



FEDERCHIMICA
AISPEC **GAIL**
GRUPPO AZIENDE INDUSTRIALI
DELLA LUBRIFICAZIONE

LUBE DAY 2026

Il futuro dei lubrificanti tra intelligenza artificiale
e transizione energetica.



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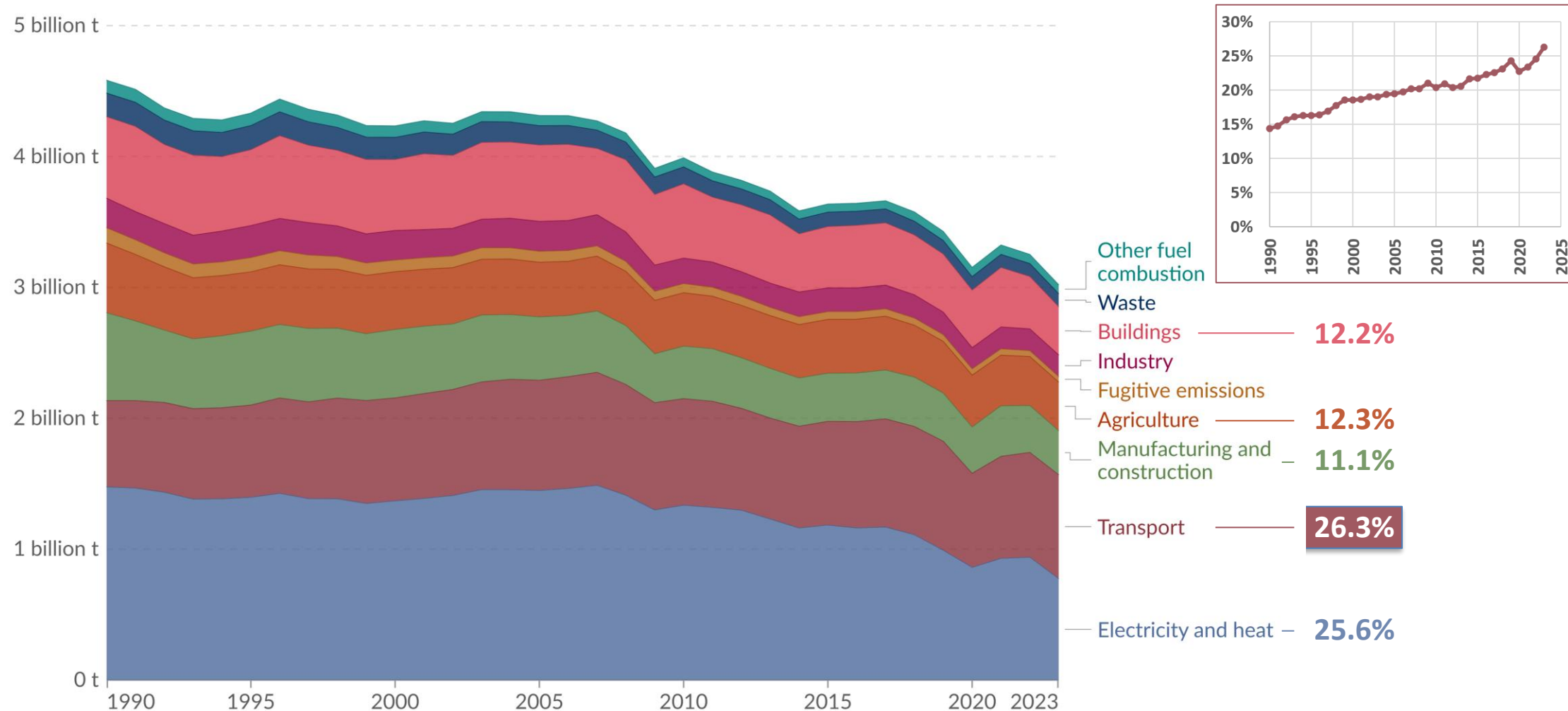
DIPARTIMENTO DI ENERGIA

