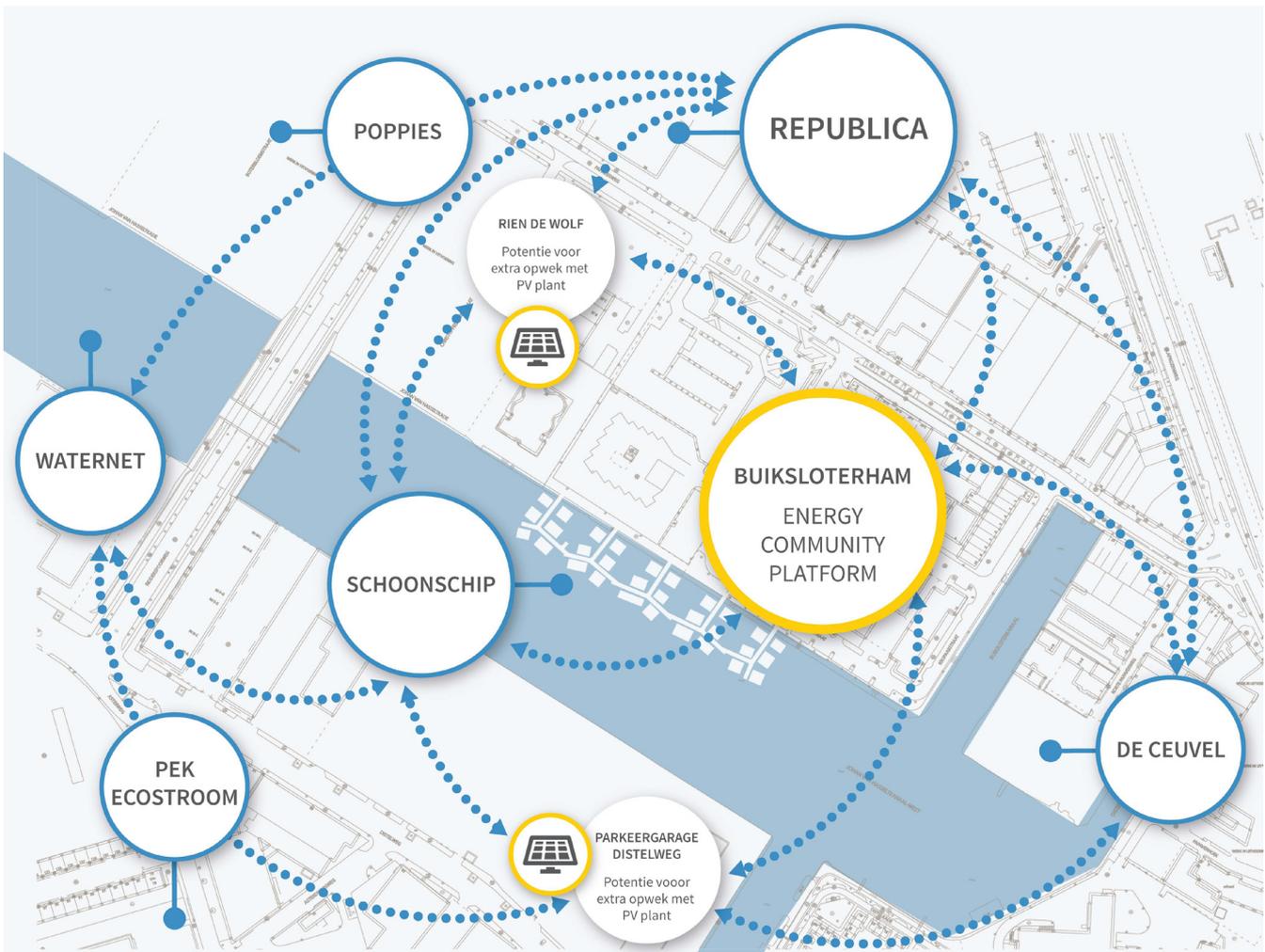


## ATELIER: A GLOBAL SMART ENERGY SHOWCASE FOR CREATING POSITIVE ENERGY DISTRICTS

Amsterdam, The Netherlands - 28 May 2020 - Spectral has joined the ATELIER project, an international consortium of a total of 30 partners, to develop a community-driven Positive Energy District (PED) - a district which produces more renewable energy than it consumes, on an annual basis.

### The ATELIER Project

As part of the European Union’s Research and Innovation program, Horizon 2020, the ATELIER (Amsterdam and Bilbao citizen driven smart cities) project will demonstrate Positive Energy Districts in two Lighthouse Cities, Amsterdam and Bilbao, which will be replicated in six Fellow Cities across Europe. ATELIER has been granted 19.2 million EUR by the European Commission to develop these PEDs.



