

Output factsheet: Tools

Version 1

Project index number and acronym	CE906 BOOSTEE-CE
Lead partner	Fondazione Bruno Kessler (FBK)
Output number and title	O.T2.1 The Online Energy Platform - OnePlace
Responsible partner (PP name and number)	FBK-PP1, EZVD-PP2, EAZK-PP3, EUWT-PP12
Project website	https://www.interreg-central.eu/Content.Node/BOOSTEE-CE.html
Delivery date	11.2019

Summary description of the key features of the tool (developed and/or implemented)

BOOSTEE-CE developed the **OnePlace** platform (<https://oneplace.fbk.eu/>) for public authorities and energy end-users. The web platform allows to access energy-related data and consists of 4 different modules:

The **Living Energy Marketplace**: it promotes relevant online databases helping to navigate amongst all kinds of different energy efficiency measures, electronic devices and experts. The experts database contains, for each participating country (Austria, Croatia, Czech Republic, Hungary, Italy, Poland and Slovenia), relevant information about experts implementing energy efficiency measures and it will be open to qualified contractors who can carry out energy efficiency investments.

The **Energy Efficient Cities**: it enables exchange of experience and good practices within the energy efficiency sector among public authorities, municipalities and other public actors. It collects a range of approaches and measures that various European cities had used to undertake efficiency improvements and thus helps to guide cities and energy planners in designing effective urban energy efficiency policies and programs.

The **Financing Energy Efficiency**: it is an attractive visual presentation of transnational strategy outcomes (financial road map), examples of best practices and practical steps to use national and EU-level resources. The module can assist local authorities and public bodies at their engagement in financing energy efficiency by presenting methods of financing energy efficiency investments and transferring them into Energy Efficiency Roadmaps.

The **3D Energy Management System (3DEMS)**: it is a webGIS viewer that allows users to navigate a 3D urban environment, select a building of interest and retrieve energy-related information, such as energy audit, cadastral/building data, thermal images, etc. 3DEMS has harmonize different data sources in one database and visualize them within the OnePlace platform using 3D city models. The main advantage of the 3DEMS over more traditional applications is its simplicity and intuitive online solution that building operators, energy planners and municipality staff can use everywhere and every time without the need of special equipment.

NUTS region(s) where the tool has been developed and/or implemented (relevant NUTS level)

The online platform OnePlace has been applied and validated 8 project pilot areas:

- Emilia-Romagna Region (Italy - NUTS region ITH5), with a focus on the city of Bologna;
- Judenburg (Austria - NUTS region AT22);
- Zlin (Czech Republic - NUTS region CZ07), with a focus on Kromeriz and Holesov municipalities;
- Tolna (Hungary - NUTS region HU23);
- Plonsk (Poland - NUTS region PL12);
- Koprivnica (Croatia - NUTS region HR04);
- Velenje (Slovenia - NUTS region SI01);
- the CZ-PL cross-border region (Poland - NUTS region PL51 and Czech Republic - NUTS CZ05), with a focus on Zacler and Lubawka municipalities.

Expected impact and benefits of the tool for the concerned territories and target groups

The project platform OnePlace offers four modules which present different aspects of the energy efficiency topic: management, information retrieval and visualization, best practices, energy efficient household utensils, contractors and financial guidelines.

OnePlace offers policy/energy administrators and citizens the possibility to better display and access energy-related information, help the realization, implementation and monitoring of Sustainable Energy Action Plan (SEAP) at city level as well as the transition towards low-carbon/smart cities.

Sustainability of the tool and its transferability to other territories and stakeholders

The tool is accessible on the LP/FBK server and will be available for 5 years. If the specific cadaster and energy-related data are available, OnePlace can be transferred and replicated to other territories and stakeholders. A transnational report will be created (Deliverable D.T2.1.7 - OnePlace sustainability Guidelines) presenting measures to sustain, preserve and widespread the created tools after the project end. This will facilitate the usage and uptake and capitalization of OnePlace and its further update among PPs and outside the consortium (more stakeholders).

