

Europe's strategy to electrify heavy duty vehicles

A mix of targets and incentives

Stef Cornelis, Director Electric Freight and Fleets



Who we are and what we do



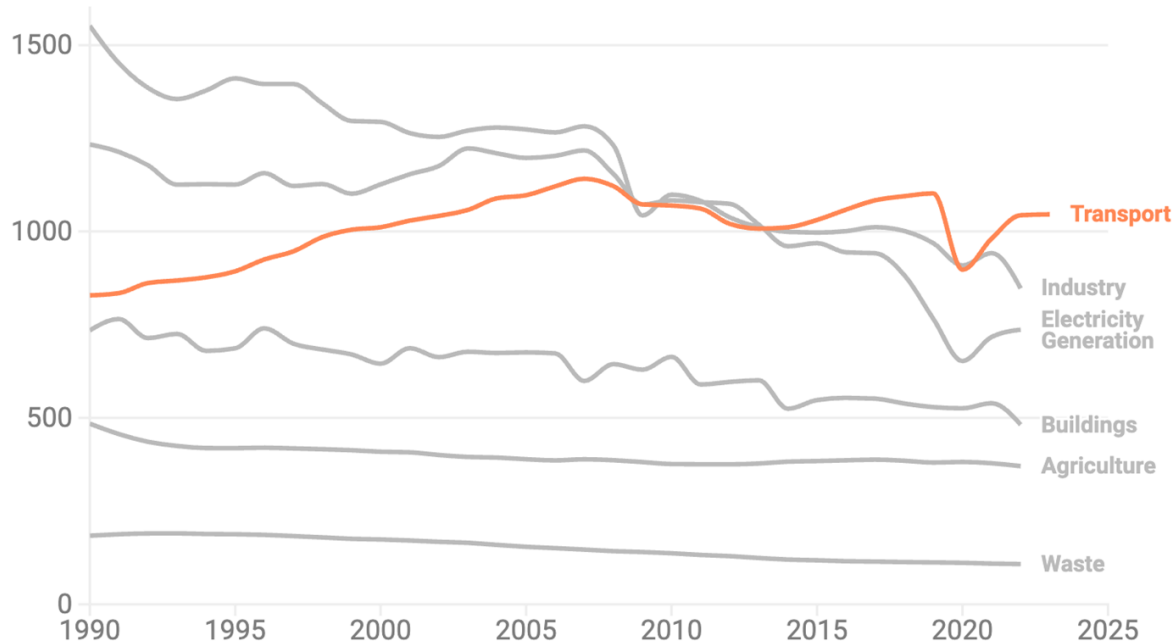
**Europe's leading advocates
for clean transport & energy**

This is the decisive decade for climate action. Decarbonising transport and the energy that powers it presents a major challenge and opportunity



Transport: Europe's biggest climate problem

EU greenhouse gas emissions by sector (MtCO₂e)



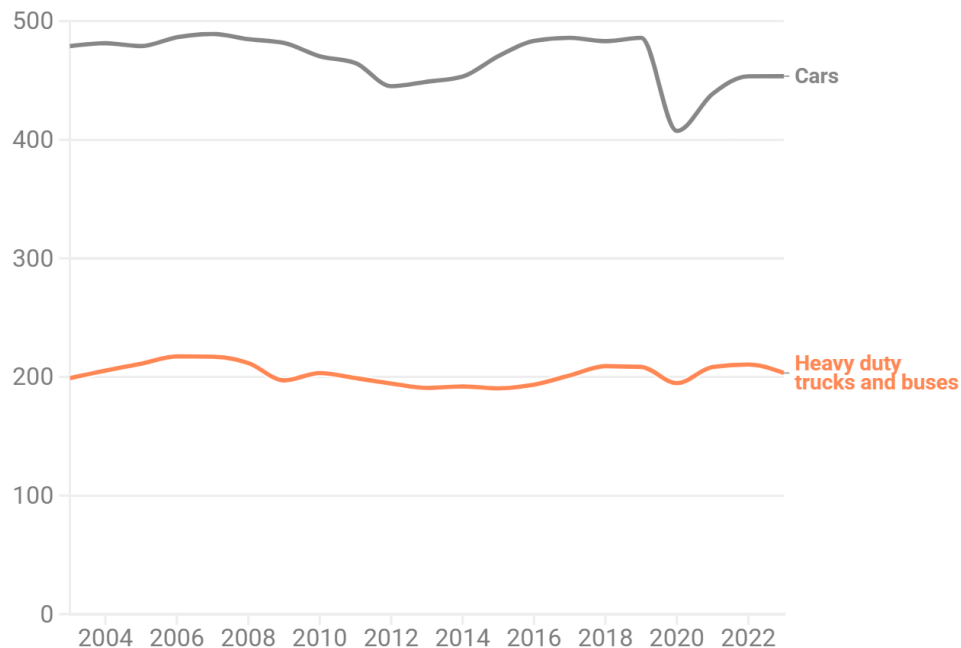
Source: UNFCCC GHG inventories, EEA, Stratas Advisors • Transport includes international aviation and maritime emissions. Public electricity includes heat generation

HDV market and emissions

- **300,000 trucks sold** per year
- Account for **almost 30% of road transport emissions**

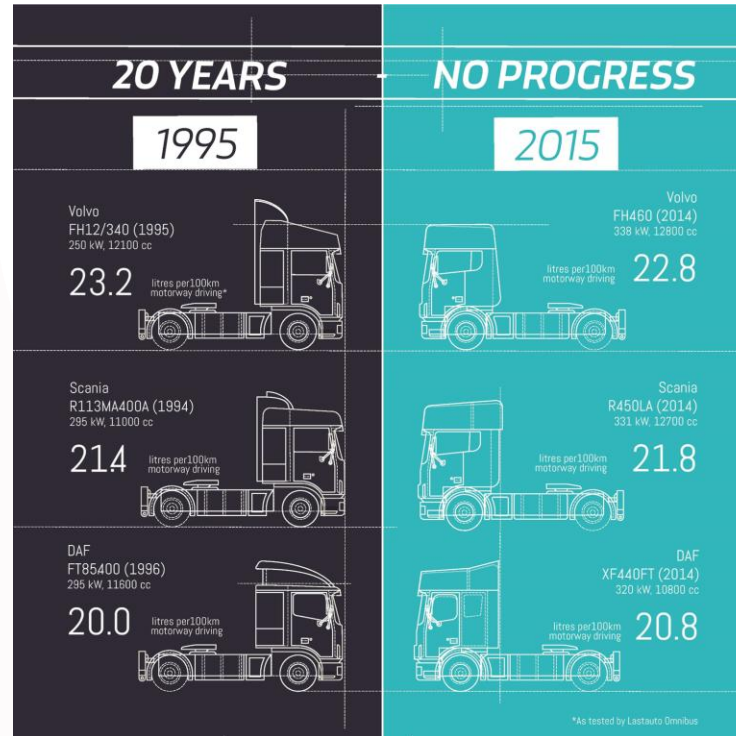
Little progress in twenty years

EU GHG emissions (MtCO₂)



Source: UNFCCC (2025)

