Electric Vehicles Management for
carbon neutrality in Europe

Electric mobility against climate change

Global greenhouse gas (GHG) emissions continue to rise, and action to combat climate change is urgently needed. In Europe, 23% of GHG emissions came from the transport sector. In 2021 Europe had around 326 million vehicles, but only 1% were electric. Thus, we must invest in electric mobility and energy transition strategies to reduce carbon emissions and global warming.

www.ev4eu.eu

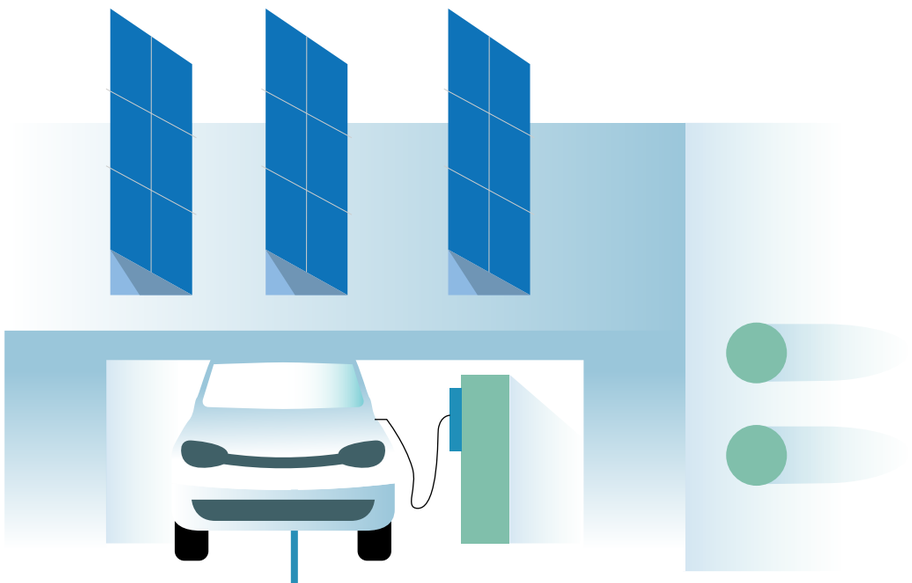
The European Commission has limited the sales of new cars with a combustion engine until 2035, estimating that in 2050 all cars will be zero-emission to meet European carbon neutrality goals. However, the massive increase of electric vehicles is limited by the current energy grid infrastructures, battery autonomy and user adoption. The EV4EU project proposes new strategies to boost the use of electric vehicles for a more sustainable mobility.

The EV4EU project

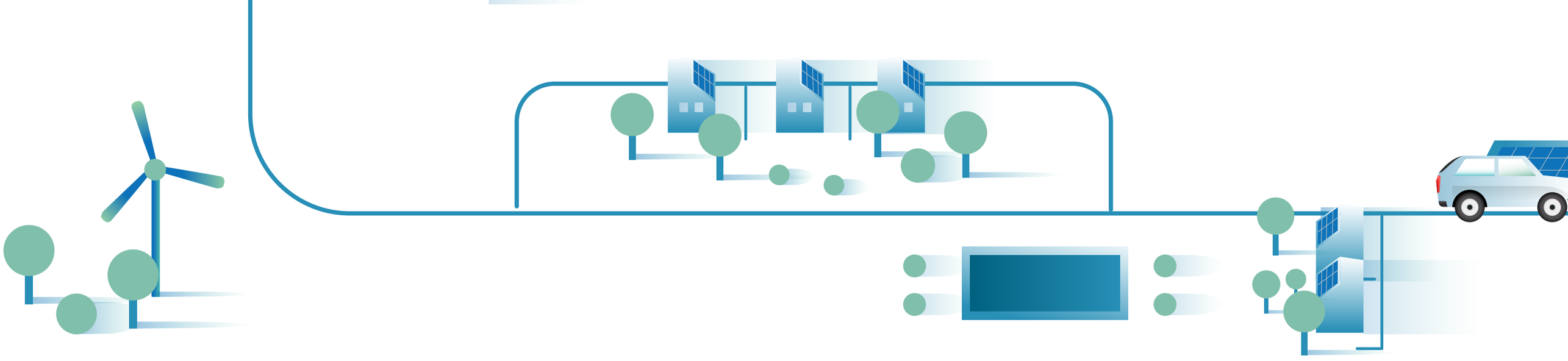
Electric vehicles management for carbon neutrality

EV4EU is a project funded by the Horizon Europe research and innovation program, aiming to develop and implement user-centric management strategies that allow massive growth of electric vehicles.

Using V2X (Vehicle-to-everything) technology that enables the exchange of data and energy between the vehicle and its surroundings, the project will develop tools and applications for the user, propose new types of chargers and develop an open platform for information exchange between systems, network operators and charging operators.



The proposed V2X management strategies will be tested in demonstrators installed in four European countries - Portugal, Denmark, Greece and Slovenia. The project, funded with 8.9 million euros, has a duration of 42 months.



The four demonstrators

Portugal

On the island of São Miguel, Azores, the Portuguese Demonstrator aims to test V2X strategies that facilitate electric vehicle integration in homes, buildings and companies.

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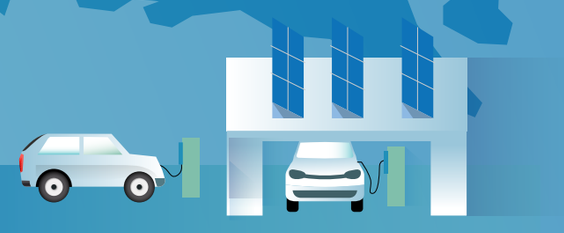

Denmark

In Denmark, different methods of energy management in buildings and parking lots, integrating renewable energy production will be tested.

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Slovenia

In Slovenia, the Demonstrator aims to assess the impact of V2X on the electricity network, the energy market and system services.

UNIVERZA V LJUBLJANI University of Ljubljana · ABB · gen-i · Elektro Celje

Greece

In Greece, a more intuitive platform for managing public charging stations will be demonstrated and the impact of electric vehicles on the grid will be investigated.

CITROËN · HEDNO · ΔΕΗ

Consortium - Participants

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Technical University of Denmark– Denmark
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https://circleconsult.dk/en/circle-consult/

University of Ljubljana – Slovenia
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Public Power Coorporation, Greece
https://www.dei.gr/en/

GEN-i, Slovenia
https://gen-i.si/en/

Citroen AIGLON S.A, Greece
https://www.aiglon.gr/

Campus Bornhom, Denmark
https://campusbornholm.dk/

Hellenic Electricity Distribution Network Operator – Greece
https://deddie.gr/en/

Elektro Celje, Slovenia
https://www.elektro-celje.s i/si/

The Azorean Directorate for Energy

Electricidade dos Açores S.A - Portugal
https://www.eda.pt/

Smart Energy lab - Portugal
https://www.smartenergylab.pt/

Bornholms Energi & Forsyning - Denmark
https://www.beof.dk/privat

Associated Partners

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https://www.ooz-krsko.si/

Nissan Motor Manufacturing (UK) Limited
https://www.nissan.co.uk/

REGIONALNA RAZVOJNA AGENCIJA POSAVJE
https://www.rra-posavje.si/

VESTAS WIND SYSTEMS A/S, Denmark
https://www.vestas.com/en

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