

Smart2B is a project funded by the European Commission in the Horizon 2020 framework, under the Call H2020-LC-SC3-2018-2019-2020 (BUILDING A LOW-CARBON, CLIMATE RESILIENT FUTURE: SECURE, CLEAN AND EFFICIENT ENERGY).

Starting in September 2021 and for the following 36 months of activities, 11 partners will collaborate to develop new software and hardware solutions for automated management and control of legacy equipment and appliances in order to upgrade smartness levels of existing buildings.

# OBJECTIVES

Smart2B's aim is to make existing building smarter by developing software and hardware solutions for automated management and control of legacy equipment and appliances.

Smartness to existing Buildings

**Smart2B** is designed to innovate the three main layers of buildings' energy infrastructure:



#### **DEVICE LAYER**

Legacy and smart devices, appliances, IoT sensors and actuators will all be seamlessly inter-connected through Smart2B devices, which allow them to exchange data with the platform.



### PLATFORM LAYER

The core "operating system" of the building, featuring machine learning based big-data analytics, predictive analysis, and overall management of the entire infrastructure.



### SERVICE LAYER

The Smart2B services toolbox will include multi-criteria management services, namely load scheduling, local energy efficiency, energy flexibility and indoor comfort assessment as well as transversal services, such as energy profiling and energy forecasting, user-in-the-loop actuation, predictive degradation assessment, air quality assessment and smart performance assessment & advisor.

## IMPACTS



Flexibility potential up to 50% **Smartness upgrades up to 93%** 



CO<sub>2</sub> emission reduction >2GtCO<sub>2</sub> Primary energy savings 7,4 GWh/year More efficient building management **Low-carbon technologies** 



**Creation & promotion of CECs Creation of jobs & knowledge in EU Enhancing EU innovation capacity** 

### Partners

























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