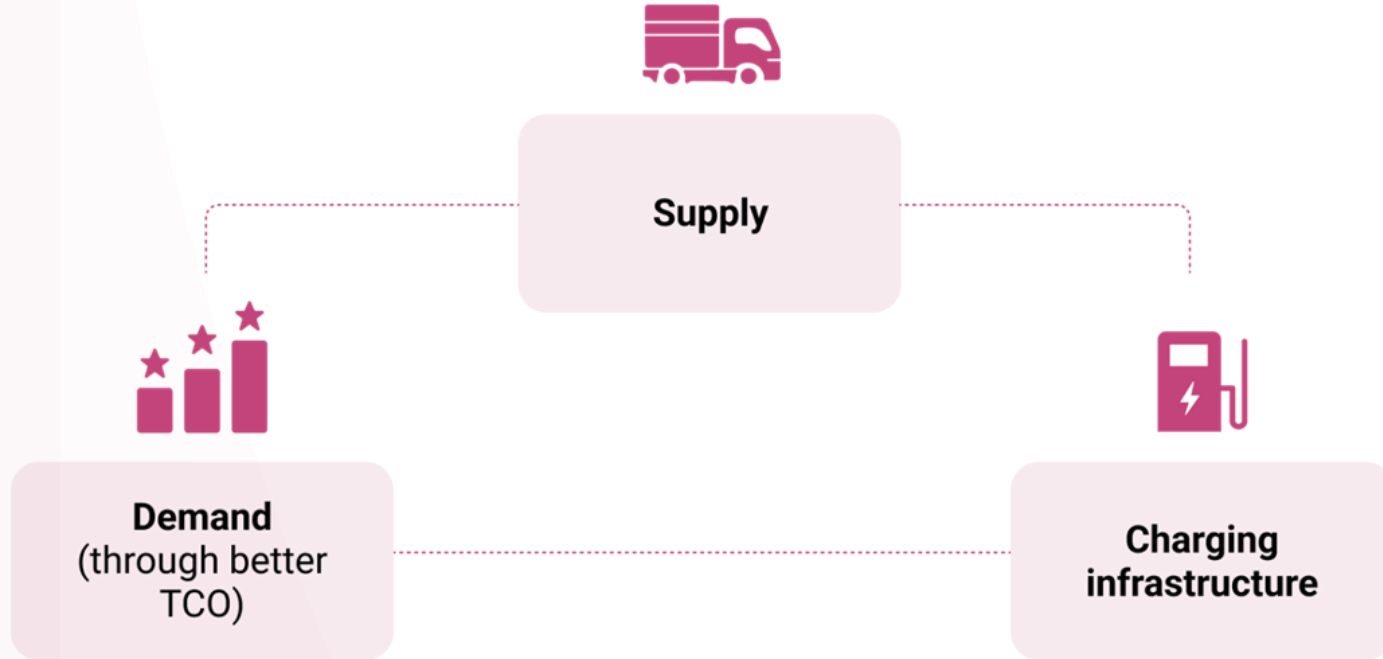
Fuel efficiency stagnated



European Commission *Strategy on low emission mobility* (2016)
Trucks became a part of Europe's climate debate

Europe's approach to accelerate truck electrification

The holy trinity



Main topics

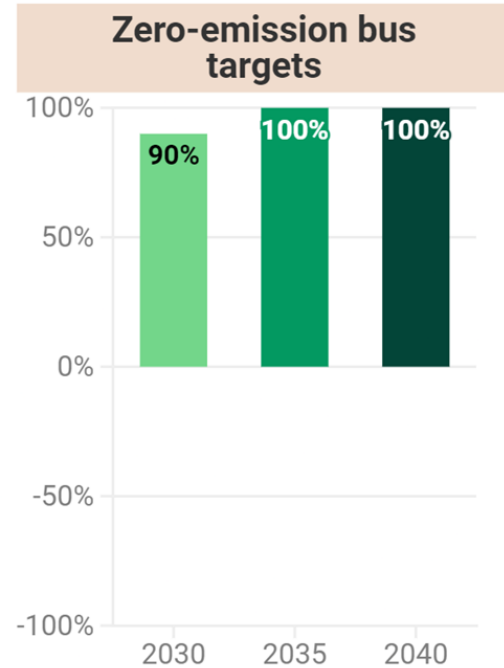
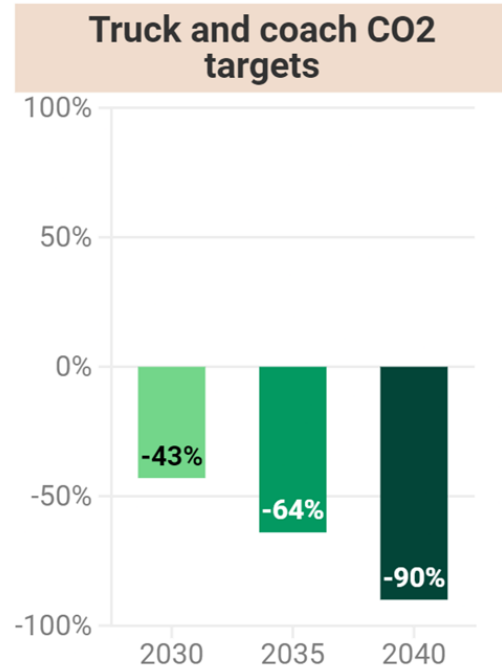
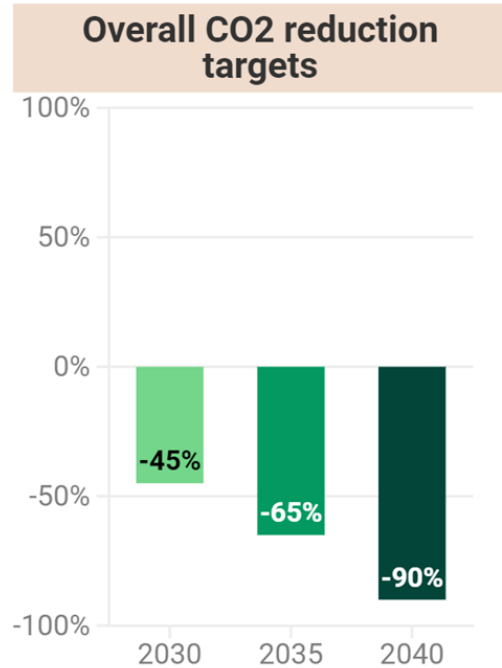
1. What has the EU done regarding these three pillars?
2. How is the market reacting?
3. What are the main lessons?