Lessons learned from the development/implementation process of the tool and added value of transnational cooperation

During the development and implementation of OnePlace, partners were exchanging and sharing experiences between different countries on different solutions and approaches about managing and monitoring geospatial and energy data. We have learned about issues that need to be considered when collecting input data (such as topographic maps or solar potential data), about obstacles that hamper the availability of data or standardization issues that significantly differ among but also within countries and regions / municipalities.

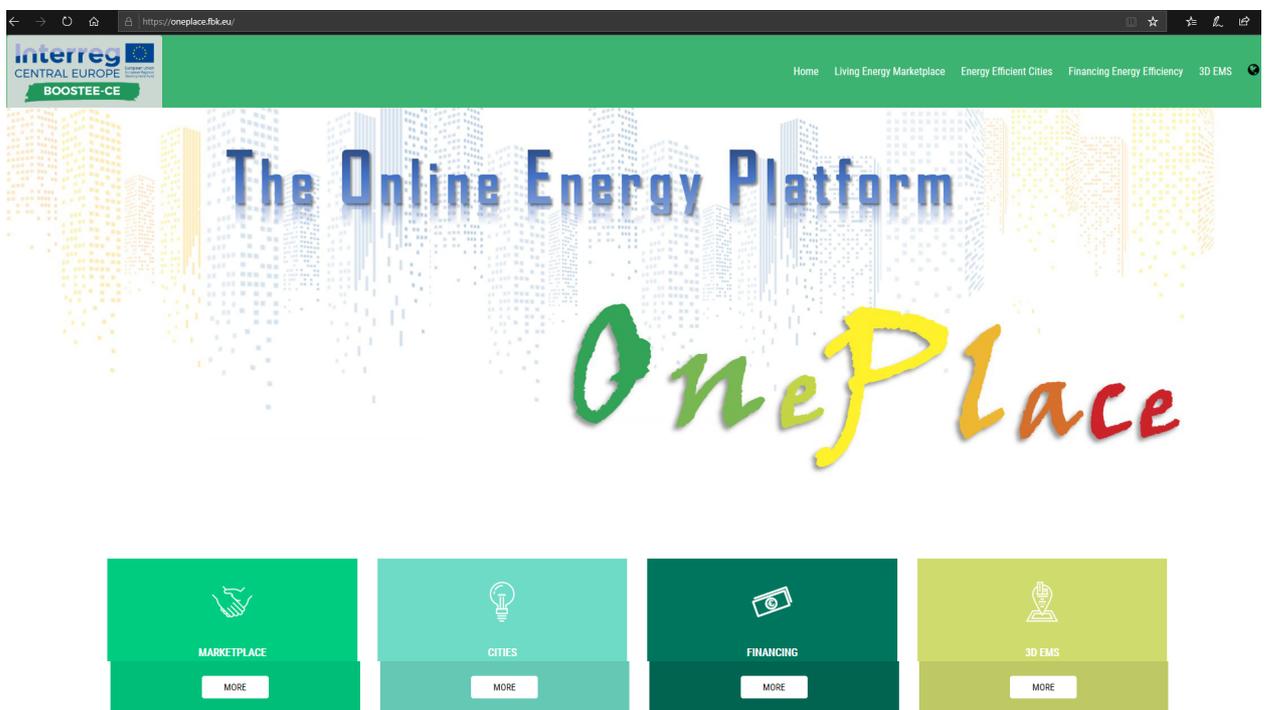
References to relevant deliverables and web-links If applicable, pictures or images to be provided as annex

The development of the platform and its four modules are summarized in deliverables D.T2.1.1, D.T2.1.2, D.T2.1.3, D.T2.1.4, D.T2.1.5, D.T2.1.6, D.T2.2.1, D.T2.2.2, D.T2.2.3 and D.T2.2.4. The deliverable D.T2.1.7 will present the OnePlace sustainability guidelines.

The online platform OnePlace is available on <https://oneplace.fbk.eu/>.

In the following annexes, we report pictures of the project platform OnePlace and its four modules.

ANNEXES



The Online Energy Platform

The BOOSTEE-CE web platform OnePlace allows visualization and query of energy audits within 3D city models to better assess, understand and plan energy uses and flows. At the same time, the platform offers also guidebooks, tools and best practices to improve energy efficiency of your building(s).
With useful tools, examples and methodologies OnePlace assists public authorities and energy planners in proper energy management and energy savings in public building.