Automotive europeo: *una prima apertura ai carburanti rinnovabili?*

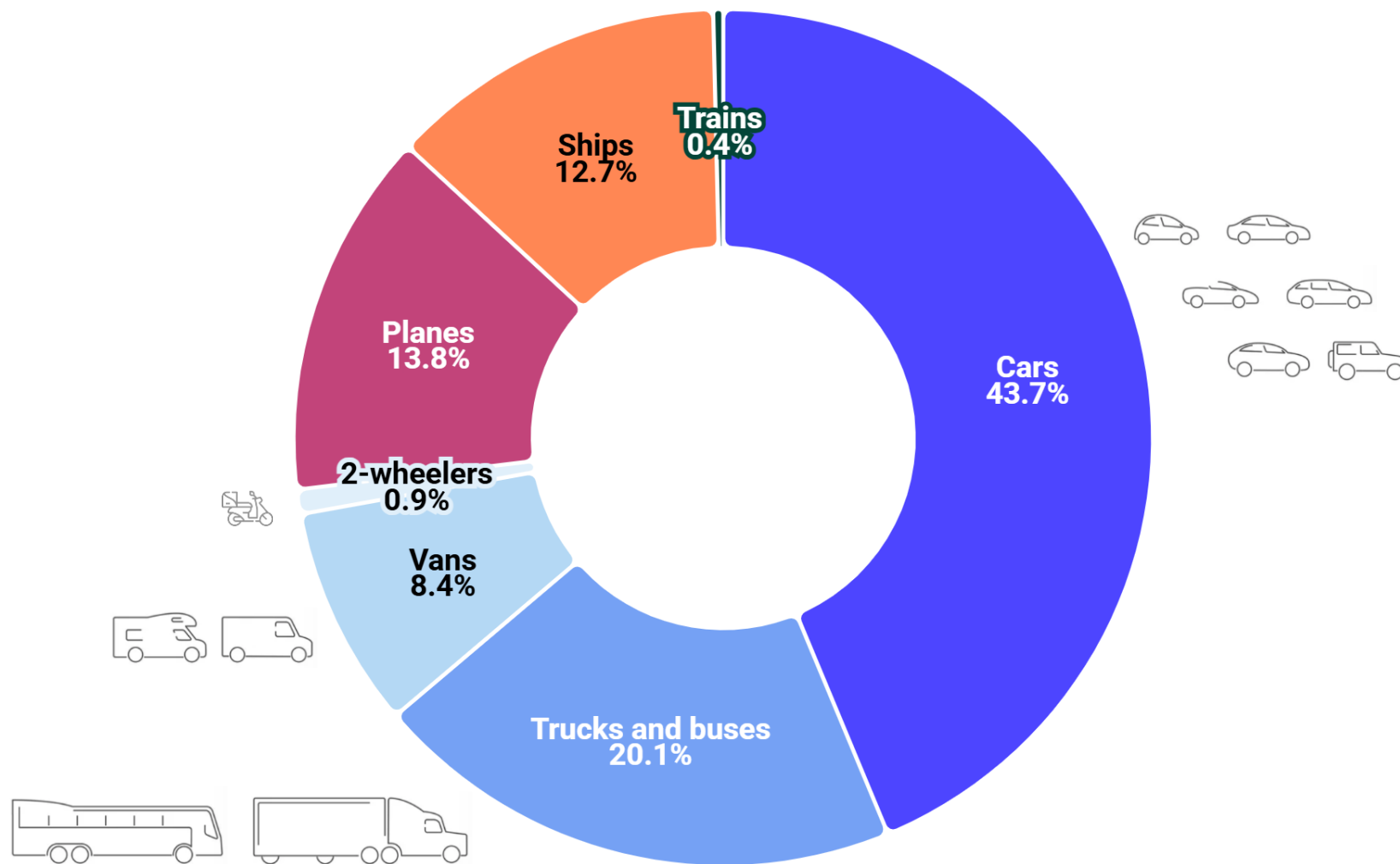
Prof. Carlo Giorgio Visconti

Milano, 14.10.2026

Greenhouse gas (GHG) emissions by sector in EU: *transport accounts for over 26% of all EU GHG emissions*



Road vehicles cause 75% of GHG emissions from EU transport: *cars are the main contributors, followed by trucks+buses*

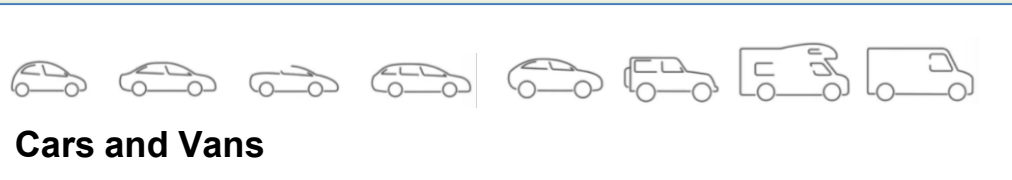


MtCO₂e 2024

EU asks to reduce CO₂ emission of all road vehicles: Annual average emission targets of each manufacturer

**LUBE DAY
2025**

Regulation (EU) 2019/631 and following amendments:



Cars and Vans

targets based on the WLTP emission test procedure

2025 to 2029 (Commission Implementing Decision (EU) 2023/1623):

Cars: 93.6 g_{CO2}/km (-15% wrt 2021 avg. emissions)

Vans: 153.9 g_{CO2}/km (-15% wrt 2021 avg. emissions)

2030 to 2034 (Regulation (EU) 2023/851):

Cars: 49.5 g_{CO2}/km WLTP (-55% wrt 2021 avg. emissions)

Vans: 90.6 g_{CO2}/km WLTP (-50% wrt 2021 avg. emissions)

2035+ (Regulation (EU) 2023/851):

Both cars and vans: **0 g_{CO2}/km** (-100% wrt 2021 avg. emissions)

Regulation (EU) 2024/1610:



lorries > 16 t

2025

Reduction wrt 2019

-15%

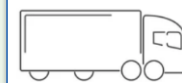


lorries > 5 t

2030

> 16 t: reduction wrt 2019
> 7.5 t: reduction wrt 2021
> 5 t and coaches, trailers:
reduction wrt 2025

-45%



lorries > 7.5 t

2035

-65%



**lorries > 16 t
+ trailers**

2040

-90%



coaches

EU asks to reduce CO₂ emission of all road vehicles: *Annual average emission targets of each manufacturer*

