

StepUP closing event: Solutions and **Technologies for Deep Energy Renovation** Processes Uptake

24th April | 9.15 AM-14.00 PM CEST Online



Solutions and
Technologies for Deep
Energy Renovation
Processes Uptake

Deep renovation is key to drastically reduce energy demand and achieve the EU vision of a decarbonised building stock by 2050. However, only 1% of European buildings are being renovated yearly and shallow retrofits persist with low impact on energy consumption.

The StepUP project final conference will unveil innovative approaches for deep renovation, to contribute to the decarbonization of existing buildings and propel us towards achieving the EU's 2050 decarbonization objectives.

Speakers will introduce attractive and low-risk-investment **innovative methodologies**, **digital tools** and **plug-and-play technologies**, highlighting their potential to transform existing buildings. Participants will explore cutting-edge smart tools tailored for the deep energy renovation market, promising streamlined processes and enhanced project outcomes.

Moreover, plug & play technologies supporting retrofitting processes to real-world project pilots will be showcased, providing actionable insights for derisking investments and maximizing benefits.



Target audience

- Construction stakeholders: building promoters, contractors, architects, and designers.
- Manufacturers or suppliers of products or services for the construction sector.
- ESCO companies.
- Researchers and students focusing on renovation, retrofitting processes and energy efficiency in construction.
- Members of other related European projects.
- European citizens interested in deep energy renovation.



9.15 - 10.20 CEST

OPENING PLENARY:

Welcome, StepUP overview and methodology framework

Host:

Miguel Casas

Senior Partner

Energinvest

9.15 - 9.40

Welcome & StepUP project overview

Amisha Panchal

StepUP Coordinator, R&D Project Manager Integrated Environmental Solutions (IES)

9.40 - 10.00

A holistic methodology for affordable, reliable deep building renovations

Melinda Orova

Senior Consultant

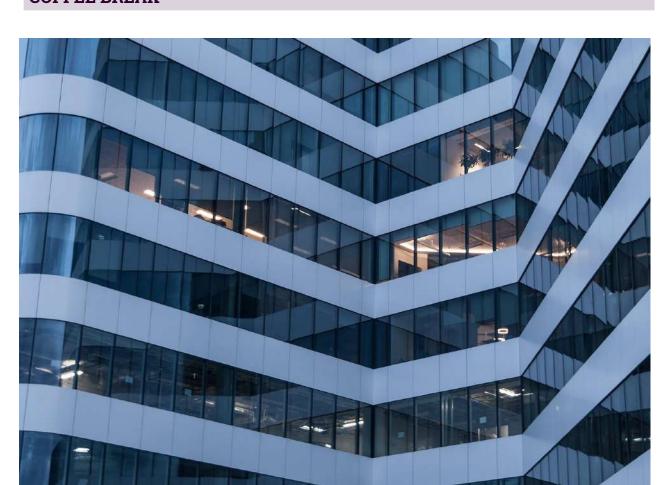
Advanced Building and Urban Design (ABUD)

10.00 - 10.15

Q&A

11.15 - 11.30 CEST

COFFEE BREAK



Solutions and Technologies for Deep Energy Renovation Processes Uptake



10.30 - 11.50h CEST

SESSION 1:

Digital Tools supporting retrofitting processes

Chair:

Gianluca Perillo

Project Manager UniSMART

10.30 - 10.50

Life cycle platform and data intelligence solutions

Amisha Panchal

StepUP Coordinator, R&D Project Manager

Integrated Environmental Solutions (IES)

10.50 -11.05

smartEPC: smart tools for smart StepUP projects

Lieven Vanstraelen

Senior Partner

Energinvest

11.05 - 11.20

Guidelines and IT tools for lean industrialised construction

Jesús Alonso

Innovation Director

Construcciones ACR

11.20 - 11.35

A set-based design matrix for a multifunctional plug-and-play façade

David Masip Vilà

Ph.D. Candidate

Universitat Politècnica de Catalunya (UPC)

11.35 - 11.50

Q&A

11.50 - 12.15 CEST

COFFEE BREAK







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12.15 - 13.15 CEST

SESSION 2:

Plug & Play technologies

Chair:

José Sevillano

Construction Business Developer Manager

Eurecat

12.15 - 12.30

HeatTank flexible thermal battery for increased energy efficiency

Zoltán Andrássy

Lead engineer

HeatVentors Kft.