The OnePlace platform has 4 main modules:

- **Living Energy Marketplace**

Living Energy Marketplace aims to connect customers interested in energy efficiency projects to qualified contractors (architects, engineers, auditors, craftsmen, technicians and installers, energy agencies etc.) in order to scale up investments in energy efficiency and to reduce information barriers. It also contains links and information covering the electronic & electric appliances to empower potential investors to make energy-wise decisions.

- **Energy Efficient Cities**

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.

- **Financing Energy Efficiency**

The Financing Energy Efficiency module is the visual presentation of the transnational strategy outcomes, financial road maps, examples of the best practices and practical steps how to use the national & EU-level resources.

- **3D Energy Management System**

WebGIS tool for better assessment of energy use within the public buildings and visualization of energy audits onto 3D city models.

Fig.1 - OnePlace entry page, with the 4 modules.

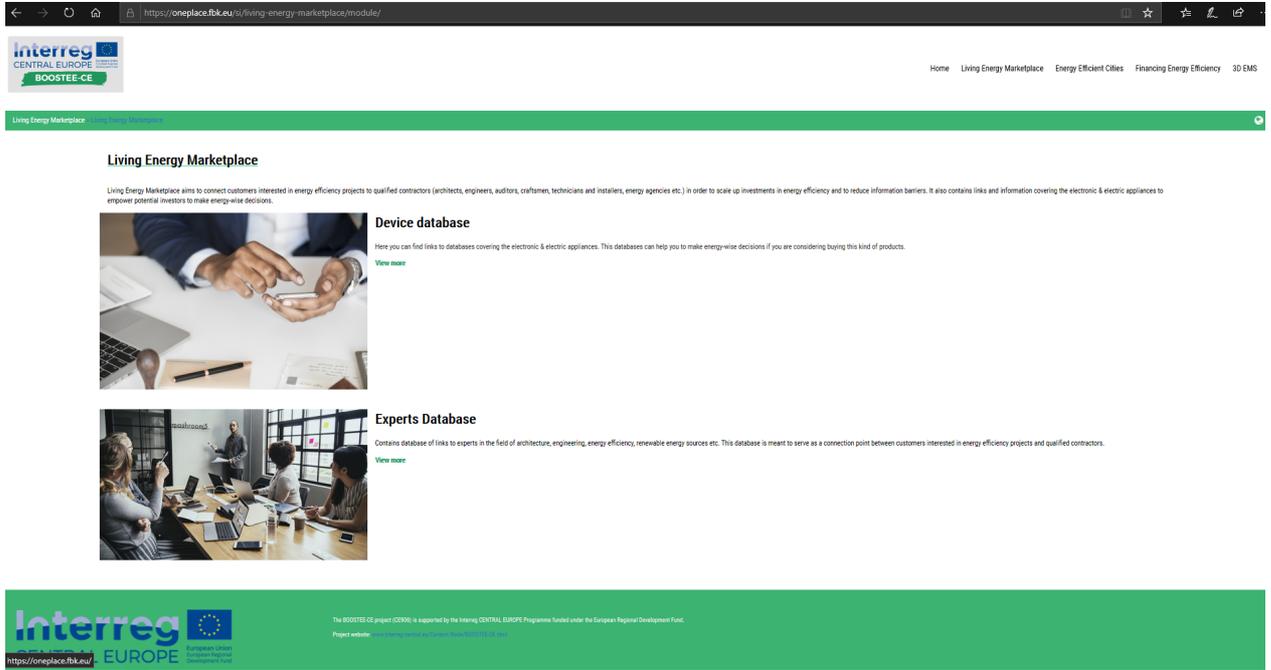


Fig.2 - The Living Energy Marketplace module

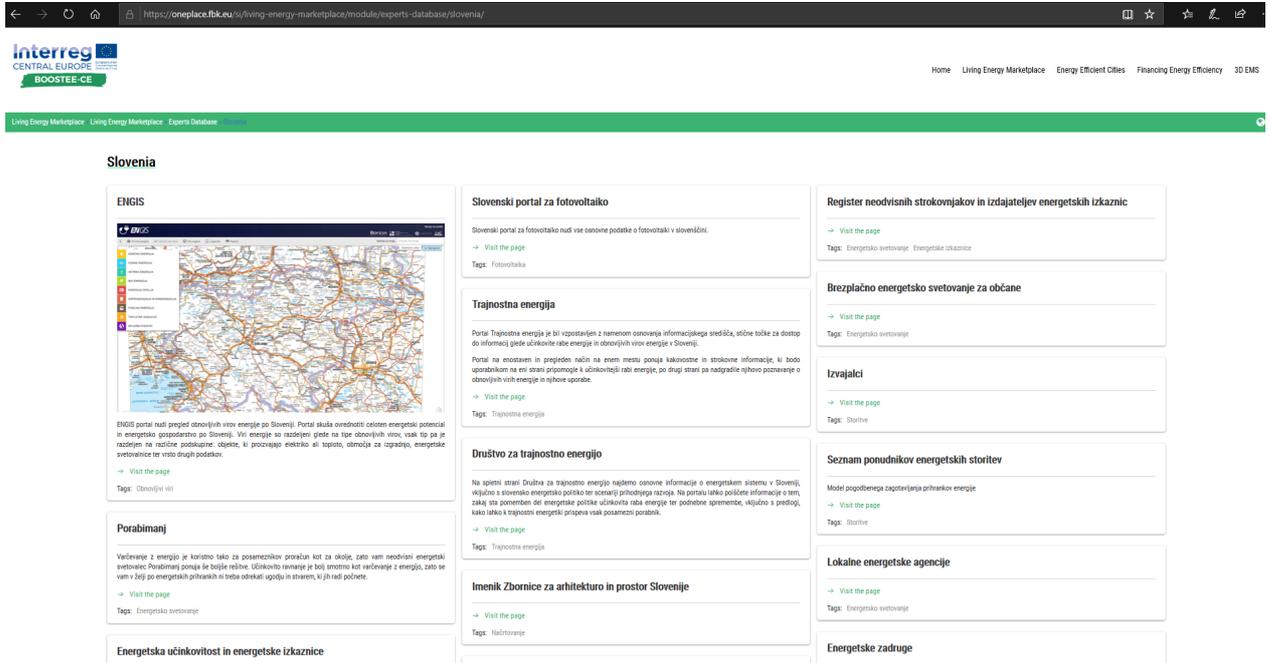


Fig.3 - The Living Energy Marketplace module - Experts Database (e.g. Slovenia).

