</i>
1	Bruno Kessler Foundation	IT	FBK
2	European Grouping of Territorial Cooperation NOVUM Limited	PL	EUWT NOVUM
3	Mazovia Energy Agency	PL	MAE
4	Union of Bassa Romagna Municipalities	IT	UCBR
5	Energy Agency of Savinjska, Šaleška and Koroška Region	SI	KSSENA
6	City of Split	HR	City of Split
7	Energy and Innovation Centre of Weiz	AT	W.E.I.Z.
8	SIPRO DEVELOPMENT AGENCY - FERRARA	IT	SIPRO

- **Research institutes:** FBK (LP/PP1), Italy; W.E.I.Z. (PP7), Austria
- **Sectoral agencies:**
 - Energy agencies: MAE (PP3), Poland; KSSENA (PP5)
 - Development agencies: EUWT/NOVUM (PP2), Poland; SIPR (PP8), Italy
- **Public authorities:**
 - regional: UCBR (PP4), Italy
 - local: Split (PP6), Croatia



TARGET-CE - KEY FACTS



TARGET-CE is about collect, adjust and deploy ICT tools, financial models, action plans and trainings to the local and regional administrations and integrate them into territorial and thematic strategies.

TARGET-CE will capitalize innovative technical & non-technical solutions combining downstreaming and upstreaming activities for increasing EE and renewable energy usage in public buildings

TARGET-CE aims to become an energy efficiency (EE) flagship in central European region, offering the solutions for public buildings on a unique web platform.

TARGET-CE will capitalize the outcomes of 5 previously funded Interreg-CE projects, 2 H2020 and 1 Interreg-Europe project, trying to answer EE territorial challenges in 7 newly engaged Pilot Actions (1 cross-border), located in 6 countries.

TARGET-CE will run the 7 Pilot Actions in 16 municipalities - with some 80 pilot buildings.

Offered outcomes will be all accessible within the BOOSTEE-CE OnePlace platform (<http://oneplace.fbk.eu>) which will become the hub for many solutions.



TARGET-CE CAPITALIZED PROJECTS



→ Interreg-CE:

- BOOSTEE-CE (FBK, EUWT),
- eCentral (KSSENA),
- FEEDSCHOOL (SPLIT),
- ENERGY@SCHOOL (UCBR, KSSENA),
- CitiEnGov (SIPRO)



→ Interreg-EU:

- EMPOWER (MAE)



→ H2020:

- PANEL2050 (MAE)
- GreenSoul (WEIZ)



HOW HAVE WE CAPITALIZED PROJECTS?

- ❑ Combination of **Downstreaming** + **Upstreaming** activities applied to past projects and based on stakeholders needs
- ❑ **Downstream** 9 tools (WPT2) to widespread and roll-up them at territorial level and in new regions
- ❑ **Upstream** 5 strategies and 5 course materials (WPT3) to reach out municipalities, high-level policymakers and energy planners and integrate solutions in territorial strategies



- BOOSTEE-CE: OnePlace Platform
- eCentral: eCentral tool for data collection and inventory & EPC Living Tool
- FEEDSCHOOLS: FEEDSCHOOLS Toolkit
- ENERGY@SCHOOL: ENERGY@SCHOOL APP
- CitiEnGov: Energy Dashboard
- EMPOWER: EMPOWER's Good Practice Register
- PANEL2050: PANEL2050's Roadmapping process
- GreenSoul: GreenSoul's Holistic socio-economic models



- ❑ **PA1** - Implementation in **Weiz, Austria** (3 pilot buildings) of EE ICT tools developed in WPT2-3
- ❑ **PA2** - Energy monitoring scheme in 7 public buildings in the City of Podkowa Leśna, Poland
- ❑ **PA3** - Implementation & testing of capitalized solutions in the **cross-border PL/CZ** area in 10 pilot buildings
- ❑ **PA4** - Optimizing energy consumption in **UCBR, Italy** (25 pilot buildings) with TARGET-CE capitalized solutions
- ❑ **PA5** - EE actions related to 20 historical buildings in the province of **Ferrara, Italy**
- ❑ **PA6** - Improving energy managers' capacity in **Nazarje, Slovenia**, using TARGET-CE EE capitalized solutions in 8 buildings



