BRIEFING

Middle East energy crisis: comparing operating costs for diesel vs electric trucks.

This short briefing highlights the benefits of accelerating heavy duty vehicle (HDV) electrification in the context of the war in the Middle East. Only weeks after the EU Parliament approved a weakening of the HDV CO_2 standards, this emerging energy crisis should serve as a stark reminder that Europe's only path to true strategic sovereignty lies in accelerating electrification of road freight transport.

Briefing published: 1 April 2026
Lead author: Nils Hooftman
Lead analyst: Max Molliere
Contributors: Stef Cornelis, Marie Chéron, Johanna Braun

Middle East energy crisis: comparing operating costs for diesel vs electric trucks.

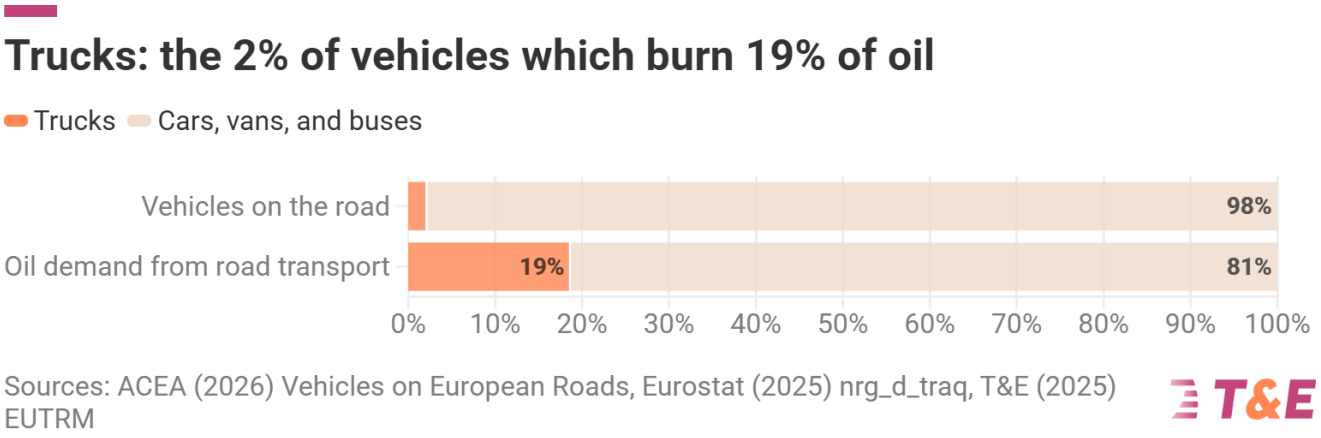
This short briefing highlights the benefits of accelerating heavy duty vehicle (HDV) electrification in the context of the war in the Middle East. Only weeks after the EU Parliament approved a weakening of the HDV CO_2 standards, this emerging energy crisis should serve as a stark reminder that Europe's only path to true strategic sovereignty lies in accelerating electrification of road freight transport.

Key findings:

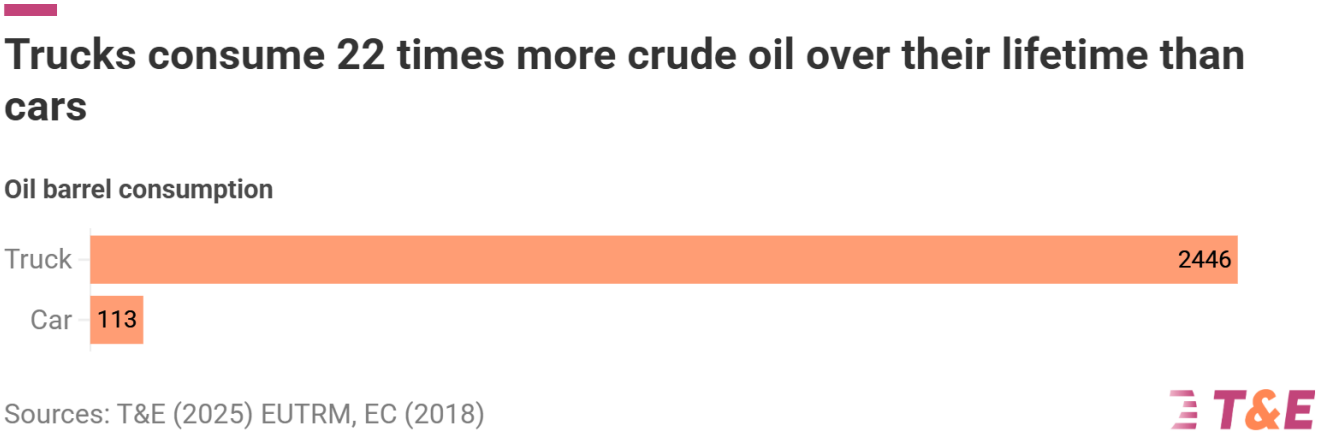
01	**Trucks have a substantial share in Europe's oil consumption:** Representing only 2% of vehicles on EU roads, trucks consume 19% of road transport's oil demand.
02	**Facing higher diesel and electricity prices, e-trucks in Germany are expected to be more than one third cheaper to operate than diesel trucks:** On EU average, diesel hauliers face an energy cost increase that is 1.5 times higher than those driving electric, in Germany this goes up to more than 2.5 times.
03	**Current EU heavy duty vehicle CO_2 standards could save one-fifth of oil imports by 2035:** Over the next decade, the EU could save €28 billion worth of oil imports. The recent decision to weaken the CO_2 targets will bring this amount down.

