











# ENERGY IN BUILT ENVIRONMENT CONFERENCE

Climate-driven solutions for next generation EU cities

29-30 June 2023

### **WELCOME MESSAGE**

Dear colleague,

On behalf of the Organizing Committee I would like to warmly invite you to the Conference Energy in Built Environment: Climate-Driven Solutions for Next Generation EU Cities, jointly organised by the Portuguese National Laboratory of Energy and Geology (LNEG), COST Action Positive Energy Districts European Network (PED-EU-NET), European Energy Research Alliance Joint Programme Smart Cities (EERA JPSC) on 29<sup>th</sup> and 30<sup>th</sup> of June 2023.

The transformation of the built environment is a key step for a climate neutral Europe and demands scalling up effort and actions from the building level to district and city level. Significant innovation at building level has already been reached with the recent development of the nearly Zero-Energy Buildings (nZEBs) and the uptake concept Positive Energy Districts (PEDs), built on the paradigm of zero energy smart and sustainable cities.

In this framework, the conference aims to provide opportunities to share and exchange knowledge and ideas on climate driven solutions for three scales application of built environment: Cities, districts and buildings, facilitating cooperation and science, policy and practice dialogue.

Your sincerely,

Laura Aelenei, Laboratório Nacional de Energia e Geologia (LNEG)

















## PED-EU-NET 3rd URBAN STAKEHOLDERS WORKSHOP

### **URBAN LIVING LABS: PATHWAYS OF SUSTAINABILITY TRANSITIONS**

Carcavelos, 29<sup>th</sup> of June 2023 (9:30-16:00) Nova School of Business and Economics University

### **OPENING SESSION**

### 9:30 Welcome messages

Vicky Albert-Seifried, Fraunhofer Institute for Solar Energy Systems, PED-EU-NET Chair | Joana Balsemão, Cascais Municipality | Prof. Miguel Pina e Cunha, Fundação Amélia de Mello Chair in Leadership at Nova School of Business and Economics

### **URBAN LIVING LABS:** ground for Circular innovation (Plenary)

### 9:45 Introduction to the Workshop

João Dinis, Empresa Municipal de Ambiente de Cascais | Laura Aelenei, National Laboratory of Energy and Geology

Inpulse #1 Climate-neutral Districts and PEDs: "in operation vs. life cycle", a story-telling approach to address multiple stakeholders' perspectives?

Michal Kuzmic, Czech Technical University in Prague | Paolo Civiero, Universita degli studi Roma Tre Inpulse #2PED-Lab/urban labs Inclusive innovation - How can urban living labs enable inclusive innovation?

Siddharth Sareen, University of Stavanger | Savis Gohari, Norwegian University of Science and Technology Inpulse #3 Metrics of circularity in PED Labs - How is circularity measured through digitalizing infrastructures with what unexploited potential?

Ghazal Etminan, Austrian Institute of Technology | Oscar Seco, Centro de Investigaciones Energéticas, Medioambientales y Tecnológicas

Inpulse #4 Orientating progress - What challenges are emerging for monitoring of progress on PEDs and PED-Labs?

Maria Beatrice Andreucci, Sapienza University of Rome | Mari Hukkalainen, Technical Research Centre of Finland

10:45 Coffee and refreshments

### **WORLD CAFE SESSIONS (Parallel sessions)**

11:15 **Group #1** Climate-neutral Districts and PEDs: "in operation vs. life cycle", a story-telling approach to address multiple stakeholders' perspectives

Group #2 PED-Lab Inclusive innovation

**Group #3** Metrics of circularity in PED Labs - How is circularity measured through digitalizing infrastructures with what unexploited potential

**Group#4** Orientating progress - What challenges are emerging for monitoring of progress on PEDs and PED-Labs?

Wrap-up by each World Cafe table rapporteur

12:30 Lunch

### A CARBON NEUTRAL SPACE LIVING LAB-CASCAIS SUSTAINABLE SMART POLE

14:00 Presentation of the case study

Technical visit

João Dinis, Cascais Ambiente

15:00 Closing remarks and main conclusions of the Workshop

15:30 Coffee and refreshments

















# Workshop EERA Joint Programme on Smart Cities and PED-EU-NET Research agendas, building capacity and networking

Carcavelos, 29<sup>th</sup> of June 2023 (16:00-19:00) Nova SBE University

### **OPENNING SESSION**

16:00 Introduction to the workshop, 2023-2024 work agenda, common goals, alignment activities

Annemie Wyckmans, Head of Smart Sustainable Cities-NTNU, coordinator of EERA JPSC

Vicky Albert-Seifried, Fraunhofer Institute for Solar Energy Systems, PED-EU-NET chair

### PARALLEL SESSIONS (open to the public)

Parallel Workshops (buildings, districts, cities, just transition)
 Scientific publications, white/policy papers, Horizon Europe calls-consortium building (List of relevant HE call topics 2023-2024).
 Wrap up from WGs (5-10 minute)

### **PED-EU-NET MC meeting (CA members)**

18:15 MC meeting: CA updates and news

(For those who are not joining the PED-EU-NET MC, they can continue the discussion in the parallel workshops)

19:00 Reception and Social Dinner

















# **ENERGY IN BUILT ENVIRONMENT CONFERENCE**

# Climate-driven solutions for next generation EU cities

Lisbon, 30<sup>th</sup> of June 2023 (9:30-17:30) LNEG-IAPMEI Campus, Auditorium

### **Opening session**

9:30 Welcome message from the Host

Teresa Ponce de Leão, President of the National Laboratory of Energy and Geology Innovation, research, and cities in Portugal-Welcome message

