

PED Programme Positive Energy Districts for Sustainable Urban Development

Outline of R&I Programme, Framework Definition

26 November 2019 Workshop Mission Innovation Austria, Wien



Contents

- Mission
- Programme structure
- Governance structure & coverage
- Goals for 2019-2020
- Joint calls & actions
- Consultation



Mission of the SET-Plan Action 3.2



"Enhance capacities of cities, industry and research to make Europe a global role model and market leader

- in technology integration for and large scale implementation of Positive Energy Districts taking into account aspects of inclusiveness
- with the aim by 2025 to have at least 100 successful Positive
 Energy Districts synergistically connected to the energy system in Europe and
- with a strong export of related technologies."



Implementation Plan 3.2 for PEDs

PED Labs

- National and transnational R&I funding for PED Labs
- International collaboration in R&I funding for PED



Innovation

Actions

European **Positive**

Energy Cities 100 Positive Energy Districts in Europe

committed by 2025

Innovation

Actions

National and transnational R&I funding dedicated to innovation actions along the circular pathway

PED Guides and Tools

- · PFD certification
- · Legal framework and regulations
- · PED funding models
- · PED capacity building and training
- Digital planning and optimisation
- Public sector innovation
- Stakeholder involvement
- Technology assessment



PED Replication and Mainstreaming

- City includes PED development in city strategies
- City establishes the pre-conditions for PED development
- City develops PED(s)





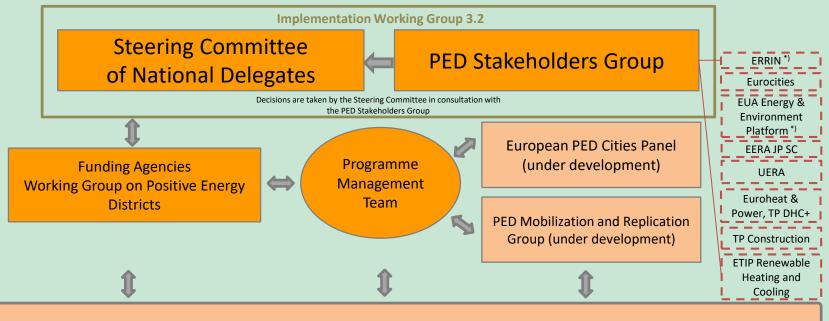


- Map of existing PEDs and monitoring framework for PED development
- Monitoring and evaluation of PED Labs



Governance Structure SET-Plan Action 3.2





European PED Community (under development)



SET-Plan Action 3.2 Countries

15 countries actively support the SET-Plan Action 3.2:

Members: AT (Chair) CH

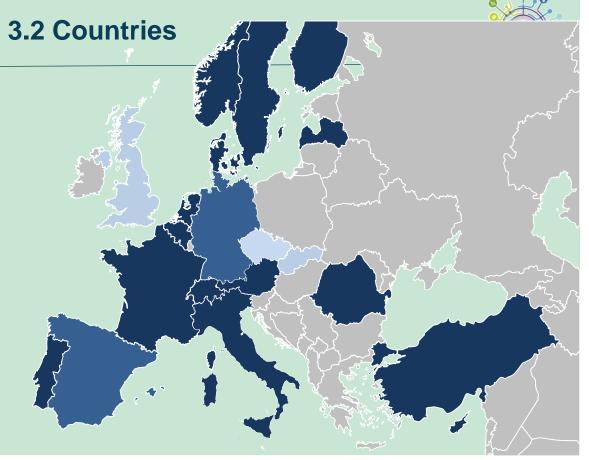
FR IT NL SE

Observers: BE CY DK FI LV NO PT RO TR

Decision pending:

DE ES

Undecided: UK CZ SK





Expected tangible results 2019/2020



Common PED Framework

Launch of PED Call I and

PED Mapping in Booklet

PED City Panel and PED
Mobilisation and
Replication Group
established

Preparation of co-funded partnership under Horizon Europe



PED Booklet of 28 Cases across Europe

- https://jpi-urbaneurope.eu/app/uploads/2019/04/Booklet-of-PEDs_JPI-UE_v6_NO-ADD.pdf
- → updated version and synthesis by end of the year



European PED Community



PED City Panel

- identification of cities' key issues
- reflection of different approaches and results
- recommendations for joint actions
- ambassadors for PEDs



SET-Plan 3.2 countries are requested to nominate cities for the PED City Panel and national city networks for the PED Mobilization and Replication Group by 20 September 2019