1. Oil consumption from trucks: disproportionately high compared to cars

The European trucking sector is a substantial contributor to the bloc's crude oil consumption and dependence. Trucks account for nearly one-fifth of road transport's yearly consumption – while only representing 2% of the EU's road vehicles.



The main reason for this is their high fuel consumption compared to cars: with a typical truck end-of-life mileage of 1.2 million kilometers, they consume 22 times more barrels of oil than passenger cars who have on average a lifetime average of 200,000 km.



Given this substantial oil consumption by trucks, the EU introduced in 2019 its first-ever CO_2 reduction targets for truckmakers to reduce its oil dependency and set the EU on a trajectory towards climate neutrality by 2050.

The majority of EU truck manufacturers are likely to have successfully passed the first hurdle — a 15% reduction by 2025. They are meeting this target by improving the fuel efficiency of diesel trucks and starting the production and sales of electric trucks. In 2025, 5% of new trucks in the EU were electric with some countries reporting double-digit registrations such as The Netherlands (18%), Sweden (16%) and Denmark (17%). In Europe's largest truck market Germany, 7% of new trucks were electric, totalling 5,537 vehicles.

Given their high mileage, the prices of diesel as well as electricity have a big impact on the costs that hauliers and logistics companies are facing. The next chapter looks into the effects of the war in the Middle East on energy and operating costs for hauliers, both for diesel as well as electric trucks.

2. The energy crisis and the impact for hauliers

2.1. How the Middle East conflict is impacting diesel prices for hauliers

Before the start of the Middle East conflict, oil prices were $67 per barrel (Brent Crude Oil, 17 Feb). On March 18th, they surpassed $110 a barrel. Diesel prices are found to be closely correlated to crude oil prices. On March 18th, diesel and petrol prices had already exceeded €2 per litre of diesel in Germany.

Given the geopolitical uncertainties, it is realistic that oil prices could reach, or even exceed, a level as seen during the 2022 energy crisis. In our analysis we assume that average diesel prices at the pump remain high at levels around €2 per litre, as last seen in 2022 when oil prices stayed around $100/barrel. On average, this means a 25% increase for diesel prices compared to a baseline (average 2025 prices).

Diesel up 36cts within two weeks of war onset

Fuel prices at the pump, corrected for inflation (in EUR 2026)

Source: Oil Bulletin, UNFCC • Pre-crisis prices represent the 2017-2019 average, when crude oil traded at $63 per barrel.
Last updated 18/03/2026

