

# Eurovignette Directive: Impact of road toll and CO2-based charges on TCO

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THE INTERNATIONAL COUNCIL  
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# **The impact of the Eurovignette policy levers on Total Cost of Ownership (TCO)**



# Road tolls and CO<sub>2</sub>-based charges

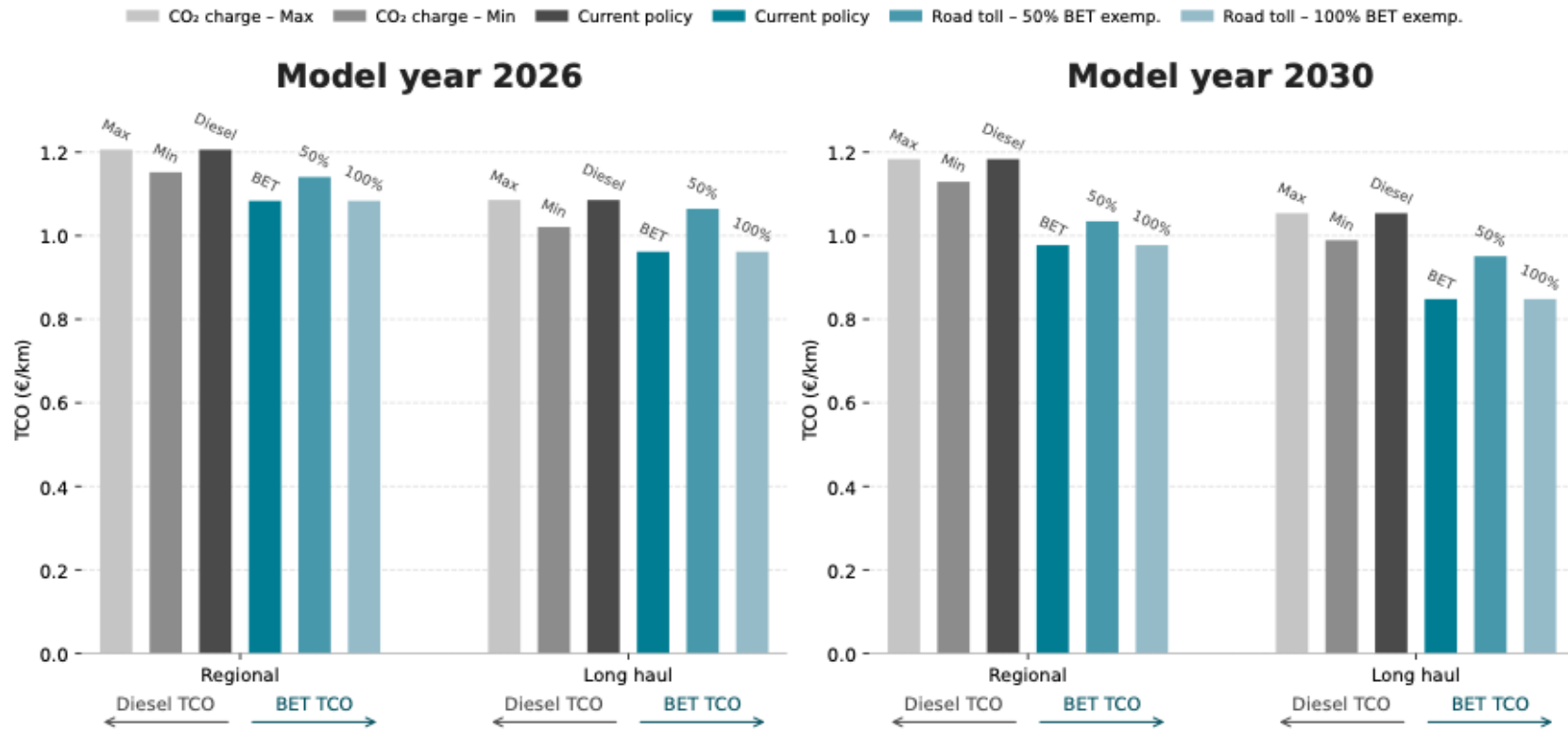
Several EU Member States impose charges on road use, often determined by the vehicle's gross weight, axle configuration, and emissions class.

To support the transition to zero-emission logistics, the EU's Eurovignette Directive allows Member States to **vary road charges for heavy goods vehicles based on CO<sub>2</sub> emissions** and **grant road toll exemptions to zero-emission trucks**.

- The Directive allows Member States to grant **full toll exemptions for zero-emission** trucks until June 30, 2031, after which the maximum exemption is limited to 75%.
- **CO<sub>2</sub>-based road charges** for trucks are calculated according to their emissions class, with typical long-haul trucks subject to charges of between €0.08/km and €0.16/km.

