POLIS
CITIES AND REGIONS FOR TRANSPORT INNOVATION

ANNUAL CONFERENCE
2024

27-28 NOVEMBER 2024

KARLSRUHE (DE)

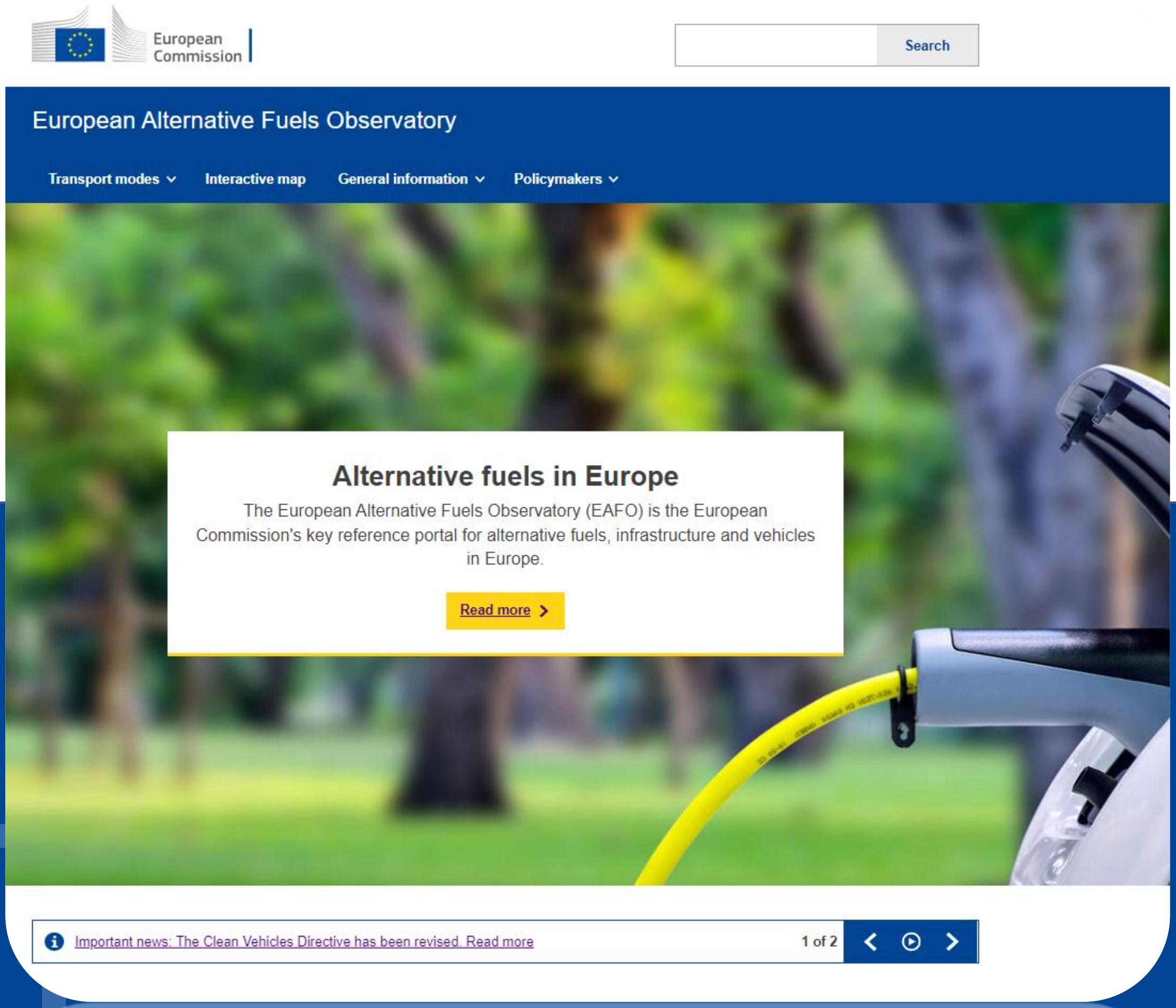
Baden-Württemberg
Ministry of Transport

Karlsruhe

European Alternative Fuels Observatory (EAFO)

Presented at the ANNUAL POLIS CONFERENCE 2024 in Karlsruhe

European Commission's key reference portal for alternative fuels, infrastructure and vehicles in Europe



Provide openly accessible data at the highest of quality, in an easily accessible way on Alternative Fuels in Europe to Public Authorities, Consumers and the EU.

Presented at the Annual POLIS Conference 2024 in Karlsruhe

28/11/2024

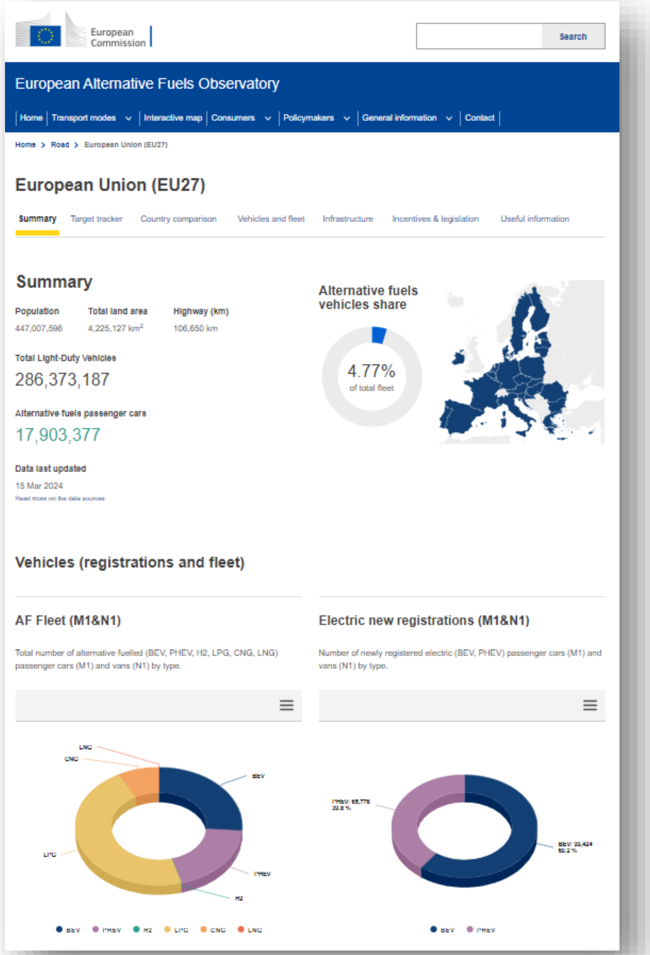
Harm Weken, Managing partner, FIER sustainable mobility

