



## PRECEPT - Research Project Fact Sheet

<b>Title of Project</b>	<b>A novel decentralised edge-enabled PReScriptivE and Proactive framework for increased energy efficiency and well-being in residential buildings- ongoing</b>	
<b>Project Acronym</b>	PRECEPT	
<b>Funding Program</b>	H2020 - Building a low-carbon, climate-resilient future (LC.)	
<b>Project Identifier</b>	Call Identifier H2020-NMBP-ST-IND-2018-2020, Topic LC-EEB-07-2020	
<b>Total Budget</b>	<b>Budget/FRC</b>	7654025 € / 321000 €
<b>Starting – Ending Date</b>	10/2020-03/2023	
<b>Consortium</b>	<ol style="list-style-type: none"> <li>1. Watt and Volt AE (GR)</li> <li>2. Centre for Research and Technology Hellas (GR)</li> <li>3. Kaunas University of Technology (LT)</li> <li>4. Frederick Research Center (CY)</li> <li>5. Cleopa GmbH (DE)</li> <li>6. Nuromedia (DE)</li> <li>7. Odin Solutions SL (SP)</li> <li>8. DEMO Consultants bv (NL)</li> <li>9. Austrian Standards International (AT)</li> <li>10. LC Innoconsult International (HU)</li> <li>11. State Higher Educational Institution Prydniprovsk State (UA)</li> <li>12. Contech GmbH (DE)</li> <li>13. Private Construction and Assembly Enterprise (UA)</li> <li>14. My Energia Oner SL (SP)</li> <li>15. Politecnico di Milano (IT)</li> </ol>	
<b>Project Objectives</b>	<p><b>General:</b>            PRECEPT ambitiously aims to set the grounds for the deployment and operation of proactive residential buildings. The proposed framework introduces a "plug-n-play" Pred(scr)ictive and Proactive building energy management system (PPBMS) installed locally at a building level, at the Edge-Enable Proactiveness (E EP) device. The proposed PP-BMS is self-adapted, self-learned, -managed, -monitored, -healing and -optimised, requiring no (or minimum) installation costs and no maintenance. PP-BMS transform traditional reactive buildings to proactive ones, increasing their performance (both energy efficiency and occupants' well-being), exploiting RES, storage, forecasts and energy tariffs. PRECEPT also targets developing a real-time digital representation of the intelligent, proactive residential buildings by employing 6D BIM technology. A set of novel indicators leveraging the smart readiness rationale will be introduced to rating the Smart Proactiveness of buildings. Also, PRECEPT approach will deliver advanced data visualisations, utilising big-data and visual analytics techniques, which in conjunction with a social collaboration platform will engage stakeholders to exchange best-practices. PRECEPT framework will be demonstrated in relevant environments in 5 use cases, including 250 apartments.</p>	
<b>Work Packages</b>	WP1 PRECEPT Requirements, Specifications and Architecture WP2 BIM & Digital Twin Technologies WP3 PRECEPT Distribution, Modelling and Security Technologies WP4 Pred(scr)ictive and Proactive Building Management System WP5 System Integration, Demonstration & Impact Assessment WP6 Dissemination, Exploitation & Promotion WP7 Project Management	
<b>External References</b>	<a href="https://www.precept-project.eu/">https://www.precept-project.eu/</a> <a href="https://cordis.europa.eu/project/id/958284">https://cordis.europa.eu/project/id/958284</a>	