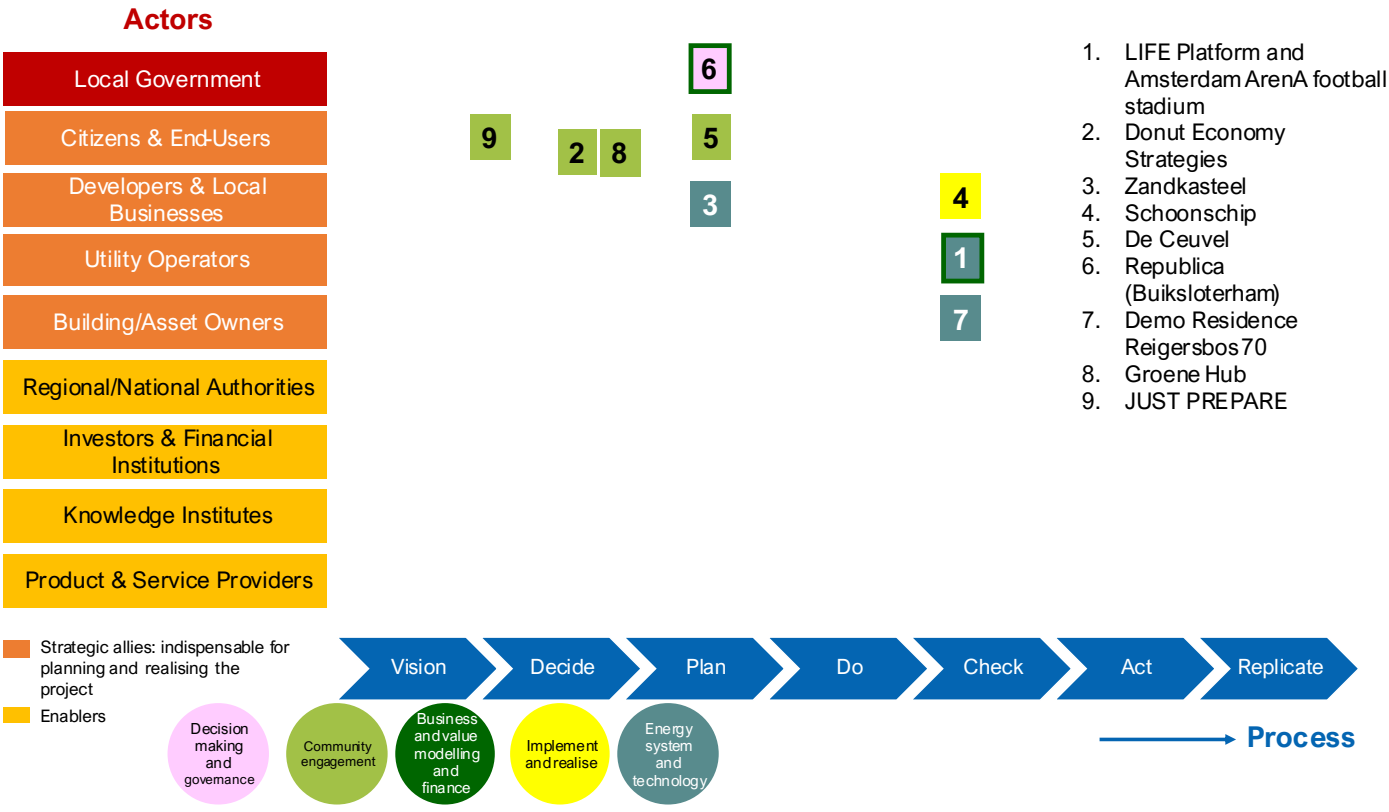
Positive Energy Districts Conference

Amsterdam
JUNE 23-24
Duurzame wijken in Europa

Need help choosing your excursion?

We have plotted the excursions against two axes: 1) main actors, and 2) where in the process the project can be placed.



Excursions

1. LIFE Platform and Amsterdam ArenA football stadium — By foot

The LIFE (Local Inclusive Future Energy) platform is the smart management of energy at district level that can help prepare Amsterdam Zuidoost for the future without unnecessary investments in the current energy grid. The LIFE platform offers users the opportunity to store energy. Choices for storage or conversion will be supported by information on economics, sustainability, or energy grid capacity. Furthermore, the project ensures that the energy that is generated in Amsterdam Zuidoost – and not immediately used – can be stored locally, such as in the Johan Cruijff ArenA battery. Key result of this project is a district-scale ICT-based smart energy management platform (LIFE) connected to a wide variety of energy devices/assets. This project will show us many distinct aspects of PEDs, including the smart energy technology, data platforms, citizen engagement, and ICT solutions.
This innovative sustainable energy platform is co-developed by several actors together. Next to that, the ArenA is one of the few football stadiums in the world that is 'giving back' to the neighborhood and is thus serving a social function. In that sense, this project can be an example for football stadiums around the world. For safety reasons, people with pacemakers cannot enter the room in which the battery will be shown.'

Keywords: sustainable energy platform on district scale, co-development, social transition

2. Donut Economy Strategies By bicycle

The whole area of Amstel III is changing rapidly, with 10,000 new homes being realized before 2027. Over the next 20 years, the number of people living in Amsterdam-Zuidoost will double. In this excursion, participants will get to hear how a business area in Amsterdam-Zuidoost, Amstel III (30 hectares) is being developed according to the donut economy principles. The mission of this project, called 'Wooden City', is to create sustainable business areas, to build high-rise office buildings and in doing so attract technological companies to base themselves in this area. This project is still in the decision phase, and conversations with the municipality are continuously held. It became clear that to tackle the challenges of the 21st century, more cooperative models are necessary. The development of this area is in that sense a prototype of such a cooperative model. The sustainability standards that are being adhered to this project are a combination of municipal policy and the ambitions of the developer. In the donut economy studies conducted for this project, social challenges and employment opportunities are combined, connecting social and sustainable goals.