T&E

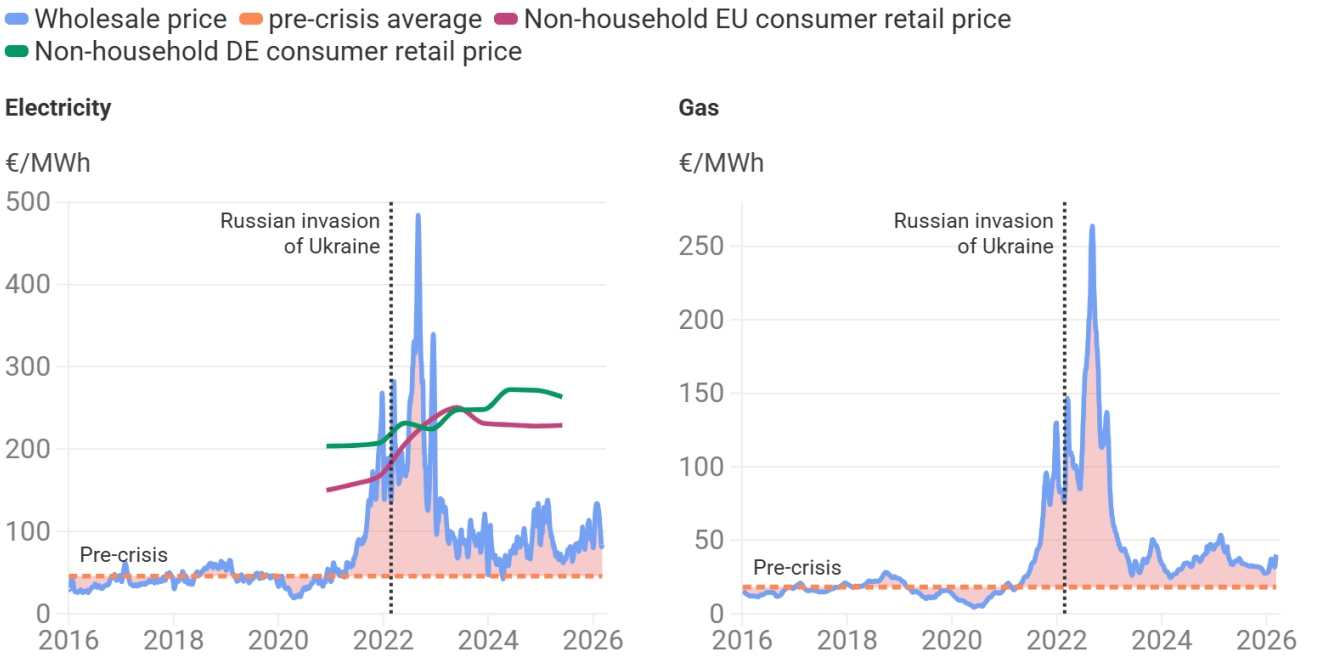
2.2. How the Middle East conflict is impacting electricity prices for hauliers

Since the start of the Iran conflict, gas prices have increased by 61% compared to the previous year. Given that wholesale electricity prices are heavily linked to gas prices – despite the increased use of renewable energy in the power mix – the average EU electricity prices for hauliers are likely to increase too.

As observed during the 2022 energy crisis, we expect electricity prices for non-household consumers to be only partly correlated to gas prices. In this analysis we assume electricity prices to increase to €287/MWh in the mid-term (26% increase compared to €229/MWh observed in H1 2025 according to Eurostat). As seen during the 2022 crisis, while wholesale electricity prices spiked in 2022, the end consumer prices did not peak abruptly but progressively increased over a longer period (2–3 years). This impact is larger for non-household consumers as their electricity prices are typically less politically sensitive and therefore less protected by means of subsidies and emergency rebate systems.

European electricity prices mirror gas quotations

Electricity and gas saw a 89% and 100% increase in wholesale price respectively after the Ukraine war compared to previous years



Source: T&E analysis, EMBER, Investing.com, Eurostat

2.3. Energy costs: electric vs diesel trucks

We analysed the likely impact of higher oil and electricity prices on energy costs that transport companies are facing.

For an average diesel truck in Germany — where 25% of new trucks in the EU are sold — the monthly costs would increase to €4,850, a rise of €1,210 due to the conflict. The average cost of charging an e-truck in Germany would be €3,100 per month — an increase of €460 because of higher electricity prices due to more expensive gas.

This means that hauliers operating a diesel truck pay a premium that is 2.65 times as much than those who already drive e-trucks. Overall, this makes an e-truck in Germany 36% — or €1,760 cheaper to operate. This increase of cost difference only refers to the energy use — diesel and/or electricity — and comes on top of several other cost differences in Germany. Examples are road toll exemptions, tax benefits and benefits from the GHG quota for e-trucks, a CO_2-price and taxes for fossil fuels.

German electricity prices for non-household consumers saw an increase of 28% between the period before the Russian invasion of Ukraine (2021 average) and the post-crisis period (2023–2025) — driven by a 100% surge in gas prices. Assuming future gas price spikes trigger a similar impact, we estimate a mid-term electricity price increase of 17% for German non-household consumers.

