

BRIEFING

Are new electric entrants serious competition for European truckmakers?

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Summary

European truckmakers face increasing competition as new players enter the heavy electric truck market offering performant products for cheaper.

Key data points

9% cheaper

TCO savings from buying an electric truck from a new entrant over a European model

24–31%

Share of the European electric heavy truck market that new entrants could hope to gain by 2030

Several new entrants, such as Tesla, BYD, SuperPanther and many others, have set their sights on the European electric truck market. Looking at vehicle prices, key specifications, and stated sales ambitions, we find that they are serious competitors to today's major European truckmakers.

Key findings

After 100 years dominating the European truck market, major manufacturers face new competition from overseas. We find that:

- **Buying an e-truck from a new entrant lowers total cost of ownership by 9%** compared to opting for an equivalent European model.
- **Electric trucks from new entrants perform as well as European trucks on key metrics**, though all truckmakers face trade-offs.
- **New entrants hope to gain over a quarter of the e-truck market by 2030** if we take public statements on their production and export targets at face value.

To avoid losing ground and remain global market leaders, **European truckmakers must accelerate electrification**. This is best done by safeguarding the truck CO₂ standards and avoiding further weakening.

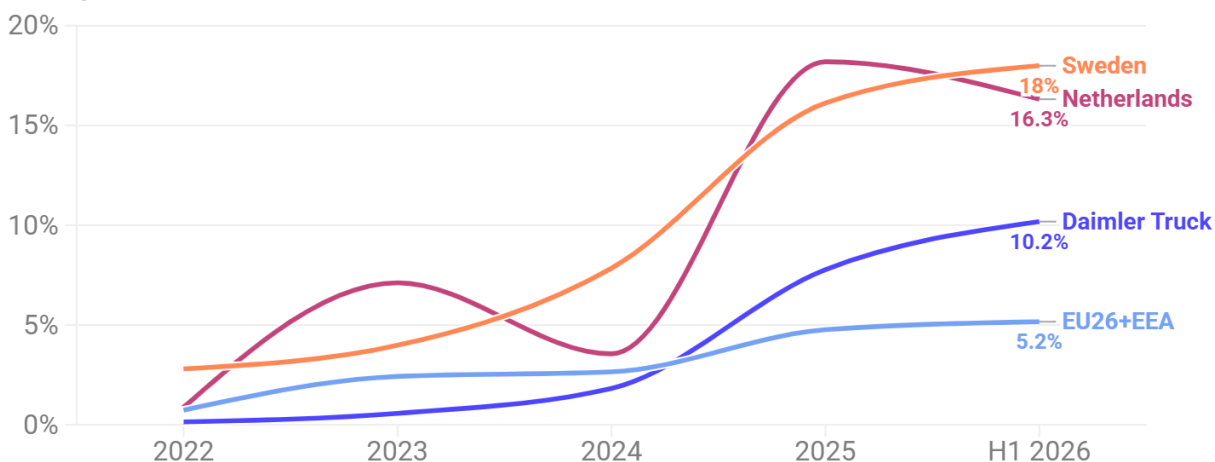
1 Introduction

New technology brings new competition

Europe is shifting to electric trucks: 5% of all new European trucks are now zero-emission, nearly double the uptake in 2024. In some markets, such as Sweden and the Netherlands, e-trucks make up over 15% of new sales in 2026. And for Daimler Truck, one in ten new trucks sold is electric.

Frontrunners reach double-digits e-truck shares as Europe electrifies

Battery-electric share of new trucks



Source: Dataforce. (2026). New commercial vehicle registrations



This shift is mainly due to the first-ever EU CO₂ target, in force since July 2025, as well as falling battery prices. Both factors have led EU manufacturers to offer more electric models at better prices. Today all major European truckmakers have entered series production of long-haul e-trucks.

