COPPER

Cities for Open and Participative Planning for Electricity grid Resilience

Creating a future-proof energy system

Clean, flexible, decentralised, and digital energy systems are central to meeting the EU's goal of climate neutrality by 2050. Renewables deployment is rapidly progressing to meet the rising electricity demand of 6,800 TWh by 2050.

Local organisational capacity is needed for local authorities to fulfil their emerging role as local energy grid coordinators, gradually taking over the role from their local DSO, increase local renewables uptake. improve grid flexibility, and reduce costs for developers and communities.

European networks (DSOs & Cities)







Belgium





The Netherlands



Denmark







Sweden

Germany





Hansestadt

Goals & Benefits



Build **local authority capacity** within NSR cities to lead future energy systems through DSO partnerships and the co-creation of an open-source digital toolkit.



Deliver smart grid pilots demonstrating improved grid flexibility in preparation for the new local energy leadership role of each local authority.



Develop long-term local energy plans (LEPs) in collaboration with transnational cities, local DSOs, the private sector, and other relevant energy actors

City Ambitions



City of Ghent

Demonstrate solutions for full-electric residential districts.



City of Bremen

Demonstrate solutions for city-wide grid-friendly EV car-sharing charging infrastructure



Esbjerg Municipality

Regional anlaysis and modelling of energy flows to ensure grid stability and identify connected business models for local actors



City of Antwerp

Pilot **net load floor** solutions for the implementation of a citywide EV mobility strategy



Dordrecht Municipality

Roll-out freight EV fast charging by coupling it with local photovoltaic systems



Flexibility solutions for decentralised campus energy systems

Lead Partner

Budget

City of Ghent

€ 5 million

Start date April 2023

Duration

4 vears

