



Positive Energy District (PED) is a part of a city, which achieves active energy balance through a number of technological and organisational innovations while offering a high standard of living. There is more energy from renewable resources produced within the district than there is consumed.

The buildings vary within the district - ranging from residential through administrative, commercial to industrial ones.

The site is attractive both for living and spending leisure time. The district is well **connected** with other parts of the city.

The buildings are **energy efficient and flexible**. This means that energy, which is produced in the buildings and is not used, is distributed to its surroundings according to their needs depending on available infrastructure. The buildings are designed as energy efficient.

Whom and how should PED serve

PED provides its inhabitants, workers and visitors with high standard for working, living and relaxing, while contributing to decreasing negative environmental impacts.

Companies may apply innovative methods and use new business models, especially in the field of energy, data services and mobility.

Why invest into PED solution

- to increase attractiveness of the site and to support the local services (the already existing as well as new ones)
- to save on building operation costs, to make use of other energy resources possible
- to offer an opportunity for additional income to citizens and businesses, which decide to actively participate in the energy market instead of paying to outside suppliers
- to create a liveable place for district residents, possibly also for business facilities, or for other users

What is necessary to create PED

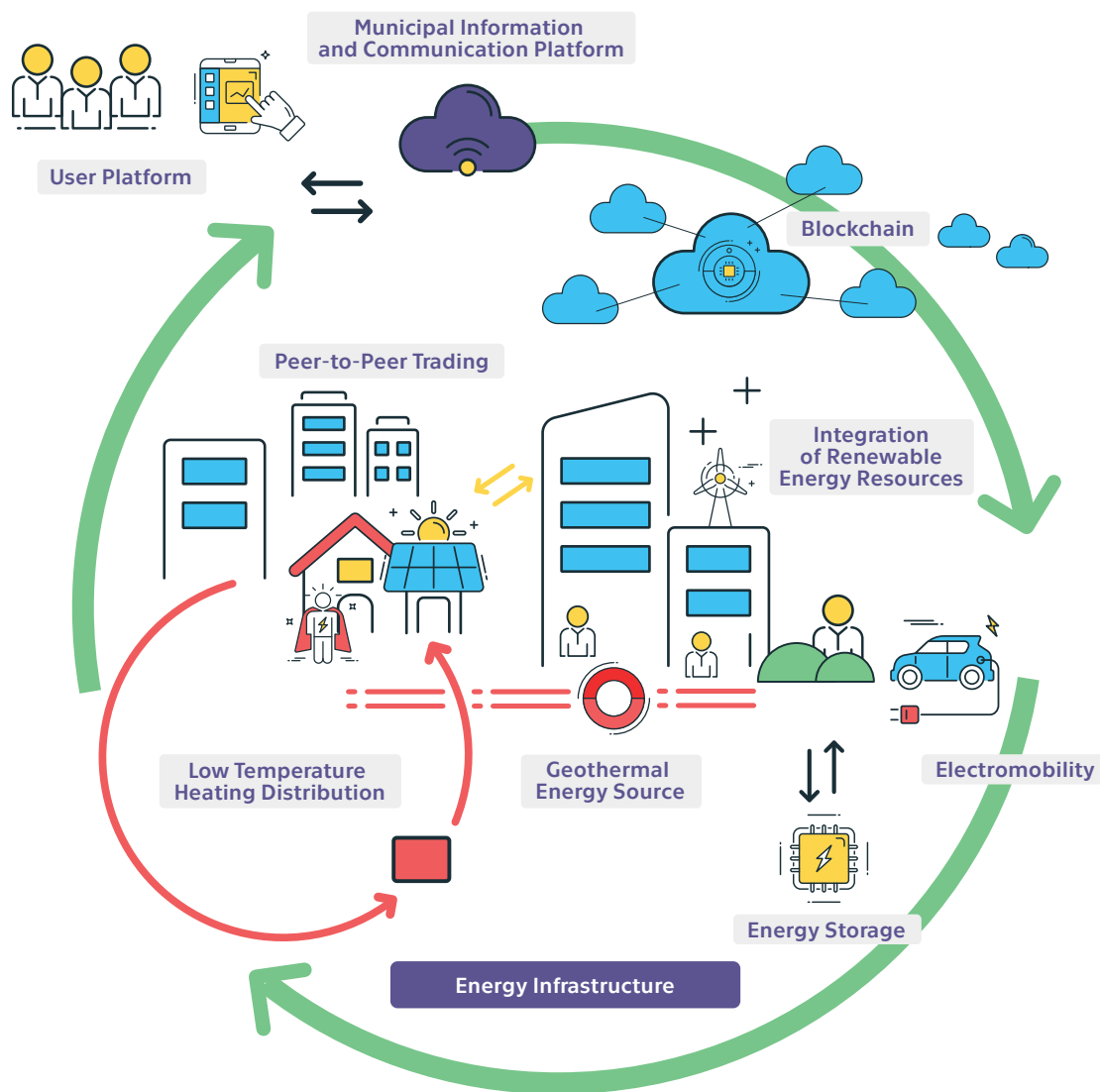
We know, based on the experience of the cities that have already built or are in the preparatory stage of PEDs (Finnish Espoo, German Leipzig, French Carquefou), that a cooperation of a number of players is needed:

- municipal authority
- small and large development and energy companies
- local businesses and local NGOs
- educational institutions and households
- regional and national level partners

The investment is made together by the city, the developers, the energy producers and distributors and by businesses which open their facilities in the district and offer their services there.

The residents make an investment by purchasing new housing or making the already existing buildings more energy efficient. They may become members of the energy community and get share of the profit from energy generation from renewable resources and other services.

What PED may look like specifically in Kladno



SPARCS Energy District

The team of the University Centre for Energy Efficient Buildings CTU in Prague and Statutory City of Kladno are working together on a plan to create PED in the city and are already modelling a PED proposal with a time frame of the year 2025. The picture shows technology solutions which may become part of the district. Their specific structure for Kladno is a question of several factors. It is namely given by the possibilities of the location, opinions of the energy experts and the interest on the part of the city and its partners in the given solutions. The principle of all the considered possibilities is 1) to support energy saving strategies, 2) to use decentralized renewable energy resources and 3) to utilize smart matching between energy generation and consumption.

Join us and participate on the preparation of PED in Kladno. For more information, please contact David Škorňa (david.skorna@mestokladno.cz, +420 731 628 368).

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