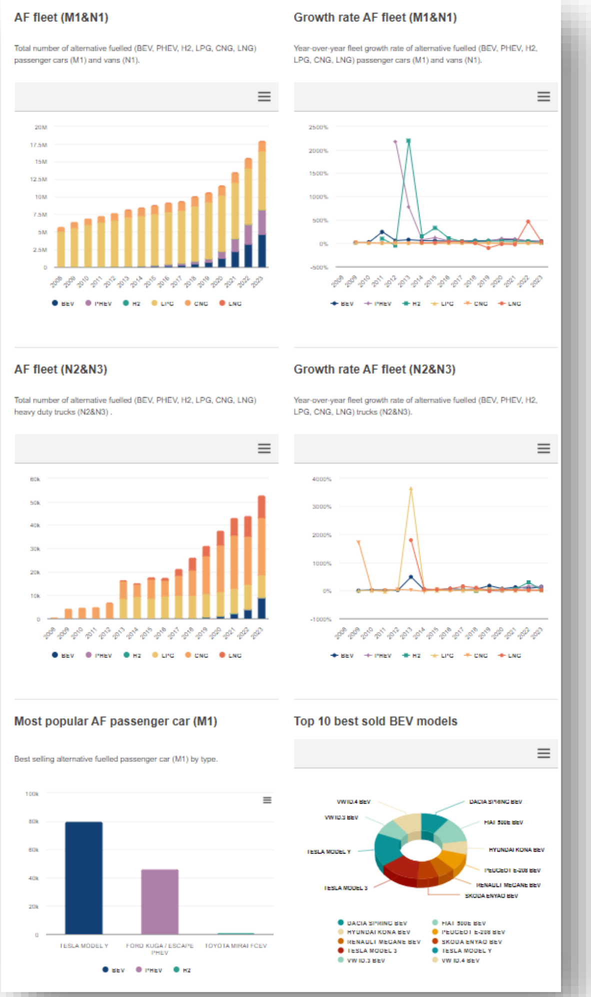
For more information: Mate Csukas (mcsukas@fier.net) or Edwin Bestebreurtje (ebestebreurtje@fier.net)