EU initiatives to accelerate truck electrification

Supply Truck CO2 standards

Fuel efficiency standards for truckmakers

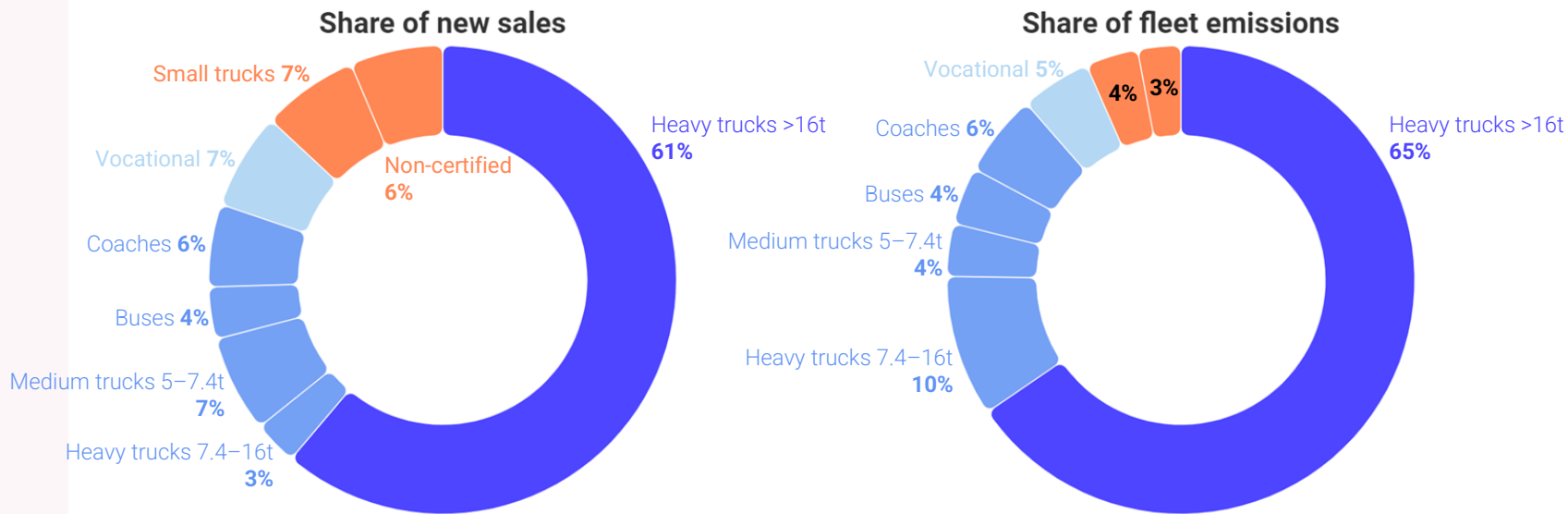
Heavy-duty vehicle CO2 standards



Focus on largest source of emissions

Scope of the heavy-duty vehicle CO2 standards

First target year ● 2025 ● 2030 ● 2035 ● None



Source: T&E modelling • EU, 2023

Demand

Bring down TCO



National level

- CO2 based road tolling
Eurovignette Directive
- Higher weight allowance for zero emission trucks
Weight and dimensions Directive
- Carbon price for road transport
ETS 2
- Electricity credits for depot charging
Renewable Energy Directive III

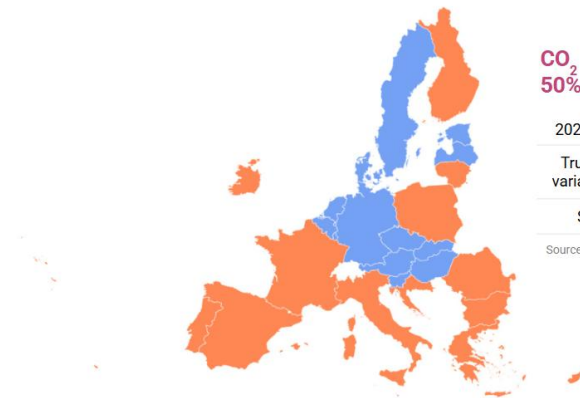
- Implementation of EU legislation
- Purchase subsidies
- Zero emission freight zones
- Fiscal measures (e.g. registration tax for vans in The Netherlands)

A deep dive: Road tolling

Several EU Member States already vary road tolls by CO₂

Yes No

- Road tolling based on CO₂ emissions i.e. the lower your emissions, the less you pay
- Class 1 truck (high CO₂) pays full toll rate
- Member States have to give a toll reduction for electric trucks (min. 50% up to full exemption)



CO₂ variation covers almost 50% of truck activity in the EU

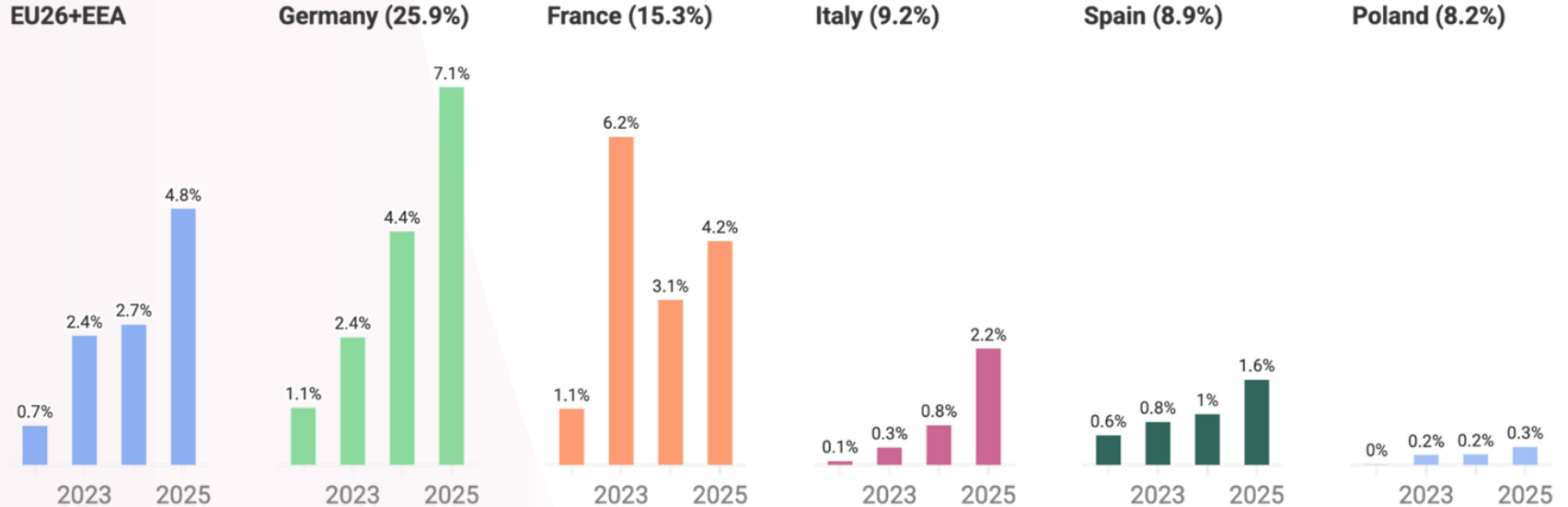
2025 truck activity (Gtkm)	2044
Truck activity where CO ₂ variation is in place (Gtkm)	915
Share over total (%)	44.77

Source: T&E's EU Transport Roadmap Model.

MAN Trucks: 'With an annual mileage of over 110,000 kilometres on German motorways, **this results in toll savings of over 60,000 euros per vehicle per year** – a clear economic advantage for the use of battery-powered trucks.'

