## Identify a future PED

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Core-consortium members of PED-ACT

## Identifying and developing a PED

The sustainability goals and the deadlines for energy transition are proceeding, but most municipalities and communities do not have the right support to get started. No matter, what the obstacle is, the current energy crisis shows, that everyone is affected and we need to move fast forward. A way to reach our sustainability goals, especially in the field of energy, is to break down

our territorial tasks in smaller, manageable units. In the energy transition we use the term Positive Energy Districts (or Neighbourhoods), which can be the inspiring units in our built environment.

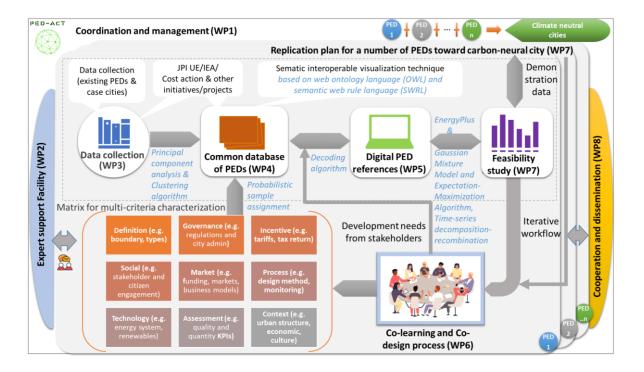
PED's can evolve and thrive, when there is a <u>community of actors</u> who envision, prepare, implement and grove the units to the whole territory. For growing a PED, it is essential to understand who needs to be involved when and how. Actors or stakeholders have limited time, resources and knowledge and very specific interests. These set the parameters of collaboration and will define the framework. The consortium of PED-ACT will try to support such stakeholders to model a PED in their region, to identify who could help in which way to implement a PED and to develop scenarios, which will allow the local community to integrate the PED steps in their upcoming tasks and local development.

- Share your vision for your community and settlement
- Identify which building, revitalization and development project could be the sparkling demo-site in your territory
- Connect the needs and potentials of your community to facilitate the PED transition
- Develop comprehensive future scenarios to engage multiple stakeholders in the transition process

## Offer to municipalities

PED-ACT is a network of six municipalities whose aim is to rethink, transform and integrate energy supply and use in order to reconnect people, neighbourhoods, settlements and increase their readiness for energy transition. We will develop strategies, describe processes, instruments and partnerships to foster public-civic partnership, reduce externalities and social segregation and unlock opportunities through energy transition. Our long- term vision is a more sustainable, equitable and attractive neighbourhoods for all.

The partners of the PED-ACT Project want to support you to <u>identify potential PED areas and</u> <u>neigbhourhoods</u>, and support you with the creation of an <u>energy balance and modelling</u> to plan a PED which can help you to achieve your sustainability goals.



Tasks in PED-ACT

Identification of buildings, infrastructure, plans and people will help creating scenarios.

- Data on local case (settlement-neighbourhood)
- Goals and aims with timeline
- Local stakeholder
- Development agenda

For the simulation of PED models will need is datasets on the selected buildings for energy modeling - i.e. buildings (3d shape files, materials, systems etc.) and renewable energy systems and potential.

For the database of PED we will have bilateral interviews.

For the matrix and scenarios of PED we will have (potentially 2) workshops.

|  | Who/when                           | scenario                 |
|--|------------------------------------|--------------------------|
| Energy balance   | Academic partners/ spring 23       |                          |
| Stakeholders map   | WL with local actors/spring 23     |                          |
| Assessment of challenges                                   | Local partners with consortium/ 23 |                          |
| <u>framework</u> for co-learning                           | End 23/24                          | Address needs            |
| <u>Define stakeholders</u> and roles                       | tbc                                | needs                    |
| Citizen centered PED                                       | Collectively/2024                  |                          |
| local scenarios, <u>solutions</u><br><u>and strategies</u> | tbc                                | Action plans<br>roadmaps |



Revitalised municipal housing complex in Börlange/Sweden

## PED-ACT aim

Positive Energy District (PED) is important for city development. PED-ACT focuses on the process optimization for enhanced stakeholders' cooperation and reinforced decision-making. PED-ACT contribute to standardisation of the database of existing PEDs (planned, designed or implemented) with a focus on Sweden, Turkey and Austria. PED-ACT further learns from the database and creates digital PED references by mapping stakeholders' needs and priorities in cities of Borlänge (Sweden), Umeå (Sweden), Ankara (Turkey), Karsiyaka (Turkey) and the county of Lower Austria (Austria). PED-ACT pursues bilateral learning and co-design strategies among different cities for wide replication of PEDs towards 'climate-neutrality and smart cities' goals.

The PED-ACT consortium includes leading research institutes and universities in Europe in their specific field of expertise, and public/industrial partners who have a strong business strategy to contribute to the transition of urban energy systems and circular economics. The cooperation will create knowledge required for innovative solutions and technical support regarding current energy situations in various environments. PED-ACT project brings together partners from Sweden, Turkey and Austria. Its multiple benefits can be described as follows:

**Continuation of successful collaborations:** Partners, such as AIT, Umeå University, Umeå Munucipality/Energi and DEM, have been collaborating in the PED EU NET and smart city lighthouse project and will continue their collaboration with new partners to create new cross-learnings and having deepened impact in the communities.

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