







# **COST Action Positive Energy Districts European Network Final Event**

# **Energising Neighbourhoods: Reflection, Dialogue and New Perspectives**

2-3 September 2024
Tabakfabrik Linz, City of Linz, Austria



**COST** (Cooperation in Science and Technology) is an intergovernmental framework funded by the EU to support open collaboration on dedicated topics with an aim to strengthen Europe's capacity to address scientific, technological, and societal challenges.

**COST Action Positive Energy Districts European Network (PED-EU-NET)** aims to mobilise researchers, practitioners and other relevant stakeholders to drive the deployment of Positive Energy Districts (PEDs) in Europe through open sharing of knowledge, exchange of ideas, pooling of resources, experimentation of new methods and co-creation of novel solutions. Started in September 2020, the network has now around 250 members from over 40 countries.

The Final Event aims to bring together different stakeholders to reflect on the PED development across Europe to date and to discuss the opportunities for the way forward.















# 2nd September (Day 1)

8:30-9:00	Registration		
Opening (Location	Opening (Location: Hörsaal 0)		
9:00-9:15	Introduction to the event  MCs: Nienke Maas   TNO and Michal Kuzmic   Czech Technical University in Prague		
9:15-9:30	Welcome to Linz Dietmar Prammer   Councillor for Urban Planning and Real Estate, City of Linz		
9:30-10:00	The Story of Linz Hans-Martin Neumann   Urban Development Director, City of Linz		
10:00-10:30	Coffee Break & Posters Gallery		
Plenary (Locatio	n: Hörsaal 0)		
10:30-11:00	Keynote by Iris Belle: Future Trends in Energy Districts Professor of Smart City Solutions   Hochschule für Technik Stuttgart (HFT Stuttgart)		
11:00-11:45	COST Action PED-EU-NET Presentation: The Journey and Outcome PED-EU-NET Core Group		
11:45-13:00	Plenary Roundtable: Reflections from cities on PED development and what's next?  Panellists: Giulia Turci (City of Cesena)   João Dinis (City of Cascais)   Hans-Martin Neumann (City of Linz)   Nadja Riedel (City of Leipzig)   Stefan Synek (City of Munich)   Gökce Küçük (İzmir Planning Agency)   Christoph Gollner (Driving Urban Transitions Partnership) and Moderator: Savis Gohari (Norwegian University of Science and Technology)		
13:00-14:00	Networking Lunch & Posters Gallery		
Plenary (Locatio	n: Hörsaal 0)		
14:00-14:30			
14.00-14.50	Keynote by Christoph Treberspurg: Residential Quarter of the Future Architect and CEO, Treberspurg & Partner Architekten		
	Architect and CEO, Treberspurg & Partner Architekten		
Joint Workshop	Architect and CEO, Treberspurg & Partner Architekten  by PED-EU-NET, DUT and PED ACT (Location: Hörsaal 0 + Nautilus)  Introduction to the Workshop and the 5 Breakout Groups.  Group 1: Designing PEDs  Group 2: Storytelling of PEDs  Group 3: Crafting PED Vision  Group 4: Advocating for inclusive PEDs		
Joint Workshop 14:30-15:00	Architect and CEO, Treberspurg & Partner Architekten  by PED-EU-NET, DUT and PED ACT (Location: Hörsaal 0 + Nautilus)  Introduction to the Workshop and the 5 Breakout Groups.  Group 1: Designing PEDs  Group 2: Storytelling of PEDs  Group 3: Crafting PED Vision  Group 4: Advocating for inclusive PEDs  Group 5: Stress-testing the PED concept: PEDs and climate-neutral neighbourhoods		
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Joint Workshop 14:30-15:00  15:00-16:30 16:30-17:00 Plenary (Location 17:00-17:30  17:30-18:00	Architect and CEO, Treberspurg & Partner Architekten  by PED-EU-NET, DUT and PED ACT (Location: Hörsaal 0 + Nautilus)  Introduction to the Workshop and the 5 Breakout Groups.  Group 1: Designing PEDs  Group 2: Storytelling of PEDs  Group 3: Crafting PED Vision  Group 4: Advocating for inclusive PEDs  Group 5: Stress-testing the PED concept: PEDs and climate-neutral neighbourhoods  Workshop  Coffee Break & Posters Gallery  n: Hörsaal 0)  Wrap Up of Learning  Short summary by the rapporteur of each breakout group  Closing Remarks  Host: Hans-Martin Neumann   Urban Development Director, City of Linz  PED-EU-NET Chair: Vicky Albert-Seifried   Fraunhofer Institute for Solar Energy Systems		