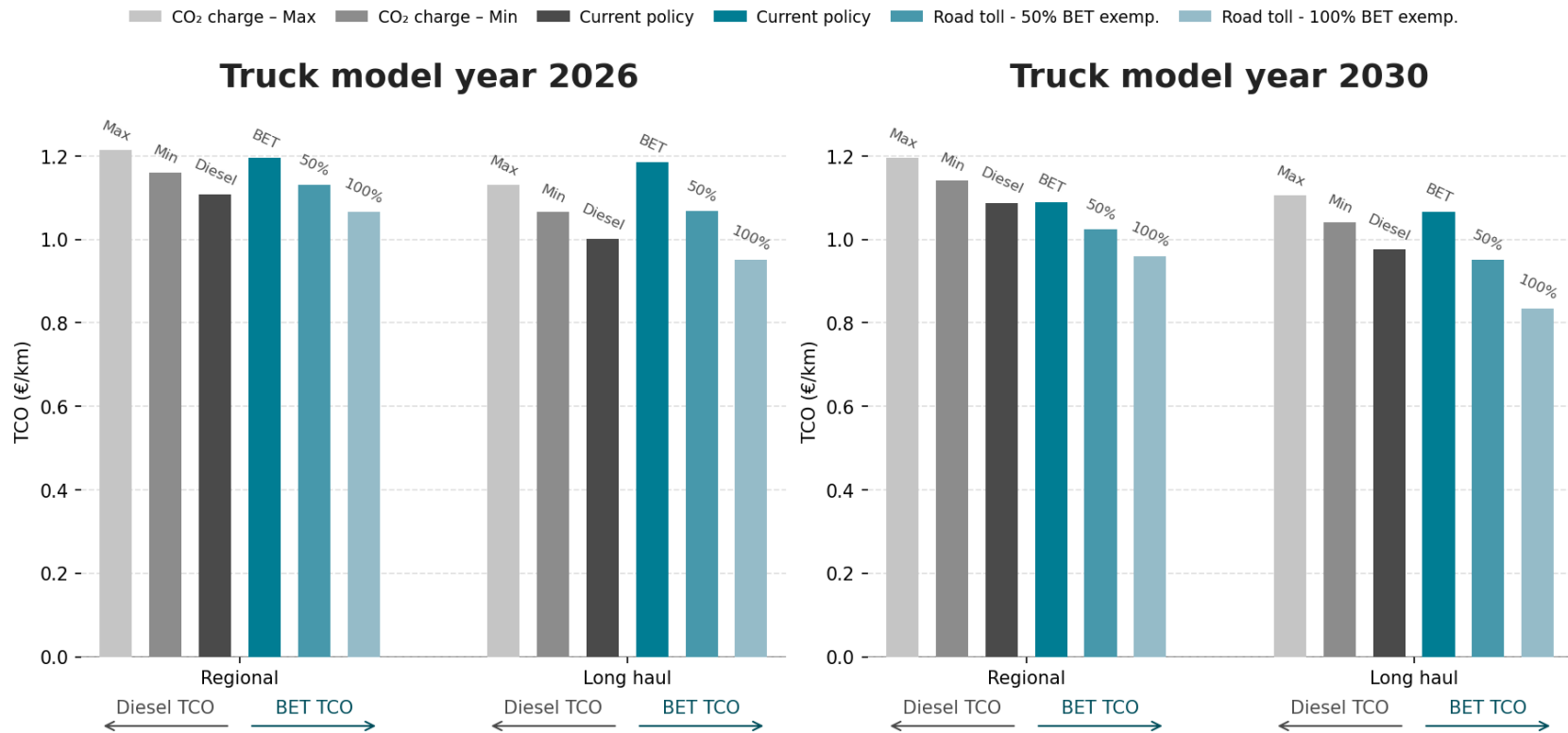
In this brief analysis, we examine the impact of road toll exemptions and CO<sub>2</sub>-based charges on the total cost of ownership (TCO) of regional and long-haul trucks in the following major European markets: Germany, France, Italy, and Poland.

# Germany



- Germany already applies the Eurovignette (full road toll exemption + CO<sub>2</sub>-based charge (0.158 EUR/km), which makes **BET's TCO cheaper than diesel across all years and segments.**
- These findings highlight the strength of Germany's existing road toll design and illustrate how CO<sub>2</sub>-differentiated charging and ZEV incentives can substantially reduce BET operating costs.