European Alternative Fuels Observatory

Monitoring-, policy-, and knowledge platform

European Commission | European Alternative Fuels Observatory





Website

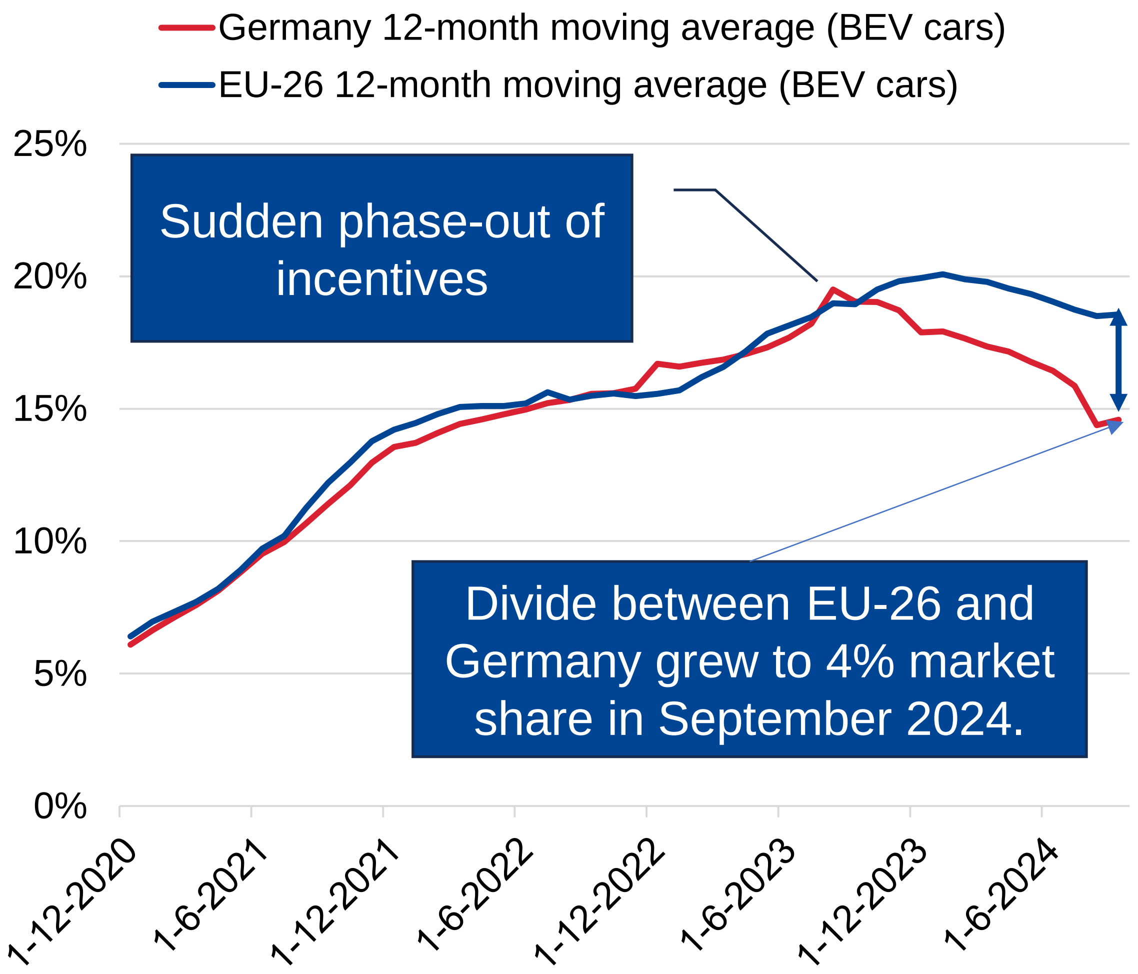
LinkedIn

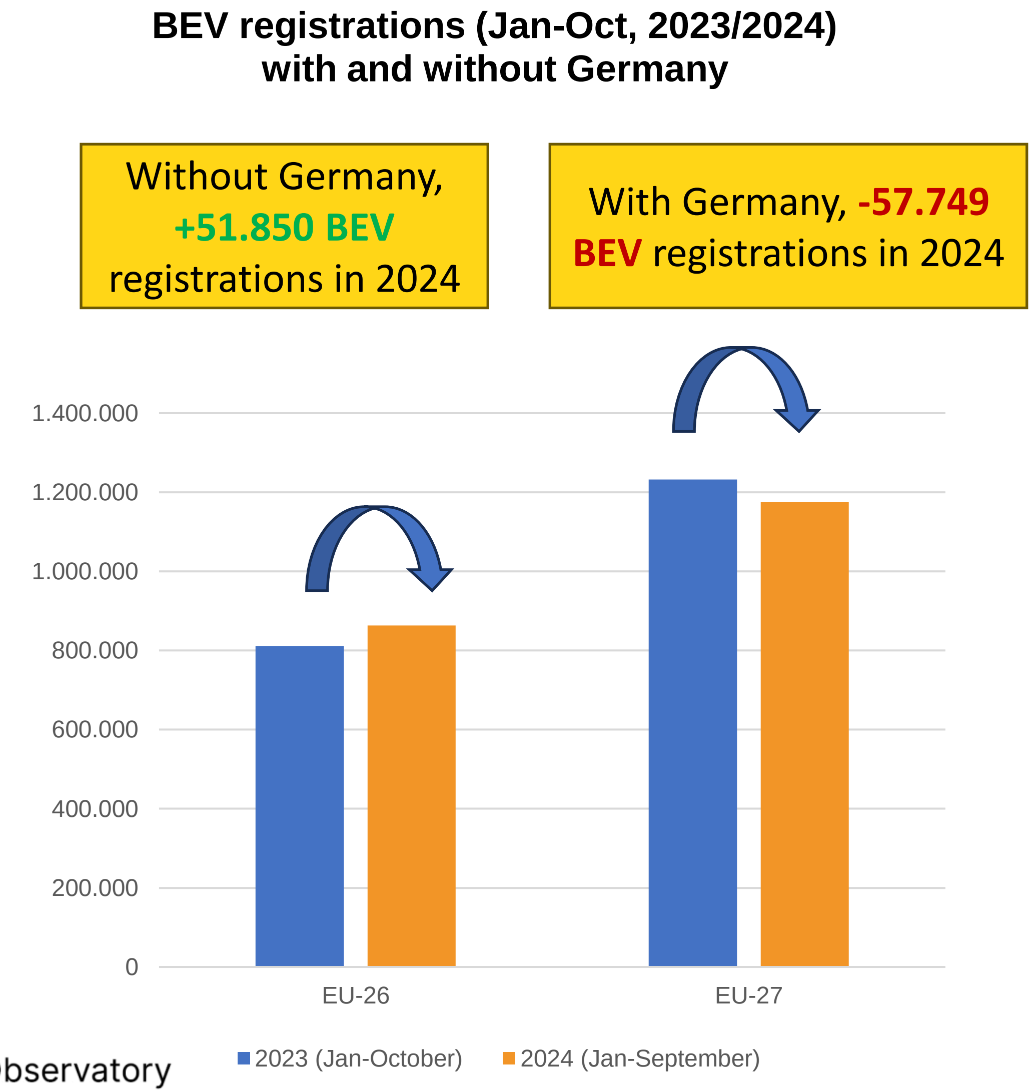
Consortium partners

(Lead partner)

Subcontractors and external partners

Since the sudden phase out of the German subsidies, sales in Germany (09/2023) is the key reason for slowing EU-27 BEV passenger car market share

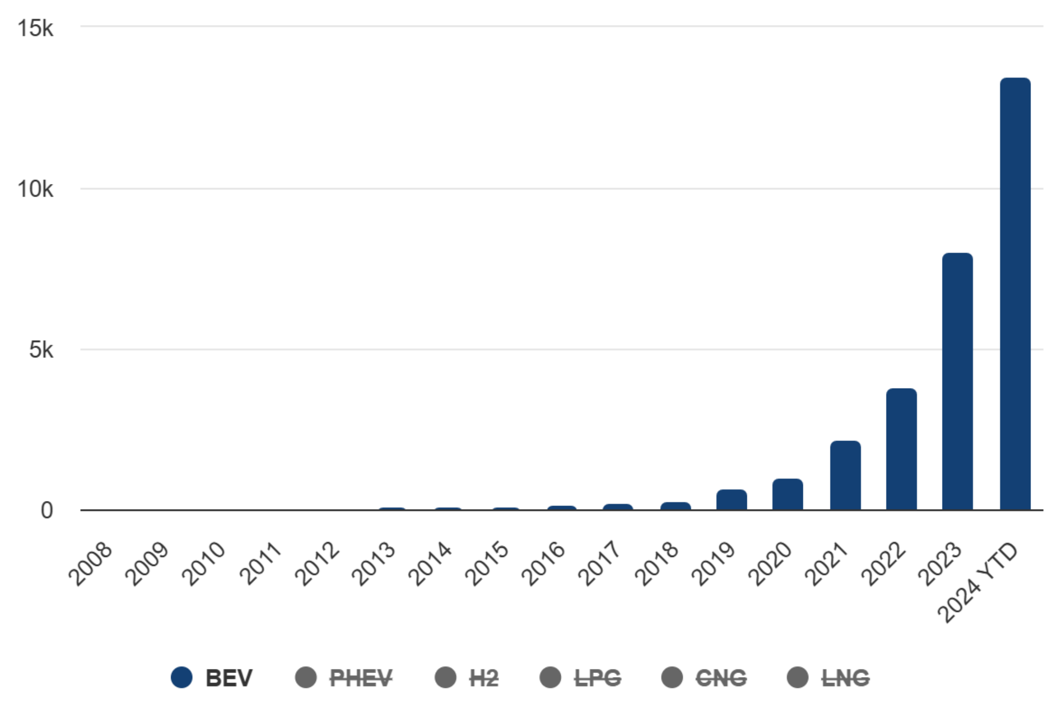




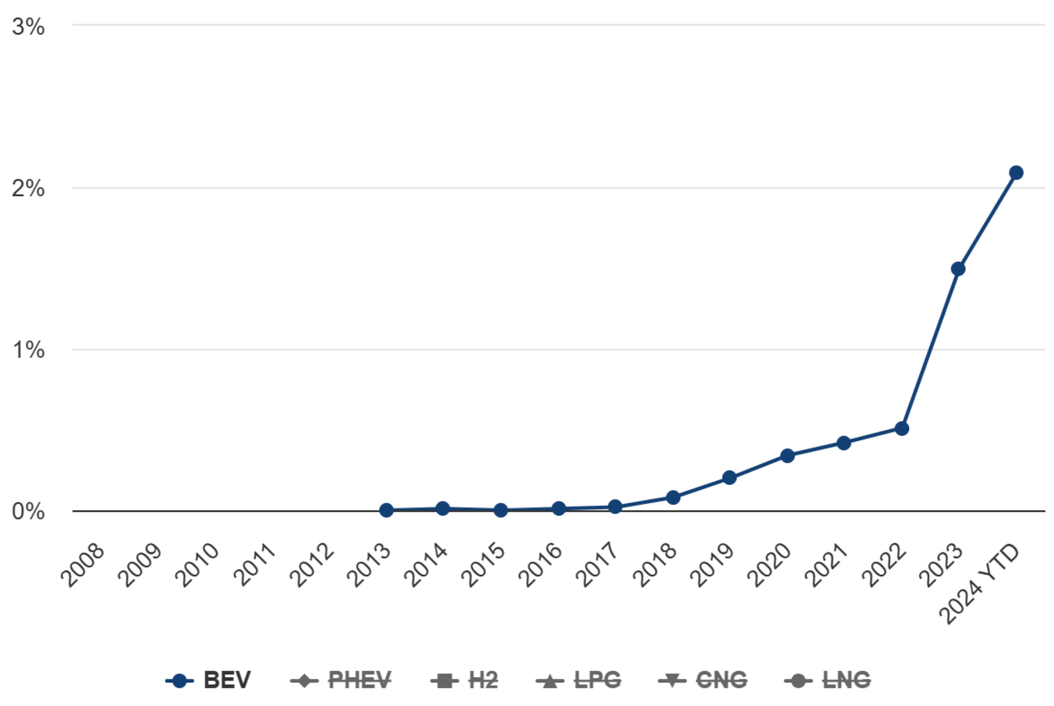
BEV trucks are still low in numbers, but growing rapidly

Heavy-Duty Vehicles (Electric Trucks)