**LUBE DAY
2025**

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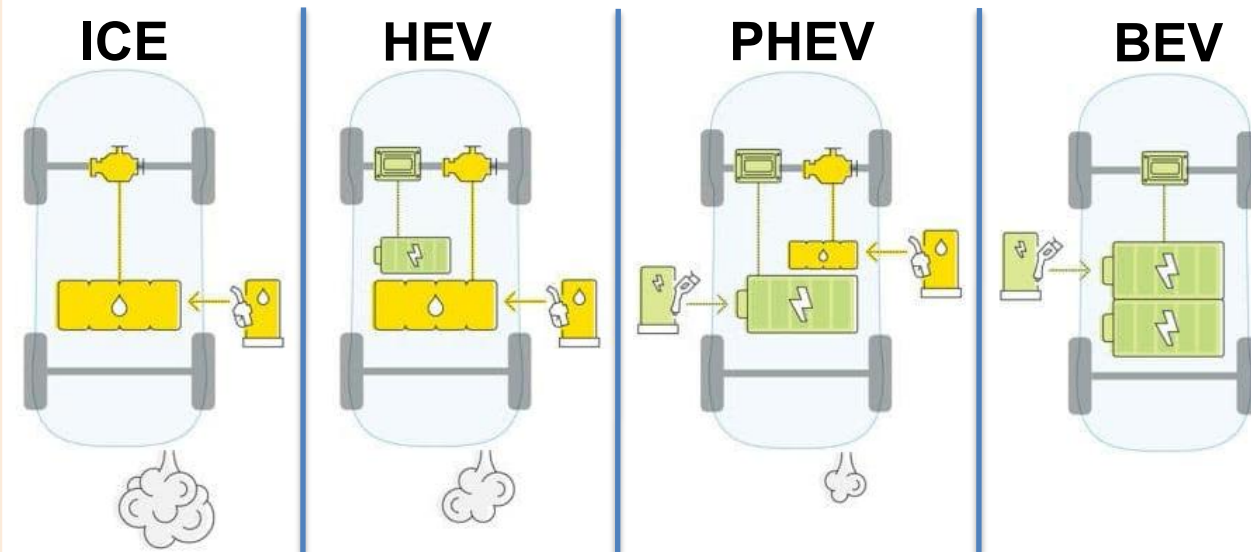
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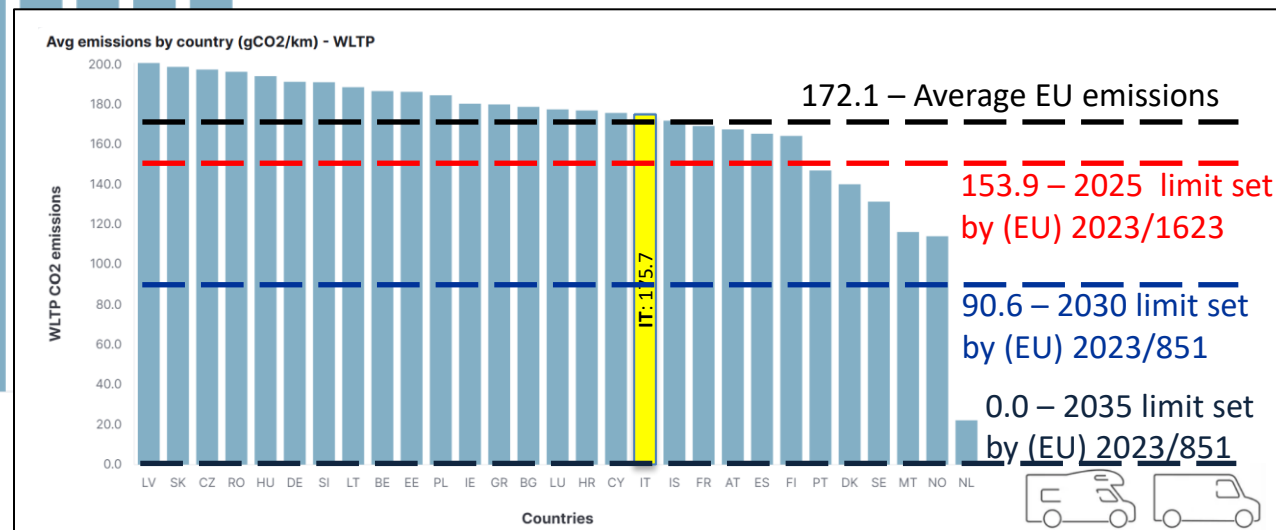
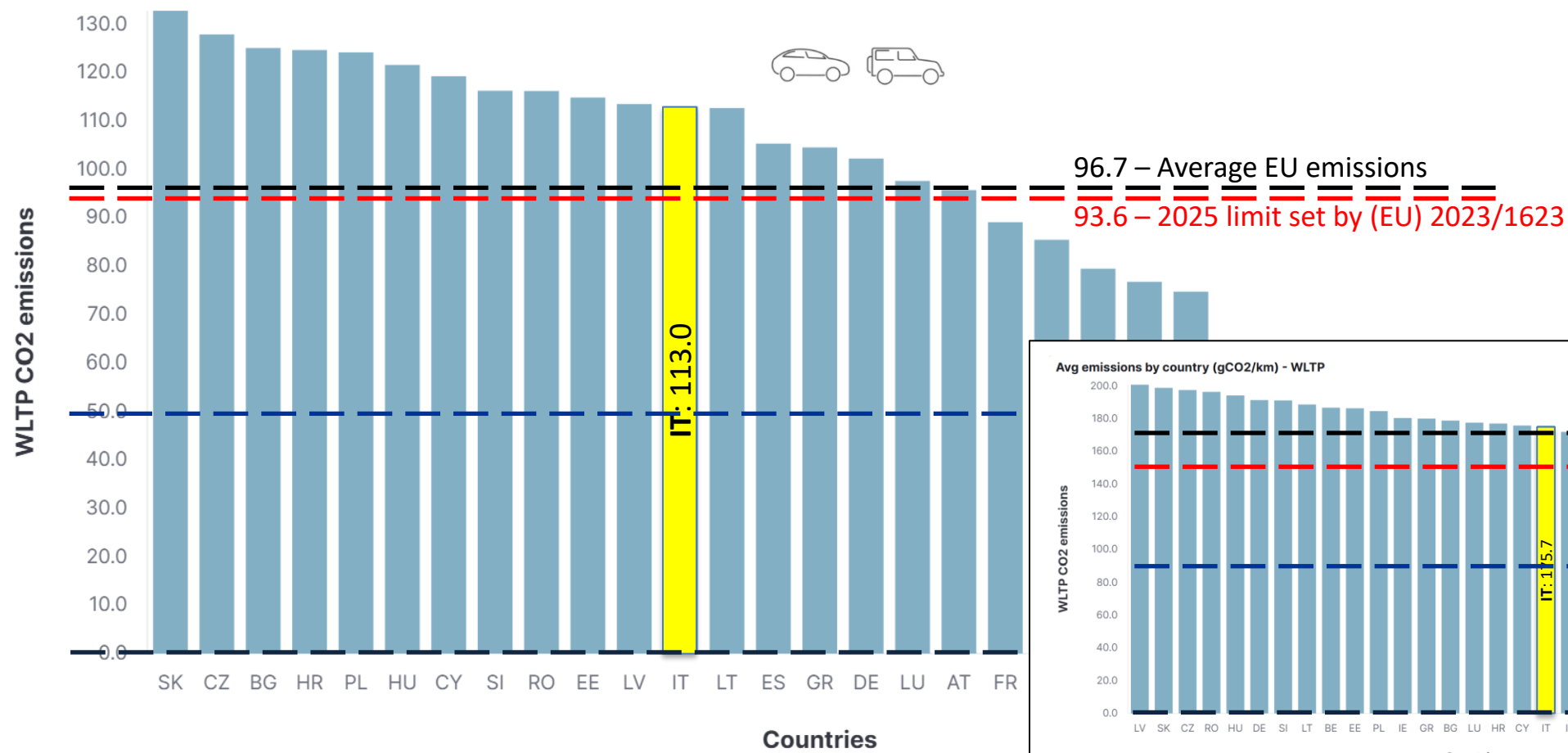
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Both cars and vans: **0 g_{CO2}/km** *(-100% wrt 2021 avg. emissions)*



