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meta build

META BUILD

Powering the METAmorphosis of
BUILDings



WHO WE ARE



38

Participants

13

Countries

6

Pilots
Front Runners

7

Replication
Multipliers

BACKGROUND

Natural gas is responsible for 42% of heating & cooling needs of EU buildings sector

Decarbonisation of heating & cooling needs through electrification

Need to implement Energy Efficiency first principle and employ smart control technologies

High dependency in fossil fuel for heating and cooling

01

Lack of cost-effective digital tools in building energy performance

03

Low integration of localised renewable energy sources

02

Low electrification solutions adoption in building sector

04

OUR VISION

The overall vision is to operationalise energy efficiency first principle towards the decarbonisation of the EU building sector.

Integrate Renewable Energy Sources in building sector

Electrify building thermal energy using Heat Pumps

Optimise building energy systems performance

Decarbonisation pathway of the building sector

Enhance building digitalisation and intelligence

OUR METHODOLOGY

Phase 1

Engineering

- i) Requirement Analysis
- ii) Packaged Services Development
- iii) Feasibility Assessment
- iv) Prototype Development

Phase 2

Transition

Front Runners: Demonstrations in real-life pilots (Implementation of six pilots)

Phase 3

Adoption

Widespread Acceptance

Phase 4

Replication

Decarbonization as a Service

Through these 4 Phases META BUILD will develop and demonstrate at TRL 6-8 highly cost-effective, integrated and replicable solutions like:

- Advanced HP technologies
- PVTs & other RES solutions
- Thermal & second-life battery storage systems.

OUR CONSORTIUM



tecnal:ia
HUB FOR INNOVATION, RESEARCH & TECHNOLOGY ALLIANCE

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UNIVERSITÄT
DRESDEN

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PLANOTANAS
REGIONS

RAP
REGULATORY
ASSISTANCE PROJECT

VEOLIA

Zēniē

SOZIALBAU AG

ENDEF

CIRCU
LI-ION

inetum

KAIMAMHXANIKH

HOB

CER

BE
BLUEPRINT
ENERGY
SOLUTIONS

HEPTOPLINARSTVO

eurac
research

SAUTER
Für Lebensräume mit Zukunft

FSB
University of Applied Sciences
for Engineering and Business

GDYNIA
miasto

EDF

Hellexia

3CARTIF

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