Germany is the only major market above EU average; others have to catch up

Electric truck sales share



Source: Dataforce (2026) | Gross Vehicle Weight > 3.5 tonne • Percentages in brackets indicate the country's share of total EU truck sales in 2025

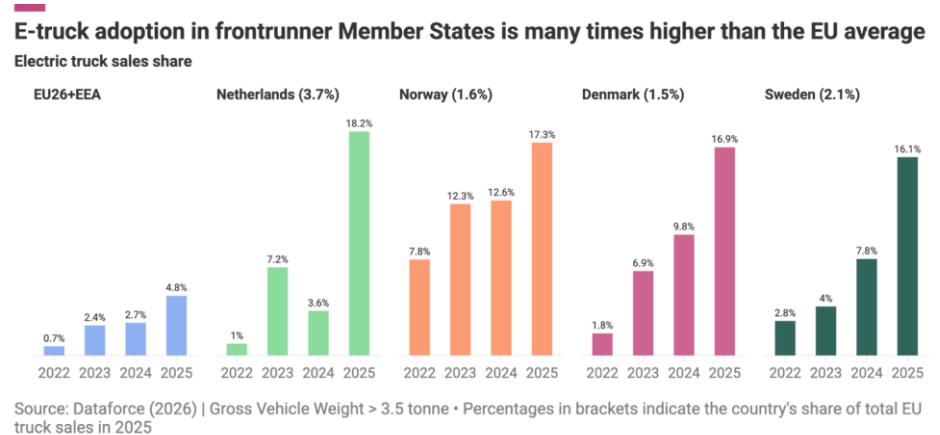
A deep dive: National fiscality

Denmark:

- E-trucks get 45% rebate on registration tax
- Tax-free depot charging
- E-trucks get 80% reduction on the road toll

Netherlands:

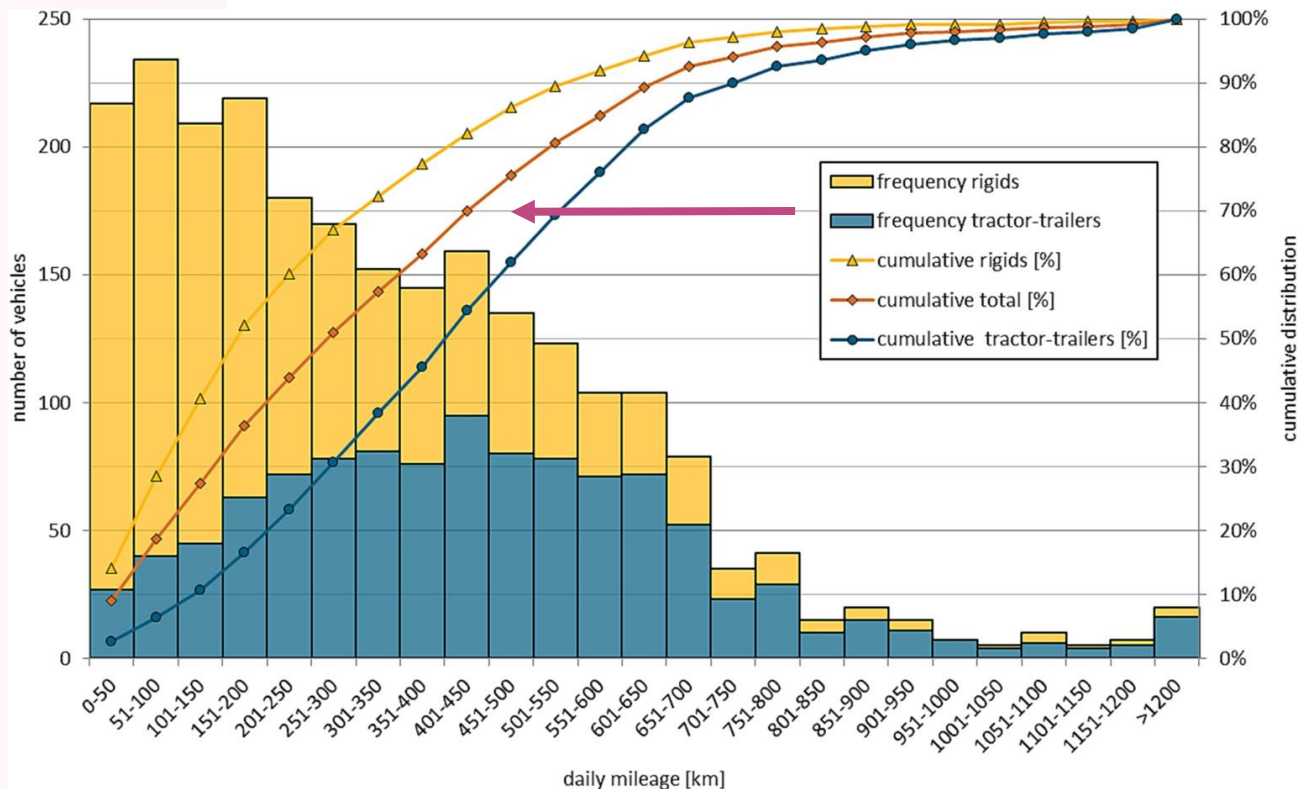
- Zero emission freight zones in 40 cities and communes
- 45% of costs e-trucks can be depreciated
- E-trucks get 80% reduction on the road toll



Charging infrastructure

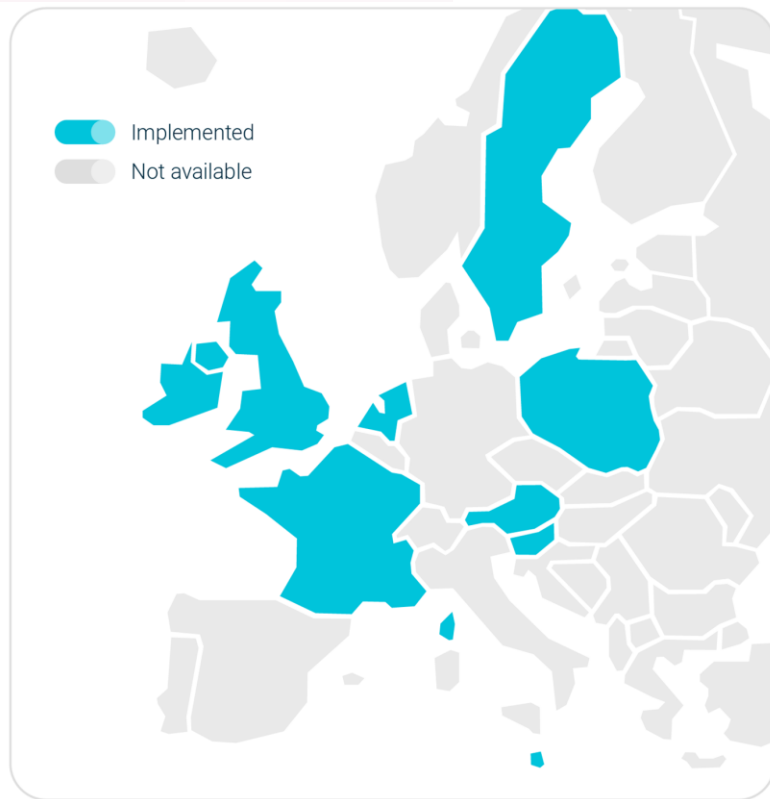
Mix of national and EU measures

How far do trucks drive?



Source: Speth & Plötz, Fraunhofer (2024)

Depot charging - National measures



Source: IRU 2025

BMV specifies procedures for promoting depot stores

The federal government intends to subsidize companies that want to charge their electric trucks at depots and company yards. A corresponding funding guideline is expected in the first half of 2026, as Transport Minister Patrick Schnieder announced last year. DVZ has obtained initial details.

