

Case Study

How the **City of Antwerp** is developing **energy planning** for its heat and e-mobility transitions

With funding from the European Union through the COPPER initiative, the **City of Antwerp** is piloting evidence based planning of charging solutions to prevent electric vehicles from overwhelming the city's energy grid.



CHALLENGE

Antwerp is a green transition frontrunner in Europe, aiming to reduce emissions by 55% by 2030 and reaching neutrality in 2050. Securing these reductions requires the electrification of heating and at the same time accommodating the growing demands of the electrification of transport.

These developments will put pressure on the local electricity grid. To ensure that the city can continue to grow and be reliably powered, Antwerp must continually update its Strategic Energy Vision to incorporate plans for all-electric heating and planning of (new) types of infrastructure for electric vehicles (EVs) such as mobile charging solutions, fast-charging points and flexible slow charging solutions.



APPROACH

Working closely with local DSO Fluvius, Antwerp will pilot solutions for the two big stressors on its increasingly decentralised local grid. Focussing its efforts of Antwerp's Left Bank, the city will roll out pilots for all-electric heating in residential areas, updating its Strategic Energy Vision according to outcomes from the pilot.

Antwerp will also deploy new electric mobility pilots, which will test innovative electric vehicle charging solutions to help the city learn how to reduce grid stress at peak charging times.



2030

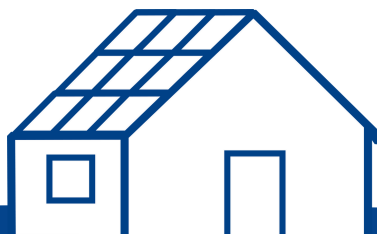
Climate neutrality
target date for the
Left Bank

800+

Car charging
stations in Antwerp

25%

Buildings with all-electric
heating by 2030

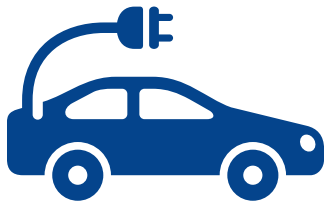


OBJECTIVES



Increase city readiness for all-electric heating with a LEAP

Working with the DSO, Antwerp will improve their capacity and readiness to take on the challenges of an electrified heat network by incorporating heating into their local energy action planning (LEAPing).



Accelerate electrified mobility plans at city level

By piloting new approaches to EV load distribution on the Left Bank, Antwerp will set the path for a future city-wide implementation of a charging solutions planning methodology.



Develop a new way of working between DSOs and cities

Local DSO Fluvius are partnering on this project, helping both city and DSO to determine how local energy action planning responsibilities will be shared between different local energy stakeholders



Reaching our carbon targets will mean to step up our efforts and close collaboration with our DSO is necessary to achieve these goals. This pilot provides an opportunity here to discover how we as a city should handle energy in the future and where our DSO Fluvius can help us in this transition.



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