

# Official PLURAL project kick-off

The kick-off meeting of the PLURAL project "Plug-and-use renovation with adaptable lightweight systems", was held remotely on 12<sup>th</sup> and 13<sup>th</sup> of October 2020 and was organized by the project coordinator National Technical University of Athens from Greece.

The meeting, attended by over 40 representatives of the 18 partners involved in this project, was held online instead of the originally planned physical meeting in Athens due to current implications of the Covid-19 crisis. The project was attended by the Project Officer from the European Commision – Mrs. Dominique Planchon. Project partners have discussed how the set objectives can be achieved and how the expectations of the end users and interest groups can be met with respect to the intended project outcome.

PLURAL project aims to design, validate and demonstrate a palette of versatile, adaptable, scalable, off-site prefabricated Plug-and-Use kits. A Building Information Modelling (BIM) based platform and a Decision Support Tool (DST) will be developed to enable the optimal component selection, and integration, best Plug-and-Use kit design, faster and low-cost manufacturing and installation. Renewable energy and smart control systems will be coupled with low environmental impact prefabricated façade components to create the integrated all-in-one Plug-and-Use kits for residential building deep renovation. The project aims to create best practice renovation examples for the residential sector based on innovation and competitiveness, with benefits for the citizens and the environment; to develop training tools for main stakeholders (planners, installers, building owners and end users); to improve the life cycle based (LCA, LCC) performance standards applied in the building sector.

**Starting date:** October 01, 2020 **End date:** September 30, 2024

**Duration:** 48 months

## **Objectives**

- 1) Near zero energy consumption of buildings renovated with PnU kits
- 2) Cost-effective renovation
- 3) Fast-tract renovation

- 4) Environmentally- friendlier deep renovation
- 5) Flexibility Adaptability

#### **Demonstration**

The PLURAL concept will be integrated at **three different real demo building sites**, located in **Greece, Spain and the Czech Republic**, featuring different climate conditions and heating/cooling needs and user requirements, thus demonstrating the versatility and robustness of the overall concept.

PLURAL also includes **three virtual building demos** for simulating and validating the performance and operation of the solutions. The real demonstrators will also be used for their virtual assessment under conditions that differ from the actual ones. The results will be used for establishing best available techniques and guidelines regarding all implementation phases, including shipping, installation, maintenance and decommissioning.

# **Consortium of partners**

The consortium consists of partners from 7 countries: Poland, Germany, Greece, Switzerland, Luxembourg, Spain and Czech Republic. The coordinator (National Technical University of Athens) along with the rest of partners constitutes a very experienced consortium capable of achieving the project objectives. The PLURAL multi-disciplinary consortium brings together 18 partners with expertise in: advanced materials (Advanced Management Solutions), prefabrication and energy saving windows (BG Tec Bergamo Tecnologie), system integrators and monitoring (The Catalonia Institute for Energy Research – IREC, RECUAIR), municipalities (Vari-Voula-Vouliagmeni, Kašava, Agència de l'Habitatge de Catalunya), architects (Pich Architects, ZRS Architekten), energy systems (Czech Technical University in Prague, Institute for Solar Technology SPF, NTUA, DAIKIN), façade panels producers (DENVELOPS, RD Rymarov), business-financing-marketing (FENIX TNT), LCA and certification (The Catalonia Institute of Construction Technology – ITeC), IT (Intrasoft International).

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### Photo from the meeting:

