

Title: UERA TWG 2.1 PED Webinar

Date: 16 April 2021

Time: 09:00-11:00

Organizers:	Gudrun Haindlmaier (AIT) - Gudrun.Haindlmaier@ait.ac.at Monika Heyder (ElFER) – heyder@eifer.org Christoph Gollner (FFG) - Christoph.Gollner@ffg.at Gilda Massa (ENEA) - gilda.massa@enea.it
Minutes Author:	Monika Heyder (ElFER)
Minutes Validation:	Daniela Bear (SINTEF) - Daniela.Baer@sintef.no

Participants:		
Name	Institutions	
Piero De Sabbata	ENEA	
Maurizio Cellura	University Palermo	
Viera Joklová	University Bratislava	
Katarina Kristianova	University Bratislava	
Francesco Guarino	University Palermo	
Anders Riel Müller	University Stravanga	
Kate Reilly	University Antwerpen	
Vicky Albert-Seifried	Frauenhofer ISE	
Haase Matthias	ZHAW	
Marco Palma	University of Bologna	
Oliver Dinter		
Apostolos Michopoulos	Cyprus University	
Anne Ruas	University Gustave Eiffel	
Margit Noll	FFG	

Summary

The webinar was jointly organised by UERA TWG 2.1 and PED Programme. The webinar allowed to receive insights in the draft of the Roadmap of the PED Programme (SET Plan Action 3.2 and JPI Urban Europe). Overall 20 participants exchanged information and discussed on the research topic prioritisation in the possibly fast topic of PED.

Webinar agenda

- Welcome and setting the scene
- Short introduction to PED Program, DUT and UERA TWG2.1
- Presentation of PED roadmap and current status
- Joint discussion on research topics and priorities (interactive part)
- Wrap up and closing of the webinar

Presentations are sent out with the minutes.

Essentials from the discussion

The webinar was jointly organised by UERA TWG 2.1 and PED Programme. The webinar allowed to receive insights in the draft of the Roadmap of the PED Programme (SET Plan Action 3.2 and JPI Urban Europe) and the expressed need for future research topics within the PED field. Overall 20 participants exchanged information and discussed on the research topic prioritisation in the possibly fast topic of PED. Roadmap is well on the way. The focus of prioritisation for the future research within the PED field are: UERA members express interest in the topic of PED primarily on “Business cases and financing models” (7points). As well rated high (6points) by the participants was the need of an exchange of knowledge and experiences between cities. In order for this to be impactful not traditional dissemination should be used but a contextual learning and research should draw on learning from political movements to create society and stakeholder activism and mobilisation. When regarding governance of PEDs the participants underlined the need for citizen participation (6points). Additionally, mentioned were here strategies that are inclusive for those without political power or voice.

The webinar

Setting the scene

The event was moderated by Gudrun Haindlmaier (AIT, University of Vienna).

After short introduction to the webinar and the organisers (joint event by UERA TWG 2.1 (Monika Heyder) and PED Programme of JPI Urban Europe (Margit Noll and Christoph Gollner) a short interactive exchange to set the scene was conducted using the webApp “slido”. Aiming at knowing the background of the participants, their interest and understanding in PED as well as expectation in regard to this webinar.

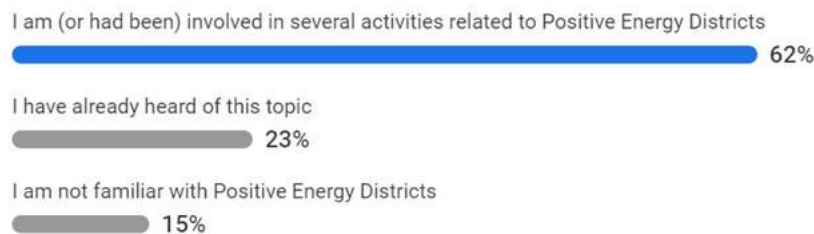


12 participants answered the question of “What is your field of research”.

The main focus was on Urban Geography. However, many expressed a link to energy research in the urban and build environment.

While the majority is already involved in projects/activities around PED some have heard and for others are not familiar with concept (13 participants).

Your personal experience with PEDs...



Regarding PED topics we see a focus on energy production and consumption from a technological view point (production, efficiency, sharing, flexibility) but as well societal concerns were expressed (energy poverty, energy communities) (12 participants).

The participants expressed their expectations towards the webinar as follows:

- PED and governance
- Technical vs. broader societal approaches
- Research challenge on PED
- New knowledges about the PED realizations
 - focusing/discussing on the urban context of PED: What makes PEDs in urban context special?
- Updated information about PEDs
- Exchange expert views
- Define R&I priorities for PEDs
- Getting a better understanding of the research needs and directions
- What are the strategies for coming years in term of PED?

Gilda Massa (ENEA) gave a presentation on the PED landscape with the particular focus on the “What? Why? Where? When? How?”

What: describing PEDs with research definitions

- a) from the PED Programme Reference Framework White paper which clearly states energy efficiency, flexibility and production but tries to encompass more than a pure energy focus but aims at “*securing ... a good life for all in line with social, economic and environmental sustainability.*”
- b) EERA definition outlines PED as autonomous, dynamic and virtual (more than a geographical boundaries). Especially the last aspect seems was later taken up in the Webinar discussion.

Why: long-term energy strategy climate neutrality by 2050 --> link to Green Deal and Paris Agreement

Where: 20 European countries are involved in the PED programme

When: by 2025 the objective of 100 Positive Energy Districts connected to the European energy system should be attained.

Who: Different groups beside UERA are tackling the topics: COST Action, IEA EB Annex 83 and the joint initiative SET Plan Action 3.2 / JPI Urban Europe called the PED Programme.

Margit Noll introduced the DUT Partnership and gave insights into its ambitions. DUT Partnership represents 22+4 countries and thus allows to represent the different (urban) planning realities and challenges. Margit Noll underlined that PED is an already established activity, while the other DUT Partnership pillars are taking up momentum. Challenges expressed were capacity and community building, integrated approach, knowledge spreading across EU.

Q: Integration of management strategies such as change management and/or facility management under the DUT (in specific implementation plan)

Christoph Gollner gave insights into the PED Programme and its mission of Europe wide 100 PEDs by 2025. He underlined the holistic approach: liveable, sustainable, inclusive urban neighbourhoods leading a pathway towards climate neutrality. PEDs are primarily not new district developments but should find integration into existing urban structures: answering the question on “how to transform the urban morphology?”. The programme sees the cities at the core of the activities, which should be supported by “Innovation Actions”. Key achievements: mapping through a PED inventory, PED framework definition, involve key stakeholders, pilot projects starting in 2020/2021: TRNAS PED, PED-ID, INTERACT, Cities4PEDs. Draft roadmap distinguishes four overarching topics: Described PEDs as shelves with different layers.

1. Preparing energy system, production and consumption
2. Integrated urban planning, all levels of sustainability --> green-blue infrastructures
3. Governance/PEDs for people -> vertical and horizontal collaborations and governance
4. Mainstreaming

Q: Data base for LCA is missing up to now. **Christoph Gollner** acknowledges this gap and its need to allow to calculate the carbon neutrality of the PEDs.



Q: Will the pilot projects use joint platform/have collaborative nature? **Christoph Gollner** states that an informal workshop will take place in 2 weeks, how to create connections/synergies to be seen in summer 2021.

Q: How long until these pilots will finish? **Christoph Gollner:** short projects due to ambitious timeframe to establish in 2025, which results in a duration of max 2 years. The projects should support the PED design.

Q: Is there a consideration of system boundaries overarchingly between the different DUT pillars?

Christoph Gollner: until now not but a rather good point to consider since PED is not only about physical boundaries, but as well technical definition of boundaries

Brainstorming with MURAL:

Using “Mural” a rich interactive session of exchange with the participants took place.

In a first step 5 Minutes were dedicated to the following question: current research, stakeholders and impactfulness in regard to PEDs from the participant’s perspective.

Current Research

We asked which smart city projects the participants were currently involved. Resulting in the following:

- Local community energy projects (2 times)
- Research Centre on Zero Emission Neighbourhood in Smart Cities
- City Storage and Sectors coupling lab
- Positive energy district Switzerland
- 2000-Watt Areas
- Data Management for energy neighbourhoods
- Building integrated PV
- Smart Eco District funded by the Cyprus Land Development Cooperation
- Networks: COST Action PED (2 times), IEA EBC Annex 83, EERA JPSC, Future Energy Hub
- Projects: GECCO project, Creating Interfaces (Food-Water-Energy Nexus), Integrated Solution for Positive Energy and Resilient Cities (H2020 Programme)

Stakeholders

The participants were asked who needs to be involved to put research into practice within the DUT:

- Standardisation bodies (2 times)
- Unions
- Energy communities
- Energy producers and grid operators
- Civil society: transition town, culture (new Bauhaus Initiative), citizens, environmental NGOS, NGOS,
- Chamber of commerce
- Real estate, buildings managers, Institutions with large building stock
- Financial sector/investors



- Policy makers and ministries
- Local, urban and regional administration and planning authorities, city managers, city climate change managers
- Planners

Impactfulness

Furthermore, the participants were asked how to increase the impact for PEDs? How can we identify impactful/effective research interventions while recognizing the inherent uncertainty and long-term perspective of urban research? Which skills and capacities do we need to strengthen?

How to increase the impact for PEDs?

- Alignment of different levels (top down AND bottom up)
- Creating stakeholder networks: more events and projects with real estate, more stakeholder engagement on visions and goals of PED to answer their question: What is in it for me?
- Higher embeddedness of projects in local/regional and national stakeholder ecosystem, regulatory framework alignment,
- More communication in energy research networks, stakeholder networks
- Knowledge sharing between cities/region/countries
- Knowledge sharing, education of municipalities and developers
- More funding for research projects
- Joint development of projects with end users
- Awareness raising: pedagogy on the question “what is in it for me”, highlighting the link between PEDs and decarbonization strategy

How can we identify impactful/effective research interventions while recognizing the inherent uncertainty and long-term perspective of urban research?

- Programs should allow for a community building across Europe
- Solid research-based monitoring and evaluation of processes towards PEDs (economic, social, political)
- Clear requirement in the calls to identify why the cases/PEDs projects are chosen and why they are “typical”/replicable for the city/region/country/international
- Common publications
- Review of what has been done in existing/past projects and summaries the success factors and pitfalls
- Establish/further strengthen communities of practice/agora to share knowledge in a trustful atmosphere

Which skills and capacities do we need to strengthen?

- Thinking globally, acting (design) locally, developing the design approach of PEDs
- Scalability and transferability potentials/limitations
- What can be learned from individual projects how is it relevant for other districts?
- Implement the outcomes from research projects into actual applications
- Translate research/scientific outcomes into ideas/solutions that are understandable and useful for people developing PEDs on the ground (local planners)



- How to make PEDs sites of local public mobilization?

Priorisation of research topics (35 min)

Besides the creation of impact, the participants voted on 5 key areas: 1) Preparing the energy system for PEDs, 2) Integrated (urban) planning, 3) Governance/PEDs for people, 4) Preparing mainstreaming and replication and 5) Accompanying measures. Different topics were linked to these pillars, on which votes (5 per participant) were cast by the participants show the following priorities:

- ➔ 7 votes on business cases and financing models
- ➔ 6 votes on Citizen participation, exchange of knowledge and experiences between cities*
- ➔ 5 votes for 4 topics on holistic approaches, policy frameworks on different political level,
- ➔ 4 on boundaries, sectoral integration, climate change
- ➔ 3 votes on LCA, Strategies for PED energy functions, tackling affordability of housing and fighting energy poverty
- ➔ 2 votes on standardization, components of PEDs in different context, funding of concrete initiation projects*, development of new policy instruments and mixes*, establishments of multi-stakeholder platforms*, stakeholder-oriented strategies and process innovation
- ➔ 1 vote on user-centred approaches and behavioural change*
- ➔ None on regulatory framework

* formulated by UERA II all others were either formulated by PED Program or formulated by PED Program and UERA equally.

As missing topics for further PED research, the participants added:

Pillar preparing the energy system for PEDs:

- About life cycle assessment and sustainability: there is the need for true integrated sustainability assessment of peds, as well as quantitative LCA data per technologies and districts

Pillar integrated urban planning:

- Consider the district as well as a social space
- Make it a process for all -> no one left behind -> do not leave people without voice, low-income or political power behind

Pillar preparing main streaming and replication:

- contextual learning
- what motivates and mobilise, learning from political movements

Discussion around need of knowledge exchange/learnings between cities:

- The demand to shift from the concept of replication to learning communities and communities of practices.
- What can we learn from global movements like 'Friday for future' – to learn from the mobilization of people through these initiatives and how could that be a focus of research?
- Need for contextual learning, which is more problem based. E.g. a workshop where cities/PEDs to present their status and problems to discuss with other PED project/city partners to open up for conceptual and explorative learning.