But new players are entering the European market: [SuperPanther](#) just recently started series production of its eTopas 600 in Austria, whereas both [BYD](#) and [Tesla](#) will unveil their electric tractors for the European market at the IAA trade fair in Hannover in September 2026. [SANY](#), [Windrose](#), [Farizon](#), [Sinotruk](#) are all launching e-trucks for Europe.

Indeed, China is moving fast on commercial vehicle electrification. 16% of [all new trucks](#) were electric in 2025 (and 28% of [new heavy-duty trucks](#)). By 2030, 40% of trucks over 12 tonnes [should be new energy vehicles](#). In Europe, Chinese OEMs have already gained sizeable shares of the European electric car and electric bus markets.

Established European truckmakers are aware of this emerging competition. Karin Rådström, CEO of Daimler Truck, [expects](#) Chinese OEMs to go on the offense in the electric truck market. Meanwhile, Christian Levin, CEO of Scania, [has warned](#) of the risk of Europe falling behind China on e-trucks.

To explore whether new entrants could successfully capture a significant share of the European e-truck market, we look into the following three aspects:

- **Electric truck costs:** based on T&E's total cost of ownership (TCO) tool, we calculate the savings expected from buying an e-truck from a new entrant instead of a European model.
- **Performance on key metrics:** T&E has commissioned Apollo Vehicle Safety to compare the latest and best-selling e-truck models based on what matters most to transport operators, to see whether European or overseas OEMs have an operational advantage.
- **Ambition by 2030:** we estimate how much market share new entrants could gain by 2030, taking at face value the production and export targets they communicate.

2 Electric truck costs

Transport companies can save €34,000 by opting for a Chinese electric truck

Investments in trucks are primarily driven by cost considerations. All companies in the supply chain—the shipper procuring the freight, the freight forwarder organising it or the trucking company transporting the goods—are looking for the most cost-effective option.

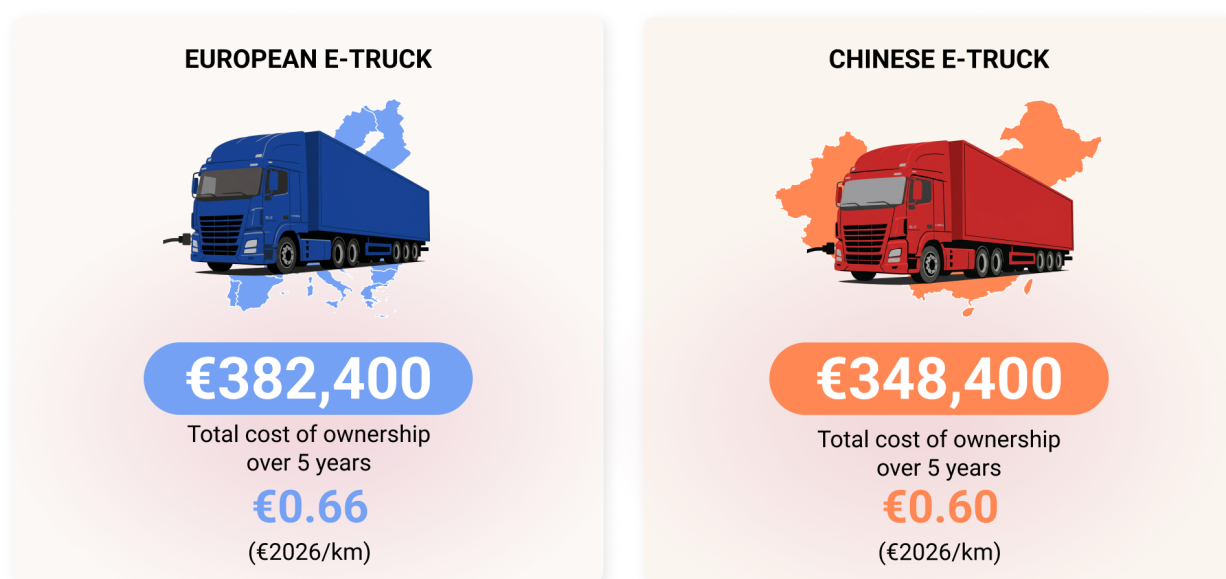
Today, we estimate a European battery-electric truck costs €265,000 on average based on T&E desk research and contacts with dealerships. However, prices vary greatly depending on vehicle configuration and fleet bargaining power. Indeed, there is anecdotal evidence that prices can vary from €230,000 to €280,000 for the same model. Electric three-axle tractors with maximal battery capacity routinely cost €300,000 or more.

