



Citizens 4PED

Citizen-inclusive PEDs in existing urban areas:
Diversification, standardisation and reflexive replication.

1. Objectives and key themes addressed

The project aims at elaborating guidelines for the development of PEDs in existing urban neighbourhoods, by focusing on Renewable Energy Communities as enabling mechanisms for just transitions. It does so by dealing with three interrelated dimensions:

- techno-energetic – improvement of existing models for techno-energetic scenario development at neighbourhood level.
- socio-cultural – energy demand and energy practices, sufficiency, distributive effects of transitions (with focus on low-income and low-adaptation capacity groups and territories)
- institutional/regulatory – institutional, regulatory, policy and relational frameworks fostering/hampering PED development; link to broader spatial strategy making for just energy & climate transitions.

2. Key results

- Development of techno-energetic scenarios based on multi-dimensional optimization approaches (taking into account different criteria: costs, efficiency, emissions but also energy sufficiency).
- Development of action plans for PED development in the four case studies.
- Development of guidelines and process-based roadmaps for PED development.
- Development of a CEN Workshop Agreement (CWA) to support replicability of Guidelines and roadmaps in different European contexts.

3. Key innovations and game-changing elements

- Renewable energy communities and energy sharing mechanisms as key drivers of PED development and just transitions.
- Living labs for the co-creation of project solutions with local communities as key factor to kick-start PED development and to link it to broader regeneration initiatives for just transitions in a long-term perspective.
- Focus on energy practices beyond energy demand – i.e. individual and social practices about energy use for different activities – to stimulate alternative imaginaries of how energy production and demand can be met.
- Integration of sufficiency requirements for PED achievements together with energy efficiency and renewable energy production.

4. Key challenges and barriers

- Identification of key enabling and disabling mechanisms for PED development according to three dimensions: techno-energetic, socio-cultural, institutional/regulatory.
- Focus on challenges for just transitions in existing neighbourhoods with low income communities (with related problems of physical degradation of the building stocks, low accessibility, socio-economic marginalization) and partly in existing neighbourhoods with heritage buildings.

Read more www.citizens4ped.eu/



BRUSSELS



WIEN



BARI



1. LA ROUE (BRUSSELS, BELGIUM)

Neighbourhood of around 2,000 individual houses, including 40% of social housing, in the Municipality of Anderlecht (project partner). Inhabitants and the social housing company are already developing activities to retrofit houses; they are willing to develop a district heating network and install local sources of energy. Challenges: heritage buildings, citizens' ownership of the renewable energy networks, co-financing.

2. USQUARE

Block of 4ha, which used to be police barracks. Its heritage buildings are being transformed into an open campus for two universities (ULB and VUB, both project partners), with around 20,000 sqm public housing (including 70% social housing), housing units for 600 student, public facilities (shops, park) and a sustainable food court. Heating/cooling with geothermal energy and boilers with cogeneration units; electricity production through photovoltaics on most rooftops. Challenges: enlarged energy community with social houses outside the block (under renovation); mixed uses.

KAHLENBERGERDORF (WIEN, AUSTRIA)

Independent municipality until 1892, today part of the 19th district of Vienna. Mix of historic buildings under protection, buildings from the 1960s-1980s and new ones. Property mix (private owners on land own by neighbouring foundations, municipal buildings with social housing). About 500 households. Challenges: decarbonization of heat, together with PV to a smaller extent; historic buildings under protection.



SAN PAOLO (BARI, ITALY)

Social housing settlement (with physical degradation of the building stocks, economic problems and social stigma) of around 30,000 inhabitants. Pilot neighbourhood (about 2,200 inhabitants) with undergoing urban regeneration projects (focusing on urban design, slow mobility and cultural revitalization), as well as housing retrofitting proposal by the Regional Body for social housing (cooperation partner). Challenges: social housing; very low income community; links to urban regeneration and broader urban strategies for just energy and climate transitions.