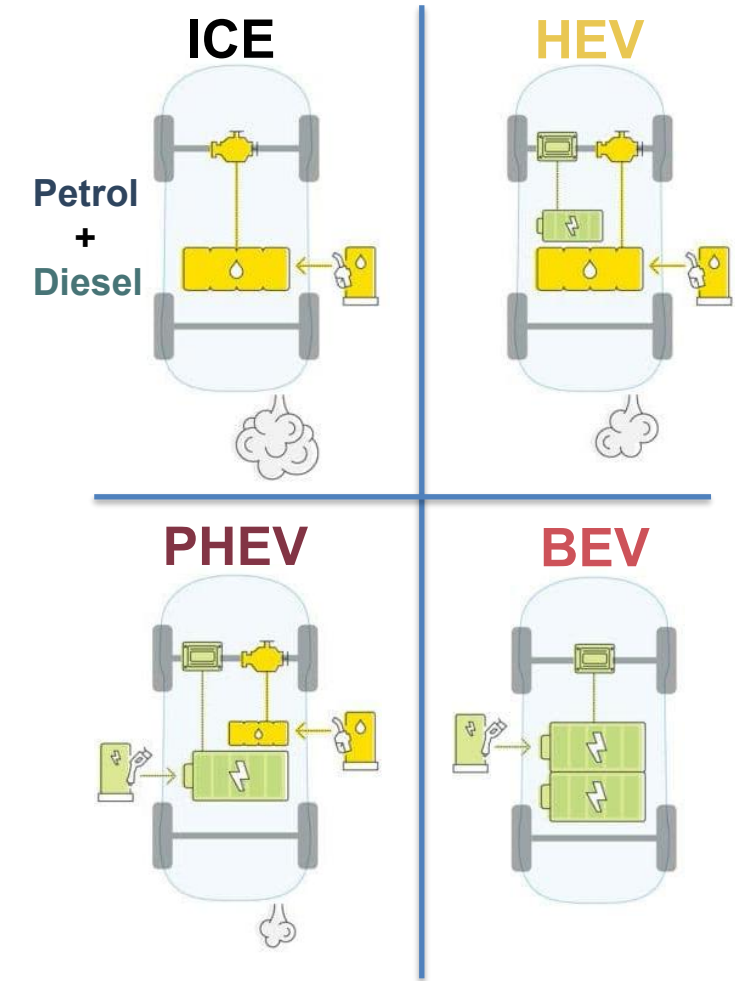
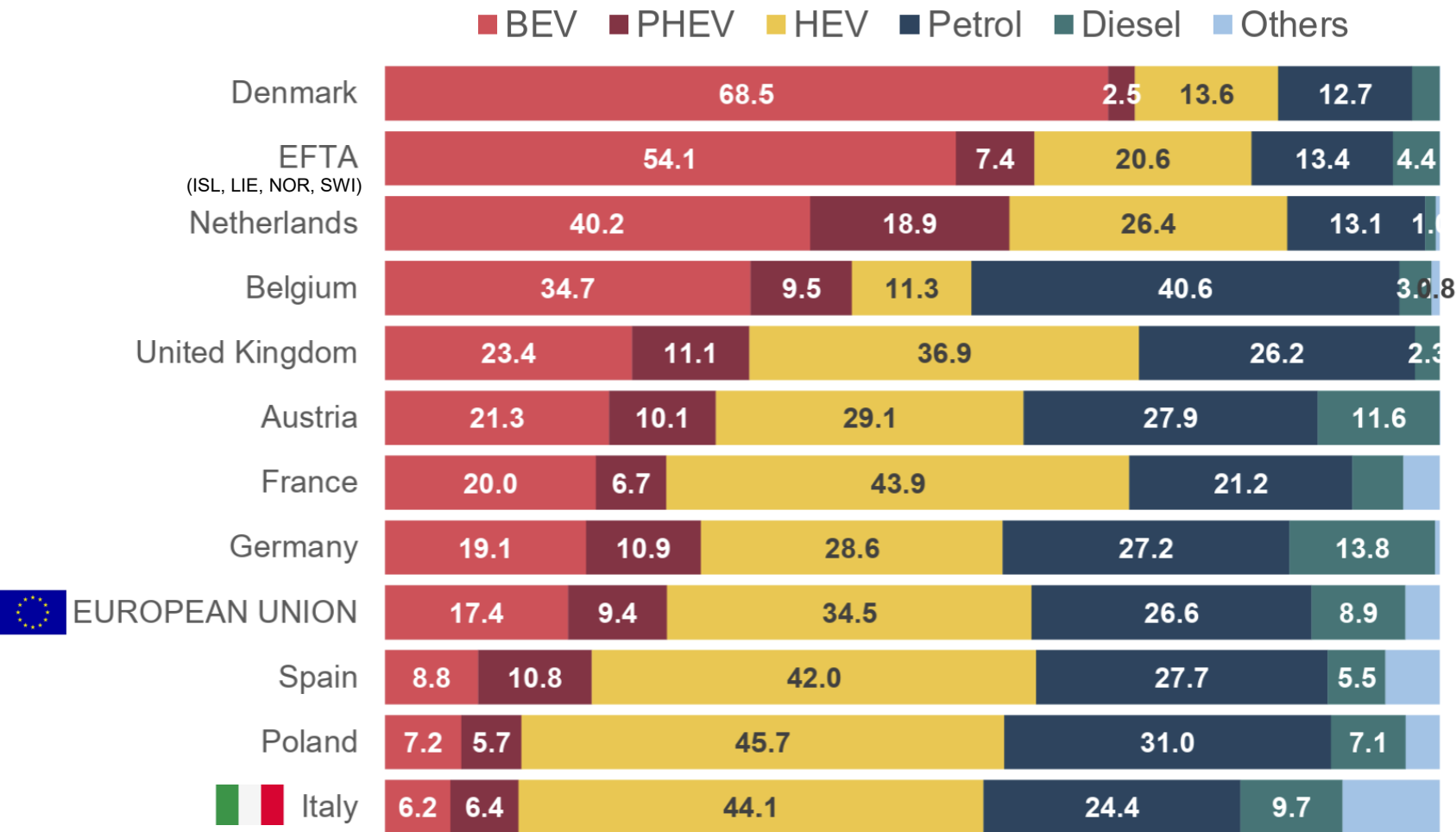
Average WLTP CO₂ emissions of newly registered vehicles across European Countries (+IS* and NO*) in 2025: *cars and vans*