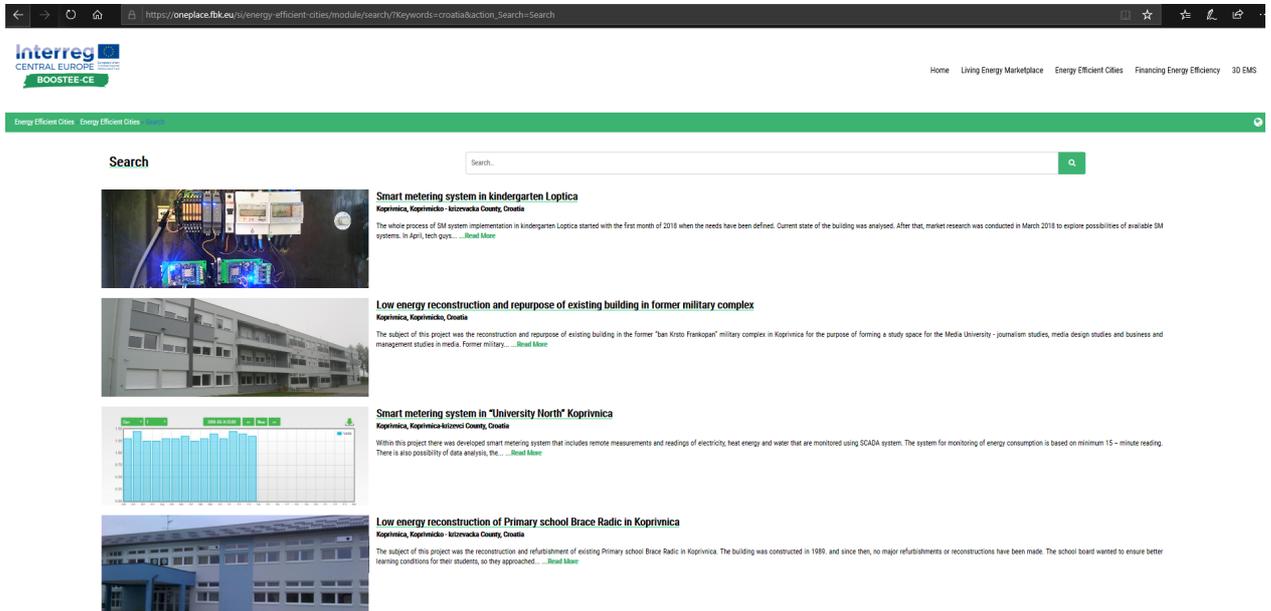
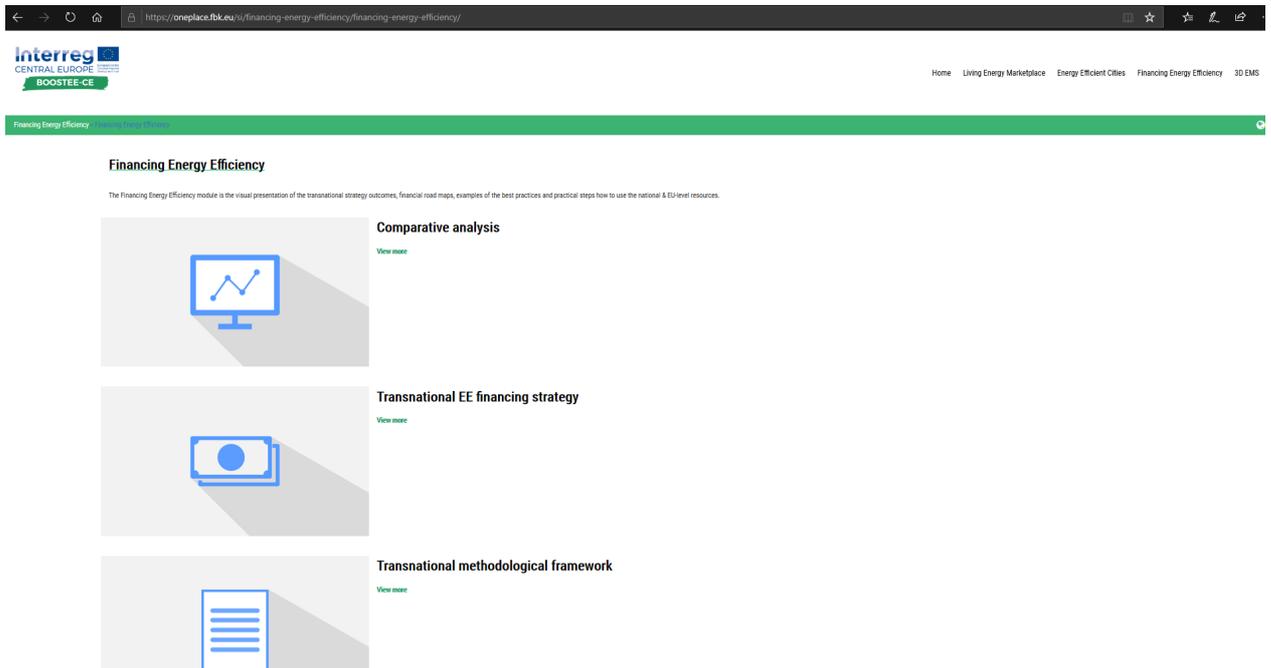


Fig.4 - The Energy Efficient Cities module (example: Croatia).





EE financing roadmaps

[View more](#)



Best practices and investments return models

[View more](#)



Energy efficiency financing project calculator

[View more](#)



Fig.5 - Financing Energy Efficiency module.

