

## Europæisk konsortium udvikler ny teknologi, der mindsker CO<sub>2</sub>-udledningen fra bygninger

- SUNTHERM deltager i det europæiske StepUP-projekt, der har til formål at udvikle løsninger og teknologier, der kan være med til at ændre og udvikle markedet for energirenovering af bygninger.
- De løsninger, der udvikles under StepUP-projektet, vil blive installeret i en række forskellige bygninger, herunder lejlighedsbyggeri, skoler og kontorer, der udgør en væsentlig del af Europas bygningsmasse.

Suntherm deltager i det europæiske [StepUP](#)-projekt, der har til formål at ændre markedet for energirenoveringer ved at udvikle løsninger og teknologier, der er økonomisk overkommelige, og dermed gøre energirenoveringer til en attraktiv, pålidelig og holdbar investering.

Blandt StepUP's nye teknologier udvikles en plug&play-facade, der integrerer vinduer med forberedelser til en række tekniske systemer og med en varmeløsning, der giver mulighed for et fleksibelt varmekoncept.

Projektet undersøger også nye finansieringsmodeller med henblik på at optimere energiforbrug, komfort og omkostninger i løbet af en bygnings levetid.

De løsninger, der udvikles i projektet, vil blive installeret i tre forskellige bygningstyper, nemlig en lejlighedsblok, en skole og en kontorbygning.

Baseret på plug&play-komponenter vil StepUP-teknologierne mindske installationstiden på stedet og dermed drastisk minimere de gener, som bygningernes beboere og brugere normalt er udsat for i forbindelse med renoveringer. Projektet udvikler også intelligente data-løsninger, så man allerede på designstadiet kan tage velbegrundede beslutninger og efterfølgende monitorere virkningen af energirenoveringen.

**Suntherms** rolle i projektet er bl.a. at levere et varmeanlæg med et stort varmebatteri til en børnehave i Budapest, som vil blive renoveret i løbet af projektet. Suntherm har stor erfaring med at installere varmepumper med en integreret lagerløsning, og det er den kombination, der er interessant i projektet.

*"Step-UP er direkte målrettet den udfordring, som Europa står over for, nemlig at gøre alle eksisterende bygninger CO<sub>2</sub>-neutrale inden 2050", siger Morten Veis Donnerup, direktør i Suntherm. "Dette mål kan vi kun nå ved at udvikle omkostningseffektive renoverings-teknologier og løsninger, der alle medvirker til at reducere bygningernes energi-forbrug."*

*"StepUP tager udgangspunkt i beboernes feedback og går ind for en iterativ tilgang til energirenovering, baseret på både reale og simulerede data. Det mindsker performance-problemer, sænker de økonomiske barrierer og optimerer investeringer", understreger projektets koordinator, Giulia Barbano fra Integrated Environmental Solutions Ltd, Glasgow, UK.*

*"StepUP vil byde på en reel mulighed for at opnå nul-udledning af CO<sub>2</sub> fra bygninger. Det sker ved at udvikle en minimalt indgribende, hurtig og sikker dybdegående renoverings-løsning, der samtidigt nedsætter varigheden af de nødvendige arbejder på stedet og minimerer risikoen for installationsfejl,"* tilføjer Barbano.

Projektet, som Suntherm deltager i, gennemføres af i alt ni partnere fra syv europæiske lande, herunder to institutioner der arbejder med teknologioverførsel, ([Eurecat](#), [Unismart](#)), fem

virksomheder ([IES](#), [Manni Group](#), [Suntherm](#), [ABUD](#), [Energinvest](#)), et byggefirma og en kommune ([ACR](#) og [Municipality of 18th District of Budapest](#)).

Step-UP er finansieret af EU's forsknings- og innovationsprogram, Horizon 2020.

StepUP-teamet giver gerne flere oplysninger og kan kontaktes [via dette link](#).



The StepUP project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 847053.

## **Partnerne i Step-UP-projektet**

### **About Integrated Environmental Solutions (IES)**

IES deliver technology that reduces the carbon emissions of buildings and cities worldwide. Our aim is to see that technology used by every building of every city to secure a sustainable future. Our technology, supported by integrated consulting, has expanded from use on individual buildings to creating entire sustainable communities.

IES Ltd. coordinates the StepUP project and carries out the development of the data intelligence solutions and lifecycle software platform.

### **About Unismart**

Unismart is a foundation of the University of Padova in charge of managing the technology transfer and innovation consulting activities directed to public and private bodies. It focuses its activities in the provision of innovation and business support services in several market sectors.

Unismart leads the innovation management, exploitation, and market strategies for the StepUP results.

### **About Manni Group**

Manni Group, founded in Verona in 1945, drives the international market of steel processing, insulating panels and renewable energy and energy efficiency. The Manni Group holding comprises 14 companies operating in 3 different business areas. Manni Group promotes innovation in the processing and use of steel and a sustainable, safe and efficient construction through constant efforts in the R&D.

Manni Group develops a Plug & Play Envelope solution for deployment in pilots.

### **About Suntherm**

SUNTHERM is a young start-up company, built on the idea of bringing an innovative heating solution on the market. The company has successfully attracted investors and soft funding to make it possible to develop and test the SUNTHERM SmartHeat solution, of which the first generation is currently on the market.

Suntherm develops a SmartHeat energy production and storage solution for deployment in pilots.

## **About Eurecat**

Eurecat is the leading Technology Centre of Catalonia, providing the industrial and business sector with differential technology and advanced expertise. The centre offers solutions to their innovation needs and boosts their competitiveness in a fast-paced environment. It brings together the expertise of 650 professionals who generate a volume of income of 50M€ per year. Serving more than a thousand companies, Eurecat is involved in 200 projects of R&D national and international with high strategic value.

Eurecat leads the prototype development activities, together with outreach and stakeholder engagement.

## **About ABUD**

ABUD is a Budapest-based consultancy company powered by engineers, architects and researchers, specialized in sustainable building and urban design. The company has broad practical and research experience in the energy efficient refurbishment of existing buildings, including involvement in dynamic energy simulation and sustainability consultancy for renovation projects, especially historical heritage buildings, and research on district level renovation potential.

ABUD leads the pilot design, installation deployment and feedback loop processes.

## **About Energinvest**

Energinvest is a strategic, financial and operational consulting firm specialized in the development and implementation of public and/or private energy efficiency initiatives to scale up investments in energy transition, in particular sustainable and large-scale building energy retrofit investment programs.

Energinvest develops business models for owners and smartEPCs for deep renovation.

## **About ACR**

Construcciones ACR is a construction company which was founded in 1973 and belongs to ACR Group. The company initiated the extensive business activity which has low lasted over four decades. Since it started business, ACR Group has stood out as a company with a clear industrial vocation in project management on the building sector, ensuring deadlines, guaranteeing levels of quality, and taking its customers' commitments on board as though they were its own.

ACR manages the Spanish pilot and develop guidelines for lean P&P construction.

## **About Municipality of 18th District of Budapest**

The 18th District is located South-East of Budapest and it operates a large number of public buildings. It is the responsibility and also the interest of the municipality to achieve better energy performance related to its public buildings. It is also of high priority to increase the share of renewable energy in the energy resource portfolio.

BP18 manages the Hungarian pilot, engaging with the local stakeholders and end users.

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