

## **IREC leads the international “Making PEDs” consortium to create Digital Twins as a decision support tool for cities in their transition towards climate neutrality**

**IREC together with 10 partners from 4 European countries has been chosen to run the Making PEDs project for the next 2 ½ years. It will use digital twins to support the active regeneration of four urban areas in Linz (Austria), Civitavecchia-Rome (Italy), El Prat de Llobregat (Spain), and Bærum (Norway) aiming to become climate neutral.**

Making cities sustainable is a very challenging task, not at least for their complexity and the many interlinked topics. Improving the sustainability of the building stock, for example, touches questions of materials, technology, business models in the real estate sector, mobility, and energy – to name just a few. In addition, social aspects play an increasingly important factor for urban transformation projects, adding with co-creation and participatory approaches a distinctly human aspect to the process.

The Making PEDs project will research and test the application of 3D visualization and simulation applications – Digital Twins – as a critical tool to master complexity and support decision-making in cities easier while engaging citizens in urban district regeneration.

“The project will not only research and plan climate neutral PEDs (Positive Energy Districts), but more importantly facilitate this transition by providing Digital Twins as a decision support tool”, says Jaume Salom of the Catalonia Institute for Energy Research (IREC) and manager of the project. “While we look at the assessment of energy districts and how citizens impact the energy equation, a critical part will be to develop reliable predictions for business models in the large-scale energy retrofitting of buildings”, Mr. Salom adds.

IREC is the coordinator of Making PEDs and responsible of the development and integration of the PEDs calculation methodologies under a holistic life-cycle assessment perspective.

Developed digital twins and models will be tested and refined while supporting decision-making processes for the regeneration of four districts aiming to climate neutrality in the cities of Linz (Austria), Civitavecchia-Rome (Italy), El Prat de Llobregat (Spain), and Bærum (Norway).

### **Additional information**

Making PEDs is an international DUT – Driving Urban Transitions project coordinated by the Catalonia Institute for Energy Research (IREC) commencing in November 2023.

Partner cities are Linz (Austria), Civitavecchia-Rome (Italy), El Prat de Llobregat (Spain), and Bærum (Norway).

Expert partners of the Making PEDs consortium are Catalonia Institute for Energy Research – IREC (Spain), ATER Civitavecchia (Italy), AIT – Austrian Institute of Technology (Austria), CICLICA (Spain), NTNU – Norwegian University of Science and Technology (Norway), R2M Solution (Italy), Università Degli Studi Roma Tre (Italy), and Urban Future (Austria).

**Media requests**

For media requests on the Making PEDs project, please contact Elisabeth Meze via [elisabeth@urban-future.org](mailto:elisabeth@urban-future.org) or project coordinator Jaume Salom via [jsalom@irec.cat](mailto:jsalom@irec.cat). For requests on the involvement of IREC, please contact Anna Magrasó ([amagraso@irec.cat](mailto:amagraso@irec.cat), mb: +34 674 123 245)