New entrants offer electric trucks for much cheaper than established OEMs, a key competitive advantage in logistics, a sector with razor-thin margins. The Tesla Semi Standard Range [starts at](#) \$260,000, or €224,000, whereas the Windrose E700 is currently [priced at](#) €198,000 in Europe for the first 100 units, [down from](#) €250,000 originally. Sany meanwhile is [confident](#) they can sell their truck 30% cheaper than European OEMs.

But new entrants are wary of pricing their e-trucks too low. Sany is [planning](#) to charge higher prices for e-trucks overseas than it does in China, hoping to increase its profit margin as well as avoid suspicions of price dumping which could lead to trade restrictions.

T&E models that for a German transport operator today, opting for an electric truck from a new entrant instead of a European model could bring the total cost of ownership (TCO) from €0.66/km to €0.60/km (including residual value). Over five years of ownership, this would save nearly €34,000¹.

Buying a Chinese e-truck over a European model can lower total costs by 9%



Source: T&E modelling • For a 5-LH tractor purchased in Germany in 2026. Assuming a 9.5% discount rate.



Cutting TCO by nearly 10% can be a game changer in the haulage sector where [profit margins](#) are routinely between 1.5–2%. A lower TCO can help transport operators increase profitability or win contracts when bidding.

3 Performance on key metrics

Trucks from new players perform as well as European models on key metrics

¹ Correction 24/09/2026: the efficiency and private charging price data for Germany have been updated with the newest available data since this report was first published.

T&E commissioned Apollo Vehicle Safety (AVS) to compare the latest and best-selling e-truck models on the European market today, or soon to be launched, both from European OEMs and new market entrants. Here, we focus on the key specifications which matter most to transport operators:

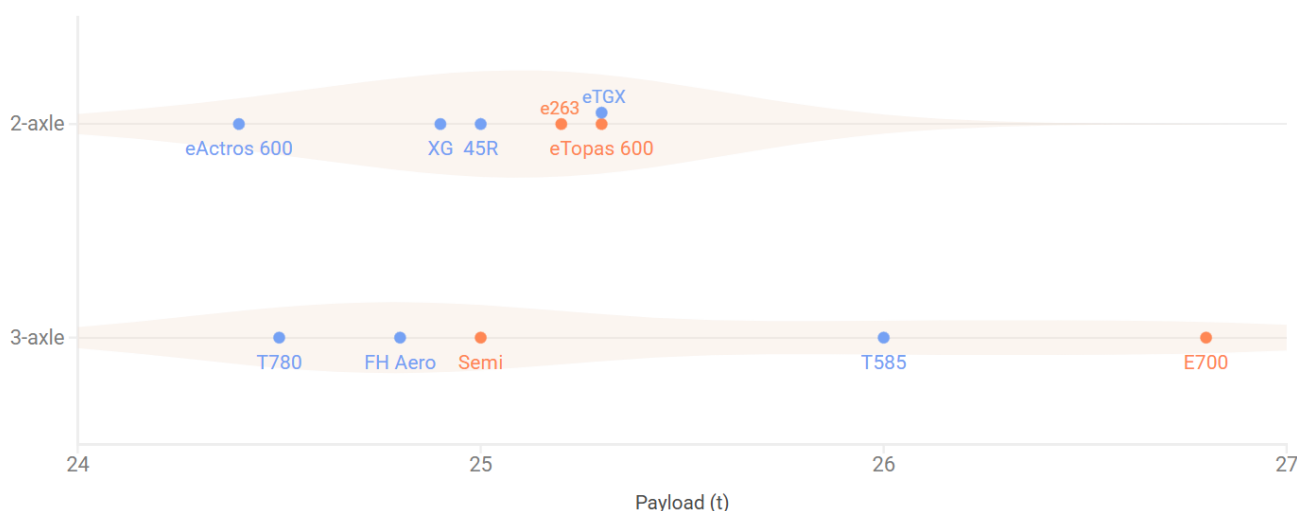
- maximum payload,
- driving range on a single charge,
- energy efficiency,
- charging time at peak power to recharge for a 4h30 journey, and
- whether the truckmaker offers a comprehensive service and maintenance network.

