



Methodological Note - March 2026

This version, modified May 8, 2026, includes additional commentary regarding the temporary expansion of the spread between physical Dated Brent and the front-month prices.

Paying for a crisis they didn't cause: tracking excess profits along the EU road fuel supply chain

A guide to the data, methodology and limitations behind the excess profits tracker

Published: 27 March 2026

Authors: Daniel Quiggin, Daniel.Quiggin@transportenvironment.org

Juliette Egal, Juliette.Egal@transportenvironment.org

Contributors: Antony Froggatt, Thomas Earl

1. Introduction

This methodological note accompanies [T&E's EU road fuel excess profits tracker](#). Its purpose is to set out, clearly and in full, how the tracker works, what it measures, and where the estimates may diverge from reality.

The tracker estimates excess profits generated along the EU road fuel supply chain following the escalation of conflict in the Middle East, triggered by US and Israeli strikes on Iran on 28 February 2026. It does so by comparing EU pump prices and crude oil prices against a pre-conflict baseline of January–February 2026, and calculating how much wider the gap between the two has become. That widening gap – the gross margin expansion – is the excess revenue generated by the oil industry per litre of fuel sold. Multiplied across EU fuel sales volumes, it produces an estimate of total excess profits generated across the supply chain.

The methodology is similar to Dr Bukold's approach - from [EnergyComment Hamburg](#) - who applied this framework in the aftermath of the [2022](#) invasion of Ukraine by Russia, and to the German petrol station market, early in the [2026](#) Iran conflict. Many thanks to Dr Bukold and Greenpeace Germany for their collaboration. T&E has extended and adapted the methodology to the EU level. The underlying logic is: when pump prices (excluding taxes) rise faster than crude oil prices, the difference flows to the oil industry as additional revenue. When operating costs remain stable – as they largely do in the short term – that additional revenue becomes profit.

The tracker separates the supply chain into two segments. Upstream excess revenues flow primarily to crude oil producers and oil-producing nations; they are presented for completeness but fall largely outside EU policy reach. Downstream excess revenues – captured through expanded refining and distribution margins – are the policy-relevant figure. A significant share of these profits is realised within the EU and could fall within the scope of a reinstated windfall profits tax, such as the solidarity contribution mechanism used in 2022–23.

The estimates are preliminary by nature. The tracker's confidence in the headline figures will grow with each additional data point. This note explains what assumptions underpin the current estimates, in which direction those assumptions are most likely to introduce error, and what a reader should bear in mind when interpreting the figures. A full discussion of the sources of uncertainty – and where the tracker is likely to over- or understate reality – is set out in the final section.

Margins may move in either direction from here. If the crisis deepens, margins and excess profits will increase; if it stabilises or resolves, they will compress. History suggests excess profits are temporary – they are a feature of acute market dislocation, not a permanent condition

1.1 IEA: margin expansion began within days of the conflict

On 12 March, the IEA's monthly [Oil Market Report](#) noted that refinery margins had risen to their highest level since autumn 2022 – the last time European fuel markets were in acute crisis. The trigger was immediate: oil product markets priced in the prospect of materially lower exports from the Gulf, relative to import requirements for both Asia and Europe. The Middle East is typically the lowest-cost source of middle distillates, naphtha and LPG – its absence from export markets is felt quickly.

The biggest jump was in diesel and jet fuel. The price spread between crude oil and gasoil – a middle distillate and the direct precursor to diesel – doubled in Europe, from around \$25 per barrel in February to over \$50 per barrel in early March. European diesel margins ran ahead of other regions, reflecting a structural deficit in domestic diesel refining capacity.

The more muted response of petrol margins reflected a different supply picture. The IEA attributed this to high stock levels in the US and Europe, seasonally weak global petrol demand, and the comparatively limited role the Middle East plays in global petrol supply – factors that buffered petrol markets from the same shock that hit diesel.

The IEA went further. European markets, it noted, are now contending with two compounding supply pressures: the ongoing loss of imports from refineries processing Russian crude, and the sharp drop in exports from the Middle East. Together, these factors are expected to support materially stronger refining margins until buyers have secured future supply from alternative sources – a process that, given current market conditions, appears far from straightforward.