Pilot Action:

Energy monitoring scheme in 7 public buildings in the City of Podkowa Leśna, Poland

Scope of PA:

- Implementation of energy monitoring scheme in seven public buildings
- Input of data and 3D buildings models on BOOSTEE-CE OnePlace Platform with useful data
- Use of eCentral EPC Living Tool to provide nZEB scenarios for PA buildings



PILOT ACTION - BUILDINGS

7 BUILDINGS INCLUDED IN PILOT ACTION:

- Two communal buildings - overall 16 flats
- City Hall building in Podkowa Leśna
- Social Welfare Center in Podkowa Leśna
- Public Library in Podkowa Leśna
- Center for Civil and Cultural Initiatives in Podkowa Leśna
- „Casino” Palace building

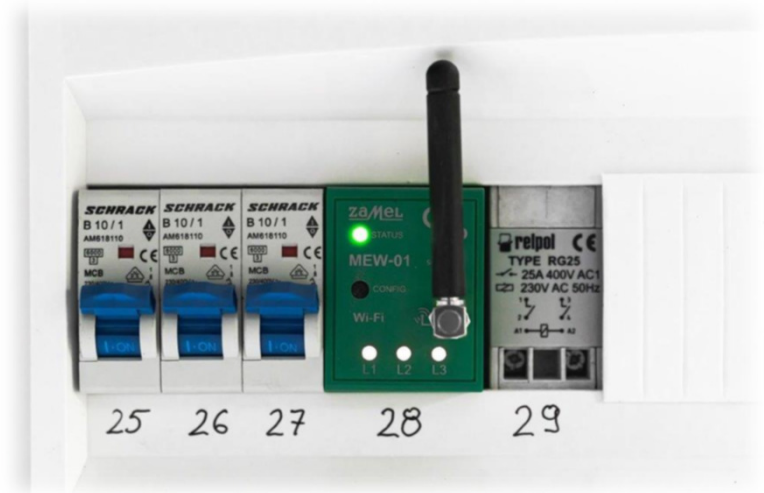
Various needs, various characteristic
Energy class: from B to E



PILOT ACTION - ENERGY MONITORING

Scope of energy monitoring:

- ❑ measurement of:
 - ❑ electricity consumption
 - ❑ electricity production
(in one buildings with PV installation)
 - ❑ natural gas/heat consumption
 - ❑ water consumption
- ❑ recording of measurements in the cloud and dashboard
- ❑ possibility of report preparation on consumption and generation of energy profile



PILOT ACTION - ENERGY MONITORING

Benefits of Energy Monitoring Scheme:

- Identification of the current shape of the energy profile of each building
- Presentation of how to manage each type of building and how to modernize it in order to achieve savings
- Achieving of satisfactory financial savings
- Obtaining reliable and self-sufficient data



PILOT ACTION - BOOSTEE-CE

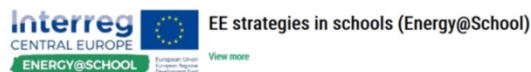


OnePlace Platform: <https://oneplace.fbk.eu/3d/>

This is a screenshot of the Interreg Central Europe PROSPECT2030 website, specifically the 'Tools' section. The header includes the Interreg Central Europe logo and navigation links: Home, Capitalized Projects, Marketplace, EE Cities, EE Strategies, EE Finances, and EE Tools. The main content area is titled 'Energy Efficiency Tools' and lists three items: 1. '3DEMS' (3D energy management tool) with a description and a 'View more' link. 2. 'Energy Ghost simulation game' (Energy@school app) with a description and a 'View more' link. 3. 'The Living EPC Tool'. To the right, there is a 'Financing Energy Efficiency' section with two items: 'Analysis of innovative financing schemes for deep renovation of public buildings (eCentral project)' and 'Comparative analysis', both with 'View more' links. The footer shows the same navigation links as the header.

Energy Efficiency Strategies, Roadmaps and Action Plans

This section collects past EE strategies, roadmaps and action plans developed in the past years by various European projects.