Ana Fontura Gouveia, Secretary of State for Energy and Climate

9:40 Introduction to the event

Laura Aelenei, Head of Energy in Built Environment Research Area at LNEG

### **Urban Energy Transition, 100 Climate neutral Cities, EU Cities Mission Europe**

9:50 Urban Energy Transition, 100 Climate neutral Cities, EU Cities Mission Europe Keynote

Paulo Ferrão, Vice-chair of the Commission's Mission Board for the Climate-Neutral and Smart Cities, EU Mission Ambassador for Portugal

10:20 Coffee break & Posters gallery

Plenary, Moderators: Maria Beatrice Andreucci, Sapienza University of Rome | Siddharth Sareen, University of Stavanger

10:50 SCIENCE4POLICY - EERA Joint Program on Smart Cities

Kevnote

Annemie Wyckmans, Head of Smart Sustainable Cities-NTNU, Coordinator of EERA JPSC

11:20 Lisbon towards 100 Climate-neutral and Smart Cities

Keynote

Miquel de Castro Neto, President of Lisboa e-Nova

11:50 Learning from PRACTICE

Fireside chats (interviews and discussion) with practitioners, policy makers, researchers (Cities,

Neighborhoods, Buildings)

Angelina Tomova, Energy Agency of Plovdiv

João Dinis, EMAC, Cascais Municipality

Maarten De Groote, VITO / EnergyVille

Rui Fragoso, Diretor of Buildings and Resources Efficiency Department at ADENE

12:10 Wrap up and reflections from the Plenary

12:30 Networking Lunch & Posters gallery

Climate neutral CITIES dialogue, Moderators Helder Gonçalves, Director of LEN, LNEG Ghazal Etminan, AIT

14:00 Progress of Transition Towards Positive Energy Districts and Climate-Neutral Cities

Christoph Gollner, Driving Urban Transitions Partnership (DTU)

**DivAirCity-Bucharest City** 

Cristiana Croitoru, Universitatea Tehnică de Construcții București (UTCB)

9 Cities for Mission CNC in Italy: which emerging issues related to PED perspective

Paola Clerici Maestosi, ENEA Department Energy Technologies and Renewables, Smart Energy

**CrAFt cities - Creating Actionable Futures** 

Judith Borsboom-van Beurden, Locality

















From NZEB to ZCB, Moderators: Daniel Aelenei, NOVA School of Science and Technology University Paolo Civiero, Universita degli studi Roma Tre

15:00 Towards zero-emission, efficient and resilient buildings

Mariangiola Fabbri, Head of Research, Building Performance Institute of Europe

From NZEB to NZEC, Portuguese perpective

Rui Fragoso, Diretor of Buildings and Resources efficiency Department at ADENE

15:30 Coffee break & Posters gallery

Sustainable Neighborhoods and districts, Moderators: Michal Kuzmic, ČVUT | Savis Gohari, NTNU

16:00 PED-urban: The German approach towards climate-neutral neighborhoods

Gerhard Stryi-Hipp, Head of Group Climate-neutral Cities and Districts, Fraunhofer ISE **POCITYF (Évora)** 

Júlia Oliveira Pereira, NEW R&D - Centre for New Energy Technologies, EDP

The Dutch vision on local energy systems in 2050 and autonomy on district level

Nienke Maas, TNO

oPEN Lab

Maarten De Groote, VITO/EnergyVille

17:00 Closing remarks

### **ORGANIZING COMMITTEE**

**HOST AND LOCAL ORGANIZATION** 

Laura Aelenei and Helder Gonçalves, Laboratório Nacional de Energia e Geologia João Dinis, Cascais Ambiente

**ORGANIZING PARTNERS** 

Vicky Albert Siefried, Fraunhofer Institute for Solar Energy Systems ISE, Germany (Chair of the COST Action PED-EU-NET)

Annemie Whyckmans, Norwegian University of Science and Technology, Norway (Chair of the EERA Joint Program on Smart Cities)

Maria Beatrice Andreucci, Sapienza Università di Roma, Italy (COST Action PED-EU-NET Grant Holder Scientific Representative and WG4 Leader)

### **SCIENTIFIC COMMITTEE**

Vicky Albert-Seifried, Fraunhofer Institute for Solar Energy Systems ISE, Germany

Laura Aelenei, National Laboratory of Energy and Geology (LNEG), Portugal

Maria-Beatrice Andreucci, Sapienza University of Rome, Italy

Jelena Brajkovic, University of Belgrade, Serbia

Savis Gohari Krangsås, Norwegian University of Science and Technology, Norway

Nienke Maas, Organisation for Applied Scientific Research (TNO), The Netherlands

Ghazal Etminan, Austrian Institute of Technology (AIT), Austria

Mari Hukkalainen, Technical Research Centre of Finland (VTT), Finland

Oscar Seco, Spanish Research Centre for Energy, Environment and Technology (CIEMAT), Spain

Michal Kuzmic, Czech Technical University in Prague, Czech Republic

Paolo Civiero, Universita degli studi Roma Tre, Italy

Siddharth Sareen, University of Stavanger, Norway

Cristiana Croitoru, Universitatea Tehnică de Construcții București (UTCB), Romania