1.2 What is this analysis doing?

This analysis covers **road fuels sold in the EU only** – it does not capture excess profits from jet fuel, marine fuel, heating oil or other fossil fuel products refined and sold in the EU. The true total downstream windfall across all oil products is higher than that quoted within the tracker. However, as this methodological note demonstrates, there are various dynamics and assumptions that can result in our analysis overestimating the headline road fuels excess profits that can be captured in the EU. Equally there are some assumptions that may result in the trackers headline figures understating the true road fuel excess profits.

The tracker shows weekly snapshots of the excess profits, based on a given week's retail pump prices and crude oil prices compared to the pre-conflict baseline. The tracker also shows the excess profits based on the whole period of the current crisis as compared to the pre-conflict baseline. The longer time frame period is then extrapolated to the entire year of 2026, on the assumption that current conditions persist. The more data points the tracker collects, the greater confidence that can be ascribed to the headline findings.

Margins may move in either direction from here. If the crisis deepens, margins and profits will increase; if it stabilises or resolves, they will compress. History suggests **excess profits are temporary** – they are a feature of acute market dislocation, not a permanent condition

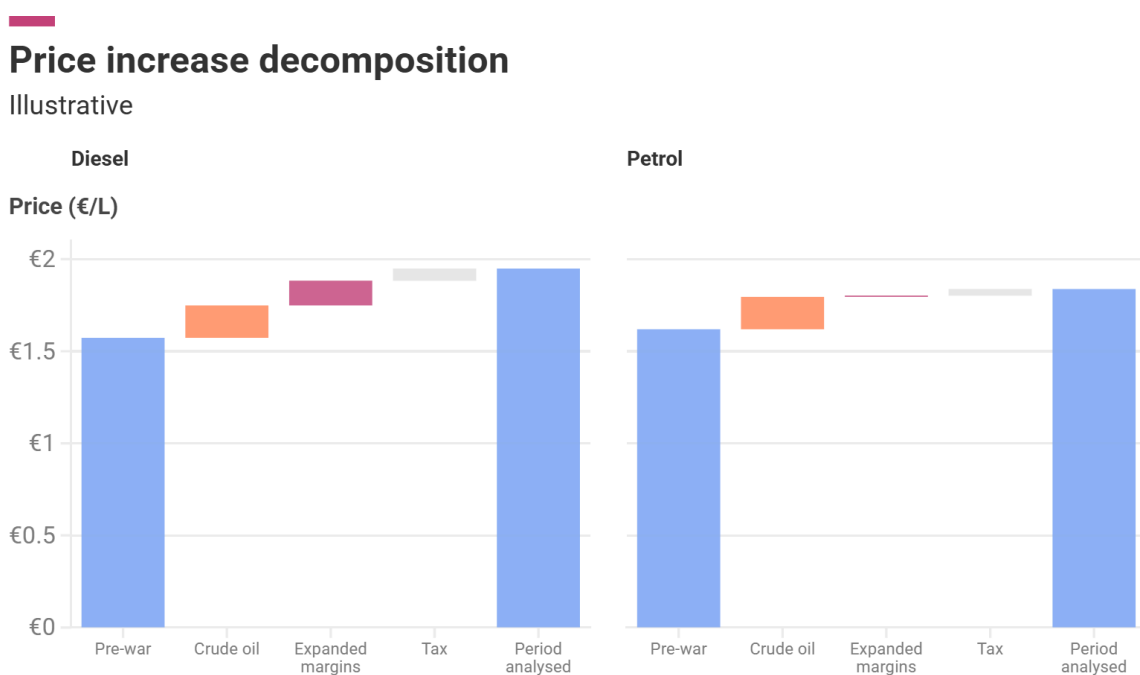
2. Methodology

This method breaks down changes in retail fuel prices between the period studied and the pre-conflict baseline into their main drivers and allocates the excess profits to different parts of the supply chain. The following section explains each step of the analysis:

- Taxes component: The tax component is calculated as the difference between the change in retail prices including taxes and the change in prices excluding taxes over the same period. While most excise duties are fixed per litre and do not change with price, the VAT component increases as prices rise.
- Crude oil component: The crude oil component captures how changes in Brent crude oil prices are passed through to pump prices, expressed in euro cents per litre (cts/L). The calculation accounts for the energy content of diesel and petrol and adjusts for refinery losses (93%). Higher crude oil prices increase revenues for oil producers.
- Gross margin expansion: The remaining difference between observed retail price changes and the combined effect of changes in taxes and crude oil prices represents the change in gross margins. Expanded margins translate into higher revenues per litre for refiners and distributors.