Keywords: just sustainable area development, PED example

3. Zandkasteel By foot

Zandkasteel (sandcastle) used to be the head office of the Dutch bank ING and was one of the most sustainable buildings in the world in the 80's. Now the 90,000 m^2 area is being transformed into residential apartments, cafés and restaurants, offices, and an international school. Zandkasteel wants to transform the area using circular and sustainable concepts and aims to achieve the highest possible circular renovation score. The transformation consists of retrofitting the facades and getting thermal insulation up to modern standards. Afterwards the transformation of the former office building will take place, which consists of updating and improving the existing installations and appliances to meet current industry standards. Also, the building will be disconnected from natural gas. City heating and cooling will be provided by Vattenfall, heating will be 'harvested' from a heat plant, cooling will come from a lake, both nearby. Other options are also considered, like geothermal heating, biomass, and residual heat sources. In this excursion, the developer of this project will give you an insight into the considerations they make when applying sustainability measures.

Keywords: urban transformation and repurposing, circular renovation, sustainable heating and cooling concepts

4. Schoonschip By bus

Schoonschip (Clean Ship) is a floating neighbourhood in Amsterdam Buiksloterham. Since 2020, 46 households have made their home in this ecological, social, and sustainable neighborhood. The buildings have been constructed using sustainable materials, they do not use natural gas, and heating is generated through sun boilers and heat pumps that draw heat from the surrounding waters (aquathermal). Energy is generated through solar panels on the green roofs and each home has a battery for temporary energy surpluses. The whole neighbourhood is connected to a smart grid which enables each home to exchange electricity whenever it is needed. The community shares electric cars and bikes for its mobility needs. The neighbourhood works together as a community to advance this innovative concept of living, helping further develop the concepts of smart grids, new forms of sanitation, shared mobility, ecology, water quality, and communication. The next step is to expand to other areas of the neighbourhood.

Keywords: energy community, bottom-up initiatives, smart grid, sustainable housing, shared mobility, water innovations

5. De Ceuvel/Republica (Buiksloterham) By bus

Republica is going to consist of multiple residential buildings, a hotel, and creative spaces, with streets and squares running through the 20.000m2 area in Amsterdam Buiksloterham. The to-be-developed area will generate its own energy through solar panels and a heat exchange installation, and will use recyclable building materials, green rooftops, a nature swimming pool, façade gardens and nesting spots for swifts and bats. Republica aims to become an energy producing community that stores and sells surplus energy through a digital platform. There are several small and larger circular concepts in the works to be implemented in Republica, e.g. water buffering and the reuse of heat from shower water.

In this excursion we will show you the plot of land that will become Republica, of which the first constructions can be seen. Rudy Rooth from the municipality of Amsterdam will give a presentation on Republica and its plans for a smart grid. He will guide us through the area and show us the Ceuvel, a former heavy polluted shipyard-site that has been converted into a sustainable and vibrant community with workplaces and that manages its own energy, water, heat and waste systems; Poppies, which is constructed with wood and is built with a clear vision of circularity. Lastly, Rudy will take us to Papaverhaven, where Waternet has a new installation for waterfiltering.

Keywords: energy community, circular economy, sustainable development, urban planning, multi-functional

6. Demo Residence Reigersbos 70 By bicycle

To create a climate-neutral neighbourhood, at least 90% of the existing housing accommodations must be renovated. Housing association Stadgenoot in Amsterdam wants to retrofit at least 10,000 of its buildings to make them climate-neutral using a sustainable retrofitting method. The first dwelling has been done in Demo Residence (‘Demowoning’) Reigersbos 70, which Stadgenoot has chosen to serve as a demonstration project for the neighbourhood. The house is monitored to gain insights into the performance of its façade and installations after the retrofitting. These insights can help to determine what the effect of the retrofit could be for comfort and quality of life, also looking at where improvements are possible. How to involve residents in the renovation process? How to develop a service organization (renovation as a service)?

Keywords: climate-neutral retrofit concepts, citizen engagement, retrofitted demo residence, project with 10 homeowner associations with mixed ownership of citizens and housing association

7. JUST PREPARE By foot

JUST PREPARE is a consortium of researchers, municipalities, companies, and civil society organizations that conducts research into the social, societal, and technical aspects of the energy transition. Specifically, this project focusses on an effective and just energy transition in underprivileged neighborhoods. Discussions about the energy transition in Amsterdam Southeast often revolve around poor and unemployed residents with little confidence in the authorities, who should also benefit from the changes. In these neighbourhoods we see a mismatch between the retrofit of poorly insulated houses and the actively involved residents. This does not help the energy transition. On the other hand, these motivated ‘green’ residents from Amsterdam Southeast can be a good example which can boost the local motivation to act on energy. In addition to this challenge of just energy, there are also certain migrant groups that the government finds difficult to reach. Lector Stan Majoor from the Amsterdam University of Applied Sciences will take us on a citywalk through the neighbourhood in Amsterdam Southeast and tell us about the energy transition challenges in underprivileged neighbourhoods

Keywords: citizen engagement, energy poverty, a just energy transition, awareness raising