

ZEFER – Table Ronde sur la mobilité hydrogène

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Political targets for 2030 – 2035 in zero emission mobility

Sustainable and Smart Mobility Strategy

Adopted in December 2020 – Action Plan with 82 measures guiding the European Commission’s mandate



Overall objective towards 2050...



...translated into various milestone for zero emission mobility



By 2030, there will be at least 30 million zero-emissions cars and 80 000 zero-emission lorries in operation.



By 2030, there will be at least 100 climate-neutral cities in Europe.



All large and medium-sized cities put in place their own sustainable urban mobility plans **by 2030**.

Political targets for 2030 – 2035 in zero emission mobility

Translation of these objectives into legislation

From the Fit for 55 Package, legislation being finalized:

Legislation	State of play	Objective
CO2 standards for light duty and passengers vehicles	<i>Adopted Published in Official Journal of the EU in April 2023</i>	2030: Reduction of CO2 emission for new passengers cars of 55% by 2030/50% for light commercial vehicles) 2035: all new passengers cars and light commercial vehicles should be zero emission Incentives mechanisms to support the sales of new zero and low emission LDV
Alternative Fuel Infrastructures Regulation (AFIR)	<i>Agreement in trialogue</i>	1 hydrogen refuelling station per urban node (city >100 000 hpts) for 2030 . Daily capacity of 1t and at least one 700bar refuelling point at each station (standard being 350bar)
Renewable Energy Directive	<i>Agreement in trialogue</i>	New targets : 29% renewable energy share within final consumption of energy in transport by 2030 . minimum requirement of 1% RFNBOs in transport

Political targets for 2030 – 2035 in zero emission mobility

Translation of these objectives into legislation

Legislation currently being negotiated or awaited for publication:

Legislation	State of play	Objective
Trans-european Network for Transport regulation	<i>Trialogues ongoing</i>	Urban nodes from 84 to 424 Each urban node has to do a Sustainable Urban Mobility Plan by 2025 & link it with a Sustainable Urban Logistic Plan
CO2 standards for heavy-duty vehicles	<i>Published in February 2023</i>	-All new city buses 100% zero emissions as of 2030 -Sales of new HDV 45% zero emissions as of 2030 and 90% zero emission as of 2040 Makes logistics zero emissions inside cities as well
Corporate fleet initiative	<i>Publication expected in 2024</i>	Goal to increase the demand for zero emission vehicles with mandatory targets for corporate fleets

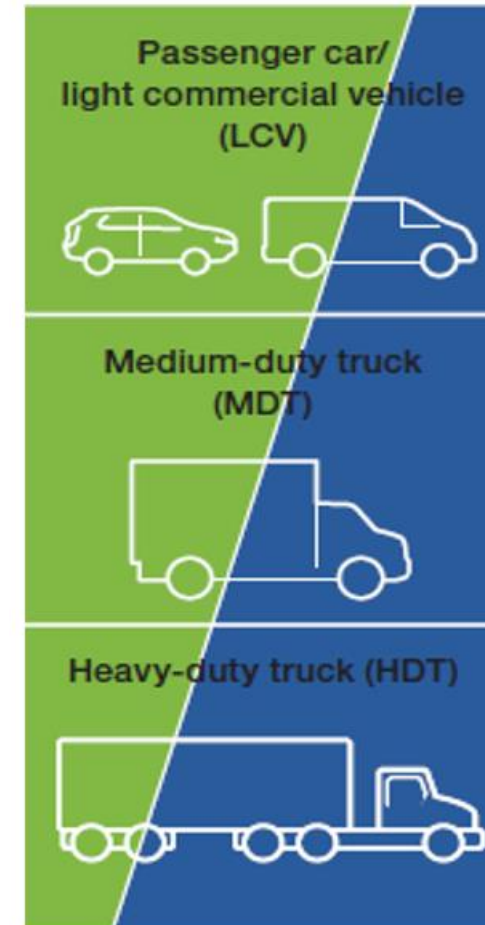
Battery Electric Vehicles and Fuel Cells Electric Vehicles are complementary

Zero-emissions vehicles are expected to be powered by a mix of batteries (using electricity) and fuels cells (using hydrogen).

Both technologies are **complementary** and FCEV can provide some advantages compared to BEV:

- Faster refuelling
- Longer range
- Better suited for some specific use cases :
 - Users without convenient access to e-charging
 - Users who require high flexibility or travel frequently (taxis)
 - Users in cold climates
 - Users with regular towing cases (deliveries, vans etc)

The optimal choice is not black and white.