Roadmaps for Energy Future 2050 (Panel 2050)

[View more](#)

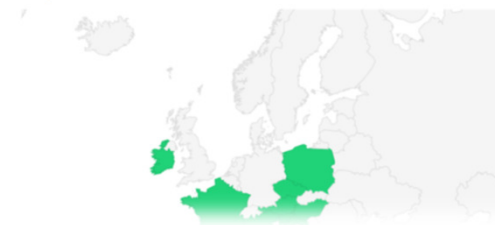


Questionnaire example to change users' behaviour and achieve higher

Energy Efficient Cities best practices

The Energy Efficient Cities module is an exchange platform of experiences and identification of good practices within energy efficiency sector for public authorities and other public users. It demonstrates the range of approaches and measures various cities have used to undertake efficiency improvements and thus helps to guide cities in designing effective urban energy efficiency policies and programs.

[Catalog of Best Practices](#)



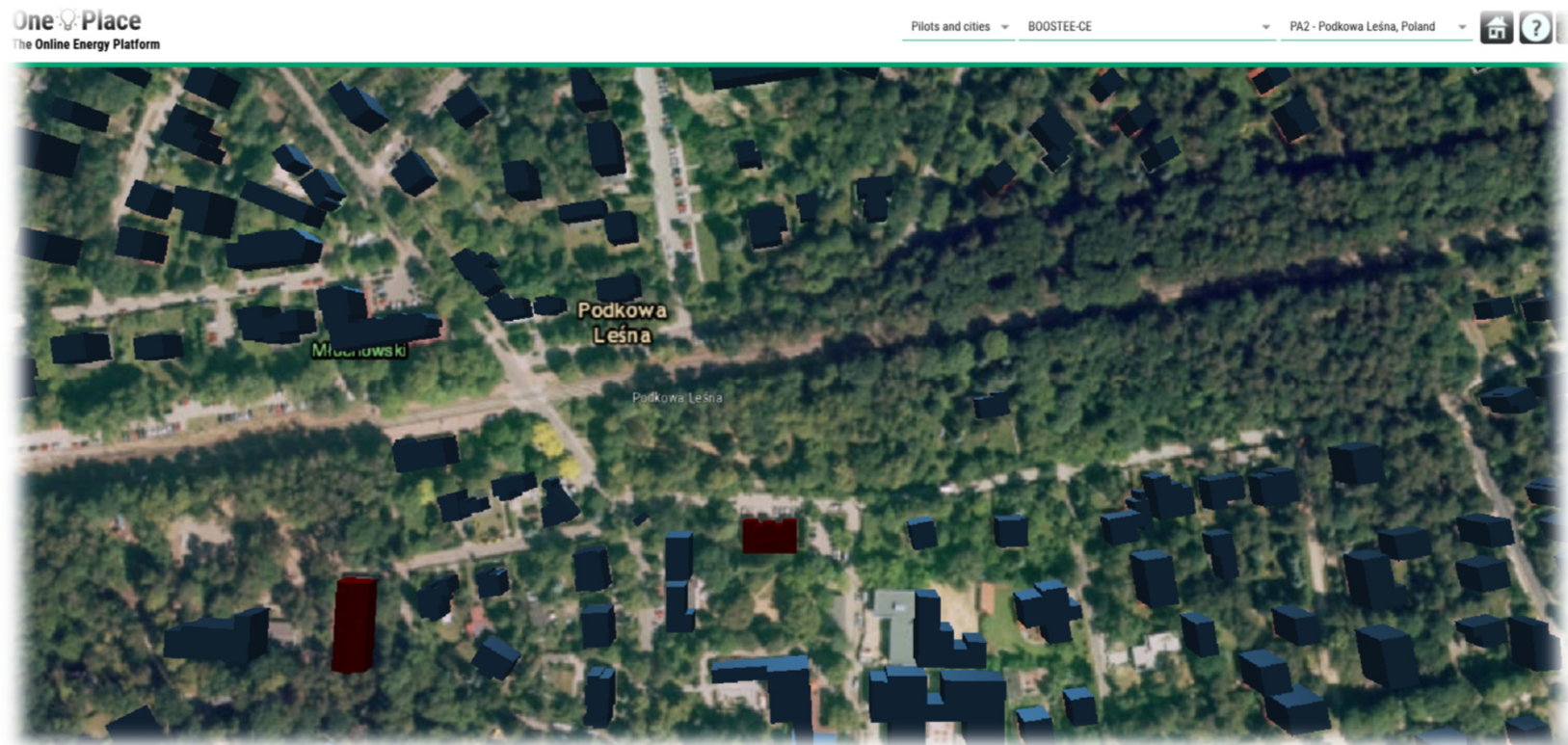
[Search Database](#)