Visualization of the involved communities and renewable energy plots within the Amsterdam Demonstrator project in the Buiksloterham area (Amsterdam North)

### The uniqueness of the Amsterdam demonstrator project

The Amsterdam demonstrator project will be implemented in the Buiksloterham district in Amsterdam North. Due to the focus on sustainability and smart energy innovation initiatives in this area, Buiksloterham has turned into a leading, international cleantech hub within the broader Amsterdam region. Over the last couple of years, several communities and project developers within Buiksloterham have invested into smart microgrids, including De Ceuvel, Schoonschip,



This project has received funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement No.864374.

and Republica, which are being realized in collaboration with Spectral, the leading technology partner in ATELIER's Amsterdam demonstrator. Within the ATELIER project, all the existing and upcoming smart microgrids in Buiksloterham will be integrated into an overarching, district-level smart-grid which will combine local sustainable energy generation and storage systems into one larger energy community portfolio. The graphic above shows a number of microgrids and communities which are currently involved in the Amsterdam Demonstrator project, however, the plan is to scale up the initiative to all of Buiksloterham and surrounding neighborhoods.

Commented Frans Verspeek, Overall Project Coordinator ATELIER, City of Amsterdam: *"The ATELIER project connects the different locations within Buiksloterham together into a Positive Energy District, to demonstrate how smart technologies can enable greater resilience and energy efficiency on a local level. With local communities cooperating to keep the grid in balance and enable maximal use of local sustainable energy."*

### ***The involved renewable energy innovation plots***

The Amsterdam demonstrator consists of five smart microgrids and energy cooperatives including Republica and Poppies - new-build area developments (consisting of residential apartment buildings, a large hotel, offices, restaurants, and commercial spaces), Schoonschip (Europe's most sustainable floating neighborhood with 47 net-zero dwellings), De Ceuvel (a globally visible circular innovation hub with offices and a cafe), and PEK Ecoström (a local energy cooperative shares ownership of a large solar plant in the area). These five sites will be connected via the smart-grid platform, together with several large solar roofs in the area, and a floating wastewater resource recovery station developed by Amsterdam's water utility. These innovation plots will form the initial group of participants in Amsterdam's Positive Energy District as part of the ATELIER project.

### ***A new Local Energy Market area platform for citizen energy communities***

The Amsterdam PED demonstrator will feature several integrated electrical and thermal energy networks, including more than 1 MWp of solar plants, smart heat pumps, (underground) heat storage, smart electric vehicle charging hubs, and both (30+) decentralized home batteries, as well as a (>1MWh) centralized community battery system. A core aspect of the project will involve implementing Spectral's Local Energy Market platform within the PED, which will empower local citizens and businesses to exchange renewable energy and unlock the value of their flexible energy assets.

The Local Energy Market platform will enable the Buiksloterham community to generate additional revenues using their flexible energy devices, such as heat pumps and batteries, to provide smart energy services to grid operators and energy companies. The Local Energy Market not only enables additional revenue streams for participants, but it also ensures that the (local) energy network is kept in balance, allowing for higher penetration of renewable energy sources.

These new technological approaches which are being demonstrated in ATELIER are in line with the EU Clean Energy Package and particularly Article 16 which describes the emerging role of the Citizen Energy Community.

Commented Philip Gladek, CEO & founder Spectral: *"Spectral has been working closely with real-estate developers and local communities in the Buiksloterham district over the past few years to support them in realizing their highly ambitious sustainability goals. We're thrilled to work together with the City of Amsterdam and all the other involved partners to further scale up our work in Buiksloterham and to demonstrate how smart, Positive Energy Districts can be developed to facilitate the transition to 100% renewable energy supply."*

### ***European Fellow Cities***

The project started in November 2019, and completion is planned for October 2024. Besides the core Lighthouse Cities - Amsterdam and Bilbao - six additional European cities (the ATELIER Fellow Cities) are closely observing the ATELIER demonstrator projects in order to benefit from lessons learned and knowledge dissemination efforts. The intention is to replicate the ATELIER solutions within the Fellow Cities - Budapest, Matosinhos, Riga, Copenhagen, Bratislava, and Krakow - in order to further scale up Positive Energy Districts across Europe.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No.864374.

## ***ATELIER Consortium***

The project is coordinated by the City of Amsterdam, which together with the City of Bilbao forms the two Lighthouse Cities within ATELIER. The consortium consists of 30 partners from 11 countries tasked with realizing the project objectives and evaluating the results. <https://smartcity-atelier.eu/>.

## ***About Spectral***

Spectral is an Amsterdam based end-to-end systems and platform integrator focused on the smart energy domain. With strong expertise in developing and implementing the next generation of integrated smart energy control systems, Spectral aims to revolutionize the energy transition by scaling up smart grids, smart assets, and smart buildings. More info can be found at <https://spectral.energy>.

## ***Contact***

For interview requests and media related inquiries regarding Spectral's involvement within the ATELIER project, please contact Jessica Nuboer at [press@spectral.energy](mailto:press@spectral.energy). For general press requests related to ATELIER, please contact Bettina Remmele from Steinbeis-Europa-Zentrum via [info@smartcity-atelier.eu](mailto:info@smartcity-atelier.eu).



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No.864374.