3.1 Maximum payload

Overall, new entrants tend to offer slightly more payload than European OEMs. However, it should be noted that for two-axle tractors the payload shown in the chart can in practice be limited by load constraints on the rear axle. AVS was able to model the maximum payload accounting for rear axle load for four models: the DAF XG Electric, MAN eTGX, Mercedes Benz eActros 600, and Sany e263.

New entrants often offer more payload than EU OEMs

OEM ● New entrant ● European



Source: Apollo Vehicle Safety (2026) • Assuming no rear axle load limit. Assuming a weight allowance of +4t instead of +2t for three-axle tractors.



For both the Mercedes Benz eActros 600 and Sany e263 limitations on rear axle loading limit total payload when AVS assumes the tractor is coupled to a standard trailer loaded homogeneously. In practice, this payload penalty may be mitigated by opting for a lighter, e-optimised trailer, or shifting cargo weight to the back of the trailer. Both options could help reduce rear axle load.

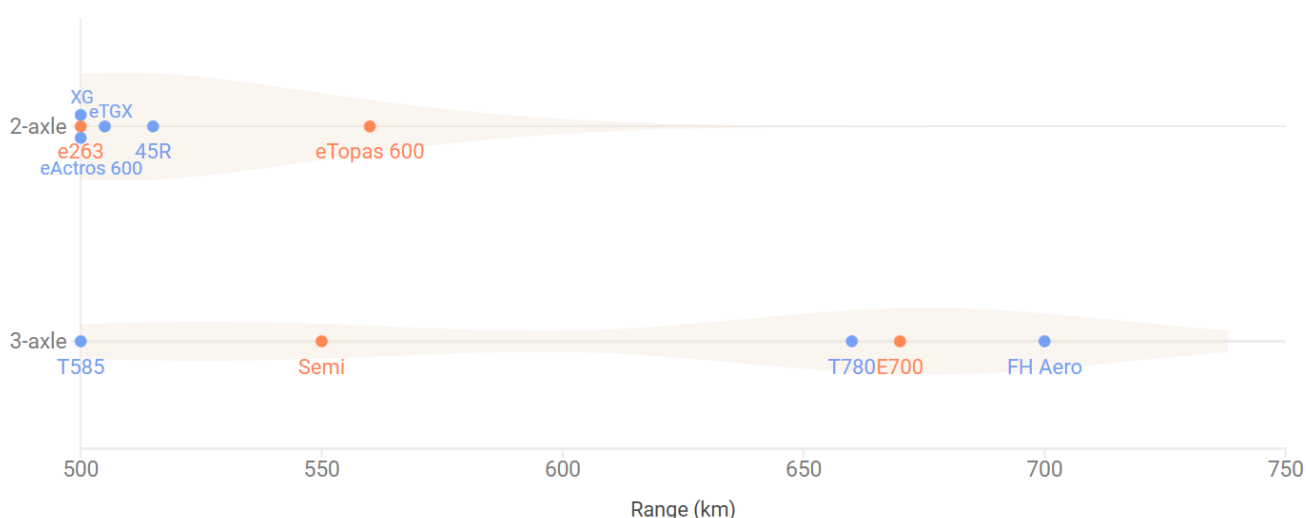
3.2 Driving range

Driving range is usually around 500 km for two-axle tractors. For more range on a single charge, hauliers can opt for three-axle tractors, which fit more batteries on the chassis without risking overloading the rear axle.