Relevance in the sector of BEVs and FCEVs (illustrative)

Zero emission mandates in cities – case for FCEV development

Potential of replicability

Zero emissions zones :

Includes all the C40 cities, committed that a major area of their city will be zero-emission by 2030 : includes Amsterdam, Paris, London, Copenhagen, Oslo, London, Oxford, Rotterdam...

Only allows BEV and FCEV

Low emissions zones:

Berlin: low emission zone of 88km²

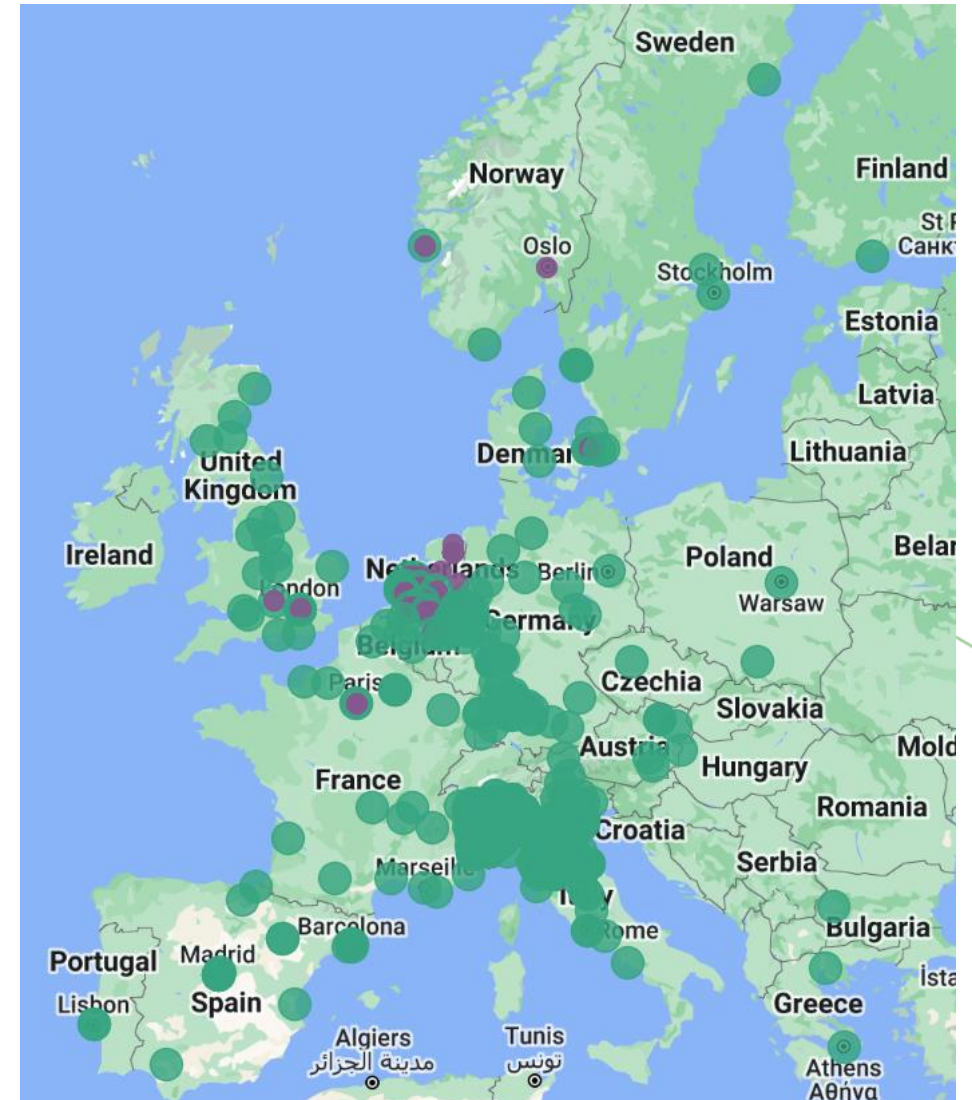
Bigger cities in France

Lots of cities in Italy, Germany, Warsaw, Madrid, Lisbon, Milan, Leipzig, Cologne Stockholm...

The most polluting cars are regulated: vehicles with higher emissions cannot enter the area or must pay. Usually the threshold goes gradually down.



Momentum for zero emissions in cities – huge potential for FCEV to play a role



Fuel Cells Electric Vehicles are already happening in urban mobility

BMW iX5
Hydrogen model
2022



Hyvia (Renault Group)
2024



Hyundai NEXO
2018



Caetano (Toyota) FC buses
2019



Toyota Mirail 2
2021



Solaris FC Buses
2022



Thank You



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