T&E

Response to the EC call for evidence

What the future of the Renewable Energy Directive should look like

T&E's recommendations on the new post-2030 Renewable Energy Framework

Briefing published: 16 April 2026

T&E's main recommendations in the post-2030 Renewable Energy Framework

01 Keep the **Renewable-only Energy Directive as the backbone of the post-2030 Energy Union**, with a binding EU renewable-only 2040 target to **rapidly reduce dependency on energy imports** and meet climate commitments.

02 **Preserve the RED's sectoral architecture, including sectoral targets across transport**, industry, heating and cooling, and buildings, to maintain clear decarbonisation pathways and strong demand signals.

03 **Maximize the contribution from renewable electricity as a transport fuel for all transport modes** and focus sustainable liquid fuels for aviation and shipping.

04 **Retain and expand the current crediting mechanism**, making it mandatory for Member States to include it to all transport modes.

05 **Phase out first generation food and feed crops** to prevent competition with food security and land use change impacts, and to ensure regulatory consistency with the aviation, shipping, and cars CO_2 regulations.

06 **Strengthen safeguards on problematic feedstocks in Annex IX** to ensure only truly sustainable and low fraud risk feedstocks are incentivised.

07 Prioritise **renewable hydrogen and e-fuels for aviation and shipping through a binding RFNBO target for those sectors**, and exclude low-carbon hydrogen from counting toward renewable transport targets.

The future of the Renewable Energy Directive

The Renewable Energy Directive (RED) must remain the central pillar of the EU's post-2030 Energy Union. The next phase of the framework should **strengthen the role of renewables and renewable electrification in delivering climate neutrality, energy security and industrial resilience**. Concretely this means: **keep RED as the backbone of the post-2030 Energy Union**, alongside the Energy Efficiency Directive and the Governance Regulation, with **a binding EU renewable-only energy target for 2040**.

Russia's war of aggression against Ukraine and the US-Israel war on Iran, exposed the cost of Europe's dependence on imported fossil fuels and pushed energy security back to the centre of EU policymaking. This reinforces the urgent needs to transition away from fossil fuels. The Renewable Energy Directive links that crisis context to the need to accelerate the deployment of renewable energy across the Europe Union. The Commission's call for evidence for the post-2030 renewable energy framework makes the same point: *higher renewable deployment is needed to strengthen energy security, third-country independence, affordability and competitiveness*.

Europe's dependence on fossil fuels remains a pressing issue. In 2025, the transport sector alone remained 92.9% dependent on fossil fuels. It is therefore crucial that the revised RED draws a hard line between genuine domestic renewable energy and so-called low-carbon fossil and/or "clean energy" technologies to phase out this dependency. T&E's position is clear: the renewable energy target must remain **strictly focused on renewable energy sources and should not be broadened to include fossil low-carbon or other "clean energy" categories**. At the same time, to reinforce this, T&E recommends the EU to also **set a headline target to cut imported energy in final consumption to 30% by 2040**. In 2023, imported fossil fuels still account for 58% of EU primary energy — far more than China (24%) or India (37%) energy import dependency rate stood at 58,4%. This would reflect the energy security gains that flow from delivering its own electrification pathway and scaling up domestic renewables.