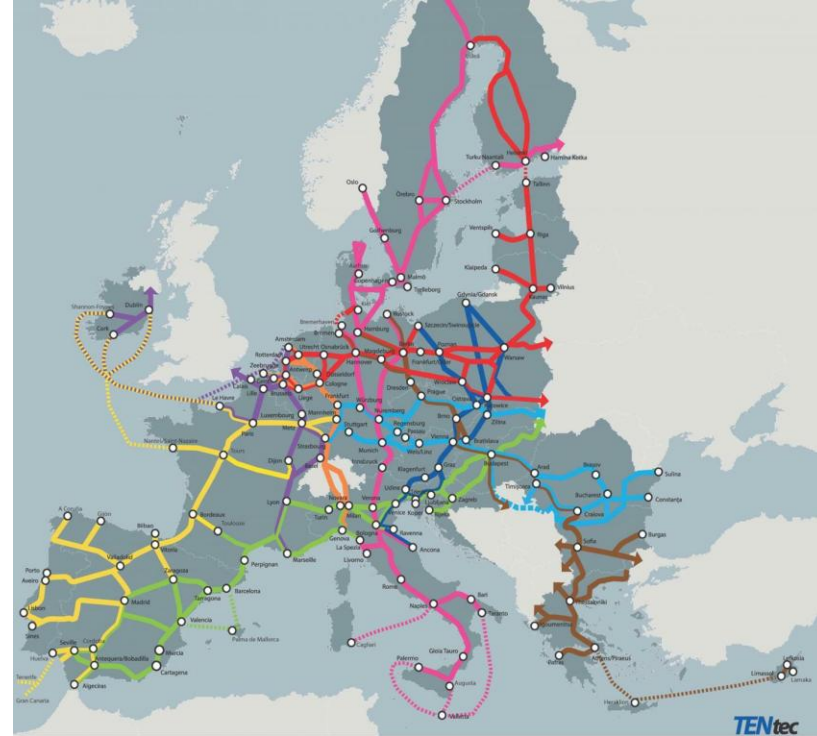
Denmark boosts electric truck fund to €47m

The Danish government has increased funding for its heavy transport electrification scheme. Logistics companies can now apply for up to 4 million Danish kroner (€535k) each to invest in electric trucks and charging infrastructure.

Public charging - EU Alternative Fuel Infrastructure Regulation

Binding targets for EU countries to install charging infrastructure:

- By 2025, 15% of the main motorways needs to be covered, goes up to 50% by 2027
- Max 120 km distance
- Each charging pool must offer approx. 1,400 kW total, min. one ≥ 350 kW charger
- Combined with a new financing scheme *AFIF* that provides grants and favourable loans



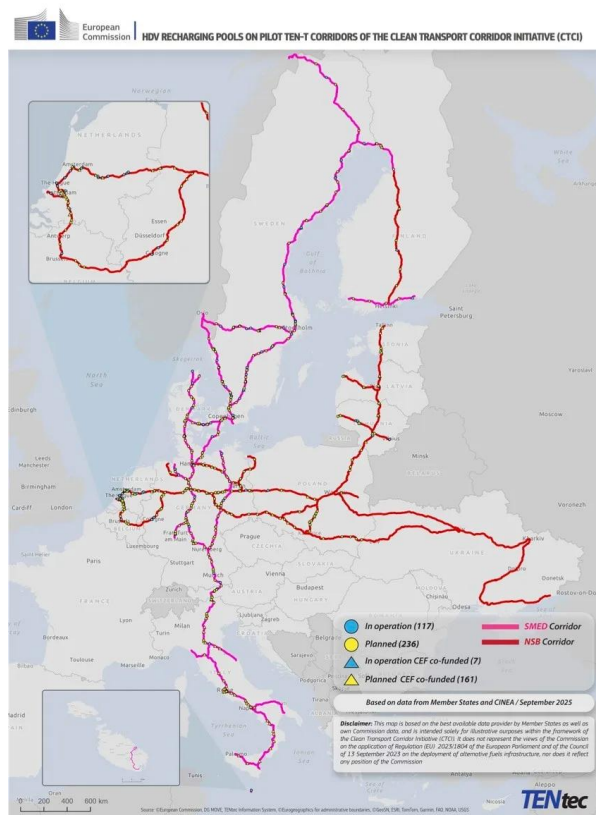
TEN-T corridor & urban nodes, from Directorate-General for Mobility and Transport, European Commission, CC BY-SA 4.0, via Wikimedia Commons

EU Clean Transport Corridor Initiative

- Objective: to fast-track the deployment of HDV recharging pools along key freight corridors
- Focus: two TEN-T Corridors
- Cooperation between nine Member States (high-level engagement)

EU mega-project on cross-border charging corridors for electric trucks

The European Commission and nine EU member states have officially launched the announced “Clean Transport Corridor” initiative to accelerate the roll-out of charging infrastructure for electric lorries along major freight routes. The initial focus is on a North Sea–Baltic route and a Scandinavian–Mediterranean corridor.

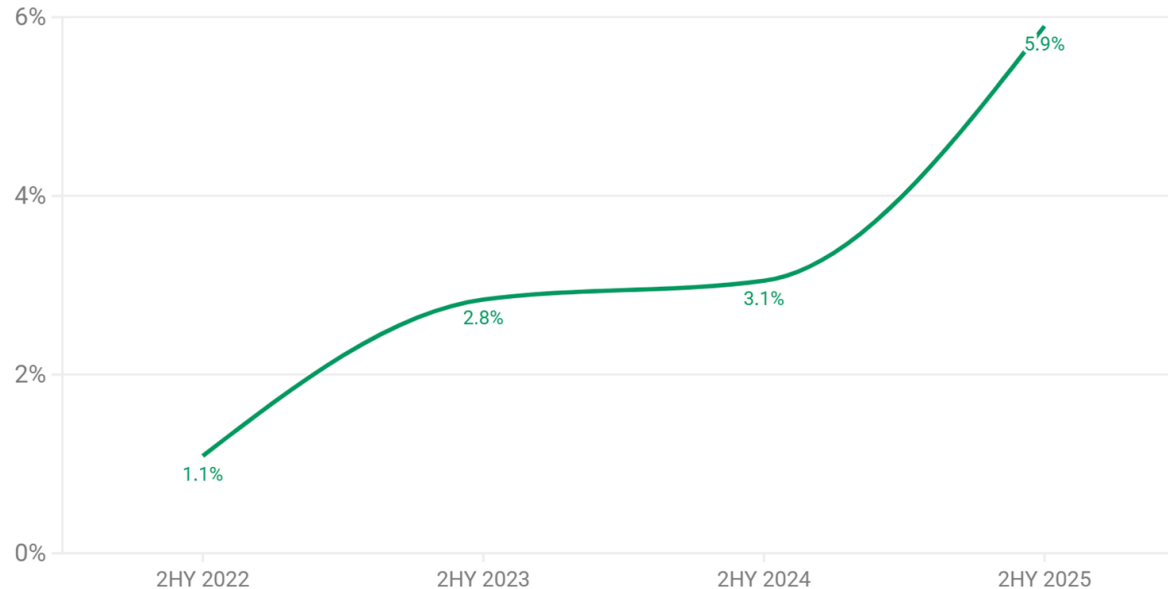


How is the market reacting?

