DELIVERABLE D.T2.1.5

**Achieved downstreaming actions
for spatial energy management,
monitoring and visualization EE tools**

Version 1

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D.T2.1.5: Achieved downstreaming actions for spatial energy management, monitoring and visualization EE tools

Activity A.T2.1 Downstreaming past ICT EE solutions for spatial energy management, monitoring and visualization

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1. Introduction

The deliverable T2.1.5 belongs to the activity related to the downstreaming past ICT energy efficiency solutions for spatial energy management, monitoring and visualization (A.T2.1). Within this document the tools from 4 previous projects were selected: BOOSTEE-CE, eCentral, ENERGY@SCHOOL and CityEnGov. The report summarizes the works which have been done in order to adjust the past solutions, widespread their use, increase impact. More details are available in D.T2.1.1-2-3-4.

2. Capitalized EE tools for spatial energy management, monitoring and visualization

Project name	BOOSTEE-CE

Name of the capitalized tool	OnePlace platform and 3DEMS tool
Link to the tool:	OnePlace: https://oneplace.fbk.eu 3DEMS: https://oneplace.fbk.eu/3d/
PA involved	-PA1: Weiz (Austria); -PA2: City of Podkowa Leśna (Poland); -PA3: Podgórzyn (Poland) / Chrastava (Czech Republic) cross-border region; -PA4: Union of Bassa Romagna Municipalities (Italy); -PA5: Province of Ferrara (Italy); -PA6: Municipality of Nazarje (Slovenia); -PA7: City of Split (Croatia).
Problems occurred in capitalization	Geospatial data collection and lack of energy-related attributes
How the tool was adjusted and tailored?	New 3D city models included, new layout / GUI

Project name	eCentral

Name of the capitalized tool	The Living Energy Performance Certificate (EPC) Tool
Link to the tool:	EPC tool: https://nzeb.thorium.software/ Tutorial: https://nzeb.thorium.software/tutorials
PA involved	-PA 1: Weiz (Austria); -PA2: City of Podkowa Leśna (Poland); -PA6: Municipality of Nazarje (Slovenia); -PA7: City of Split (Croatia).
Problems occurred in capitalization	During the capitalization no major problem occurred.
How the tool was adjusted and tailored?	4 new pilot areas were included in the tool. The existing country specific legislations was updated. Poland specific legislation was added.

Project name   ENERGY@SCHOOL

Name of the capitalized tool	The Living Energy Performance Certificate (EPC) Tool
Link to the tool:	The DEMO version of the APP: https://energyatschool.finmatica.it/#/login (username: UserDemo ; pssw: demo2021)
PA involved	-PA4: Union of Bassa Romagna Municipalities (Italy); -PA6: Municipality of Nazarje (Slovenia);
Problems occurred in capitalization	Inability to carry out testing activities due to the closure of schools as a result of Covid-19
How the tool was adjusted and tailored?	Back office management has been simplified, various data collection bugs have been fixed, a registration form has been created to enter new classes and users without the support of a software manager.

Project name   CityEnGov

Name of the capitalized tool	CitiEnGov Energy Dashboard
Link to the tool:	The Energy dashboard: http://sit.comune.fe.it/geonext/login.html
PA involved	- PA5: Province of Ferrara (Italy);
Problems occurred in capitalization	The integration between Geonext 2D viewer (used by Municipality of Ferrara) and the OnePlace 3D viewer (by FBK) faced some initial difficulties that have already successfully been solved
How the tool was adjusted and tailored?	A new functionality has been added to Geonext able to call OnePlace using coordinate as parameter in the URL: https://oneplace.fbk.eu/3d/?lat=44.834737&lon=11.610546. In this way, OnePlace will be open in the same geographical extent of the 2D viewer and will show the 3D model of the buildings in that area.

3. Conclusions

In this summary we reported the 4 ICT EE solutions for spatial energy management, monitoring and visualization that TARGET-CE capitalizes in order to widespread their use, increase impact and valorize past solutions. More details of the capitalized solutions and adjusted tools are given in D.T2.1.1-2-3-4.