Section 2.2 explains why the additional revenues can be considered excess profits and highlights the caveats associated with this assumption.

The per-litre figures are then multiplied by fuel consumption to calculate the cumulative excess profits since the outbreak and extrapolated to cover the entire year of 2026, based on the average values observed since the start of the conflict.



Source: Oil Bulletin, Bloomberg



2.1 Retail price and crude oil price

This tracker updates based on the [European Commission Weekly Oil Bulletin data](#) and Brent crude oil prices from Bloomberg, to estimate the excess profits generated along the EU road fuel supply chain, using January–February 2026 as the pre-conflict baseline. As of 8th May, we are using Dated Brent prices to estimate excess profits, rather than front-month prices. To do this we use the *EUCRBRT Index – the standard benchmark for European physical crude, representing the Dated Brent Europe Spot Price*. See the note in section 2.2.5 for more information.

Retail prices for diesel and petrol are sourced from the Oil Bulletin, which reports prices both including and excluding taxes and excise duties. The Oil Bulletin provides a weekly snapshot of fuel prices across EU countries, as well as a weighted average for the EU. These retail fuel prices are compared with the Brent crude prices, where we take an average of daily close prices over the equivalent time span as the Oil Bulletin.

The Oil Bulletin releases fuel prices on Thursdays (P). The reporting day of each Member State (R) is used as the reference date for analysis. Member States do not all report identical data points. For example, Germany reports Monday prices, France reports the previous Friday's prices, and Italy reports the weekly average price. A few examples from the country's methodology notes are provided below. Therefore, any reference to a reporting date (e.g., "by March 16") actually spans data from the week before up to that Monday.

	M	Tu	W	Th	F	Sa	Su	M	Tu	W	Th
Retail price (Oil bulletin)								R			P
Brent crude price (Bloomberg)						/	/				

Country	Reported data
Germany	Consumer prices on Monday
France	Average consumer prices on the previous Friday
Italy	Weekly average
Spain	Arithmetic average Tuesday to Monday (inclusive)
Poland	Consumer prices on Monday
Netherlands	Consumer prices effective on Monday
Belgium	Monday price
Austria	Monday price

The *pre-war period*, or the baseline used to calculate excess profits, covers January and February and is represented by eight Oil Bulletin data points, from January 5 (with data spanning from 30 December 2025) to February 23.

The *war period* is defined from March 9 (with data spanning from March 2) to the most recent data available from the Oil Bulletin. It should be noted that the prices reported for March 3 are not considered representative of either period, as the prices collected span both before and after the first strikes by the US and Israel on Iran.

Cumulative excess profits and extrapolation to the entire year of 2026

The cumulative excess profits generated in the upstream and downstream segments since the start of the conflict are calculated using 2025 EU consumption of petrol and diesel, derived from [UNFCCC and Eurostat fuel sales estimates](#), and excluding biofuels. We assume uniform daily fuel consumption over the year.

As explained above, weekly downstream margins changes (expansion or compression) are calculated from observed retail price data over the week leading to the Monday of reporting (e.g. Monday observations for Germany; weekly averages up to Monday for Italy). Cumulative excess profits are calculated under the assumption that the calculated margins change is realised on the final day of the week analysed (Monday), with daily profits between two observation points linearly interpolated from the previous week's level. This approach results in a conservative estimate in contexts where margins increase progressively over time - which we have observed in the first three weeks analysed, following the escalation of the conflict.

The excess profits for the full year of 2026 is extrapolated based on the average margins change observed in the weeks since the outbreak.

2.2 Excess revenues to excess profit in the upstream and downstream

The analysis separates the supply chain into two segments: upstream and downstream excess revenues.