E-truck market is picking up

European e-truck registrations nearly doubled year-over-year (2024 - 2025)

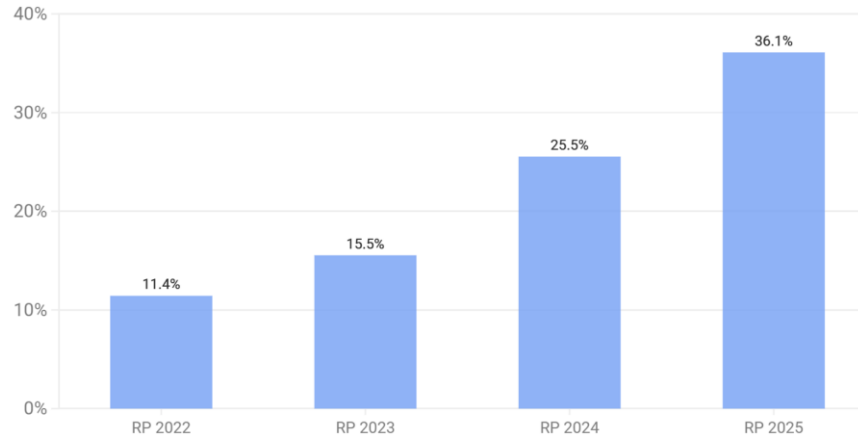
Electric share of new truck sales per reporting period



Source: Dataforce (2026)
EU26 + EEA

Today 1 out of 3 new light trucks in Europe are electric

Electric truck sales share per reporting period



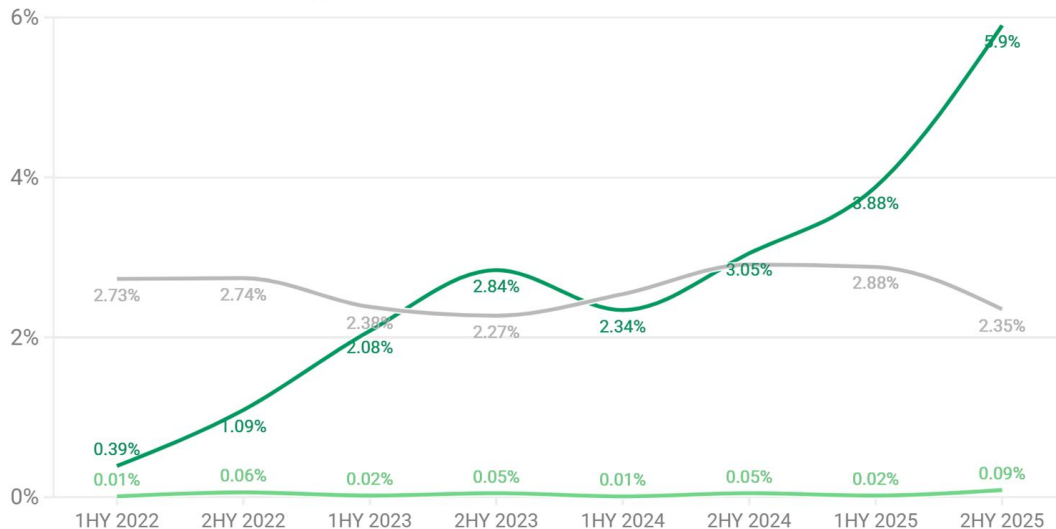
Source: Dataforce (2026) | Vecto Segment 0 (3.5t - 7.4t) - EU26 + EEA

Battery electric trucks are dominant tech, hydrogen is niche

E-truck registrations are leaving gas registrations behind

Electric Gas Fuel cell

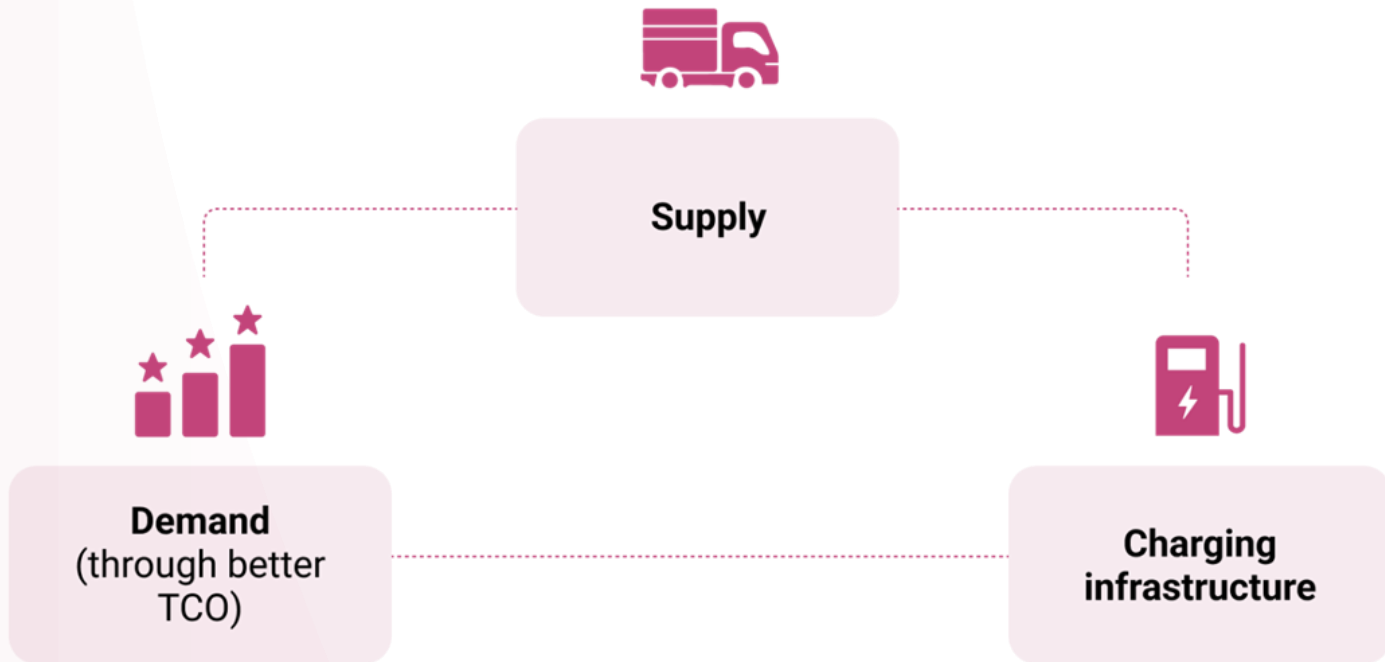
New truck sales share per fuel type



Source: Dataforce (2026)
EU26 + EEA

Main lessons

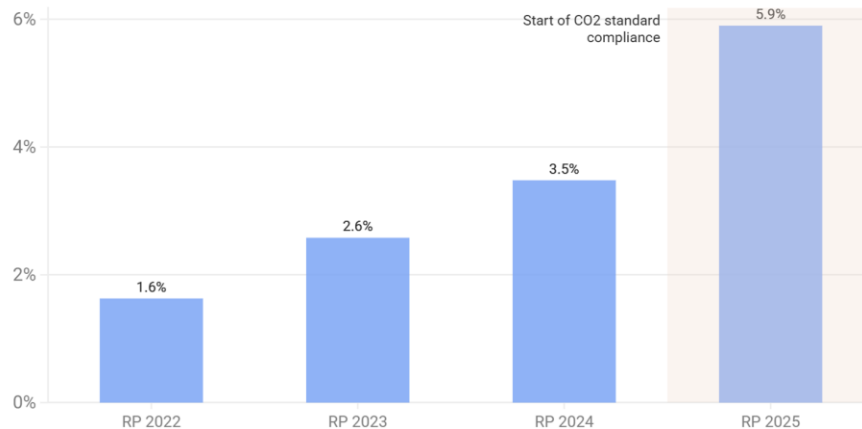
Lesson 1: Focus on all three pillars to avoid a chicken-egg debate



Lesson 2: Supply standards have put everything into motion (and are revenue neutral)

One fourth of European e-truck registrations occurred in reporting year 2025* as EU CO2 target for truckmakers came into effect