The screenshot shows a web browser window with the URL <https://oneplace.fbk.eu/financing-energy-efficiency/financing-energy-efficiency/energy-efficiency-financing-project-calculator/>. The page header includes the Interreg CENTRAL EUROPE BOOSTEE-CE logo and navigation links: Home, Living Energy Marketplace, Energy Efficient Cities, Financing Energy Efficiency, and 3D EMS. The main content area is titled "Energy efficiency financing project calculator" and contains the following text:

This is the simple web based energy efficiency project calculator which gives to the user a basic indicative idea of profitability and advisability of the investment into an energy efficiency or RES project. It counts just with own sources, not considering for instance grants and subsidies on one side or loans on the other side which both can significantly change foreseen values. If grants and subsidies are involved, the NPV and IRR are increasing and payback periods are shortening, on the other hand, loans affect the investment the opposite way, i.e. when you are co-financing the investment project with a loan, the NPV and IRR are decreasing and payback periods are extending.

You can check also graphical illustration of cash flow and discounted cash flow on a separate sheet.

For concrete investment calculations it is highly advisable to carry out a proper financial analysis by a financial specialist!

You can find instruction on how to use the calculator [here](#).

Capital costs

Capital costs are fixed, one-time expenses incurred on the purchase of land, buildings, construction, and equipment. The sum of the different types of costs related to the considered investment, for example the capital costs of building refurbishment, new EE and RES installations, infrastructure reconstruction etc.

Annual Energy Savings

Annual sum of money savings generated by the investment, for instance costs saved for heating, hot water preparation, electricity etc.

Annual Revenues

Annual sum of money generated by the investment, for instance electricity sales received on a basis of feed-in tariff, overall heat and electricity sales to customers etc.

Operational Costs

Annual operational costs including salaries, maintenance etc., these costs need to be calculated individually per each operational cost category depending on demand/press of the maintenance and operation of the investment.

Other costs per year

Other annual costs including depreciation, taxes, fees, energy costs etc., i.e. other costs depending on a specific situation in each country.

Discount rate

Discount rate.

Rate used to discount future cash flows in order to obtain their present value. The rate generally viewed as being the most appropriate is an organisation's weighted cost of capital¹, i.e. the minimum average rate of return it must earn on its current assets to satisfy its shareholders or owners, its investors, and its creditors. In other words, it is the interest percentage that a company or investor anticipates receiving over the life of an investment. For instance, if municipality considers the investment into an project the discount rate should be higher, at least as the long-term interest rate of loans deposit in a bank. Municipalities normally use discount rates ranging from 3% to 10%, for public sector it is desirable to set this rate close to the lower limit.

¹A company's weighted average cost of capital is the average interest rate it must pay to finance its assets, growth and working capital. It is also the minimum average rate of return it must earn on its current assets to satisfy its shareholders or owners, its investors, and its creditors.

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Fig.6 - The energy efficiency financing project calculator within the Financing Energy Efficiency module.