EU-27 BEV truck fleet 13,400 vehicles in September 2024



Market share accelerated to above 2% in 2024



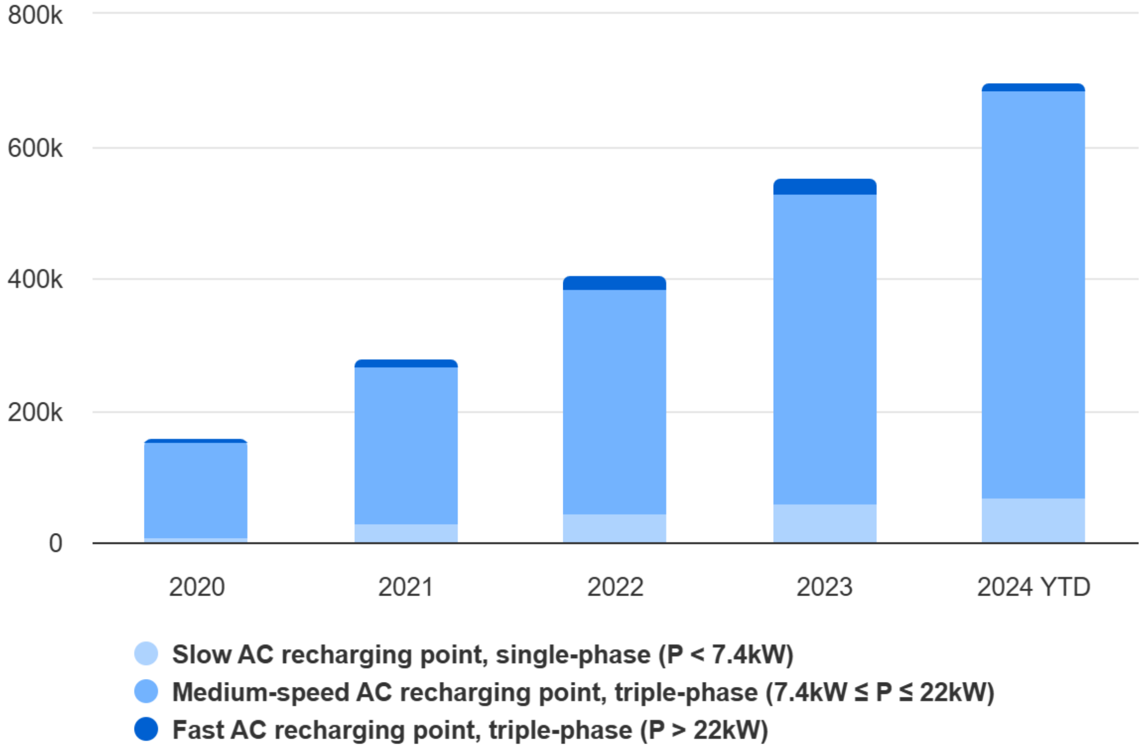
Recharging Infrastructure 2024 October

Over 800,000 Public recharging points in the EU-27

Summary | Target tracker | Vehicles and fleet | **Infrastructure** | Incentives & legislation | Useful information

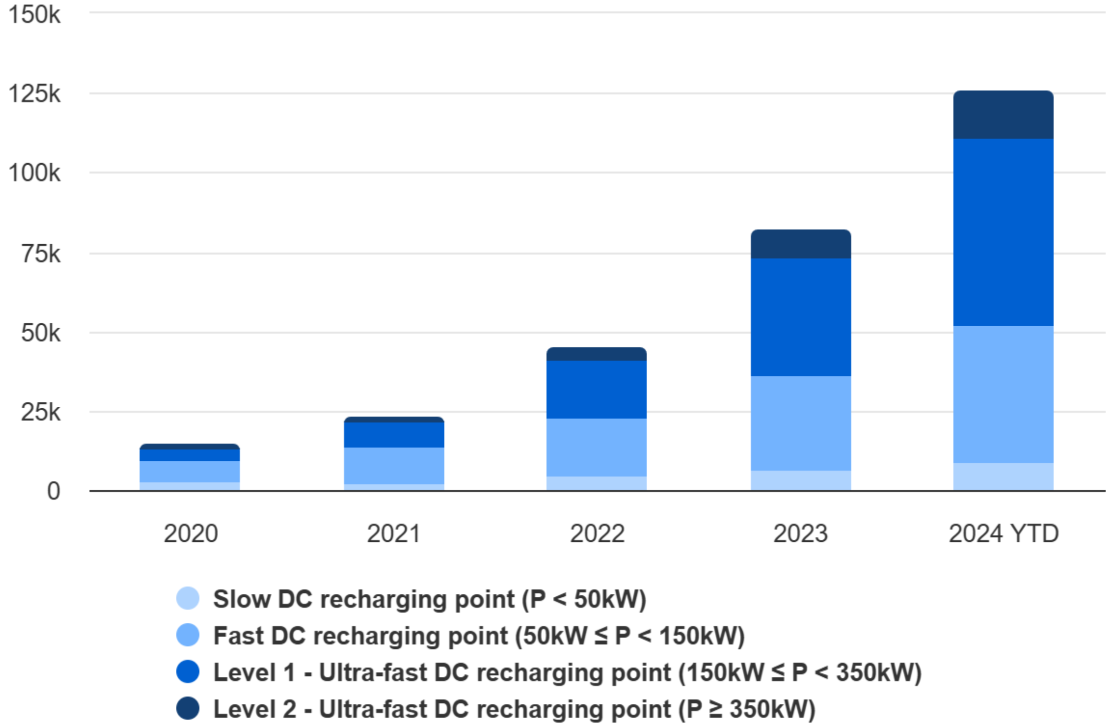
AC recharging points

Total number of publicly accessible AC recharging points, according to the AFIR categorization.