2.2.1 Upstream segment

Upstream excess revenues per litre are calculated as the additional income earned from selling crude oil at higher prices than in the pre-conflict period. Globally, these revenues flow to two main beneficiaries: the international oil companies with exploration and production operations, and the oil-producing nations themselves – through taxes, royalties, and production-sharing agreements. In the Middle East, where state-owned companies dominate production, these two often merge: the windfall accrues to national oil companies and the governments that own them. Either way, these revenues fall outside the scope of EU policy and are not the focus of this analysis.

The link between excess revenues and excess profits is clear in the upstream segment. Production costs for crude oil – drilling, extraction, and operating expenses – are largely fixed in the short term and do not rise in response to higher oil prices. When the crude price increases, the additional revenue flows almost entirely to profit. Excess upstream revenues can therefore be treated as a reliable proxy for excess profits. However, these profits accrue primarily outside the EU and fall beyond the reach of EU windfall tax policy. They are presented here for completeness, to give a full picture of where the geopolitical premium paid by EU drivers ultimately flows.

2.2.2 Downstream segment

Downstream excess revenues per litre are captured through gross margin expansion - the difference between the retail fuel price (excluding taxes) and the crude oil price. The increase in these margins reflects additional revenues generated primarily in refining and distribution.

Unlike upstream revenues, downstream excess profits are largely captured within the EU – and are therefore within reach of EU policy. Expanded downstream margins provide a reliable proxy for excess profits. Operating costs in refining are largely stable during periods of higher oil prices. Refineries do use natural gas as an energy input – for process heat and hydrogen production – but they meet their energy needs principally by burning hydrocarbon by-products of the refining process itself. In the EU, in 2008 imported natural gas accounts for only around [13%](#) of total refinery energy input – a relatively modest share that limits refiners' exposure to gas price movements. And whilst on a global basis energy costs can account for more than half of refinery operating costs, EU refineries are amongst the [most energy efficient in the world](#), meaning such exposure is further minimised. Gas prices have risen since the outbreak of conflict, but as of 26 March 2026, European gas prices were more than 80% below the peak levels seen during the 2022 energy crisis.

EU road fuels are blended with biofuels – biodiesel in diesel and bioethanol in petrol – which are priced differently to fossil fuels and subject to their own supply dynamics. If biofuel prices rise at a different rate to crude oil prices, then the gross margin calculation will not accurately reflect the cost structure of the blended fuel sold at the pump. In the immediate aftermath of the conflict escalation, biodiesel premiums over gasoil fell to [two-year lows](#). Gasoil is the feedstock from which diesel fuel is produced – essentially diesel before the final blending and additive stages.

This analysis assumes that blended biofuel prices rose as sharply as oil prices in the period under review. This is a simplifying assumption, but the available [evidence](#) suggests it is conservative rather than generous – meaning our excess profit estimates are more likely to be an underestimate.

2.2.3 Distribution costs

Downstream distribution costs may rise, but these additional costs are internal to the oil sector within the EU. In the previous energy crisis, net profit margins in the distribution and marketing segment [remained stable](#) between 2021 and 2023 – even as absolute profits rose - suggesting that any cost increases were absorbed within existing margins. This indicates that the substantial majority of the additional revenues captured downstream represent genuine excess profit – not compensation for higher operating expenses. Therefore, the majority of the additional revenues captured in the downstream segment can be reasonably interpreted as excess profits rather than compensation for higher operating expenses.

2.2.4 Diesel Vs petrol

The Middle East is typically the lowest-cost source of middle distillates, the direct precursor to diesel. European diesel margins have increased faster than other regions, reflecting a structural

deficit in domestic diesel refining capacity. The more muted response of petrol margins is also due to high stock levels in the US and Europe, seasonally weak global petrol demand, and the comparatively limited role the Middle East plays in global petrol supply.

It is important to note that Europe's vehicle fleet has a comparatively high share of diesel vehicles, which in turn shapes refinery configurations towards diesel output relative to other regions. Despite this, the EU remains structurally more dependent on imports of diesel than of petrol.

For all these reasons, when crude prices rise and refining margins widen, the impact is more acute in the diesel supply chain than in petrol. This is borne out in the data: by 23 March, diesel pump prices had increased by 49 cts/L relative to the pre-conflict baseline, compared with 27 cts/L for petrol.