Avg emissions by country (gCO₂/km) - WLTP



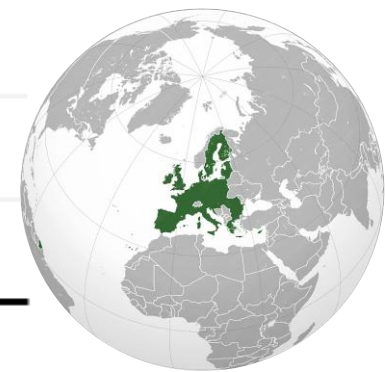
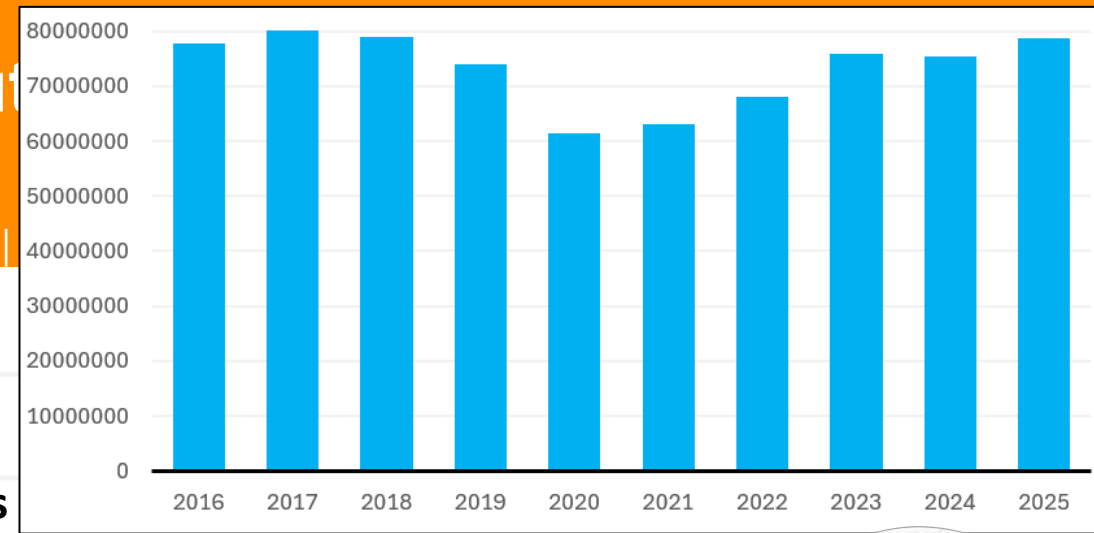
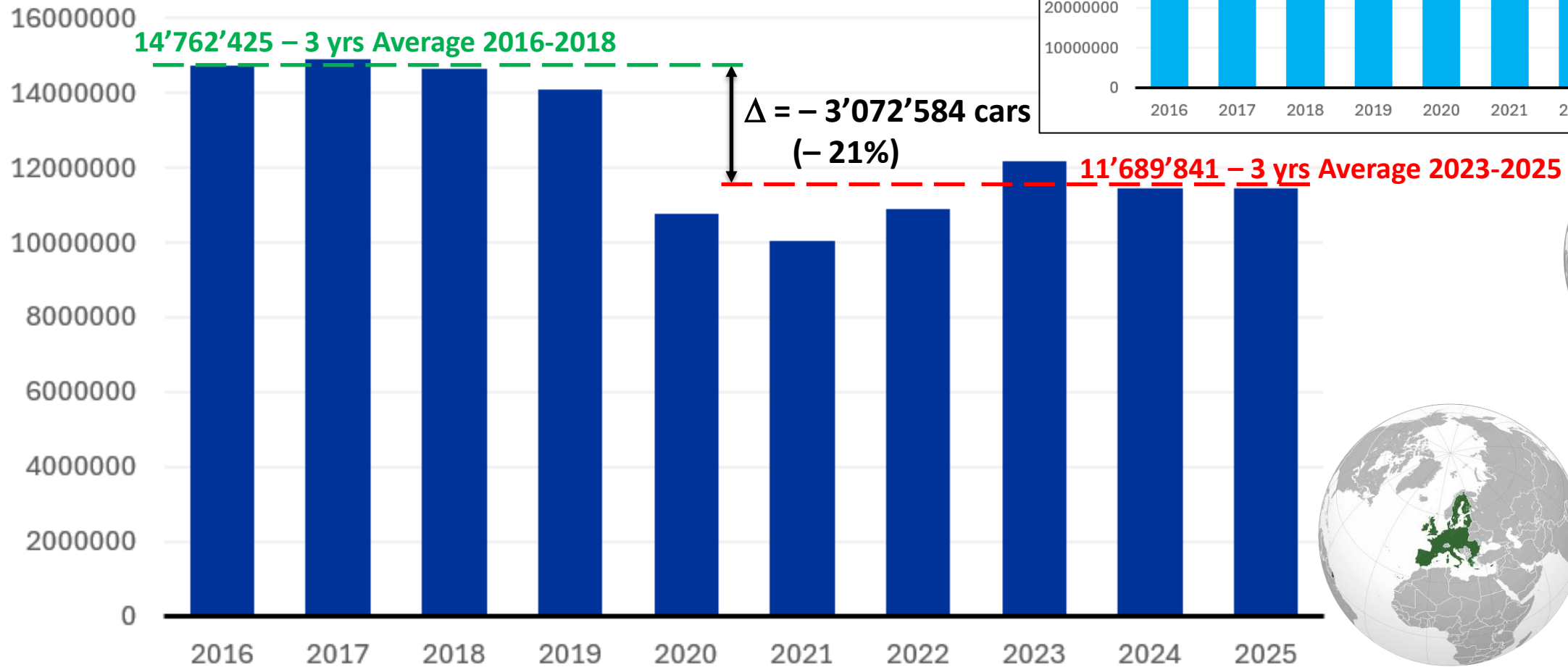
What is happening to the European automotive industry?