However, a longer tractor can create manoeuvrability problems. Indeed, AVS finds that the Windrose E700 may have difficulty meeting turning circle requirements when attached to a standard trailer. A shorter trailer, or one with a steerable axle, may be needed to meet turning circle regulations.

Truckmakers compete to deliver the highest driving range while balancing payload

OEM ● New entrant ● European



Source: Apollo Vehicle Safety (2026)

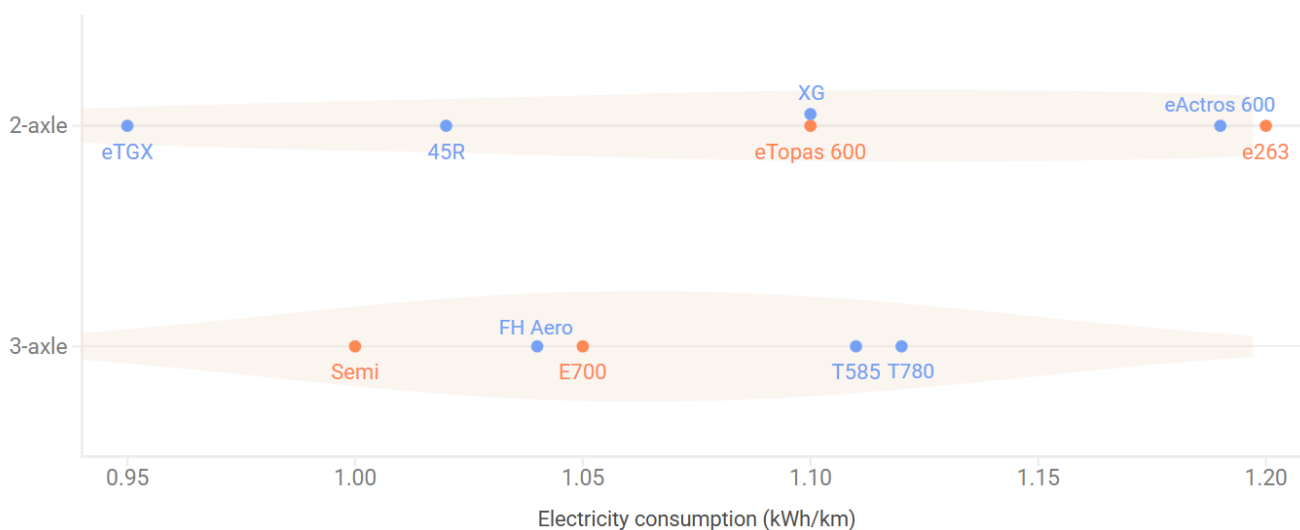


3.3 Energy efficiency

On balance, incumbents tend to offer more efficient models than new entrants for two-axle tractors. Three-axle tractors tend to be longer and more aerodynamic, which can help reduce electricity consumption.

Truckmakers compete on efficiency to bring down energy costs

OEM ● New entrant ● European



Source: Apollo Vehicle Safety (2026)



