



Towards 100 Positive Energy Districts and Neighbourhoods

European cities as a global role model for urban transitions

Europe aims to be a global role model in energy transition and reducing its carbon footprint. Cities and the building sector play a decisive role in that process. The Programme "Positive Energy Districts and Neighbourhoods for Sustainable Urban Development" supported by 20 member states, aims to implement 100 Positive Energy Neighbourhoods by 2025.

Why "Positive Energy Districts and Neighbourhoods"?

Urban development must move from mere building solutions to Positive Energy Districts and Neighbourhoods and similar innovative concepts to reach the European energy and climate targets². As an integral part of comprehensive sustainable urbanisation strategies, establishing Positive Energy Districts and Neighbourhoods shifts the focus from the individual positive energy building towards neighbourhoods and thus a new level of impact on sustainable urban development and the energy transition process.

The Positive Energy Districts and Neighbourhoods Programme



The Programme has been developed as a cooperation of 20 European countries, the European Commission and different stakeholder groups with the intention of establishing a transnational, intergovernmental initiative for planning and replication of Positive Energy Districts and Neighbourhoods. In order to boost urban energy transition, the programme coordinated by JPI Urban Europe involves stakeholders from R&I funding networks, cities, industry, research and citizen organizations.

Fig. 1: Current member states of the Programme on Positive Energy Districts and Neighbourhoods

What is a Positive Energy District/Neighbourhood?

Positive Energy Districts and Neighbourhoods are an integral part of comprehensive approaches towards sustainable urbanisation including technology, spatial, regulatory, financial, legal, social and economic perspectives while optimizing energy efficiency, energy flexibility and energy production towards climate neutrality and energy surplus.

Challenges and requirements

In order to become a successful model, implementation processes will have to tackle a range of challenges (fig. 2), consider regional differences within Europe and provide open experimental space for smart innovative solutions. A circular pathway (fig. 3) of monitoring, experimenting, developing guidelines and replication provides the framework for mainstreaming urban solutions of energy transition within the years to come. Finally, yet importantly, success of implementation will strongly depend on citizen acceptance and therefore will have to account for affordability and an actual improvement of quality of life for the citizens.



¹ Set-up in SET Plan Action 3.2 on Smart Cities Implementation Plan

² By 2030: at least 40 percent cuts in greenhouse gas emissions compared to 1990 levels, at least 27 percent share for renewable energy, at least 27 percent improvement in energy efficiency

Guides and Tools Labs • Certification, legal framework and regulations, funding/ financing models • Creating space of experiment · Capacity building and training · National and transnational R&I funding • Public sector innovation for PEN Labs, international cooperation Stakeholder involvement **European Positive Energy** Cities echnology assessment 100 positive Energy Districts in Europe Committed Replication and Mainstreaming Monitoring and Evaluation by 2025 · Integration in city strategies, • Pen development, existing PENs establishment of pre-conditions, and PEN Labs deployment • Upsclaing and replication

Fig. 3 Circular pathway

Cities as driving forces

Municipalities and urban actors play a key role in achieving energy and climate targets. By creating the pre-conditions cities and communities are the driving forces behind establishing Positive Energy Districts and Neighbourhoods. European cities are already very active in integrating strategies of sustainable urbanisation - the Programme on Positive Energy Districts and Neighbourhoods offers partnership and support for cities in the next step of sustainable urban development and becoming frontrunners in the field of energy transition. Being part of the problem means being part of the solution: cities consume two thirds of energy supply and 70 percent of CO² emission come from urban environments. Together we will develop feasible and socially sound pathways for creating liveable urban neighbourhoods meeting the challenges of the 21st century. A first PED Programme Cities Workshop on 3 April in Vienna linked more than 70 participants from cities, R&I and funding agencies, discussing challenges and needs of PED implementation.

The Strategic Energy Technology (SET) Plan

The SET-Plan is a first step to establish an energy technology policy for Europe in order to achieve Energy and Climate Change goals.

The SET Plan focuses on 10 key actions fields, of which action 3.2 on "Smart Cities and Communities" aims to support the planning, deployment and replication of 100 Positive Energy Districts by 2025 for sustainable urbanisation.

setis.ec.europa.eu/

The programme will provide:

A PED framework including guidelines and tools references
// A multi-stakeholder platform developing implementation
pathways // Exchange of good practice, experiences and
visions with other European cities // The forming of a
network of European Positive Energy Cities and urban
stakeholders // Funding schemes for R&I projects, piloting
and validating of PED concepts



PED Programme Cities Workshop, Vienna 2019

The Joint Programming Initiative (JPI) Urban Europe

JPI Urban Europe's vision is to be the European platform to create and make available knowledge and robust evidence for sustainable urban development. Twenty European countries participate in the initiative, 70+ projects have been funded with approx. 100 million Euro public investment spent for joint calls. JPI Urban Europe has established cooperation schemes with Belmont Forum and China.

jpi-urbaneurope.eu/

Interested in joining the European Positive Energy Cities Network? Get in contact with us!

Christoph Gollner,

Programme Management Positive Energy Districts and Neighbourhoods, christoph.gollner@ffg.at

JPI Urban Europe c/o Austrian Research Promotion Agenncy FFG Sensengasse 1, 1090 Vienna Austria