New car registrations by power source, 2025



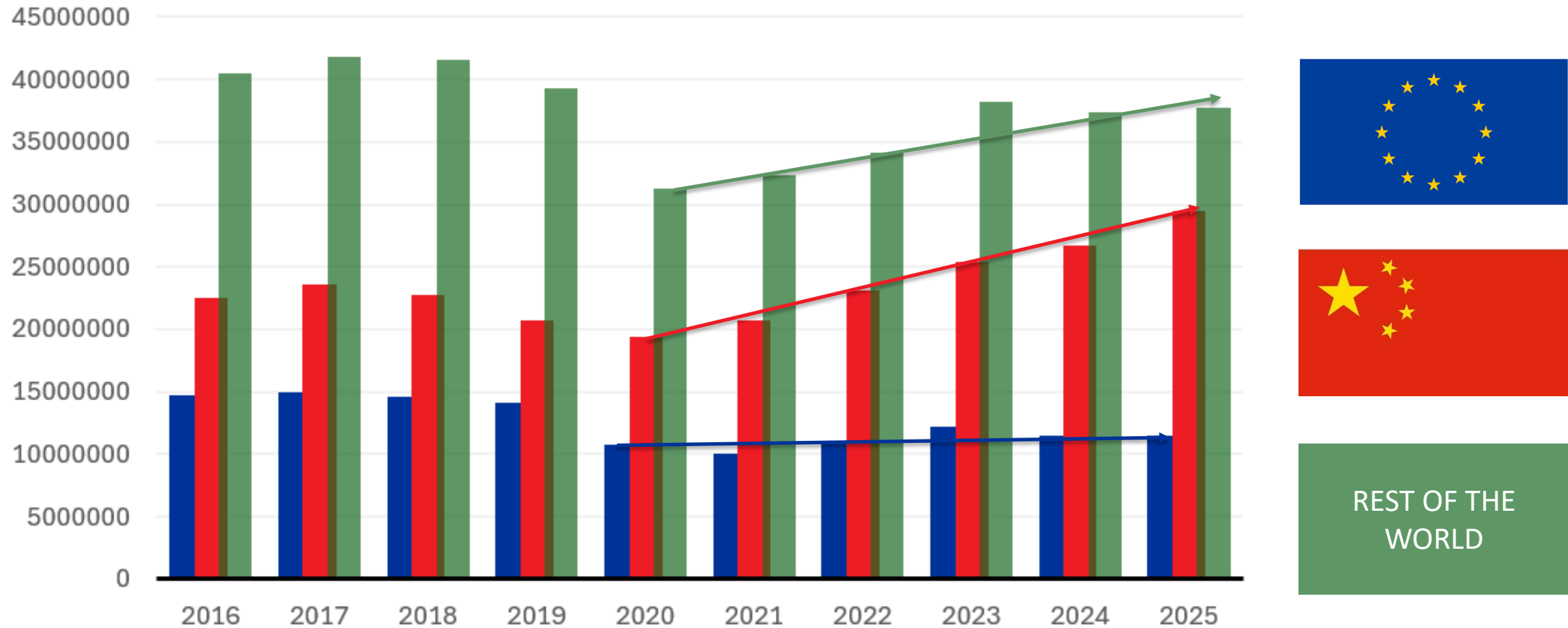
What is happening to the European auto

Car production in the EU, 2016-2025



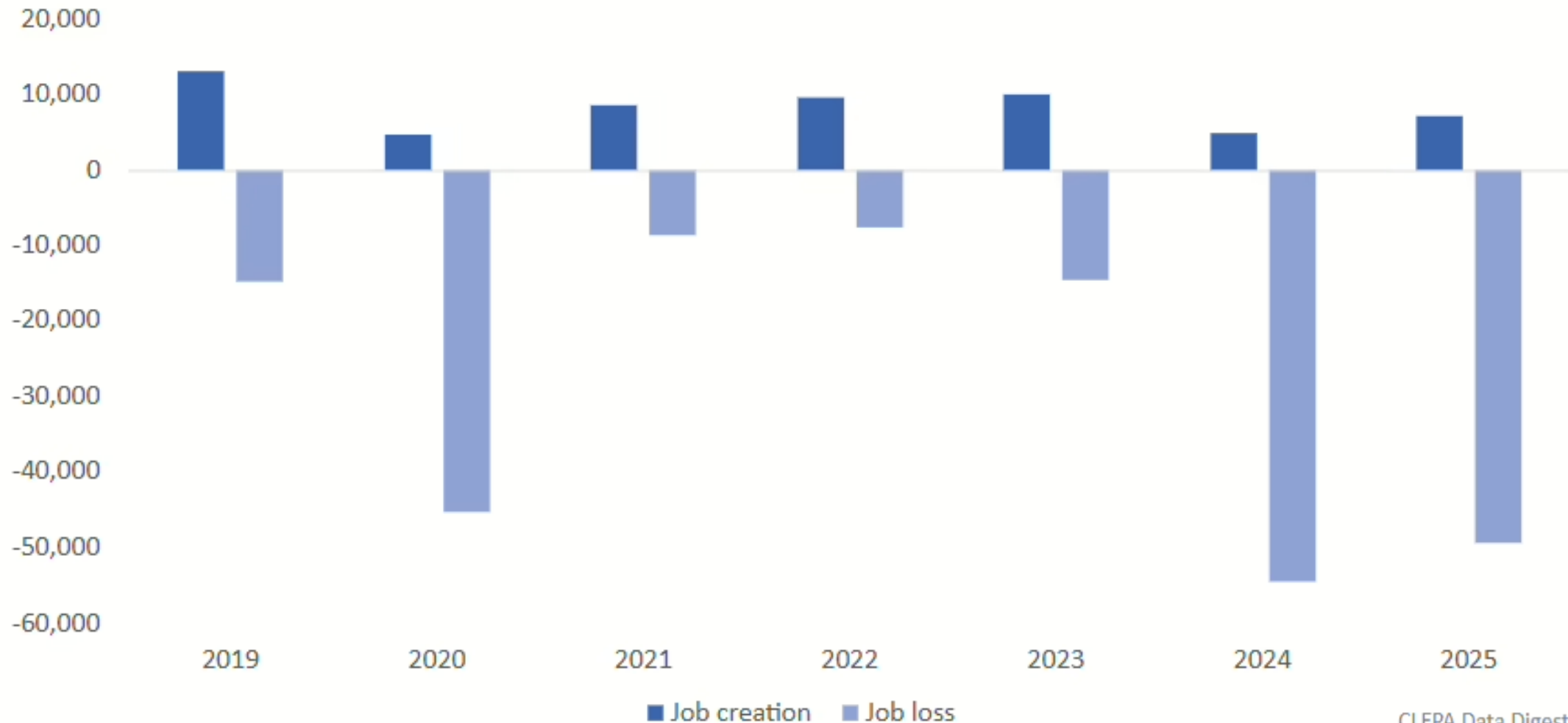
What is happening to the European automotive industry?