# France

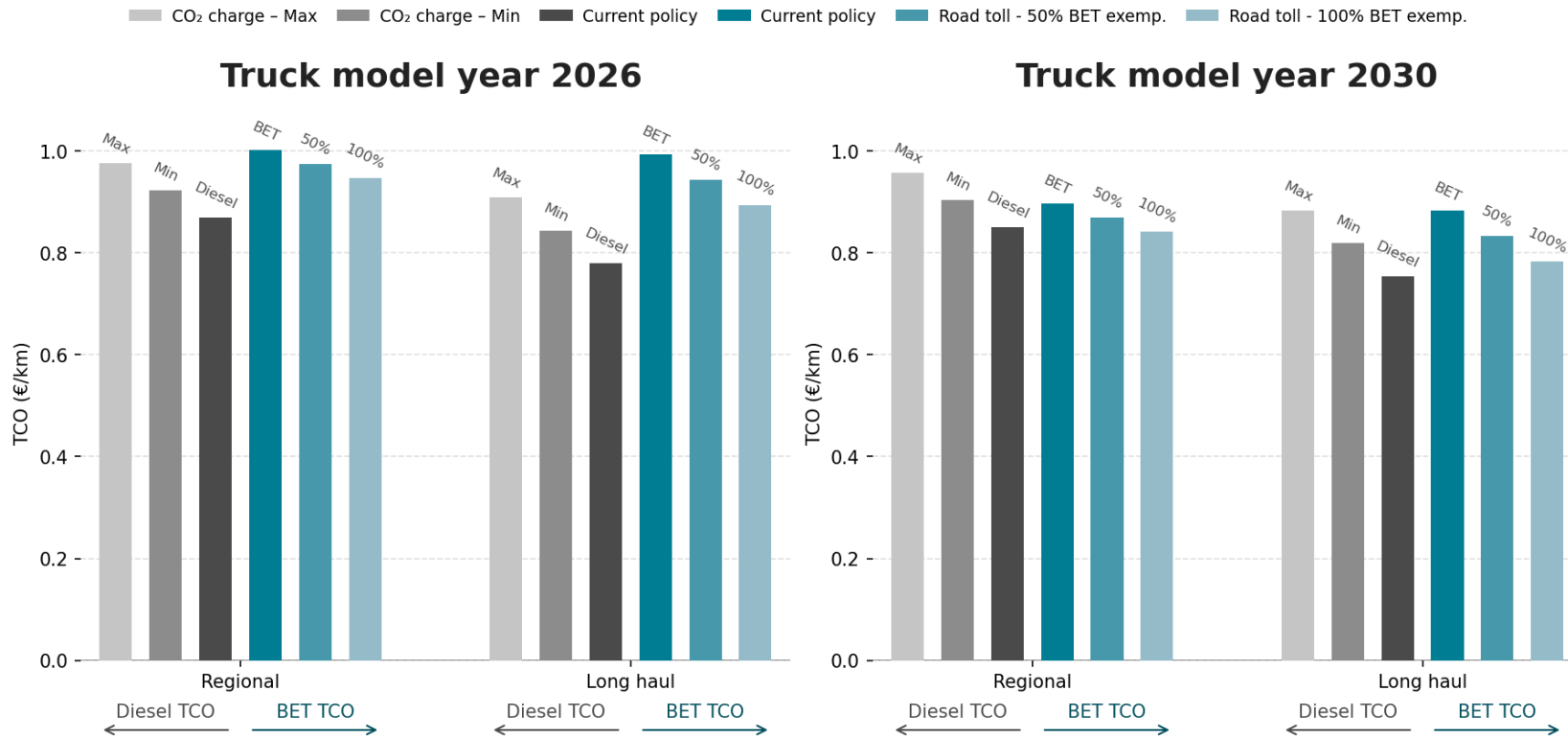


- **For regional trucks:** 100% BET road toll exemption would be enough to achieve cost parity with diesel trucks by 2026. By 2030, BETs are expected to reach cost parity even without policy support, although the Eurovignette would highly accelerate deployment.

Full Eurovignette implementation: 12.3% lower BET TCO in 2026 and 19.7% in 2030.

- **For long-haul trucks:** Full BET road toll exemptions would be required to achieve cost parity with diesel trucks for 2026 trucks, while 50% exemption would be enough by model year 2030.

Full Eurovignette implementation: 15.8% lower BET TCO in 2026 and 24.5% in 2030.