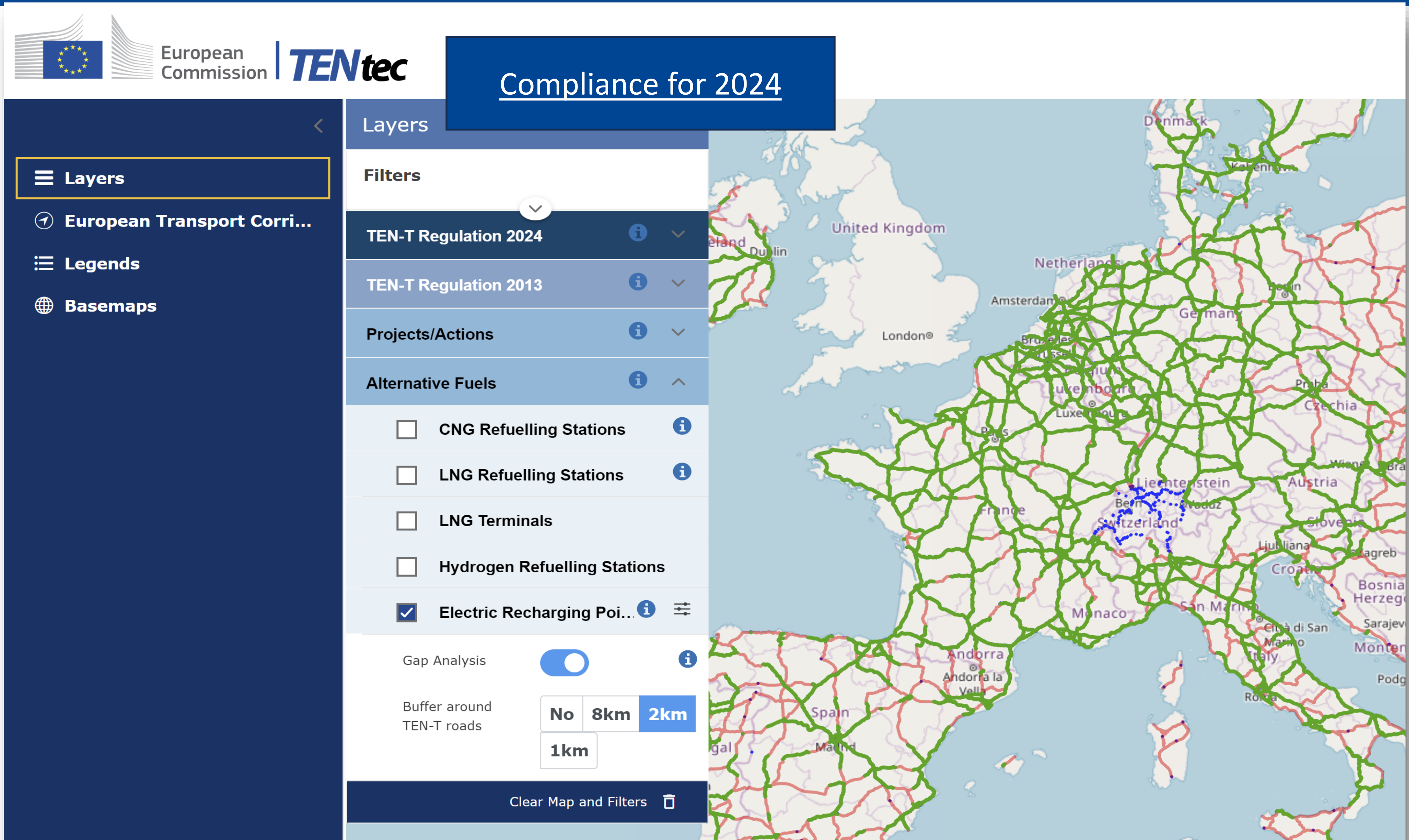
DC recharging points

Total number of publicly accessible DC recharging points, according to the AFIR categorization.



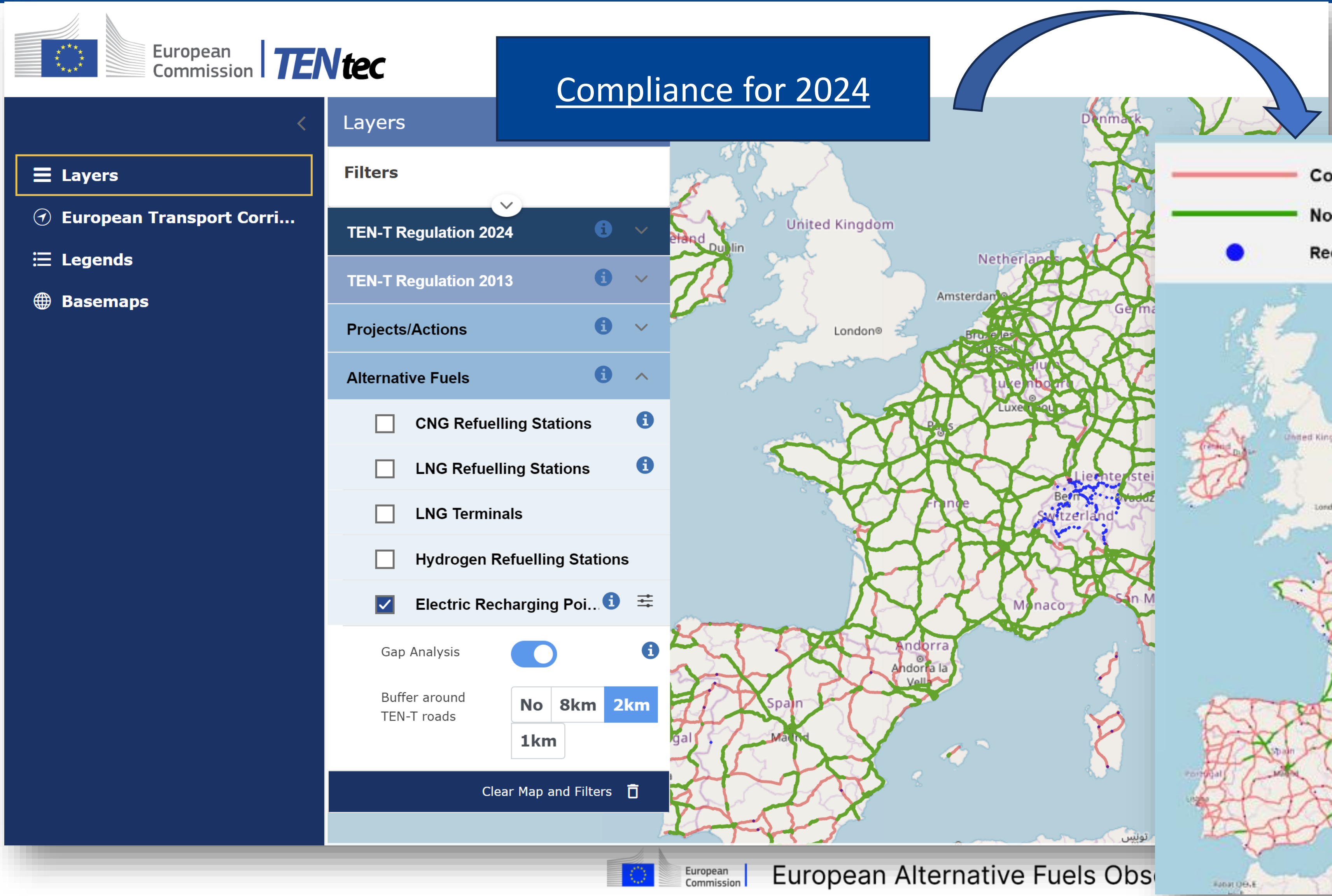
Highway network coverage - compliance with the AFIR regulation