Electric truck sales share per reporting period

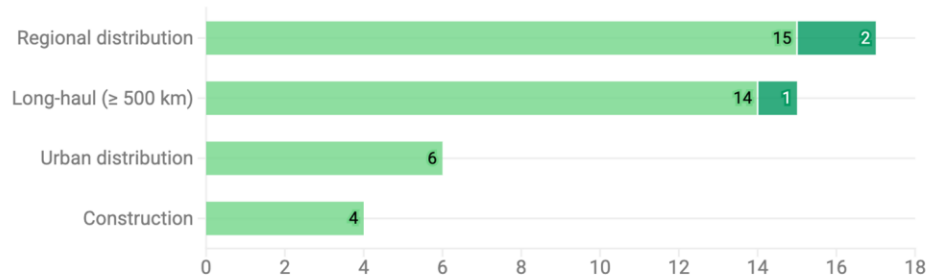


Source: Dataforce (2026)
EU26 + EEA | *Reporting years follow a July-June cycle

Created a new and positive dynamic

More than 40 zero-emission truck models are in series production

BEV FCEV

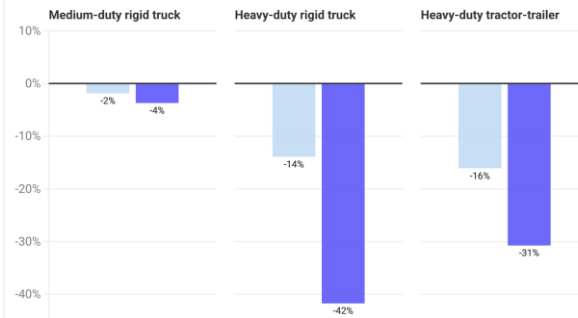


Source: ACEA (2025)



Electric truck prices have dropped since 2023

Vehicle price relative to 2023 in 2024 2025



Source: ICCT (2025)

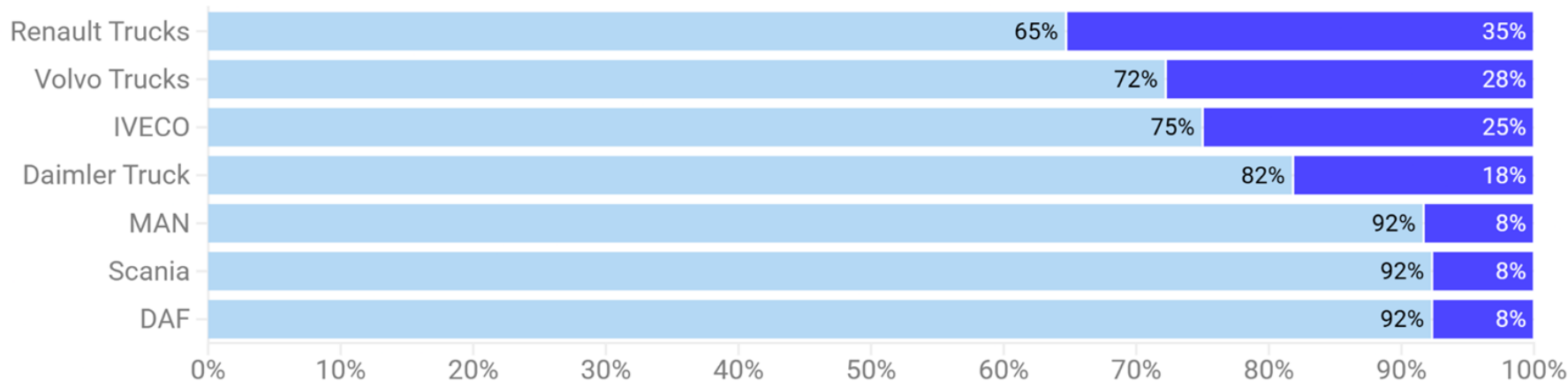


Fuel efficiency/CO2 standards will cause delays and issues

Set a zero emission sales target instead (UK approach)

Truck CO2 reductions between 2019 and 2023

CO2 reductions due to ICE efficiency improvements Increased zero-emission sales



Source: ICCT (2025) Within Reach – The 2025 CO2 targets for new heavy-duty vehicles in Europe. Figure 1.

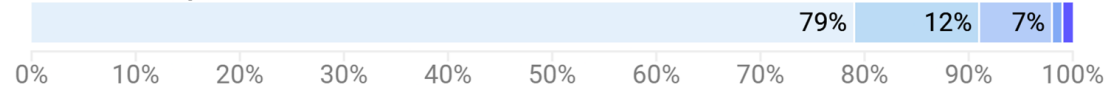
Lesson 3: Smart financing tools are key (especially in early market adoption phase)

To increase social acceptance

80% of transport companies have between one and nine trucks

1-9 trucks 10-19 20-49 50-99 100+

Share of companies



ETS 2 frontloading: EIB moves to mobilize EUR 3 billion

The European Investment Bank is mobilizing EUR 3 billion to support the decarbonization of buildings and transportation, frontloading ETS 2 revenues to help citizens transition to carbon-neutral alternatives.

Truck toll raises €1.6 billion for sustainability and innovation

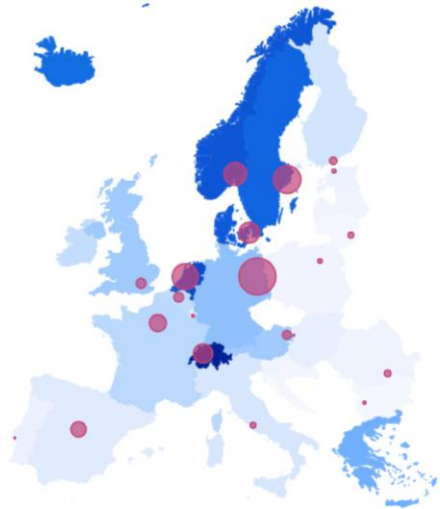
News item | 04-10-2024 | 15:30

From 2026 to 2030, more than €1.6 billion will be available for the sustainability and innovation of the transport sector. This is due to the introduction of the truck toll. The net proceeds from the truck toll will be invested in the sector.

To support the charging infrastructure industry (who has to invest ahead)

Charging providers deploy infrastructure where e-trucks are

Share of electric trucks in 2025 0%  25%
Number of charging points dedicated to HDVs 150  500



Source: Dataforce (2026), EAFO (2025), Eco-Movement (2025)

421 million euro of AFIF funding went HDV charging infrastructure:

- 213 million euro in the first call, funding >1,000 CCS points and 600 MCS points
- 208 million euro in the second call, for >2,000 CCS points and ~600 MCS points

€70 million funding for European megawatt charging network from E.ON, Voltix and GreenWay

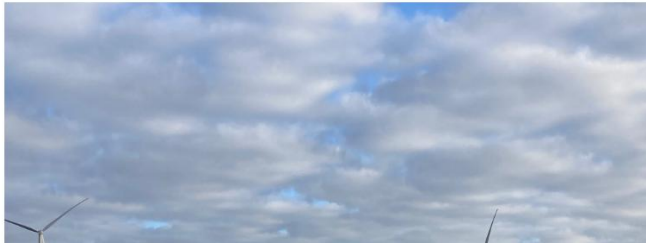
Lesson 4: Battery storage can become key tech to overcome grid bottlenecks

DutchNews 10 FEBRUARY 2026

News Life in the Netherlands Jobs Podcast About us

14,000 companies wait for a new Dutch power grid connection

October 6, 2025



Battery energy storage systems (BESS) saw the sharpest price declines, with average global prices in 2025 falling to one-third of levels seen in 2020.