Accordingly, the excess profits identified in this briefing are concentrated in the diesel segment, with the downstream diesel supply chain capturing a larger share of the windfall. However, this also has important implications for policy design. Given the EU's greater reliance on imported diesel as a refined product, a significant portion of these excess profits accrues to companies operating outside EU tax jurisdictions. This limits the extent to which such windfalls can be effectively captured through EU-based taxation measures. Around [20%](#) of diesel is imported into the EU.

2.2.5 Forward Hedging Dynamics

Futures hedging means individual refiners' actual input costs may differ from the Dated Brent and Brent front-month prices. Some refiners may have locked in crude at pre-conflict prices (meaning their actual profits are even higher than we estimate), while others may have hedged product sales forward at pre-conflict prices (meaning lower upside). Hedging dynamics may cause this analysis to underestimate or overestimate excess profits. Whilst we understand that most refiners have not been significantly hedging recently, over time, any hedging positions will unwind and margins will reflect market reality more accurately.

This introduces two considerations. A refiner that locked in crude purchases at pre-conflict prices in January or February 2026 would face lower input costs than our proxy assumes, and would therefore be capturing even larger excess profits than our methodology estimates. Conversely, a refiner that had hedged product sales forward at pre-conflict prices would not capture the full benefit of the margin expansion.

In practice, the 2022 crisis – and the current one – unfolded faster than most hedging programmes likely anticipated. The sudden and extreme nature of the margin spike means any refiner that did hedge at pre-crisis levels are likely to have been underhedged on the upside, capturing much of the windfall in real time.

Hedging practices are opaque and commercially sensitive, making precise quantification impossible. The only way to gain greater confidence in the scale of excess profits being captured is to track margins over time. History suggests that as a crisis stabilises, refining margins revert

toward their long-run average – **excess profits are a feature of acute market dislocation, not a permanent condition.**

Note on Front-month Brent price vs. Dated Brent price (Added on May 8 2026)

On 21 April, [The Economist published an article](#) showing that in April gross-profit margins for north-west European refiners had fallen from their oil crisis peak, and even turned negative. This was based on Dated Brent, the price for real cargoes delivered in the next few weeks, rather than what our tracker previously used - Brent front-month prices.

Under normal market conditions, the spread between these two benchmarks is minimal. Using the EUCRBRDT Index – the standard benchmark for European physical crude, representing the Dated Brent Europe Spot Price – we have estimated what difference this spread makes to our excess profit calculations. Using Oil Bulletin prices from 8 weeks following the start of the conflict, until the week preceding 27 April, we find that switching to Dated Brent reduces downstream excess profits (accruing to refiners and distributors) from €39 billion to €25 billion, while increasing upstream excess profits (flowing to crude producers and oil-producing nations) by the equivalent difference (€14 billion) from €52 billion to €66 billion.