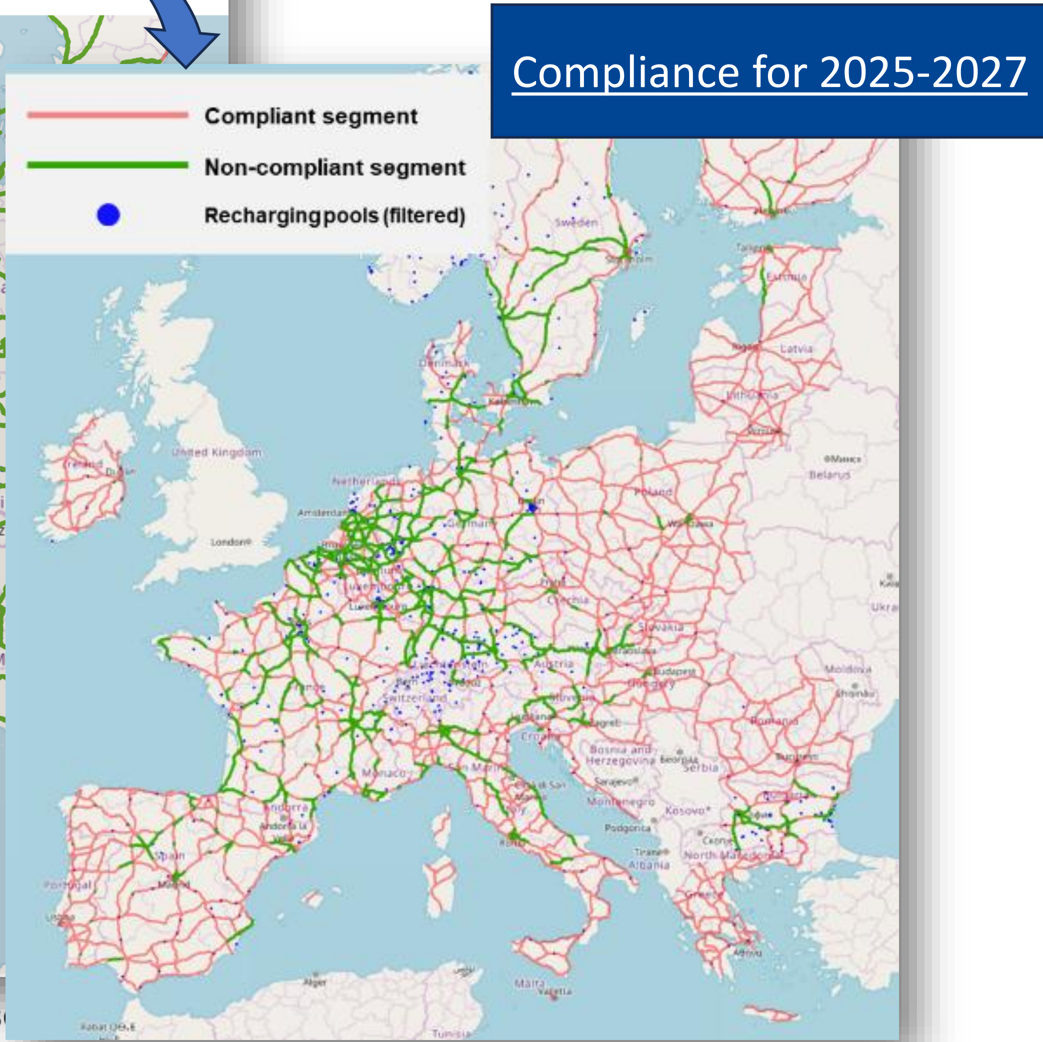
The European road network must be properly covered with fast charging infrastructure



Highway network coverage - compliance with the AFIR regulation

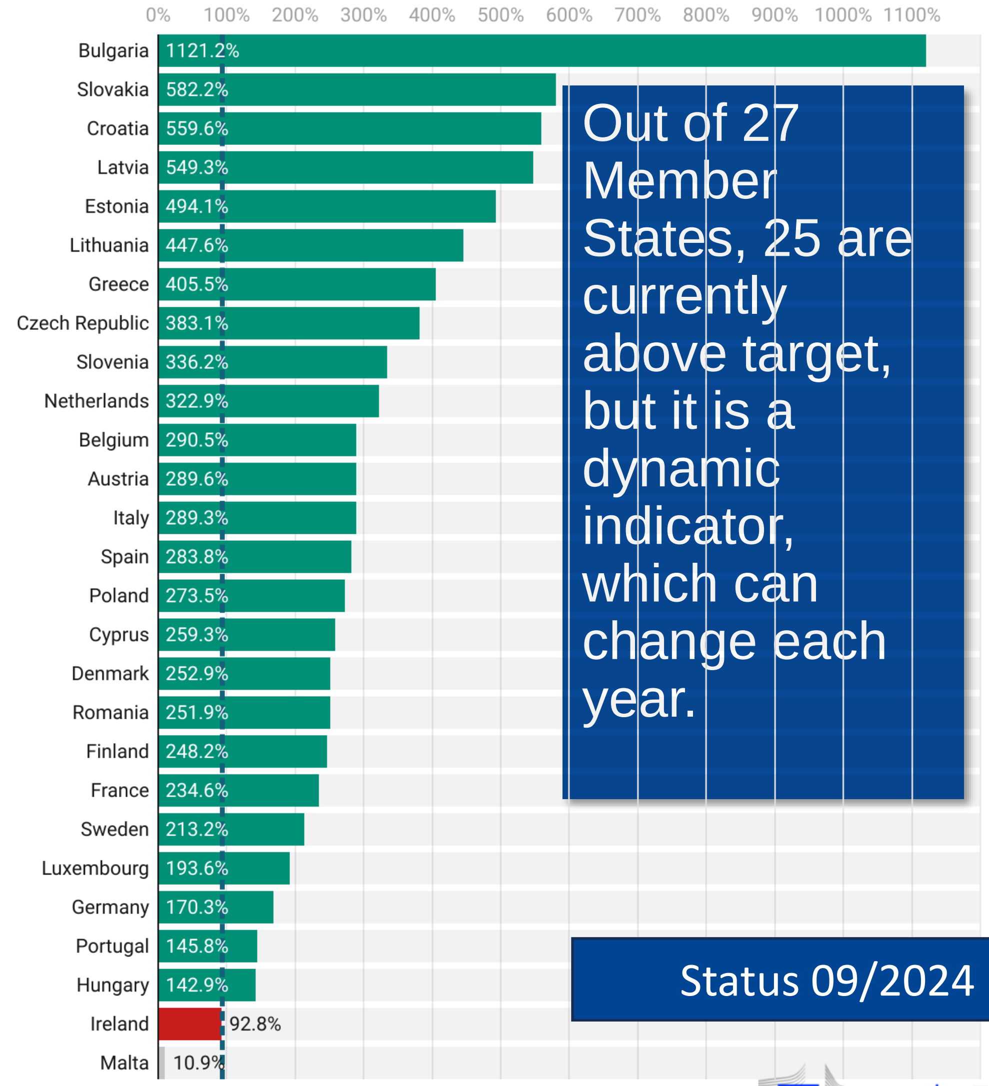
The European road network must be properly covered with fast charging infrastructure





AFIR fleet based targets met already

For every BEV in the country, 1.3 kW total power output must be available, and for each PHEV, 0.8 kW