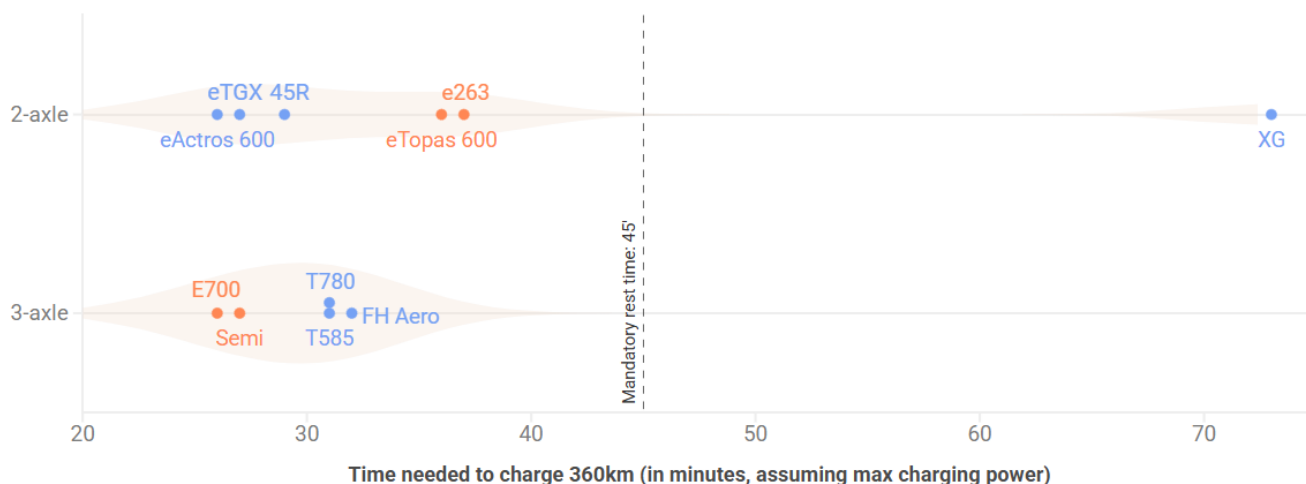
3.4 Charging speed

Except for the DAF XG Electric, all models analysed here could fully recharge enough electricity for a 4h30 journey (360 km) in under 45 minutes when assuming peak charging power.

Most e-trucks achieve ultra-fast charging speeds with the Megawatt Charging System (MCS). The SuperPanther eTopas600 and Sany e263 are exceptions, as they allow for dual-charging instead, a system where the truck can be charged using both the left and right CCS ports simultaneously.

For all but one model, peak charging power is enough to recharge for a 4h30 driving journey in a 45-minute break

OEM ● New entrant ● European



Source: Apollo Vehicle Safety (2026)



It should be noted that while series production of MCS-ready vehicles has recently begun, rollout of MCS chargers is still limited. This means charging power is in practice still limited to a single CCS port in most cases.

3.5 Service and maintenance network

In addition to the four quantitative metrics considered above, service and maintenance network is perhaps the most decisive factor in choosing a vehicle. A high-quality, comprehensive service network is crucial to ensure trucks are operational year-round. Many European OEMs refer to their networks as their key competitive advantage to defend against new entrants.

All new entrants interviewed as part of this project are aware of this. Both [Sany eTrucks](#) and [SuperPanther](#) are partnering with Alltrucks to offer service and maintenance throughout Europe. New entrants which are already established in the electric car market are also planning to set up and expand their own maintenance networks as they launch their commercial vehicle offering.

All in all, it is unclear for how long accessing an established service network will be a sufficient reason for transport operators to remain loyal to European brands, as e-trucks from new entrants appear to be on par with established OEMs with regards to key operational metrics, while being significantly cheaper.

4 Ambition by 2030

New entrants aim to gain over a quarter of the heavy e-truck market by 2030

European truckmakers have to cut truck CO₂ emissions by 43% by 2030. Based on expected engine efficiency improvements, this translates into an electric share of 31% in 2030. However, a recently approved weakening of the truck CO₂ standards [can lower this share](#) to 23%.

Assuming a market size of 245,000 heavy trucks (i.e. trucks in vehicle groups 4, 5, 9, 10), this means 75,000 new electric trucks would need to be sold in 2030 to meet the -43% CO₂ target, or 56,000 if OEMs take advantage of the targeted amendment.