Car production in the EU, CN and rest of the world 2016-2025



What is happening to the European automotive industry?

100'000 job cuts in EU in the last 2 years (2024 + 2025)



CLEPA Data Digest #24 – January 2026

How is the EU responding to the automotive crisis?

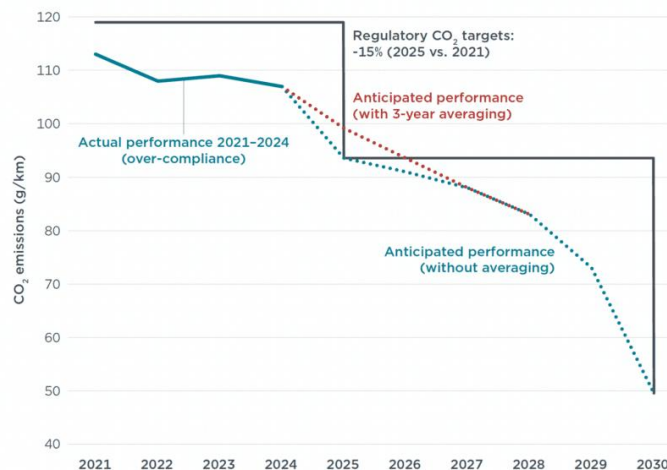
Let's discuss two actions it has taken in the last 24 months.

30.01.2025: “*Strategic dialogue on the future of the automotive industry*” launched by Ursula von der Leyen



Consequence 1: on **19.6.2025**, with Regulation (EU) 2025/1214 amending Regulation (EU) 2019/631, EU adopted the **3-year CO₂ emissions averaging mechanism**

Manufacturers can comply with their obligations for the years 2025, 2026 and 2027 by **averaging their performance over the three-year period**, rather than each individual year.



Consequence 2: on **16.12.2025**, the EU Commission presented a **new Automotive Package** (COM(2025)993, COM(2025)999, C(2025)8950, SWD(2025)1056)

2030-2034 (Regulation (EU) 2023/851, amending (EU) 2019/631):
Cars: ~~49.5 g_{CO2}/km WLTP~~ (-55% wrt 2021 avg. emissions)
Vans: ~~90.6 g_{CO2}/km WLTP~~ (-50% wrt 2021 avg. emissions)
108.7 **-40%**

2035+ (Regulation (EU) 2023/851):
Both cars and vans: ~~0 g_{CO2}/km~~ (-100% wrt 2021 avg. emissions)
11.0 cars, 18.1 vans **-90%**

...with the **remaining 10% eligible for compensation through e-fuels + bio-fuels (3% max)**, and **low-carbon steel made in EU (7% max)**

Low-C credits for each car manufacturer in EU

How to compute them?

$$LCS\ Credit_{manufacturer} \left[\frac{g_{CO_2,e}}{km} \right] = \frac{LCS_{manufacturer} [t_{STEEL}] \times GHG\ saving_{LCS} \left[\frac{g_{CO_2,e}}{t_{STEEL}} \right]}{cars\ sold_{manufacturer} \times 240'000\ km}$$



$$LCF\ Credit_{manufacturer} \left[\frac{g_{CO_2,e}}{km} \right] = \frac{LCF_{in\ EU\ cars} [MJ_{FUEL}] \times GHG\ saving_{LCF} \left[\frac{g_{CO_2,e}}{MJ_{FUEL}} \right]}{cars\ sold_{manufacturer} \times 240'000\ km}$$



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...with the **remaining 10% eligible for compensation through e-fuels + bio-fuels (3% max)**, and low-carbon steel made in EU (7% max)

3% max does not change the EU scenario!

What about VEEF, Vehicles running Exclusively on Eligible Fuels?

19.04.2023: REGULATION (EU) 2023/851 (revising emission targets from 2030)

(11) Following consultation with stakeholders, the Commission will make a proposal for registering after 2035 vehicles running exclusively on CO₂ neutral fuels in conformity with Union law, outside the scope of the fleet standards, and in conformity with the Union's climate-neutrality objective.

