NET ZERO CITIES

EU MISSION PLATFORM | CLIMATE NEUTRAL AND SMART CITIES

INNOVATION WATCH #1

Dear reader,

We are excited to introduce the **Innovation Watch** prototype for **NetZeroCities** — a new service designed to track emerging solutions and breakthroughs on the path to climate neutrality.
As we refine this service, we invite you to explore it and share your feedback to help us improve its relevance and impact. Your insights will be invaluable in shaping a resource that truly supports cities in their net-zero transition. Let us know what you think!

urban e-mobility

The transport sector, particularly road mobility, accounts for **more than a quarter of CO2 emissions in urban areas**. Driving the transition to low-emission vehicles is a key asset to achieve climate neutrality by 2030.

The majority of urban residents live in apartments and often do not have individual parking spaces. They park their vehicles on public roads. Reserving a significant number of public parking spaces for electric vehicles is thus highly incentivizing in favor of low-emission vehicles.

To support the increase in the modal share of electric vehicles, the city of Dublin, in particular, is experimenting with the **creation of parking schemes, associated with color codes, reserving certain spaces for electric vehicles**.

To facilitate urban e-mobility requires **equipping public spaces with slow-charging infrastructure**. Notably, over 300 London **lampposts were converted into charging points** in partnership with Ubitricity.

V2G (vehicule-to-grid) technology, currently being studied by major European car manufacturers, is an emerging technology that allows the use of **energy stored in a battery to balance the energy needs of a company or a neighborhood**. The electric vehicle thus serves as a buffer storage for electricity, helping to **promote the integration of renewable and intermittent energy sources into the grid**. To reduce the CO2 emissions linked to the manufacturing of electric vehicle batteries, startups like Zenobe offer **end-to-end solutions for fleet electrification**, including charging infrastructures, software, battery replacement, and **second-life battery units**.

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In a hyper-connected world, e-commerce represents 900 billion euros in revenue in Europe, with a **continuous growth of 10% year on year**. Home delivery has simultaneously seen significant growth, exacerbating air pollution in cities. Despite increasing consumer concerns about eco-responsibility, **few logistics companies offer low-emission last-mile deliveries**.

A key asset in reducing emissions related to the transportation of goods is the **Local Urban Logistics Space,** implemented for example by the City of Madrid as part of its Smart City strategies. The goal is to concentrate extra-metropolitan delivery flows into a distribution hub, from where low-emission vehicles depart to directly serve businesses and individuals in the city center: **delivery tricycles** (one of the global leaders in logistics, for instance, uses tricycles to service city centers from local logistics spaces) and small electric utility vehicles (Goupil is the exclusive supplier of the European leader in online grocery distribution). The use of digital tools and the creation of more compact parcels allows for **digitally optimizing the truck fill rate** and the delivery route order to reduce the distance traveled.

The regulation of access to certain zones, such as **Low Emission Zones** in France and London, also allows cities to reduce traffic and encourage the use of low-emission vehicles. EU countries are increasingly implementing Urban Vehicle Access Regulations (UVARs). These zones restrict access during certain hours to only electric or low-emission vehicles and bicycles. **The restrictions may apply only to heavy vehicles or to all motorists**. Compliance monitoring can be carried out through a continuous system of surveillance cameras analyzing the license plates of vehicles circulating in the toll area (London) or through spot traffic checks.

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