DELIVERABLE T3.1.2

D.T3.1.2 – Testing 3DEMS (PA1) in a dense urban area of Emilia Romagna region (IT)

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A.T3.1 Implementation of pilot actions for EE improvement

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1. Introduction and aims

This deliverable is a kind of activities report that contains information about implemented pilot action.
This document discusses the testing of the OnePlace platform as a project tool supporting the acquisition and dissemination of knowledge on the improvement of energy efficiency in buildings.
The aim of the document is to present activities and goals to be achieved as part of the tasks undertaken for pilot action.

2. PA aims

The need to upgrade an energetic and structurally inadequate heritage to the current economic and climatic needs, together with the lack of public funds to be allocated, is pushing the Public Administrations towards new ways of facing energy planning issues, easier to use and where to identify the most advantageous solution in terms of quality of intervention, maintenance and management.
The pilot building have been chosen between the social housing ones managed by ACER – *Azienda Casa Emilia Romagna*, by virtue of the strong interest in the redevelopment of the existing public housing stock, as to be as much as inclusive with the socially poor range of citizen and to provide them with a comfortable living is one of the main missions.
The aim of the pilot action developed in the Emilia-Romagna Region is to show the Public Administrations an easy to use scenario that shows in a simple but effective way the current state of public buildings, their peculiarities and shortcomings, in order to make energy management more effective and increase energy efficiency.
The project aimed to optimize the services by bringing them together in a single web platform, where to respond to the needs of:

1. interactively consult a map of the urban environment, selecting a building of interest, displayed in 3D, to retrieve its main features, from energy diagnostics to registry information
2. offer to potential customers interested in energy efficiency projects a list of qualified suppliers and technological instruments
3. enable the exchange of experience and good practice in the field of energy efficiency

3. OnePlace platform testing

Implementation of the pilot action consists of social / promotional aspect like OnePlace platform use.
This chapter describes the testing and structure of the project platform below.
The OnePlace platform consists 4 different modules: Living Energy Marketplace; 3D Energy Management System; Energy Efficient Cities; Financing Energy Efficiency.

The first one is an online database helping to understand all different kinds of energy efficiency measures, electronic devices and offering qualified contractors who can carry out energy efficiency investments.

The second one is a webGIS system which can navigate a map of an urban environment, select a 3D building of interest and retrieve the energy audit and other cadastral/building information. The 3D Energy Management System aims to harmonize the different data sources in one database and visualize them.

Next module enables the exchange of experience and good practices between regions for public authorities and other public actors.

The last one is an attractive visual presentation of the transnational strategy outcomes (financial road map), examples of best practices and practical steps to use the national and EU-level resources. This module also tries to capture and present the methods of financing energy efficiency investments that will be transferred to the participating regions' Energy Efficiency Roadmaps.

Due to data collected and available from the Emilia-Romagna region, but unfortunately inconsistent with OnePlace software requirements, the PA and the creation of the solar maps as well as calculation of thermal losses have not been developed. Despite of the constrains encountered, RER has however committed to introduce the functionalities of OnePlace to its Regional area, Municipalities, sectoral agencies and Energy managers to support the future and possible adoption of the Platform.

Therefore, the current content of the OnePlace platform has been tested by project partners and selected stakeholders. The chosen method of reviewing is the questionnaire. This choice was considered optimal and the best. It included a short time to gather feedback.

Due to reasons mentioned above, OnePlace has not been "really" tested but presented during some Focus Group Meeting arranged in Bologna, as well as descripted in details during Training sessions arranged at Transnational/ National and Regional level:

- Transnational Training session implemented in Warsaw, the 30th September and 1st October 2019
- Transnational Training session implemented in Bled, the 17th and 18th October 2019
- Focus Group Meetings: 1st in Bologna the 12th December 2017; the 2nd in Bologna the 25th January 2018; the 3rd in Modena the 23 May 2018; the 4th in Rimini within the International Fair ECOMONDO the 6th of November 2018 and a final one, organized together with the LP will be OnLine due to Covid19 and it is planned for the 21st April 2020;
- A Seminar in Bologna the 22nd of October 2019, networking with the Capitalization workshop arranged within SHERPA MED, project implemented in the MED Cooperation area and also focusing on EE of public buildings
- A National/regional Training session arranged in Bologna, the 9th December 2019.

People attending the events have been quite diversified: from representatives of local and regional authorities, energy experts, energy managers, planners and sectoral agencies, energy auditors and also general public.

In all the listed events, participants have been informed about OnePlace and its different level of development and update till training sessions specifically focusing on the four Module of the Platform and their data and functionalities.

Opinions expressed on OnePlace are also diversified: from those enthusiastic to have an innovative tools with great potentials to very skeptical audience that perceive the Platform an additional one to the many

proposed in different events, projects, platforms already in use in some administrations which have feed discussions about possible integration and /or adoption in the future and beyond the project duration.

4. Recommendations for new EE investments

The OnePlace platform can also serve and support the process of planning further investments in improving energy efficiency and spatial planning. In this pilot action, new locations were proposed to carry out investments based on the results of the tools.

The pilot action identified the urban city centres - of which Bologna has been mapped for the project - as a useful location to be analysed for further measures to be implemented. This choice has been done following some discussions developed during the consortium meetings arranged within the project and the main reason to choose Bologna is for the great variety of typology of public buildings located in the area.

The webGIS system allows to navigate a map of the urban environment, select a 3D building of interest and retrieve the energy audit and other registry/building information. The 3D Energy Management System aims to harmonize the different data sources in one database and visualize them, in order to better manage the overall building grid.

5. Conclusions

Among the activities described in the pilot action in Italy, the webGIS and the training related to it represent a good practice, thanks to the innovativeness of the platform and to the transnational cooperation that allowed its functioning.

The 3D mapping of all the medieval city centre of Bologna has been pointed as an innovative and interesting tool, thanks to added value in spatial management and the potentialities of the instrument in a large scale planning.

The stakeholders engaged has shown interest in the webGIS model and in the training sessions, because, even if the platform is still not complete and needs further in depth interventions, the management of GIS maps in 3D can help to frame the state of the area in a short time; the training sessions revealed useful to enter the dynamics of the mapping system - and its potential - in a short time and through an expert's guidance, despite sceptical persons and thanks to discussions and comparison of different ideas collected throughout the implementations of the different events implemented at Regional level.