On an EU-wide level, prices rose by an average 42% in the wake of the Ukraine crisis; based on this, we forecast a mid-term electricity price increase of 26%. Combined with a diesel price hovering around €2 per liter, monthly costs for an EU average diesel truck would increase to €4,410, a rise of €890 due to the conflict. The EU average cost of charging an e-truck would be €2,990 per month — an increase of €610 because of higher electricity prices due to more expensive gas.

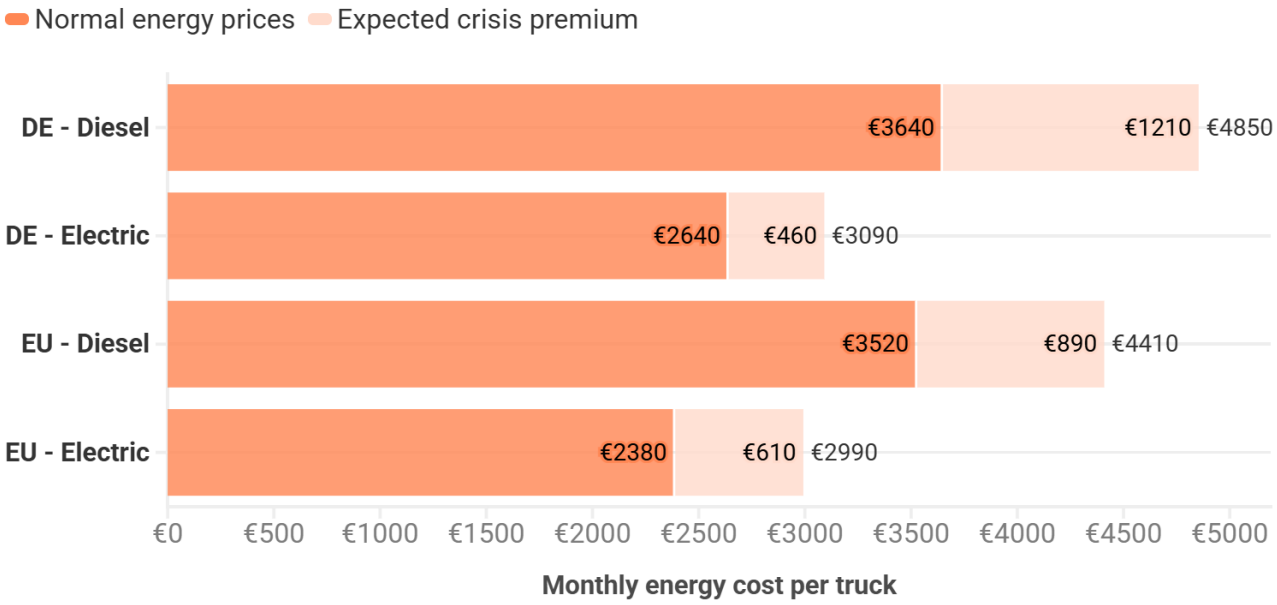
This causes the average EU haulier operating a diesel truck to pay an energy premium 1.5 times as much as one relying on an electric truck.

Calculation assumptions

An average EU truck was modeled, covering 92,000 km/year and having a fuel consumption of 29.5 l/100 km. Its electric counterpart consumes 110 kWh/100 km and is assumed to have an 80% depot/20% public charging split. A 93% charger efficiency is taken into account.

Depot charging tariffs refer to non-household consumer Eurostat data (band IB, ex. VAT and other recoverable taxes and levies), public charging tariffs refer to Milence data.

Still the cheapest to "refuel", e-trucks also face energy premiums. German diesel trucks face a premium 2.65 times that of e-trucks.



