

PED StepWise

towards zero carbon neighbourhoods.

GOALS

A participatory **step-by-step implementation plan** for zero carbon districts within existing neighbourhoods.

METHODS

- **Research & analysis** of already existing zero carbon neighbourhood concepts.
- **Development of a prototype** for the integrated decarbonisation of existing neighbourhoods.

climate-neutral neighbourhoods by 2050.

Evaluation & validation on **3 Living Labs**

- **Data-survey/collection of existing data in the Living Labs**, needs & requirement of the residents/users.
- **Developing an integrated energy concept** for each Living Lab.
- **integrating the local conditions of the Living Labs** into the implementation plan.

THE LIVING LABS

Gartenheim, Vienna:

For the Living Lab Gartenheim the challenge is to **replace the gas heaters** in all buildings and apartments and decarbonize the heat supply of the district.



- Around 200 single family houses.
- 8 multifamily houses.
- All residential buildings.
- All gas heated.

Stadionområdet, Malmö:

For the Living Lab Stadionområdet we aim to develop a **comprehensive solution for an efficient energy system** in the area, aligning with city planning efforts to **increase renewable energy** production and foster sustainable cooperation models.



- City's main district for sport and education.
- Includes the Malmö FF soccer stadium and several sports facilities.
- A few residential buildings.

Utrecht Science Park (USP), Utrecht:

For the Living Lab USP the objective is to develop a **local micro grid** in order to maximize sustainable energy production and minimize the mismatch between local production and local demand.



- Largest science park in the Netherlands.
- Around 60 buildings hosting two universities, 170 businesses, sports facilities, student housing, and a botanical garden.
- Daily 30.000 employees and over 55.000 students – 5.000 students live in the student dorms.

THE PARTNERS

Austria

e7 Energy Markt Analyse GmbH



realitylab GmbH



Sweden

City of Malmö



Energy Infrastructure Solution Nordic (E.ON)



KTH Royal Institute of Technology



Netherlands

University of Applied Sciences Utrecht



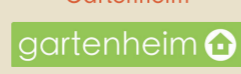
Field of Expertise

- Energy, Technology
- Financial assessment
- Organisational process
- Participation process
- Representative of Living Lab

Arteria Tech GmbH



Gartenheim



Research Institute of Sweden AB



white Architects



Malmö FF



Utrecht University