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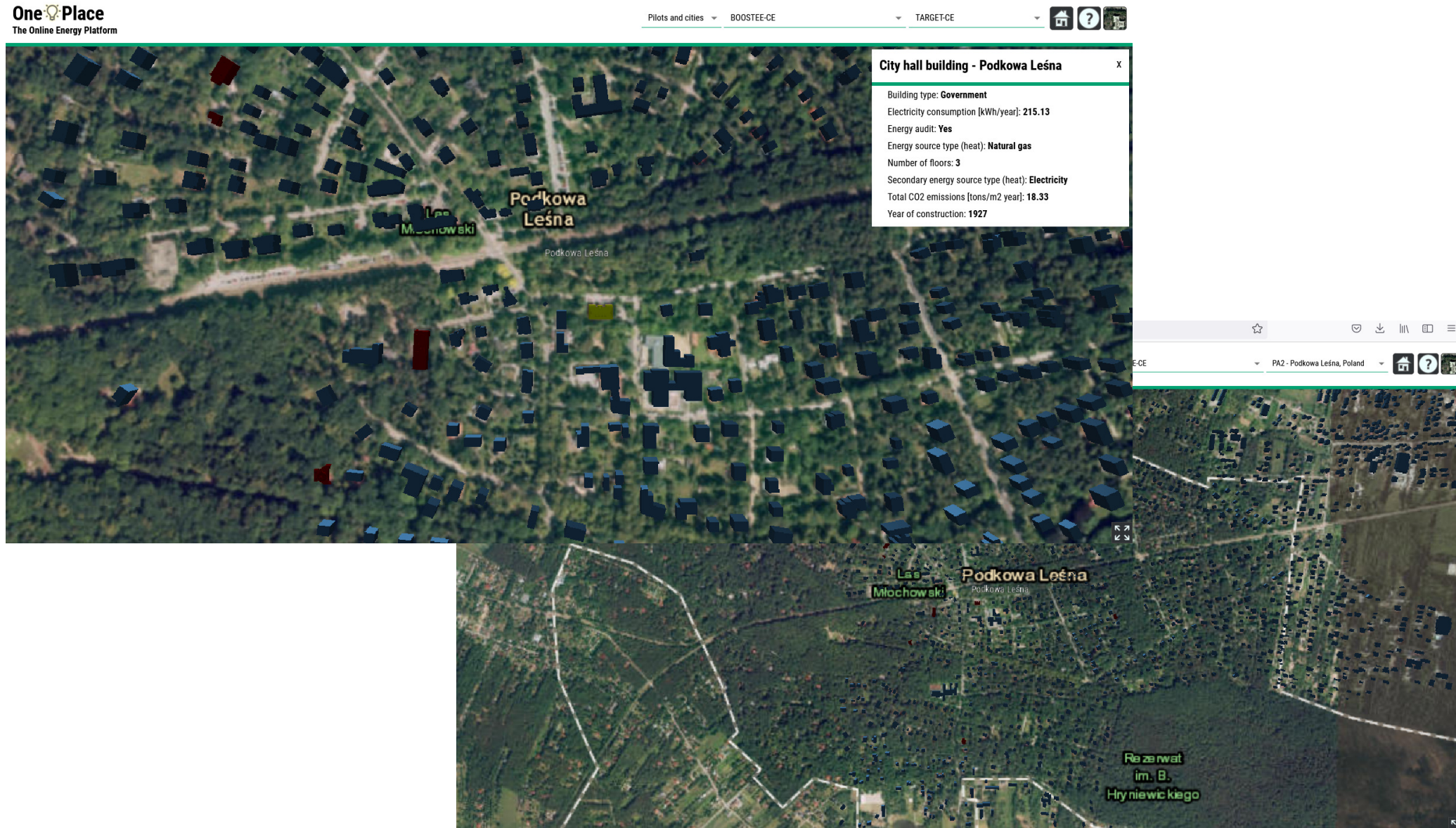
PILOT ACTION - BOOSTEE-CE 3DEMS