Source: T&E analysis

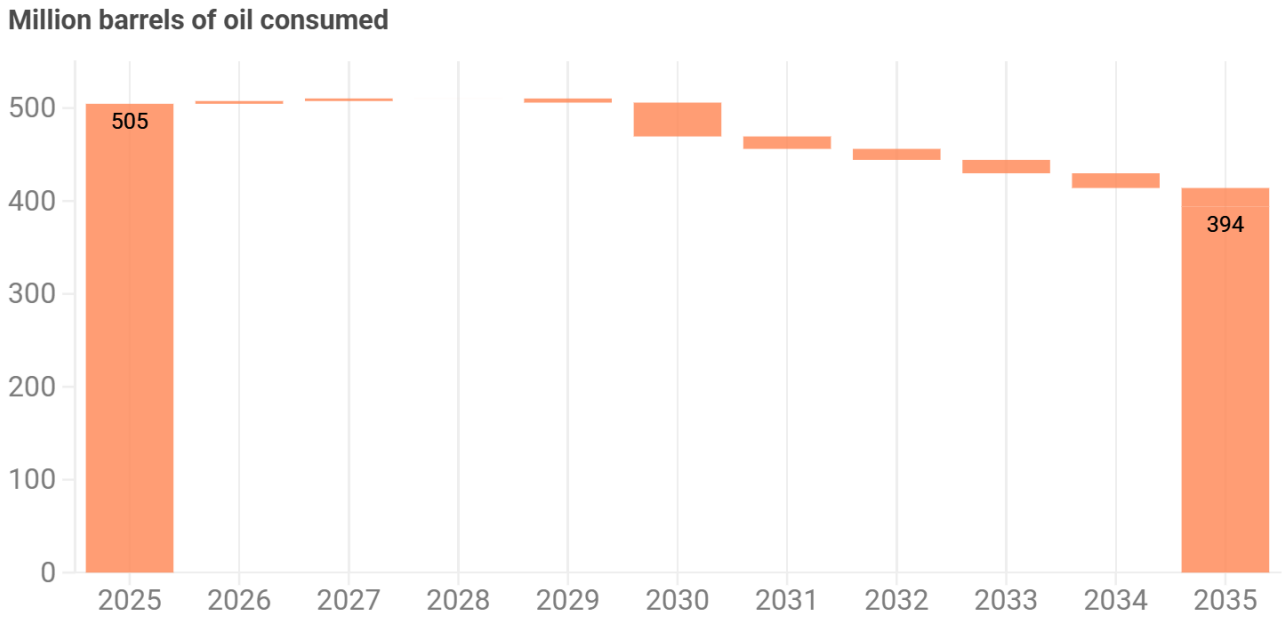
3. Faster truck electrification can cut oil imports rapidly

The EU HDV CO_2 standards — introduced in 2019 — set targets for truckmakers to reduce emissions of new trucks and start increasing electric truck sales. Relative to 2019 levels, new trucks should emit 15% less CO_2 by 2025, 43% less by 2030, 64% less by 2035 and finally 90% less by 2040. This translates to a zero-emission truck sales share of respectively 31% by 2030, 57% by 2035 and 88% by 2040.

T&E analysis finds that these targets can cut the annual oil imports for trucks on EU roads by 22% by 2035 compared to 2025 levels. This translates into 400 million barrels of oil saved in the coming decade, equivalent to a saving of €28 billion spent on imports — assuming a barrel price of €70.

E-trucks can cut EU oil imports by one-fifth by 2035

Reduction potential according to the existing HDV CO2 regulations



Sources: T&E (2025) EUTRM

The recently adopted targeted amendment to the HDV CO_2 regulations will lower the ambition level and impact of this EU law. T&E expects this weakening to reduce the number of electric truck sales in 2030 by 27%, from 31% to 23%. This watering down of the 2030 target hits hauliers the hardest. A slower ramp up of e-truck production delays increased scale by truck manufacturers and the reduction in retail prices. Consequently, fewer EU hauliers will be able to absorb the higher upfront costs and offset them with more favorable operational expenses.

The European truckmakers are now calling for an early review of the CO_2 regulations, which is scheduled for late 2027. T&E urges the European Commission to stick to the original timeline to guarantee the necessary production scale-up of e-trucks and retail prices continuing to decrease. As this analysis shows, electrification remains the most sustainable way to shield the trucking industry and its clients from external shocks, such as sudden global oil shortages.

Simultaneously, T&E calls on the European Commission to continue to double down on the enabling conditions required to further improve operating costs of e-trucks. This includes:.:

- Prolonging the financing of the EU Alternative Fuel Infrastructure Facility (AFIF) to ensure continuous funding for public charging infrastructure in 2026 and 2027;
- Taking legal action against EU Member States that fail to implement the Eurovignette Directive;
- Bringing forward, by 2027 at the latest, an EU demand regulation that sets binding zero-emission freight targets for large shippers and cargo owners.