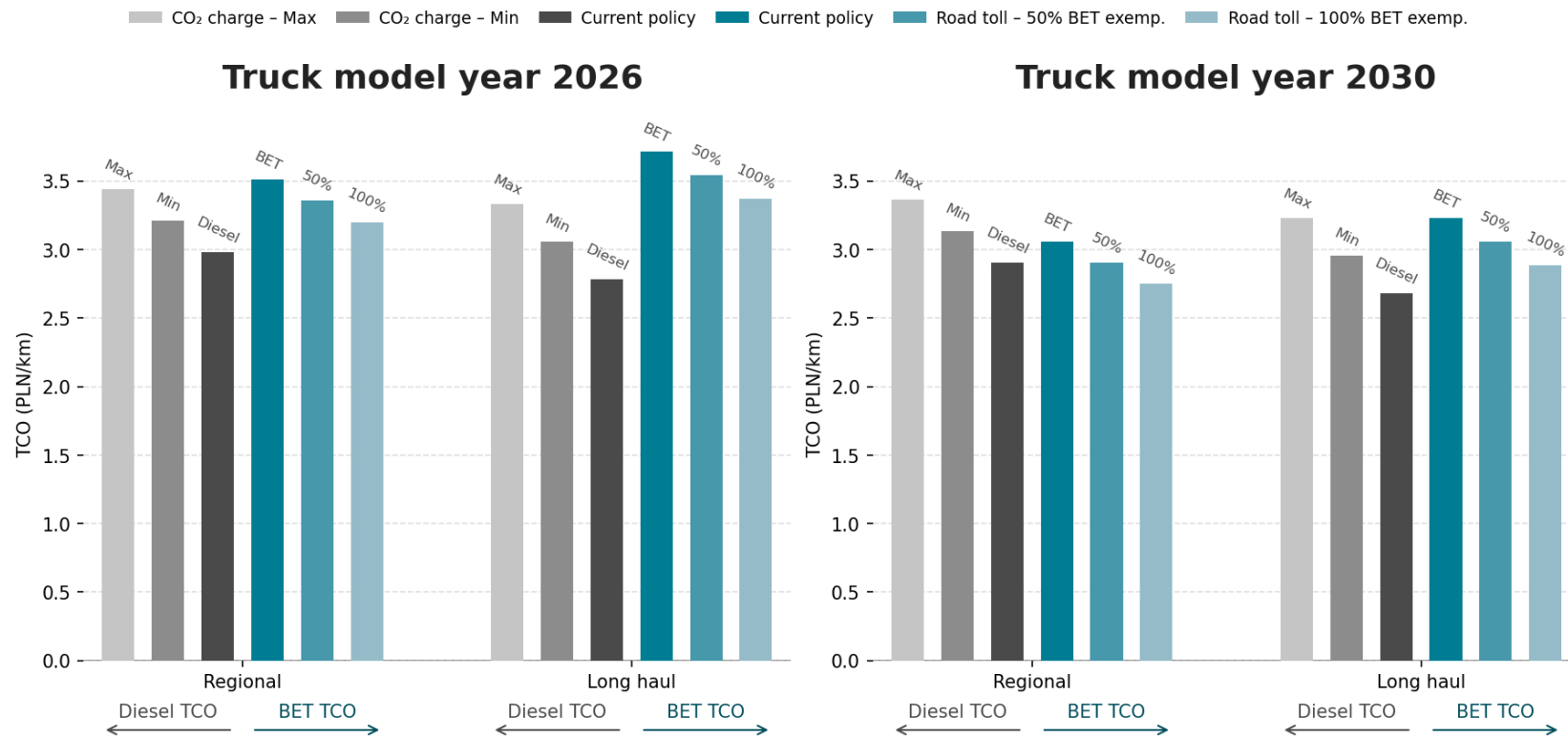
- **For regional trucks:** 100% BET road toll exemption and maximum CO<sub>2</sub>-based charges would be required to achieve cost parity in 2026. By 2030, 100% road toll exemptions alone would be sufficient to achieve cost parity.

Full Eurovignette implementation: 3.1% lower BET TCO in 2026 and 12.2% in 2030.

- **For long-haul trucks:** Full BET road toll exemptions would reduce the TCO gap with diesel trucks from 27.4% to 14.6% in 2026, and from 17.1% to 3.8% in 2030.

Full Eurovignette implementation: 1.7% lower BET TCO in 2026 and 11.4% in 2030.

# Poland



- **For regional trucks:** 100% BET road toll exemption and maximum CO<sub>2</sub>-based charges would be required to achieve cost parity in 2026. By 2030, 50% road toll exemptions alone would be sufficient to achieve cost parity.

**Full Eurovignette implementation: 6.9% lower BET TCO in 2026 and 18.2% in 2030.**

- **For long-haul trucks:** Full BET road toll exemptions would narrow the TCO gap with diesel trucks from 33.6% to 21.2% in 2026, and from 20.5% to 7.6% in 2030.

**Full Eurovignette implementation: BET TCO gap reduced to 1% with diesel trucks in 2026 and BET TCO 10.7% lower in 2030.**

**Questions?**  
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