# 3rd September (Day 2)

Site Visits	
9:00-12:30	<ul> <li>Site Visit Locations: (1) Franckviertel District and (2) SolarCity</li> <li>Participants will be divided into 2 groups: one group will visit the Franckviertel District and the other to SolarCity.</li> <li>Participants can choose which site to visit during registration on Day 1.</li> </ul>
	<ul> <li>Participants will need to make their own way to the sites. Advices on local transportation can be found below.</li> </ul>
12:30-13:30	Networking Lunch & Posters Gallery
Joint Workshop	by PED-EU-NET, PED ACT and Making PEDs (Location: Cuba + Libre, Havana Building)
13:30-13:45	Introduction to the Workshop and the Breakout Groups.
13:45-14:45	Workshop: 4 Breakout Groups.  Group 1: Funding strategies and Governance models for PEDs  Group 2: Digitalization of built environment for PEDs  Group 3: Decision Support Tool for PEDs  Group 4: Desing of Action Plan for PEDs
14:45-15:00	Coffee Break & Posters Gallery
15:00-16:00	Workshop: Wrap Up of Learning in a Joint Group to create a common ground.  Joint Group: Guidance on the need for a PED Roadmap
Plenary (Locatio	n: Cuba, Havana Building)
16:00-16:30	News on Driving Urban Transitions Partnership Call for Proposals 2024 Christoph Gollner   Coordinator Positive Energy Districts Transition Pathway, DUT
16:30-16:45	Closing Remarks Host: Hans-Martin Neumann   Urban Development Director, City of Linz PED-EU-NET Chair: Vicky Albert-Seifried   Fraunhofer Institute for Solar Energy Systems PED-EU-NET Vice-Chair: Laura Aelenei   National Laboratory of Energy and Geology Portugal
	sion (Location: Cuba, Havana Building)
16:45-17:45	PED-EU-NET 8th Management Committee Meeting Open to all COST Action PED-EU-NET members

# **Site Visits: Local Transportation Advice**

















#### **Site 1: Franckviertel District**

Meeting time: 3 September 9:00

Meeting location: Volkshaus Franckviertel, Franckstraße 68, 4020 Linz

Local transportation: Depart from the city centre "Linz/Donau Taubenmarkt" bus stop, take bus no.27 in the

direction "Linz/Donau Chemiepark" and get off at "Linz/Donau Lonstorferplatz". "Volkshaus Franckviertel" is about 180m from the bus stop. The entire journey takes

roughly 30 mins.

**Bus Time**: 08:11 Linz/Donau Taubenmarkt → 08:39 Volkshaus Franckviertel

08:26 Linz/Donau Taubenmarkt → 08:54 Volkshaus Franckviertel

Google map link: <a href="https://maps.app.goo.gl/QnQdwJvxPiXQZP1y8">https://maps.app.goo.gl/QnQdwJvxPiXQZP1y8</a>

Site 2: SolarCity

Meeting time: 3 September 9:00

Meeting location: SolarCity-Zentrum, 4030 Linz

Local transportation: Depart from the city centre "Linz/Donau Taubenmarkt" tram stop, take tram no.2 in the

direction "Linz/Donau solarCity" and get off at "Linz/Donau solarCity-Zentrum". The

entire journey takes roughly 40 mins.

**Tram Time**: 08:06 Linz/Donau Taubenmarkt → 08:42 Linz/Donau solarCity-Zentrum

08:15 Linz/Donau Taubenmarkt  $\rightarrow$  08:51 Linz/Donau solarCity-Zentrum

Google map link: <a href="https://maps.app.goo.gl/LAHqrp6SfTCYD78K9">https://maps.app.goo.gl/LAHqrp6SfTCYD78K9</a>

## 4<sup>th</sup> September 10:00-12:00 (optional event)

## **PED Information Workshop**

POSTCITY, City of Linz, Austria

Part of the Ars Electronica Festival

Public Event: Free of charge but registration with the festival is required via the following URL: <a href="https://ars.electronica.art/hope/en/events/energizing-neighbourhoods-from-dialogue-to-co-creation/">https://ars.electronica.art/hope/en/events/energizing-neighbourhoods-from-dialogue-to-co-creation/</a>

## **Positive Energy District Public Engagement Workshop**

10:00-12:00 Energizing Neighbourhoods: From Dialogue to Co-Creation

Joint workshop by COST Action PED-EU-NET, City of Linz and PED ACT; coordinated by: Bahanur Nasya, Beril Alpagut, Isin Can Traunmüller and Vicky Albert-Seifried

Description: Positive Energy Districts (PEDs) are seen as one of the key urban transition pathways towards climate neutrality, the EU has set out a vision of creating 100 PEDs in Europe by 2025. PEDs seek to energise our neighbourhoods with renewable resources and bring about positive impacts to our cities in environmental, social and economic terms. In this workshop, participants will engage in a dialogue on PEDs and co-create PEDs considering different challenges and stakeholder perspectives via game plays.

