12.30 - 12.45

Plug & Play module envelope system for deep building renovation

Marta Lupi

Project ManagerISOPAN - MANNI Group

12.45 - 13.00

Third party products integration

Irene Ràfols

Head of Product Innovation and Multiphysics Simulation Unit Eurecat

13.00 - 13.15

Q&A





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13.15 - 14.00 CEST

SESSION 3:

Deep renovation project pilots

Chair:

Melinda Orova

Senior Consultant

Advanced Building and Urban Design (ABUD)

13.15 - 13.25

Hungarian pilot: Deep energy renovation in a public non-residential building

Zsófia Regula

Project Manager

BP18

13.25 - 13.35

Spanish Pilot: Residential building deep renovation

María Ibáñez Puy

Head of R&D projects

Construcciones ACR

13.35 - 13.45

Showcase StepUP virtual pilot project

Amisha Panchal

StepUP Coordinator, R&D Project Manager

Integrated Environmental Solutions (IES)

13.45 - 14.00

Q&A

14.00 CEST

Key takeaways and conclusions of the day

Chair:

Miguel Casas

Senior Partner

Energinvest





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Speakers Wednesday, 24 April



Amisha Panchal StepUP Coordinator, R&D Project Manager Integrated Environmental Solutions (IES)

Amisha has a background in the field of building simulation, sustainability in built environment and building services. She has experience in using IES software and tools and has worked on projects ranging from Compliance modelling to NABERS. In her current role at IES, she is a project manager at IES working on a number of projects focused on Digital Twins technology. In this role, she is responsible for managing IES's contribution in the project, coordinating projects, and actively seeking opportunities for innovation in the field. She is a member of CIBSE and promoter of adaptation of Digital Twins in operation.



Melinda Orova Senior Consultant Advanced Building and Urban Design (ABUD)

Msc. Architect and Building Engineer, energy efficient building design consultant at ABUD, actively involved in R&D projects and LEED and WELL building certification. As a senior consultant in ABUD, she led and participated in several renovation focused EU research projects with responsibilities covering project management, decision making methodology development, demonstration project coordination, tool testing and user engagement activities.



Lieven Vanstraelen Senior Partner Energinvest

Senior Business Consultant at Energinvest, President of the board of Belesco (Belgian ESCO association) member of the group of experts of the program DSMIV Task 16 of the International Energy Agency on "Competitive energy services. Before joining Energinvest, he was for 6 years CEO of Fedesco, the Belgian federal energy services company (public ESCO). He has a strong expertise on ESCO's/TPF's scheme development for public and private players as well as Energy Efficiency investment program development and EE/EPC project facilitation. As EPC project facilitator, he has managed various EPC projects amongst which the Fedimmo federal Project, the Beersel Municipal Project, the ESCO4Oost Vlaanderen Project (ESCO model for Small and medium size companies). Within the Energinvest team, Lieven support our clients as ESCO business expert, EPC expert, financial and M&V expert. Lieven is a Certified M&V Professional (accreditation under renewal). Lieven is fluent in French, English and Dutch.



Jesús Alonso Innovation Director Construcciones ACR

Mr. Jesus Alonso is M. Sc. Mining Engineer (Polytechnic University of Madrid- UPM), MBA (EAE Business School) and Master in Tunnelling and Underground Works as well as R&D Management (Polytechnic University of Madrid- UPM). He has more than 15 years' experience in participating, managing and coordinating of national and international R&D projects, including Horizon 2020 projects, many of them related to Energy Efficiency in buildings, transport infrastructures and the application of new technologies to the construction sector. He has also written diverse papers related to this topic, which have been published by relevant organisms such as IEEE.