16.12.2025: AUTOMOTIVE PACKAGE

07.05.2026: Draft report proposing 45 amendments to Regulation (EU) 2019/631. The most significant amendment is the introduction of **VEEF** as a new category of zero-emission vehicles

European Parliament
2024 - 2029



Committee on the Environment, Climate and Food Safety

06/05/2026

AMENDMENTS: 45

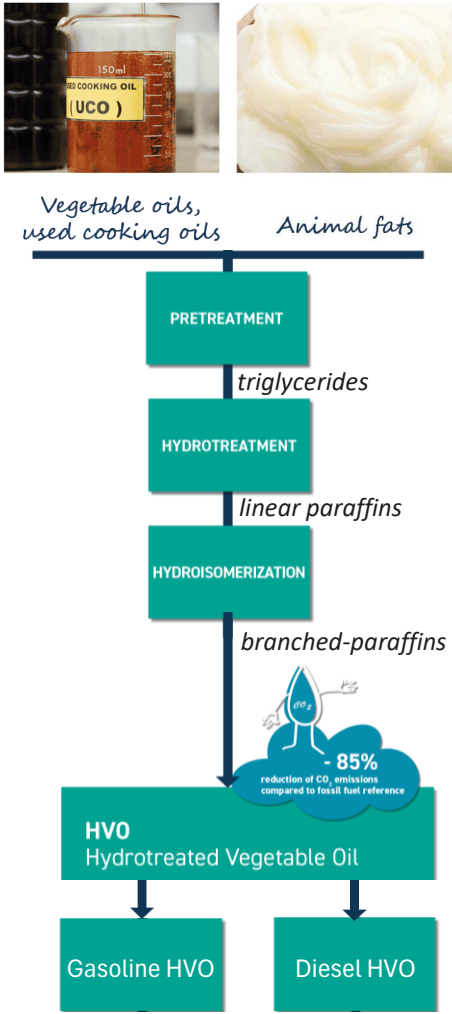
Massimiliano Salini
Amending Regulation (EU) 2019/631 as regards CO₂ emission performance standards for new light duty vehicles and vehicle labelling and repealing Directive 1999/94/EC

Proposal for a regulation COM(2025)0995 - 2025/0420(COD)

Amendment (11a) The Commission proposal refers to biofuels and e-fuels, but confines their role to a capped, post-2035 compensatory mechanism. It also lacks a clear regulatory signal to enable the full deployment of renewable fuels, despite their relevance for the decarbonisation of road transport. To address that gap, **a dedicated category for vehicles running exclusively on eligible fuels (VEEF) should be introduced, ensuring proper recognition of their decarbonisation potential. For the purposes of this Regulation, such vehicles should be classified as zero-emission, contributing to manufacturers' targets through the attribution of a zero tailpipe emission value, equivalent to battery electric vehicles.** The establishment of such a category would foster innovation while reinforcing both competitiveness and sustainability in the Union.

What about the availability of Eligible Fuels in EU?

Gasoline HVO is available now together with diesel HVO in Spain.

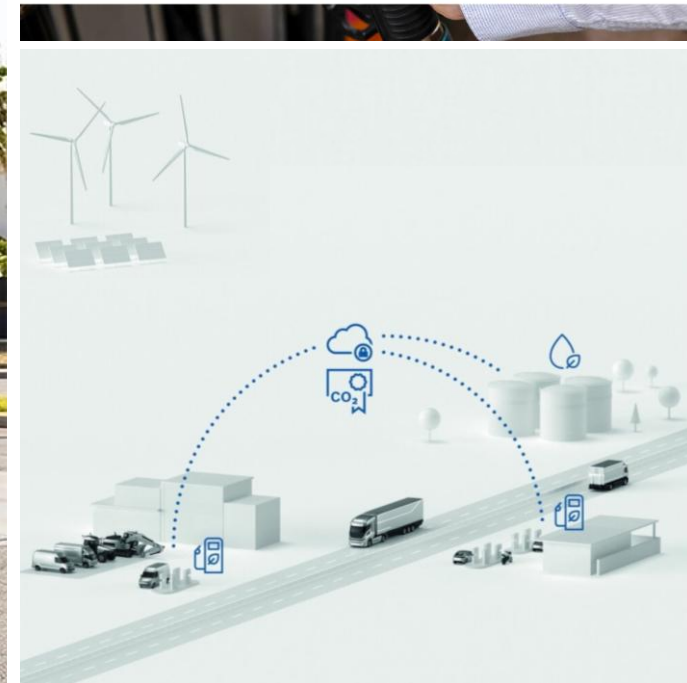


Diesel (B7)	Diesel HVO (XTL)	gasoline (E5)	Gasoline HVO (E10)	LPG
Fossil diesel +7% FAME max	100% diesel HVO	Fossil gasoline + 5% ethanol max	gasoline HVO + 10% ethanol max	

What about the possibility of “managing” VEEF in EU?

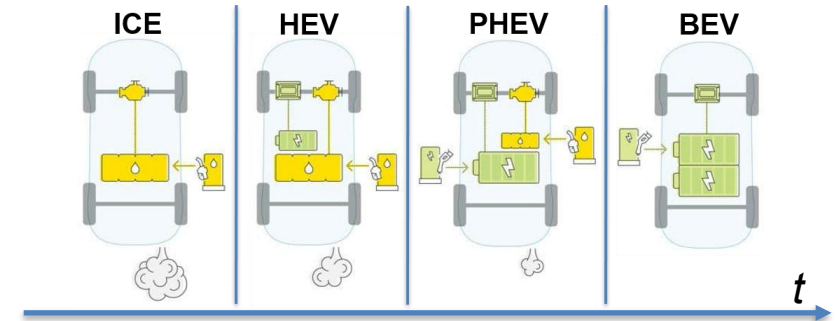
July 2026: 6 months real-world pilot project launched with VEEF

Need to reliably track and verify the eligible fuels from the moment they enter the market right down to the end consumer. 20 BMW (incl. MINI) and Toyota (incl. Lexus) cars, Repsol NEXA 95 renewable gasoline, Bosch’s advanced “digital fuel twin” tracking (*AI-supported?*) technology.



European automotive industry: *a first opening to renewable fuels?*

- The **progressive electrification** of the automotive market **will continue**, **but it cannot be the sole solution** for achieving the EU's ambitious climate goals while preserving its automotive industry.



- The **Automotive Package does not go far enough to create a viable market for e-fuels and bio-fuels**. Limiting their contribution to 3% of the 2035 target would fail to provide the long-term demand signal investors need to finance new production plants.

- Introducing a **VEEF category is therefore essential** to establish a clear regulatory framework and create the market certainty needed to mobilise investment.



CONTACTS



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AND CATALYTIC
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Offsetting CO₂ emissions with renewable fuels

Why do e-fuels and bio-fuels reduce GHG emissions?