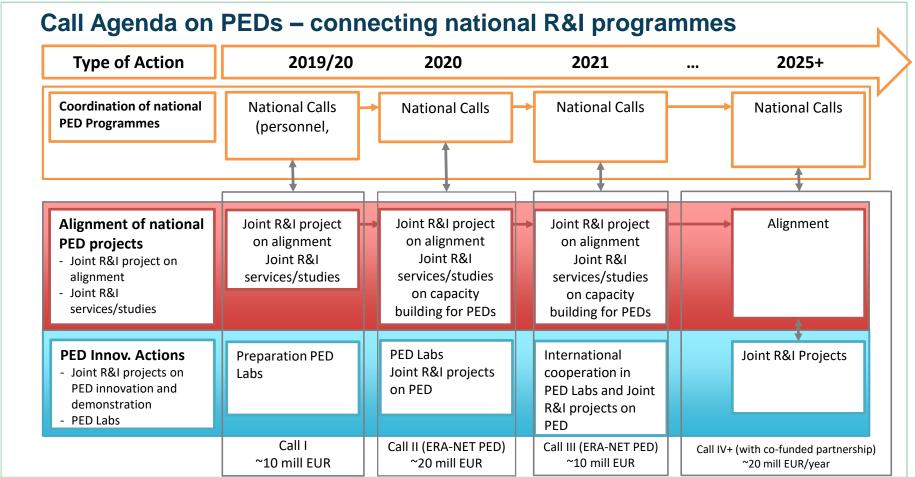
PED Community

- transnational platform for multi-stakeholder cooperation
- network of PED stakeholders
- input for City Panel on strategic and thematic priorities

PED Mobilization and Replication Group

- interface between national and transnational community
- awareness raising among national cities
- communication of funding opportunities, results and good practice







Mission: 100 Positive Energy Districts in Europe by 2025 synergistically connected to the energy system in Europe



Liveable, sustainable, inclusive urban neighbourhoods



PED Framework under national consultation (due end of 2019)



Functions of PED/PENs in the regional energy system

Energy efficiency

Energy production

Energy flexibility

Target:

Optimisation of the three functions of PEDs (energy efficiency, energy flexibility and energy production) towards climate neutrality and energy surplus by taking into account the guiding principles

Guiding principles:

- · Quality of life
- Inclusiveness
- Sustainability

Enablers:

- Political vision and governance framework
- Active involvement of problem owners and citizens
- Integration of energy and urban planning
- ICT and data management



PED Framework under national consultation (due end of 2019)

"Positive Energy Districts are energy-efficient and energy-flexible urban areas which produce net zero greenhouse gas emissions and actively manage an annual local or regional surplus production of renewable energy. They require integration of different systems and infrastructures and interaction between buildings, the users and the regional energy, mobility and ICT **systems**, while optimising the **liveability of the urban environment** in line with social, economic and environmental sustainability."



Framework definition: next steps

- Potentially include a relevant topic for a R&I service/study in Call I (to be discussed in the FAWG-PED on 8 November 2019)
- An expert workshop on the theme of the PED framework to be organised in spring 2020 with the following goals:
 - To describe possible national or regional approaches to PED depending on the relevant climate zones and energy system configurations
 - To extract best practice cases from existing national or regional approaches
 - To map the way towards a set of more detailed (regional?) PED definitions and a future PED certification framework



PED Framework under national consultation (until end of 2019)

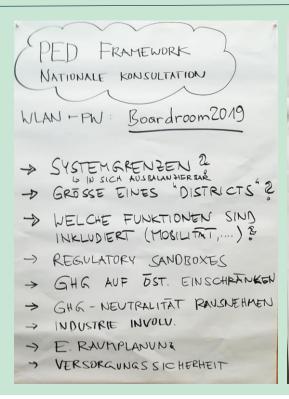
→ National/PED stakeholder consultation – key questions

- 1. How does the proposed PED reference framework **align with your national approach for PEDs** or related ongoing activities/projects/programmes on national, regional and municipal levels?
- 2. Which aspects are of particular importance from your national point of view to include in the PED reference framework? Which of these aspects are covered well/not covered well? (renewable energy sources, boundary conditions, economic, technological, social, etc. aspects)
- 3. How does the framework **reflect and consider different existing PED approaches** in your country/region? (incl. zero-emission, low-carbon, climate neutral, 2000 Watt, ...)
- 4. Does the outline put adequate emphasis on different aspects of sustainable urbanization (e.g. urban economy, social inclusion, bio-diversity)?



Conclusions

- → rege Diskussion zum PED/PEQ Framework
- Detailliertes Feedback aus den Gruppenarbeiten wird analysiert (gemeinsam mit Feedback anderer europäischer Länder), neue 2. Version Anfang 2020



- > PUES GEMEINDEN
- -> MÜLLVERBRENNUNG! (SKALIERBAR)
- -> ALTBESTAND + DENKMALSCAUTA
- > LEC / BURGERKRAFT WERKE ...
- -> CO2 / WASSER-FOOTPRINT
- -> LANDESWEITER & ALS
- -> & TRANSFORM. D. FERN-WERMENETSE
- > IKLIMATISIERUNGSBEDARF
- -> ABWARME ALS EMISSION



https://setis.ec.europa.eu/



Hans-Günther Schwarz
Chair of SET Plan Action 3.2 on PEDs
Austrian Ministry for Transport, Innovation and Technology
Hans-Guenther.Schwarz@bmvit.gv.at

Christoph Gollner
PED Programme Coordination
Christoph.Gollner@ffg.at

Susanne Meyer PED Policy Coordination AIT Austrian Institute of Technology Susanne.Meyer@ait.ac.at