EU truckmakers can also receive zero-emission vehicles from other OEMs, up to 5% of their total registrations that year. This means new entrants could transfer 12,000 electric trucks to European OEMs to help them comply with the standards.

In comparison, new entrants have set themselves ambitious goals to enter the European electric truck market:

- SuperPanther [plans to sell](#) up to 16,000 e-trucks between 2026 and 2030 based on its partnership with Steyr Automotive, i.e. 3,200 vehicles annually.
- Windrose [aims to assemble](#) 2,000 e-trucks annually in Antwerp, and wants to expand annual production to 5,000 e-trucks in a second phase.

In addition to production in Europe, foreign OEMs have also set export targets:

- Sany [wants](#) overseas markets to account for half of new sales by 2030. Its e-truck factory in Changsha can currently produce 150,000 trucks a year, set to double to 300,000 by 2030. This means Sany aims to export 150,000 electric trucks globally by 2030.
- Sinotruk [has set](#) global export targets of 250,000 heavy trucks and 100,000 light trucks in 2030 (including both diesel and electric trucks).

In practice, imports of e-trucks in the EU will be constrained by the production capacities of European assembly factories. It is unknown how many electric trucks Steyr Automotive will [assemble](#) annually for Sinotruk as part of their agreement. A few years ago, Steyr Automotive [had reserved](#) a capacity of 14,000 trucks annually for Volta Trucks. If Sinotruk has brokered a similar deal for contract manufacturing in 2030, it would only account for 6% of the heavy trucks it wants to export worldwide.

All told, we find that collective sales from new entrants could reach 20,100 e-trucks in 2030. In other words, **new entrants would account for 24–31% of new electric heavy trucks in Europe by 2030**. This assumes that SuperPanther and Windrose hit their production targets, and that Sany,

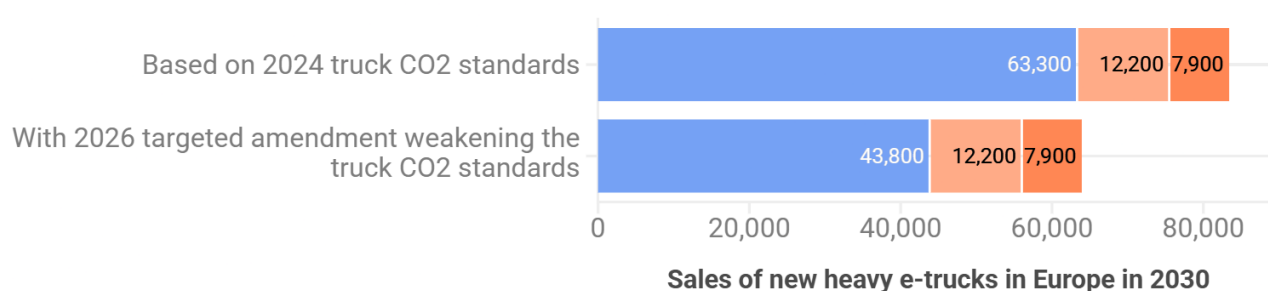
Sinotruk, Tesla, and BYD have sales ambitions in line with SuperPanther and Windrose (i.e. ~3,350 units/year each). However, we ignore here possible additional sales from other players entering the market, such as Farizon, DeepWay, or Skyworth.

Sany and Sinotruk are two OEMs which have already scaled e-truck production in China, entered into partnerships in Europe, and set ambitious export targets far exceeding 3,350 units/year each. Meanwhile, Tesla and BYD are two manufacturers with a proven track record of rapidly seizing a large share of the EU market.

In addition, we assume European OEMs make full use of the zero-emission vehicle transfer mechanism to help them comply with the 2030 CO₂ target. This means that most zero-emission sales from new entrants (12,000) are registered by EU manufacturers and only 8,000 are additional.