Use of OnePlace Platform in Pilot Action in City of Podkowa Leśna:

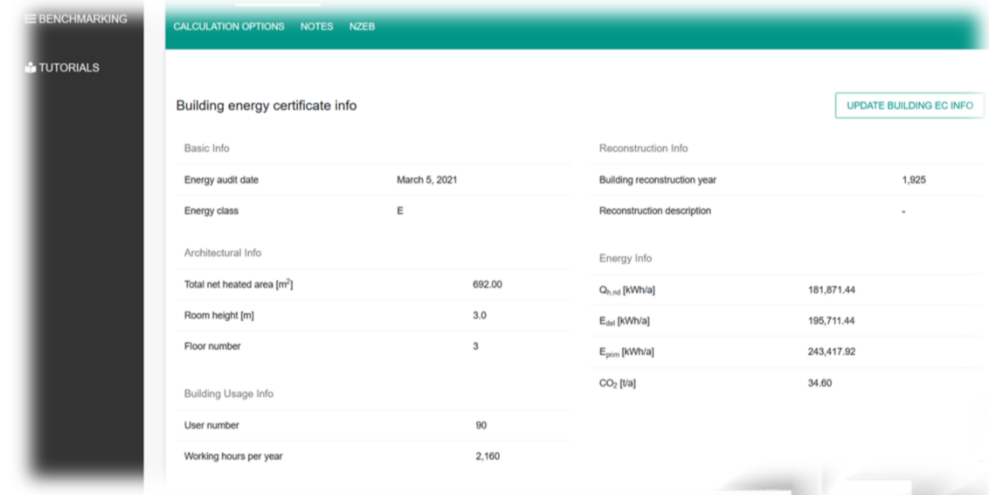
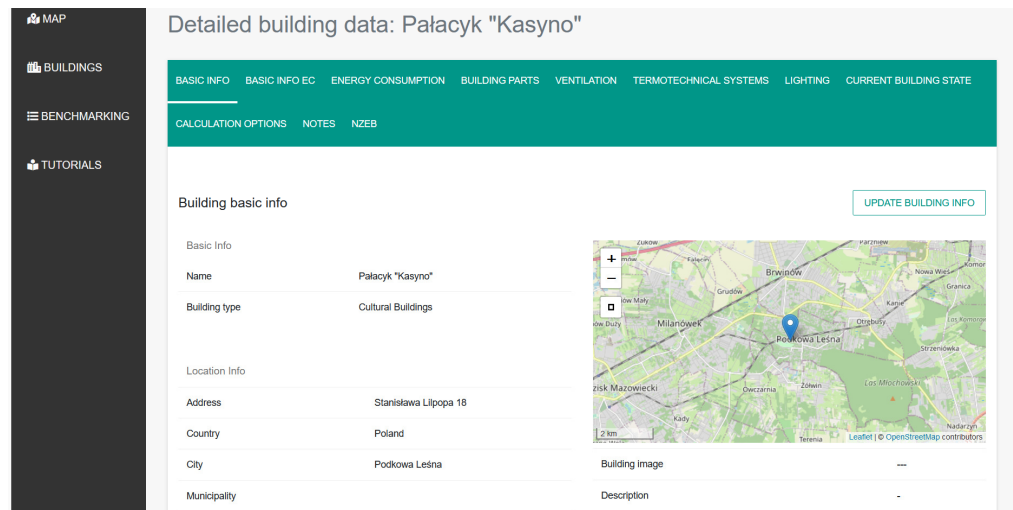
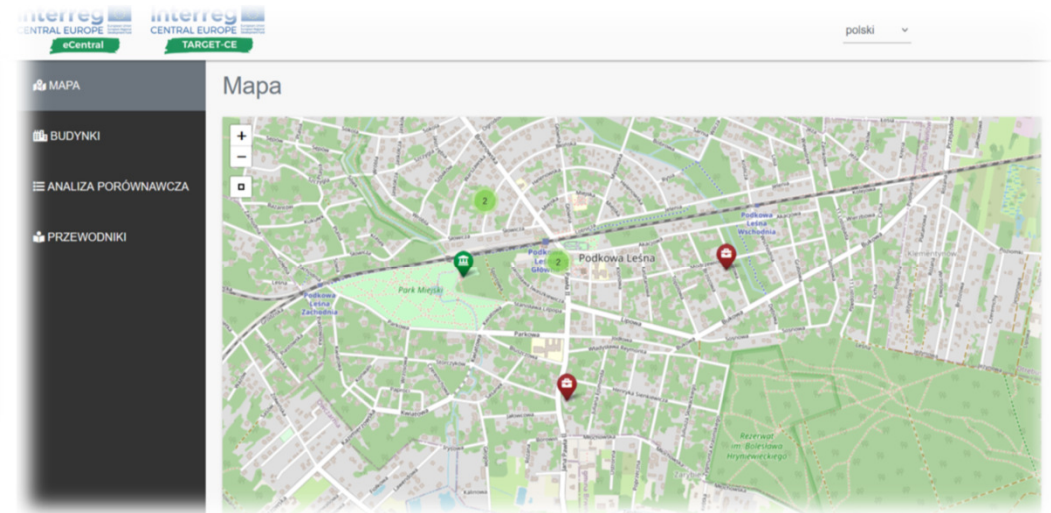
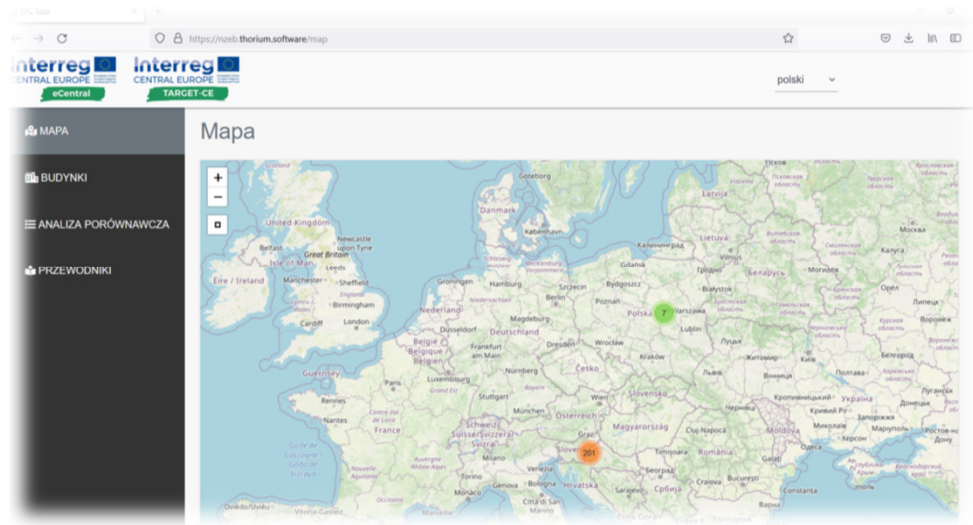
- Developing 3D models for 7 pilot buildings;
- Collection of attributes for all city buildings (in LOD1/LOD2);
- Gathering energy data of pilot buildings e.g. energy consumption, CO₂ emission;