Lesson 5: EU e-truck policies are bringing new investments to Europe

*But more can be done:
Climate and industrial policy
should go hand in hand*

11-04-2025

MAN invests half a billion euros in Nuremberg

[Commercial Vehicles](#)

E-truck developer Windrose sets up shop at Port of Antwerp-Bruges

Automotive News Europe

A CRAIN FAMILY BRAND

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EU will propose 70% local content rules for EVs to qualify for incentives, report says

Lesson 6: Purchase grants can help but bear risks too

After just one day, the subsidy fund for purchasing e-trucks is almost sold out again

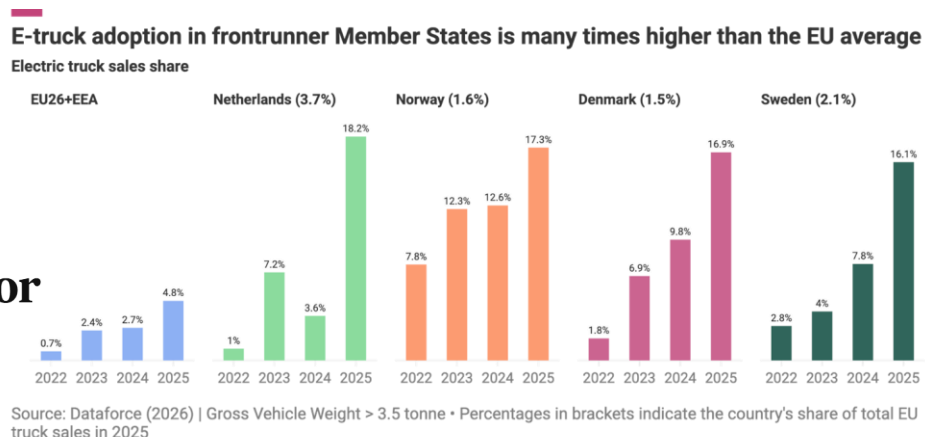
MASSIVE REQUESTS

One day after the counter for the Aanzet subsidy opened, only 4% of the available budget remains.

AUTOMOTIVE SECTOR >

Spain to provide up to €4,000 in subsidies for purchase of a new car

And the total purchase price of the vehicle cannot be in excess of €35,000



Work through smart fiscality

Concluding message

2016

ACEA Position Paper

Reducing CO₂ Emissions from Heavy-Duty Vehicles

EMPOWERING CUSTOMERS,
STRENGTHENING MARKET FORCES AND
WORKING IN AN INTEGRATED APPROACH

JANUARY 2016

The total HDV CO₂ reduction potential for vehicle-related measures via an integrated approach is estimated at 5.05% for long haul and 4.56% for regional delivery by 2020.

For city-bus applications biodiesel, natural gas and **electricity** are gaining importance.

2026

SCANIA

7 myths about electric trucks – busted

It's time to dispel some of the most common misconceptions about electric trucks.

Daimler Truck celebrates series launch of the Mercedes-Benz eActros 600 for long-distance haulage in Würth

“With a range of 500 kilometers on a single battery charge, our eActros 600 is addressing the long-haul segment in Europe. Our battery-electric long-haul truck will therefore make a real difference.” Karin Rådström, CEO of Daimler Truck

Thank you for your attention!

stef.cornelis@transportenvironment.org

2016

Amended paper (August 2018) originally presented in:
8th Commercial Vehicle Workshop,
Graz, 17-18 May 2018

Analysis of long haul battery electric trucks in EU **Marketplace and technology, economic, environmental, and policy perspectives.**

Thomas Earl*, Lucien Mathieu, Stef Cornelis, Samuel Kenny, Carlos Calvo Ambel, James Nix
European Federation for Transport and Environment (T&E)

**corresponding author:* email: thomas.earl@transportenvironment.org

The Scania logo, consisting of the word "SCANIA" in white, bold, sans-serif capital letters on a dark blue rectangular background.

7 myths about electric trucks – busted

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Today

EU cannot afford to pause zero-emission heavy-duty charging deployment

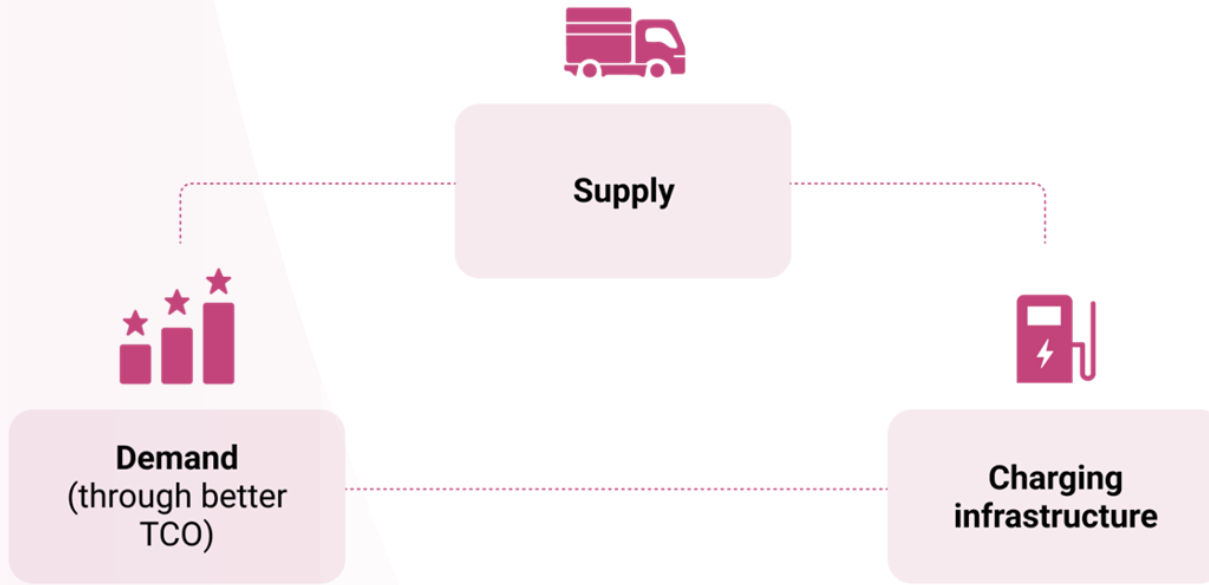
IRU, ACEA and T&E urge the European Commission to ensure continuity of EU funding for heavy-duty vehicle charging and hydrogen refuelling infrastructure, warning that a break in support in 2026–2027 would risk slowing the deployment of zero-emission vehicles.

BMV specifies procedures for promoting depot stores

The federal government intends to subsidize companies that want to charge their electric trucks at depots and company yards. A corresponding funding guideline is expected in the first half of 2026, as Transport Minister Patrick Schnieder announced last year. DVZ has obtained initial details.

Regulations create markets and investment certainty

Stick & carrot approach





Thank you!



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**FREIGHT
FORWARD**

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Australia's National Summit on Commercial Vehicle Decarbonisation

Monday 30 March, 2026 | 10am-
4pm

The Great Hall, Parliament
House, Canberra, ACT

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Supply:

Key cornerstone to get the market moving

Charging:

Get ahead of the game on grid planning

Also here supply standards help as TSOs and DSOs can plan

Blending of public and private money works

Demand:

Road pricing and tolling are effective but require smart political approach

Earmark share of revenues for sector can increase acceptance