New entrants hope to gain over a quarter of the European heavy e-truck market by 2030

European truckmakers Zero-emission transfers from new entrants to European OEMs
Additional sales from new entrants



Source: T&E modelling based on production and export targets • Heavy trucks: groups 4, 5, 9, 10 

Conclusion

Competition is coming to Europe

New entrants are now entering the European electric truck market with cheaper models which perform as well as European ones on key metrics. Looking at their public ambitions, new entrants may be hoping to gain over a quarter (24–31%) of the European e-truck market by 2030. For context, this is close to the share of the European electric bus market currently held by Chinese busmakers (27% based on T&E analysis of sales data).

Looking at the demand side, 41% of truck buyers [surveyed](#) by McKinsey in 2025 said they would consider a Chinese electric truck, provided it were 10% cheaper than a European equivalent, while

another 32% said they would be willing to buy a Chinese e-truck at price parity. A new survey that Bain & Company will [present](#) at the IAA also finds that a third of truck buyers are likely to switch brands for their next purchase.

Together, these findings suggest that new market entrants are indeed serious competitors for established truckmakers. To avoid losing ground, European truckmakers must ramp up electric truck production to achieve the economies of scale necessary to bring down vehicle costs.

Weakening or delaying CO₂ targets will only create more opportunity for new entrants to grow and secure their share of the European market.

Mixed signals expected at IAA Transportation 2026

IAA Transportation 2026 is a major trade fair focusing every other year on commercial vehicles. This is the opportunity for truckmakers to showcase their latest models and innovations. This year, Tesla will [present](#) its Semi launching soon in Europe, BYD is expected to [unveil](#) a new electric model, while Skyworth will [premiere](#) its Level 4 Skyworth Z9 truck model.

Meanwhile, European truckmakers are sending mixed signals, as electric trucks will be displayed alongside the latest installments in diesel technologies.

- Scania will [dedicate](#) part of its stand to its new 11-litre variant of its Scania Super engine, along with its electric powertrains.
- For Renault Trucks, IAA 2026 will be the stage for the [world premiere](#) of its new DE13 R engine, overshadowing its electric offering.

Overall, European truckmakers are still invested in diesel technology, whereas new players have fully embraced electrification.

Further information

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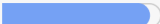
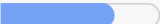
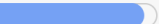
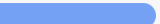
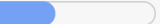
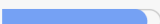
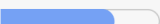
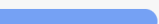
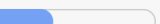
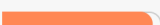
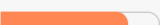
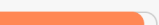
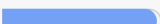
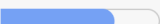
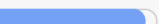
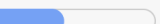
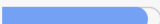
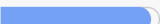
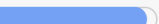
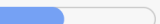
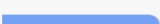
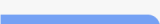
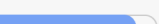
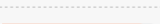
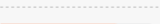
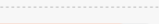
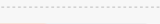
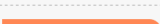
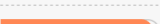
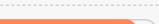
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Annex. Key data for selected electric truck models²

How electric trucks score on key metrics

— New entrant — EU OEM ★ Best value across models

Truck model	 Payload (t)	 Range (km)	 Efficiency (kWh/km)	 Charging time (min)
DAF Trucks XG Electric	 24.9	 500	 1.10	 73
MAN eTGX	 25.3	 505	★  0.95	 27
Mercedes Benz Trucks eActros 600	 24.4	 500	 1.19	★  26
Scania 45R Electric	 25	 515	 1.02	 29
SANY eTruck e263	 25.2	 500	 1.20	 37
SuperPanther eTopas 600	 25.3	 560	 1.10	 36
Renault E-Tech T 585	 26	 500	 1.11	 31
Renault E-Tech T 780	 24.5	 660	 1.12	 31
Volvo FH Aero Electric (extended range)	 26.5	★  700	 1.04	 32
Tesla Semi	 25	 550	 1.00	 27
Windrose E700	★  26.8	 670	 1.05	★  26

Charging time at maximum power required to charge enough to drive 360 km



² Correction 24/09/2026: data for the Renault Trucks E-Tech T 585 and T 780 was updated to reflect higher usable battery capacity.