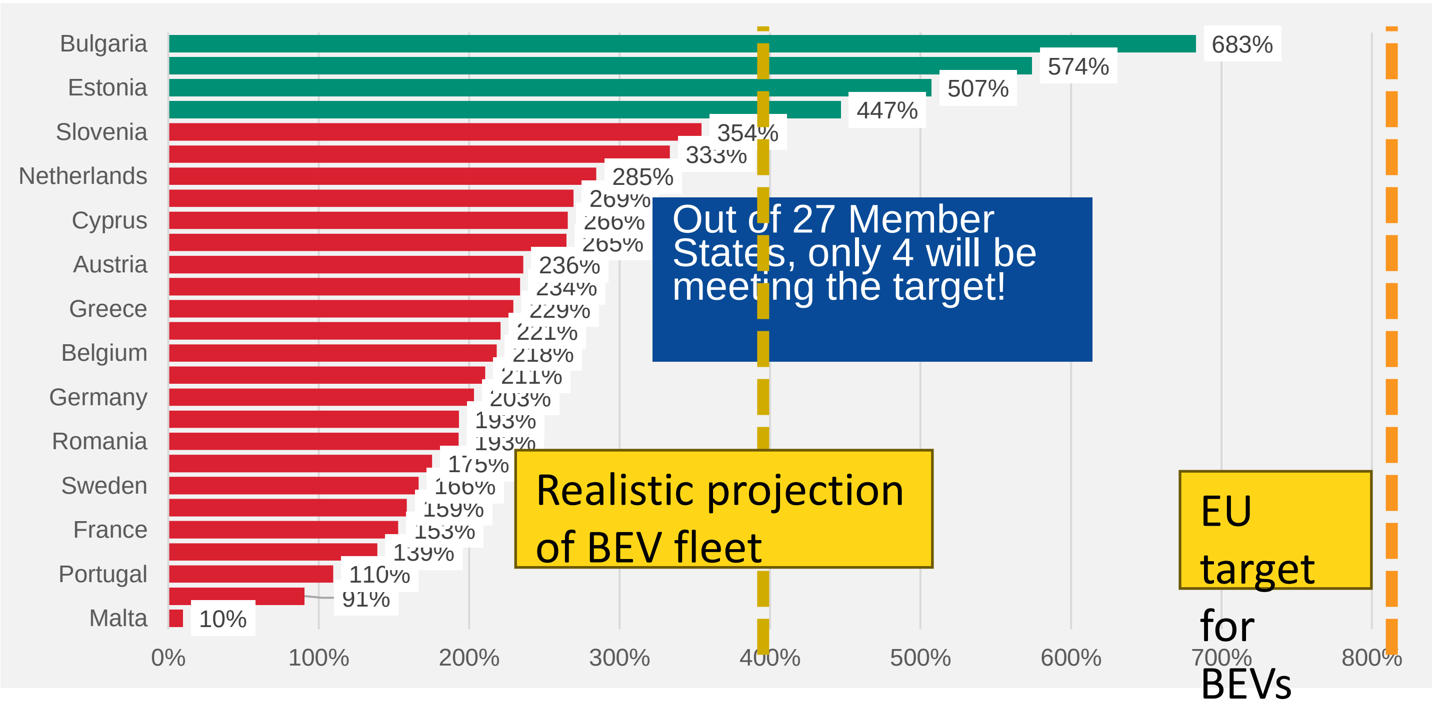


Created with Datawrapper

Out of 27 Member States, 25 are currently above target, but it is a dynamic indicator, which can change each year.

Status 09/2024

2030: What happens if no country invests in public recharging infrastructure



Out of 27 Member States, only 4 will be meeting the target!

Realistic projection of BEV fleet

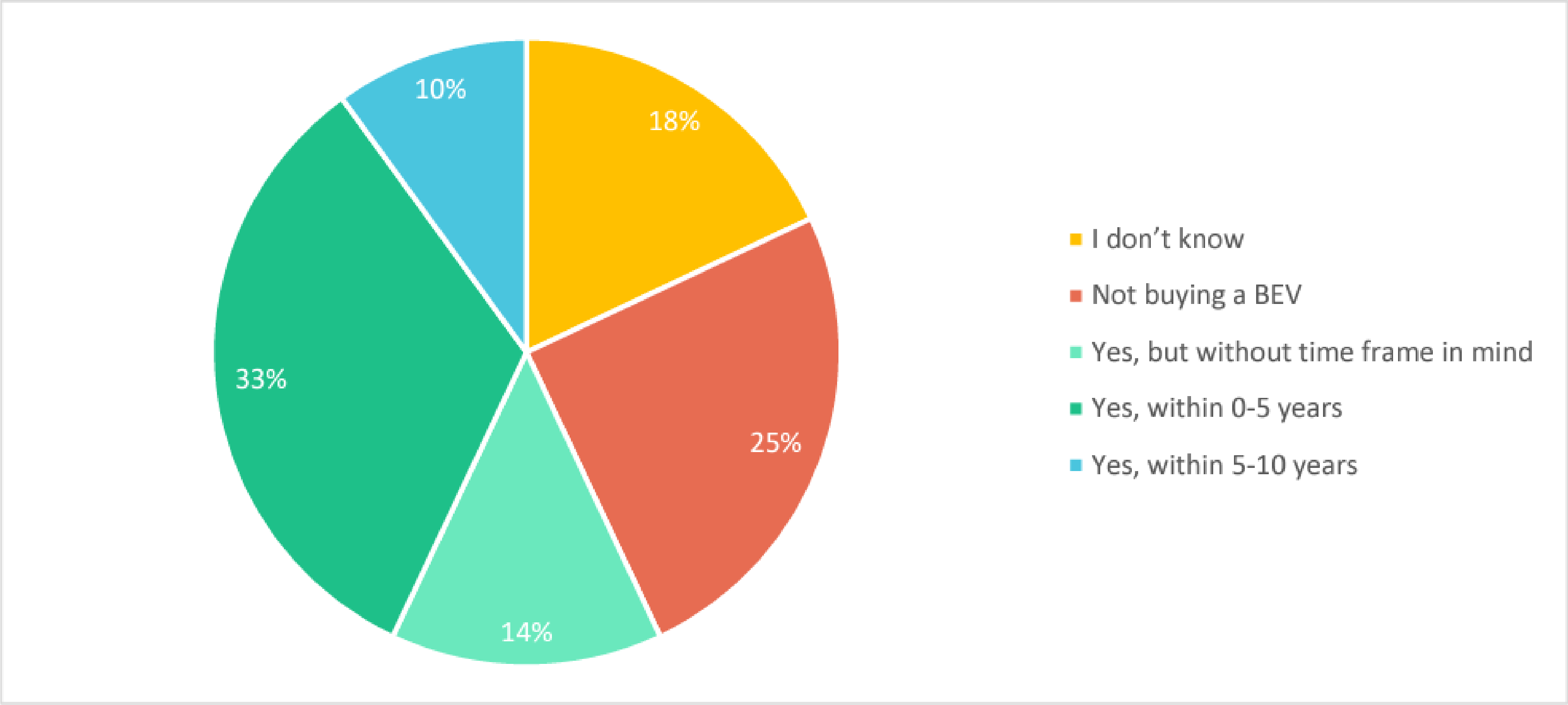
EU target for BEVs

European Commission | European Alternative Fuels Observatory

What do the consumers say?

<u>**57% of EU drivers**</u> are planning to buy an EV

4. Figure: EU (aggregated) non-BEV drivers’ time frame to buy a battery electric vehicle.



Source: EAFO Consumer Monitor and Survey 2023.

TOP 3 advantages of BEVs (all drivers)

Better for climate (no tailpipe CO2 emissions)

Driving characteristics (quiet, comfortable, fast, etc.)