BOOSTEE - 3DEMS FOR PODKOWA LEŚNA



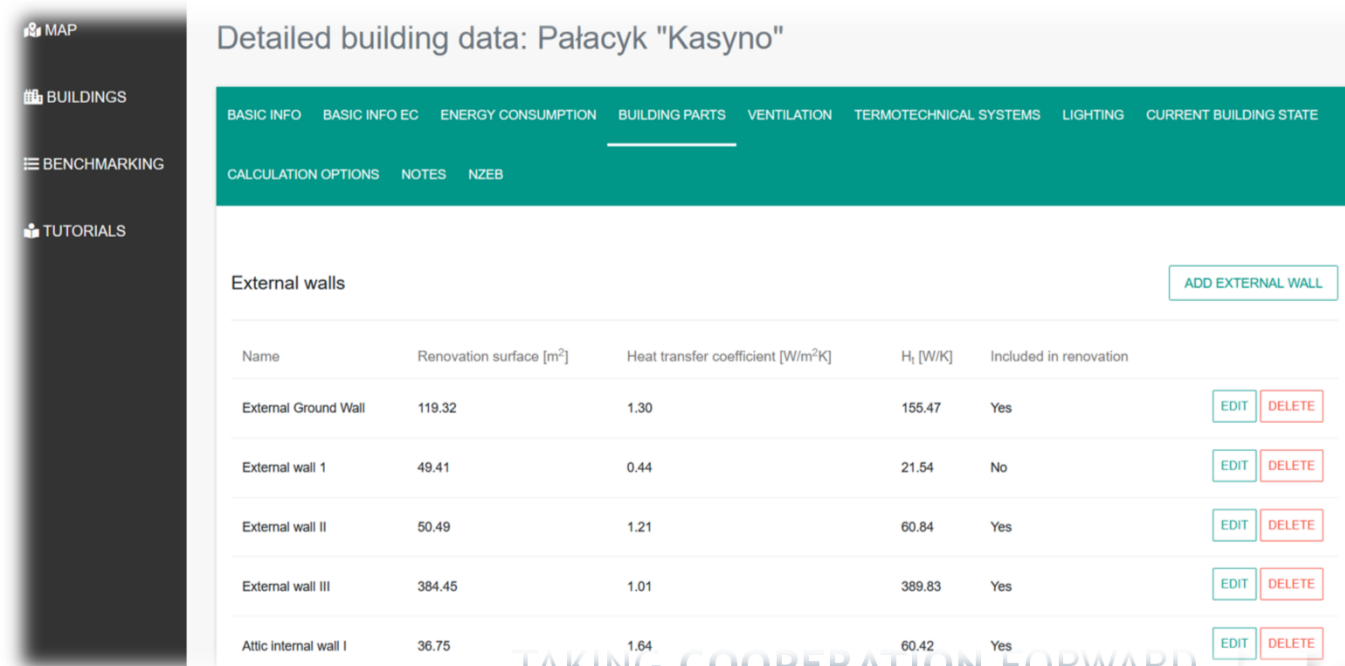
PILOT ACTION - EPC LIVING TOOL



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Capitalization of eCentral EPC Living Tool for Podkowa Leśna needs:

- Downstreaming the tool by testing, translation to the Polish language and including Polish legislation for public and residential buildings in case of nZEB requirements and primary energy consumption
- Collection of energy data
- Preparation of energy certificates for buildings (which lacked it)
- Inclusion of seven public buildings and (trying to) receive nZEB scenario results



The screenshot displays the 'Detailed building data: Pałacik "Kasyno"' interface. On the left is a dark sidebar with navigation links: MAP, BUILDINGS, BENCHMARKING, and TUTORIALS. The main content area has a teal header with tabs: BASIC INFO, BASIC INFO EC, ENERGY CONSUMPTION, BUILDING PARTS (selected), VENTILATION, TERMOTECHNICAL SYSTEMS, LIGHTING, and CURRENT BUILDING STATE. Below the tabs is a sub-header: CALCULATION OPTIONS, NOTES, and NZEB. The 'External walls' section contains a table with the following data:

Name	Renovation surface [m ²]	Heat transfer coefficient [W/m ² K]	H _t [W/K]	Included in renovation	
External Ground Wall	119.32	1.30	155.47	Yes	EDIT DELETE
External wall I	49.41	0.44	21.54	No	EDIT DELETE
External wall II	50.49	1.21	60.84	Yes	EDIT DELETE
External wall III	384.45	1.01	389.83	Yes	EDIT DELETE
Attic internal wall I	36.75	1.64	60.42	Yes	EDIT DELETE

An 'ADD EXTERNAL WALL' button is located in the top right corner of the table area.



PILOT ACTION BENEFITS:

- Complete tools adjusted to the needs of mazovia region
- Fully transferable tools can be adapter in different areas
- Useful in public buildings energy transition
- Used tools are easy to manage, especially for energy managers
- Combination of tools (eCentral and Energy Monitoring Scheme) with further spread on other public buildings can benefit in successful energy refurbishment projects
- Generation of energy savings



THANK YOU FOR ATTENTION!



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