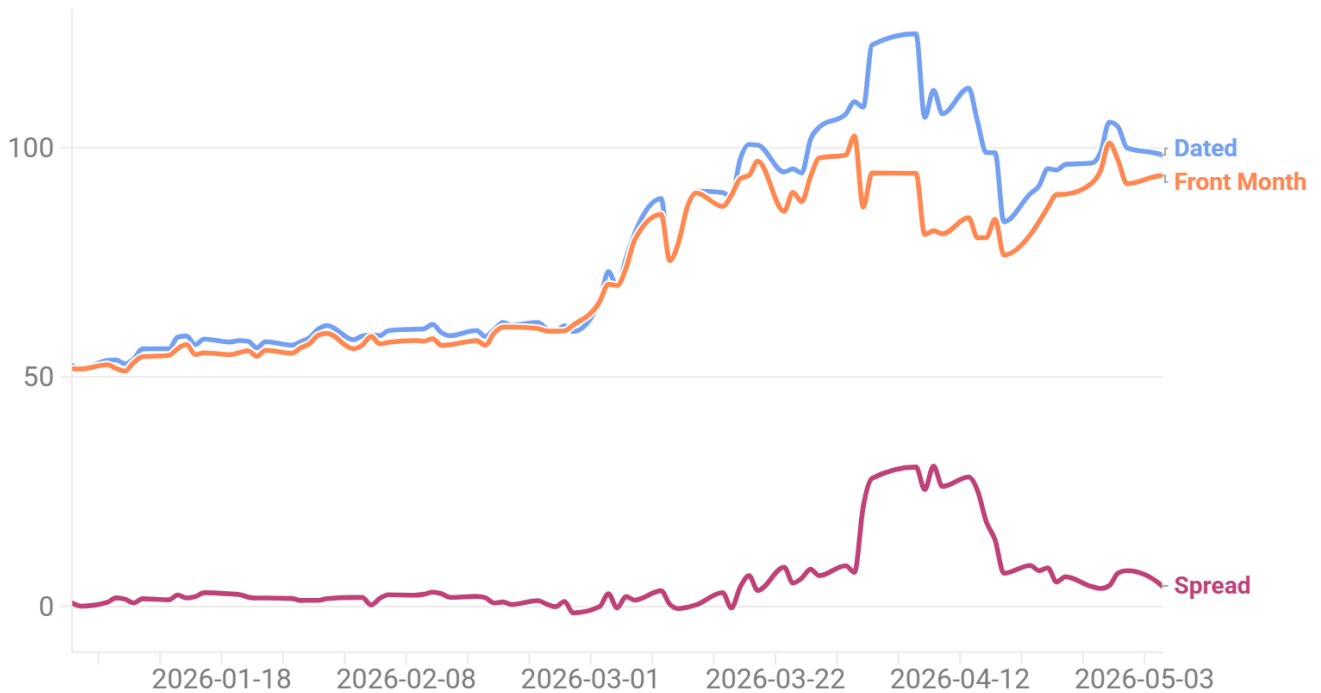
The spread between Dated Brent and front-month Brent has evolved markedly through the conflict:

- Pre-conflict (2–27 February): average spread of \$1.75
- Early weeks of the war (3–31 March): spread remained relatively contained, averaging \$4.09
- First half of April (1–16 April): spread spiked sharply, averaging \$29.09
- Second half of April (17–29 April): spread has since narrowed, averaging \$7.45

This pattern shows that while Dated Brent remains elevated relative to front-month prices, the acute dislocation of early April has partially subsided.

Spread between front-month Brent and Dated Brent

in EUR per barrel



Source: Bloomberg



One important uncertainty remains: we cannot observe how individual European refiners are using futures contracts and hedging strategies to manage their exposure to rising crude costs – a complexity discussed in detail in this methodological note. Depending on their hedging positions, actual refiner profits could be higher or lower than either benchmark implies.

3. Key Terms and Definitions

Gross margin / Spread: The difference between the retail fuel price (excluding taxes and duties) and the crude oil price, expressed in euro cents per litre. This represents the revenue retained across the downstream supply chain – refining, distribution and retail – after the cost of the primary input (crude oil) is accounted for. Note that in standard accounting, gross margin is expressed as a percentage of revenue; in this analysis, it is expressed as an absolute value in cents per litre for analytical clarity.

Excess revenues: The increase in gross margin above the pre-conflict baseline. Specifically, excess revenues are the additional income generated per litre of fuel sold – beyond what would have been earned had margins remained at January–February 2026 levels – multiplied by total EU fuel sales volumes. Excess revenues arise when pump prices rise faster than crude oil prices, widening the gross margin above its historical norm.

Excess profits / windfall profits: The portion of excess revenues that translates into profit, rather than compensation for higher operating costs. Windfall profit is an unexpected rise in profits because of favourable circumstances, with profit margins qualifying as windfall when they measure significantly higher than the historical norm. In this briefing, the two terms are used interchangeably to describe profits accruing to the oil industry that are attributable to the geopolitical shock rather than to business investment, efficiency improvements, or risk-taking.

Gross margin as a proxy for excess profit: This briefing treats excess revenues (gross margin expansion) as a reliable proxy for excess profits. This is justified on three grounds:

1. refinery and distribution operating costs are largely stable in the short term during periods of higher oil prices
2. imported natural gas – the main variable energy input – accounts for only around [13%](#) of total refinery energy input, limiting cost exposure to gas price movements; and
3. transport costs are internal to the oil sector and unlikely to structurally alter margins.