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Speakers Wednesday, 24 April



David Masip Vilà Ph.D. Candidate Universitat Politècnica de Catalunya (UPC)

David Masip Vilà is an Architect and Researcher. Ph.D. candidate in the Department of Architectural Technology at UPC, he has been involved in projects with a high degree of innovation and sustainability for over 5 years. He has collaborated on R&D projects focused on Circular Economy and Industrialization. He also combines his professional career with teaching at the UIC School of Architecture and La Salle.



Zoltán Andrássy Lead engineer HeatVentors Kft.

Zoltán holds a PhD. degree in Energy engineering from Budapest University of Technology and Economics. His thesis was the research of the Application of Phase Change Materials. Zoltán is the co-founder and CTO of HeatVentors with more than 10 years technological experience in the field of thermal energy storage. Under his leadership HeatVentors filled in 3 patents. Zoltán is working on product optimization, new B2C product and took leading role in many R&D project.



Marta Lupi Project Manager ISOPAN - MANNI Group

R&D Project Manager at Isopan, she has consolidated experience in coordinating cross-functional projects and serve as a reference for funded projects, product development, the management of the company's patent portfolio and as a support for the marketing department for the launch of new products.



Irene Ràfols Head of Product Innovation and Multiphysics Simulation Unit Eurecat

Irene Ràfols is an Architect from the Polytechnic University of Catalonia (UPC) with a Master in Integrated Engineering and Production by UPC.

She is currently the Head of the Product Innovation Department at Eurecat. He has 15 years of experience in R&D projects, having participated in different European Energy Efficiency projects for the Construction sector.

Her experience focuses on the development of new products from concept to industrialization. Her knowledge of materials is based above all on polymeric materials and high-performance concrete. She is the inventor of 3 patents.



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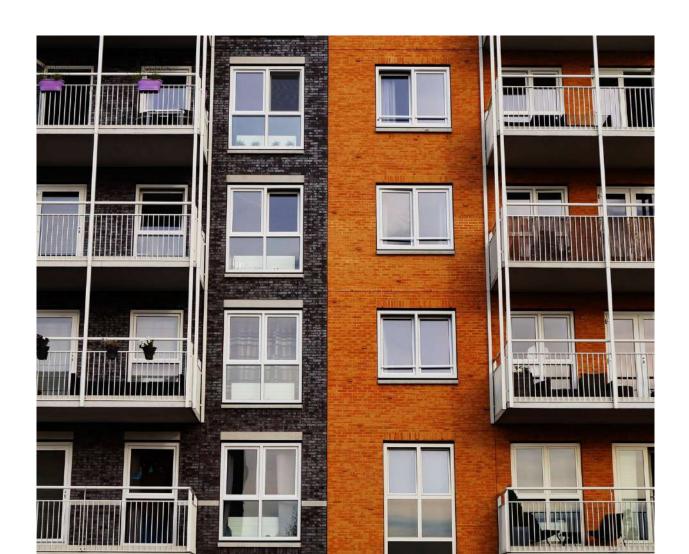
Zsófia Regula Project Manager BP18

Zsófia is a Project Manager at BP18, overseeing constructions all around District XVIII. She coordinates the Hungarian Pilot in the StepUP project on site.



María Ibáñez Puy Head of R&D projects Construcciones ACR

Dr. María Ibáñez-Puy is a Building Engineering, MSc in Environmental Management and Building Design, and PhD in Building Engineering (University of Navarra). All her career has been related with energy efficiency and sustainability in the field of architecture, focusing on adaptive and active façades. She has participated and managed several research projects related to energy saving in buildings, funded by regional and national governments and by the European Union and she is author of several scientific papers.





Solutions and Technologies for Deep Energy Renovation Processes Uptake

The StepUP project has developed affordable solutions and technologies aimed at transforming the energy renovation market and making the decarbonization of existing buildings a reliable, attractive, and sustainable investment.

This has been done through new process for deep energy renovation with fast design to operation feedback loops. This has helped to reduce the performance gaps and optimise investments, while scaling up promising Plug&Play technologies to minimise disruption, as well as maximising impact on energy, costs, and user comfort.



StepUP main objectives:

- Make renovation more attractive an reliable
- Reduce the performance gap
- Optimise renovation investments
- · Minimise time on site
- · Accelerate the renovation market

Consortium:





















Collaborators:







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