# Joint Workshop by PED-EU-NET, DUT and PED-ACT

2nd September 2024 (Day 1) 14:30-16:30 | Tabakfabrik Linz, City of Linz, Austria

## Introduction

The Workshop will be divided into 5 parallel breakout groups with roughly 20-25 people per group. Each group will work on a specific topic as listed below; a short description of the breakout groups is presented in the following.

Group 1: Designing PEDs through Game Play

Group 2: Storytelling of PEDs

Group 3: Crafting PED Vision through Game Play

Group 4: Advocating for inclusive PEDs

Group 5: Stress-testing the PED concept: PEDs and climate-neutral neighbourhoods

## **Breakout Group Description**

# **Group 1: Designing PEDs through Game Play**

Led by Beril Alpagut and Oya Tabanoğlu | PED-EU-NET

The group will play a game called "GamePED" together. GamePED was developed by the MAKING-CITY project, the game is about designing a PED in a defined geographical boundary by identifying the Built Environment (building uses) based on a state of play (in terms of the district's climate, resource availability, social, economic and politic conditions). Players will discuss optimum non-technical and technical solutions to overcome the barriers in the state of play and build a positive energy district. A Game board is for max. 15 people and two game tables will be organised that can accommodate max. 30 participants in total.





Photos of GamePED session in another event.

## **Group 2: Storytelling of PEDs**

Led by Francesca Sabatini and Michal Kuzmic | PED-EU-NET

The group will work with the PED Storytelling Framework – a comprehensive tool to support the building of a powerful narrative about PEDs targeted to different user personas. The narrative can be used to device effective communication that helps to call relevant stakeholders into action. The group will work together with participants to use the framework to create narratives and stories for their urban development projects.













# **Group 3: Crafting PED Vision through Game Play**

Led by Savis Gohari and Laura Aelenei | PED-EU-NET

The group will play a game called "BeyondPED: VisionCraft" together. It is an immersive and interactive game designed to explore innovative solutions for the future of PEDs. Participants collaborate to create a new concept that either modifies, develops, or replaces existing PED concept. They must integrate their selected role, theme, timeline, and scale to propose visionary solutions that address the challenges and opportunities in their chosen context. Through dynamic discussions and strategic thinking, BeyondPED: VisionCraft aims to generate a collective vision for the future of sustainable and inclusive communities. This vision will be grounded in the lessons learned from PED implementation and enriched by the diverse perspectives and expertise of the participants.

## **Group 4: Advocating for inclusive PEDs**

Led by Bahanur Nasya and Mengije Han | PED-ACT

There are 8 main aspects that put a PED project on strong footing. Next to technical, process, environmental, financial, and legal aspects, which have been seen as priority, social, governance and managerial aspects have often been neglected. In the first round of the workshop, the group will identify the most important topics amongst the 8 aspects of PEDs (special attention will be paid to the latter three aspects) and discuss how to address them properly. In the second round, each participant will be given a specific persona and based on it, they will verify and rate if the proposed topics/activities are appropriate or they can suggest alternatives. In the third round, the group will work on the demands for PED projects and examine how these demands can be modified or improved. The last step includes the collection of emerging topics and further needs in upcoming projects.

## Group 5: Stress-testing the PED concept: PEDs and climate-neutral neighbourhoods

Led by Christoph Gollner | DUT Partnership and Thaleia Konstantinou | PED-EU-NET Both European policies and the overall discourse on urban transformation and the urban energy transition have shifted since the introduction of the PED concept in 2018. With "climate-neutrality" on all levels in focus, particularly in the urban context, more holistic approaches are dominating the narratives. The PED concept has been successful in providing a range of elements and solutions for decentralising the energy system and transforming (urban) neighbourhoods into clean energy subsystems. However, are cities taking up the PED concept as whole? Or are we stuck in an academic debate? How do PEDs relate to "climate-neutral neighbourhoods"? How can we increase the practical relevance of the concept, what are the hot topics to better integrate PEDs into the climate-neutrality discourse? This group aims to openly discuss and stress-test the PED concept against the backdrop of academic and practical evidence gained over the last years, and identify pathways for further developing the concept.