Geopolitical premium: the total additional cost borne by EU drivers relative to the pre-conflict period, encompassing both upstream and downstream excess revenues

4. How reliable are the estimates?

Sources of uncertainty in the analysis

The estimates in this tracker rest on a set of assumptions that are reasonable and well-supported, but each introduces some degree of uncertainty. Some of those assumptions cause the tracker to understate the true scale of excess profits being generated. Others may cause it to overstate, including the share that is generated within – and therefore potentially taxable by – the EU. Both directions of uncertainty are set out below.

Factors likely causing the tracker to underestimate excess profits

- **Scope: road fuels only.** The analysis covers diesel and petrol sold at EU forecourts. It does not capture excess profits generated from jet fuel, marine fuel, heating oil, or other refined products sold in the EU. The true total downstream windfall across all oil products refined and distributed in the EU is higher than the road fuels figure.
- **Biofuel pricing.** The analysis assumes that biofuel blend prices rose in line with fossil fuel prices during the period under review. The available evidence suggests they did not: in the immediate aftermath of the conflict, biodiesel premiums over gasoil fell to two-year lows, as fossil fuel prices surged while biofuel feedstock costs held largely steady. Since a portion of the fuel sold at EU pumps is blended biofuel whose cost rose less than crude, the analysis modestly understates the true margin expansion on blended pump prices.

- **Refiners with pre-conflict crude hedges.** Some refiners locked in crude purchases at pre-conflict prices in January or February 2026. These refiners face lower input costs than our proxy assumes and are therefore capturing even larger excess profits than the methodology estimates. The analysis does not – and cannot in real time – account for this upside.

Factors likely causing the tracker to overestimate the EU-taxable share of excess profits

- **Imported refined product.** Not all diesel sold in EU forecourts is refined within the EU. Around 20% of EU diesel consumption is imported as a refined product. Excess profits on these volumes accrue to non-EU refiners, outside EU tax jurisdiction. The tracker's downstream figure therefore overstates the share of excess profits that could be captured by an EU windfall tax.
- **Profit shifting by integrated companies.** Many oil companies operating in Europe are vertically integrated, with activities spanning crude production, refining, distribution and retail across multiple jurisdictions. Such companies have both the incentive and the means to shift profits between segments or across borders to minimise tax exposure. Estimating the true EU-taxable base is therefore more complex than the gross margin expansion figure implies.
- **Natural gas costs.** The analysis assumes that gas prices do not materially increase refinery operating costs. This is supported by evidence that imported natural gas accounts for only around 13% of total refinery energy input, with the remainder generated internally from refining by-products, and that European gas prices – while rising – remain more than 80% below their 2022 crisis peak. If gas costs rise materially further, refinery operating costs would increase and excess profits would be lower than estimated.
- **Pump prices on any given date** reflect crude that was purchased and refined days earlier. This means that as crude prices rise, the crude cost implicit in current pump prices is likely slightly lower than the current Brent crude price, which would modestly understate the gross margin and therefore slightly understate our excess profit estimate.
- **Demand elasticity.** The annualised figure assumes EU road fuel consumption volumes remain unchanged from the pre-conflict period. In practice, sustained high prices may suppress demand to some degree – as seen to a limited extent in 2022.

On balance, the factors causing underestimation and overestimation do not cancel out cleanly – they operate on different dimensions. A policymaker designing a windfall tax should focus on the tracker's downstream figure being interpreted as an upper bound on what an EU-level mechanism could capture from road fuels, with the true taxable base somewhat lower due to imported refined product and profit shifting. Conversely, the true total excess profit being generated – across all products, all refiners, and all jurisdictions – is higher than the tracker's headline figures suggest.

Further information

Juliette Egal

Principal Data Analyst

Juliette.Egal@transportenvironment.org
www.transportenvironment.org | [BlueSky](#) | [LinkedIn](#)

Daniel Quiggin
Senior policy advisor
Daniel.Quiggin@transportenvironment.org
www.transportenvironment.org | [BlueSky](#) | [LinkedIn](#)