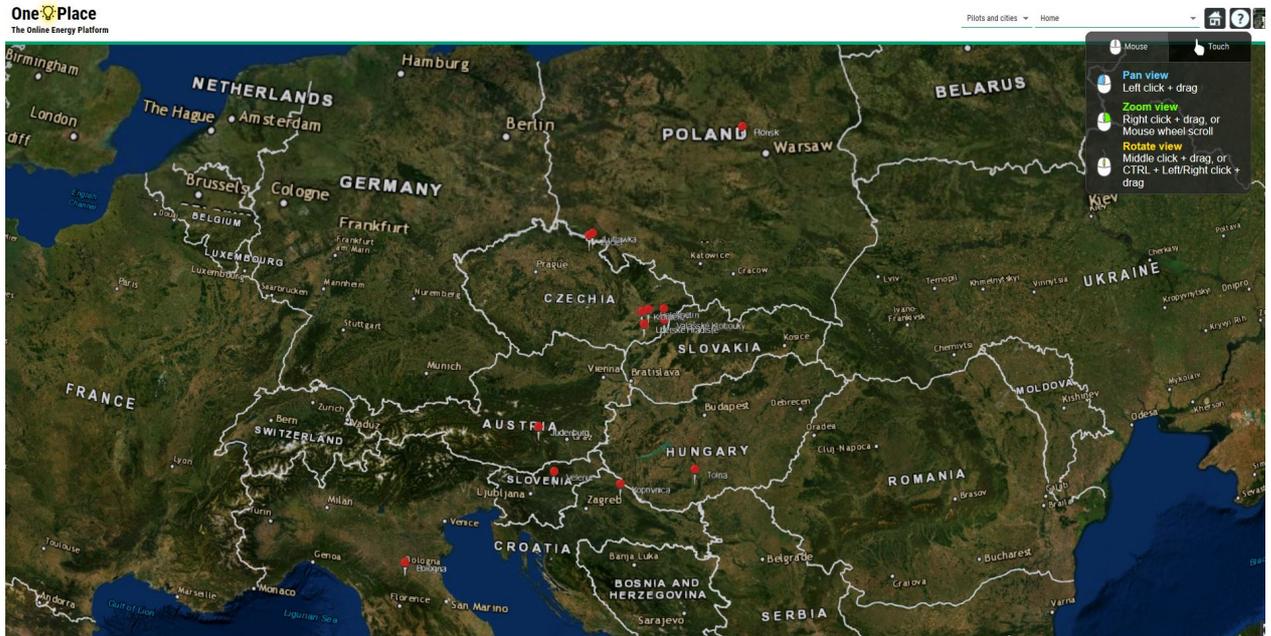


Fig.7 - 3D Energy Management System (3D EMS) module - entry page.

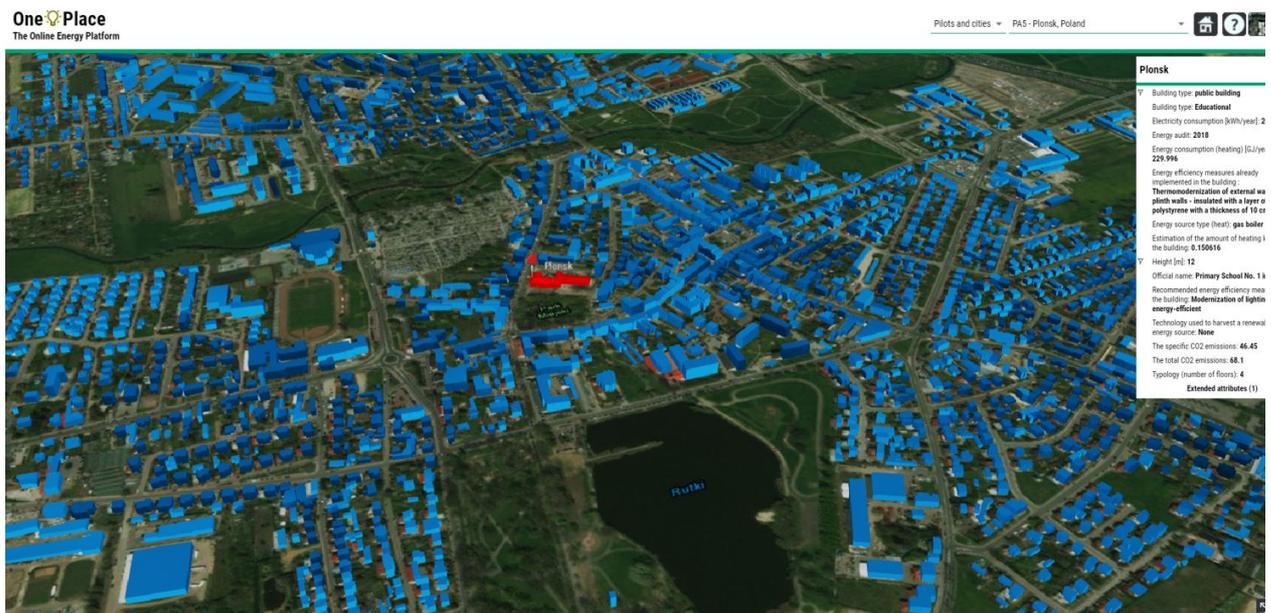


Fig.8 - 3D Energy Management System (3D EMS) module - example: Plonsk, Poland.