# Joint Workshop by PED-EU-NET, PED ACT and Making PEDs

3rd September 2024 (Day 2) 13:30-16:00 | Tabakfabrik Linz, City of Linz, Austria

## **Workshop Structure**

The Workshop will be divided into 3 sessions:

13:30 - 13:45

Introduction to the Workshop and the Breakout Groups.

13:45 - 14:45

**Breakout groups:** 4 parallel breakout groups with roughly 20-25 people per group. Each group will work on a specific topic question as listed below, a short description of the breakout groups is presented in the following.

Group 1: Funding strategies and Governance models for PEDs

Group 2: Digitalization of built environment for PEDs

**Group 3: Decision Support Tool for PEDs** 

Group 4: Desing of Action Plan for PEDs

Each breakout group will be led by 2 **Moderators/Rapporteurs** (for each table) and 4 **Experts/Representatives** from projects/cities/topic (who will move between the breakout groups).

15:00 - 16:00

Joint groups session: Wrap-up and learning from tables to create a common ground.

Joint Discussion Topic: Guidance on the need for a PED Roadmap

Moving from the work already developed in PED-EU-NET Working Group 1 Task 1.5, the aim of the session is to collect and consolidate the learnings from each group to provide a comprehensive approach for planning and designing Positive Energy Districts.

## **Breakout Groups and joint session description**

#### Group 1: Innovative Funding strategies and effective Governance models for PEDs

- 1. How can governance structures be designed to ensure the successful implementation and operation of PEDs?
- 2. What are the major challenges and opportunities in integrating funding and governance for PEDs, and how can they be addressed?
- 3. How can partnerships with local businesses, governments, and NGOs be leveraged for resources?
- 4. How can the economic benefits of PEDs be communicated to potential investors or funders?















## **Group 2: Digitalization of built environment for PEDs**

- 1. How can digital tools and technologies enhance the planning and design of Positive Energy Districts?
- 2. What digital tools are currently being used or could be used to enhance the development and management of Positive Energy Districts?
- 3. In what ways can digital twins and other calculation models be used to optimize PED design and impact of PEDs?
- 4. What are the best methods for collecting (gather/store/update) open data in your opinion?

# **Group 3: Decision Support Tool for PEDs**

- 1. How can decision support tools support the planning and design phases along the implementation process?
- 2. What are the key features and functionalities that stakeholders require from decision support tools to effectively manage PEDs?
- 3. What are the potential challenges and barriers in implementing decision support tools for Positive Energy Districts, and how can these be addressed?
- 4. How and who can interact with a digital tool and want to be visualized?

## **Group 4: Desing of Action Plan for PEDs**

- 1. Who are the key stakeholders in a PED project, and what roles and interests do they have?
- 2. How can we effectively include and engage the community in the PED project?
- 3. What are the best strategies for involving diverse community groups in PED projects?
- 4. What potential challenges might we face with stakeholder involvement, and how can we address them?

## Joint Group Session: Guidance on the need for a PED Roadmap

**Objective:** Develop detailed roadmaps for implementing Positive Energy Districts by leveraging collective expertise/stories and inputs from participants.

## **Break into Small Groups:**

Divide the participants into 2 small groups to encourage active discussion.

#### **Assign Roles:**

 Assign roles within each group (e.g., facilitator, note-taker, timekeeper) to ensure smooth group dynamics.

# **Brainstorming and Roadmap Development (30 min)**

## **Define Key Components:**

Each group should identify key components for their roadmap, such as energy efficiency measures, renewable energy integration, infrastructure needs, stakeholder engagement/stakeholder roles, and policy considerations.

















# **Develop Roadmap Sections:**

Have each group work on different sections of the roadmap:

- Part 1: Vision and Goals, Stakeholder Engagement
  - 1. What do we want to achieve with PEDs and how will we know we're successful?
  - 2. Who need to be involved in the project, and how can we get them on board?
- Part 2: Tech Solution and infrastructure development
  - 1. What key information about the state of the art (technologies and systems) do we need, and what actions must we take to ensure the success of the PEDs?
  - 2. What types of renewable energy or digital tools should we use, and how can we integrate them into our overall plan?
- Part 3: Economic and Financial Considerations, Policy and Regulations
  - 3. How will we finance the project, and how can we ensure it remains cost-effective for each actor involved?
  - 4. What policies and regulations do we need to address or modify, and how can we manage these changes?

## **Group Presentations and Feedback (30min)**

Each group presents their roadmap sections to the rest of the participants. Allow time for questions, feedback, and discussion after each presentation.