Economical to use

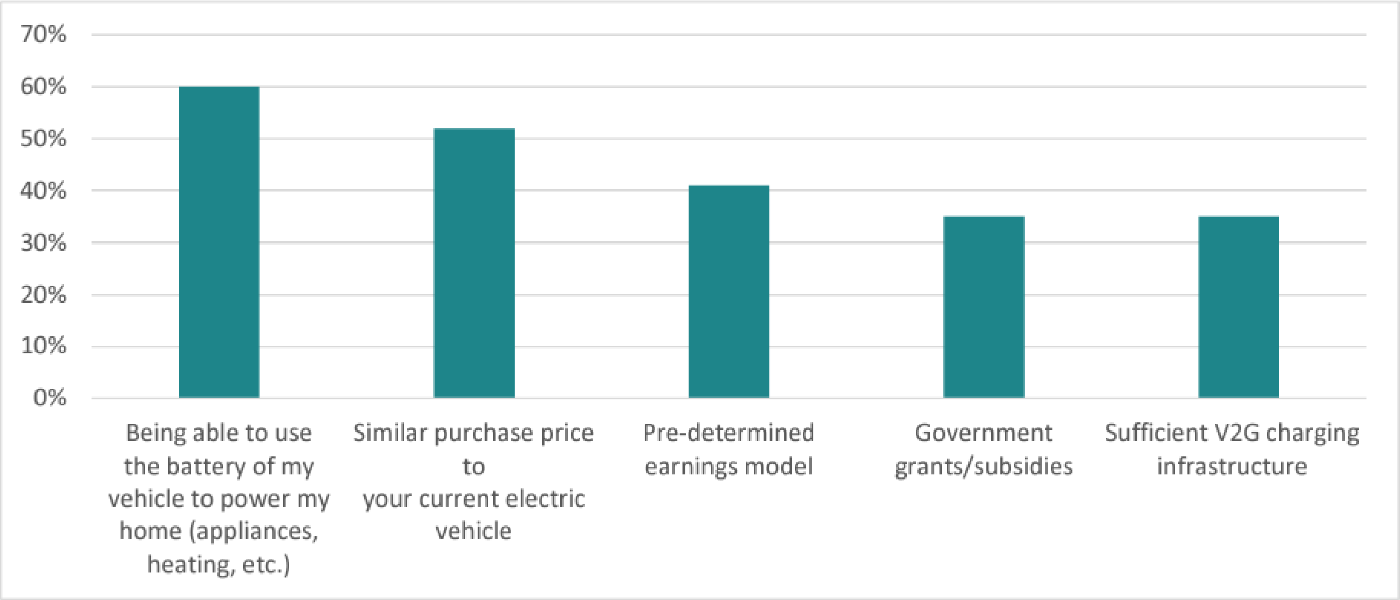
44% of BEV drivers are aware of Vehicle-2-Grid possibilities and know something about it of which:

- **68% of the EU BEV drivers** stated that they are interested in buying a vehicle with the V2G functionality
- Using V2G for **powering their home** is the most important feature (60% highlighted it)

Around **15 BEV models** can already do **Vehicle-2-Grid**

Vehicle-2-Load: 30
Vehicle-2-Home: 15
Vehicle-2-Grid: 15

16. Figure: EU (aggregated) BEV drivers' willingness to buy a V2G-capable BEV (multiple answers were possible).



Source: EAFO Consumer Monitor and Survey 2023.

atory

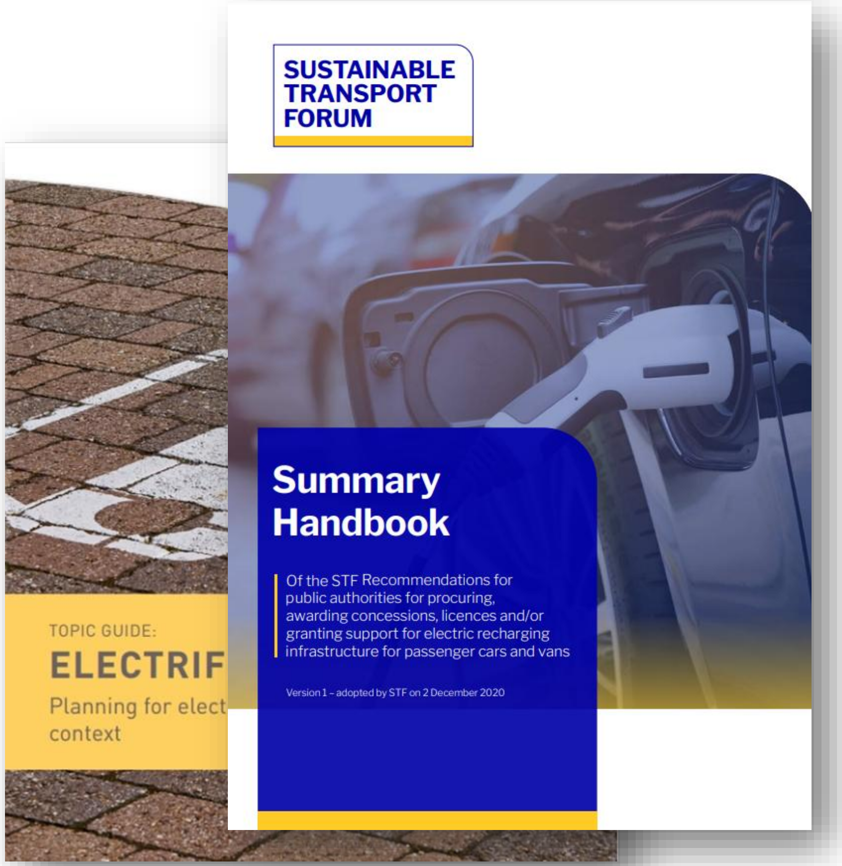
Renault 5

Polestar 3

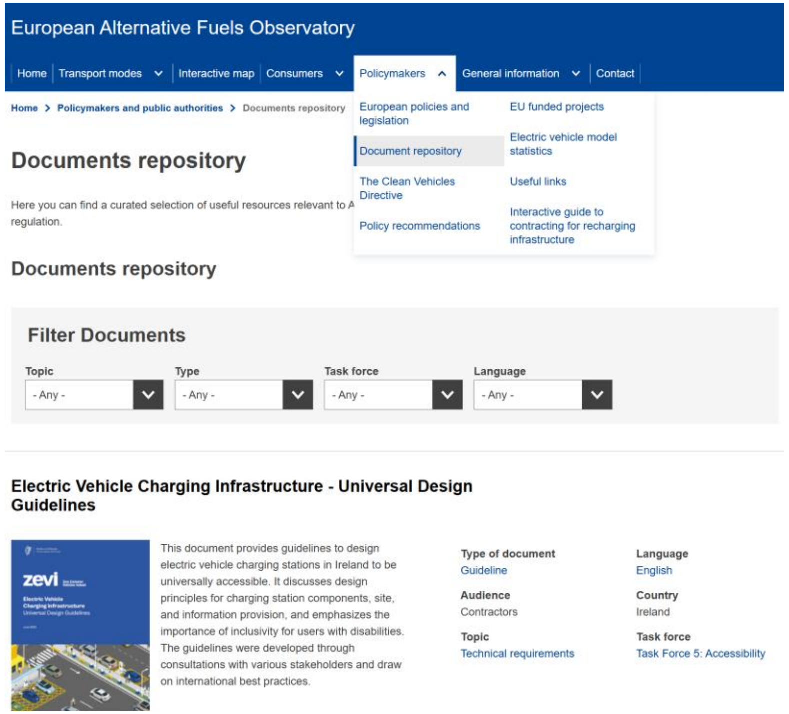
Provide policy recommendations & best practices

Hands-on guides, handbooks for cities, public authorities

Procurements and concessions for EV recharging infrastructure / SUMP guidelines for electrification



Document repository



Source: EAFO (2024): [Link]()

European Commission | European Alternative Fuels Observatory