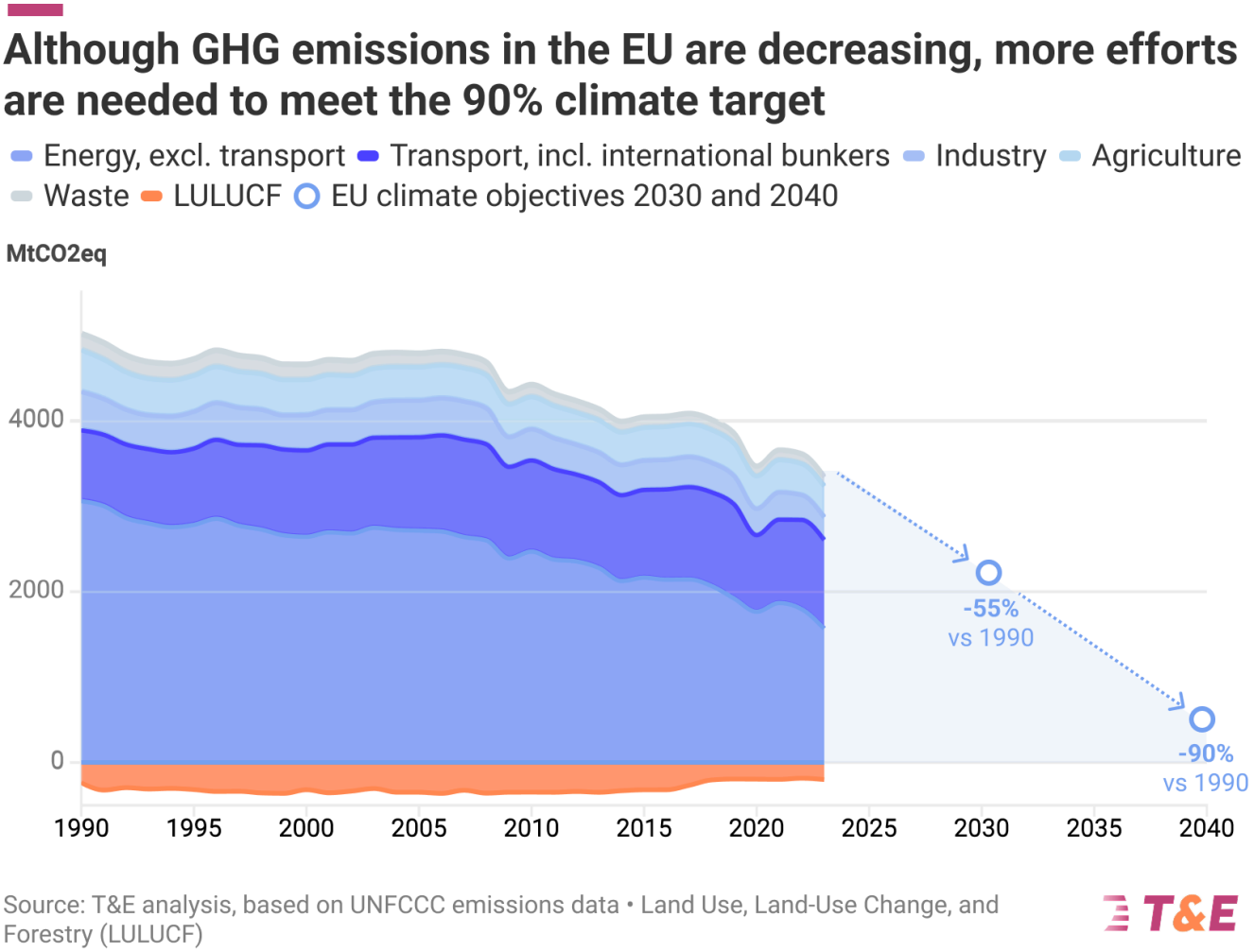
Overall, the future post-2030 renewable energy framework should do three things;

- It should **maintain ambition to deliver the 2040 climate target through renewable energy deployment**
- it should **preserve sectoral targets** to maintain strong demand signals, including in the transport sector;

- it should **ensure regulatory coherence and simplify implementation** without weakening the law.

1.1 Maintain renewable energy ambition to deliver the 2040 climate target

The European post-2030 renewable energy framework is explicitly designed to support the Climate Law's target of reducing in 2040 EU greenhouse gas emissions by 90%. In 2026, European greenhouse gas emissions still account for 6.3% of global emissions. As the graph below shows, further emissions reductions are needed across sectors to stay on track. In this context, the EU should continue to play a leading role in demonstrating the viability of decarbonisation pathways. One of its success stories lies in the renewable energy deployment. Hence, the new RED should continue to support additional growth in renewable energy, stronger power system integration, and faster electrification across end-use sectors.



Source: T&E analysis, based on UNFCCC emissions data • Land Use, Land-Use Change, and Forestry (LULUCF)

The climate argument is especially strong in transport. After energy, transport is the second largest source of greenhouse gases emissions in the EU and the sector accounts for 10.6% of global transport emissions. In parallel, the Commission's own assessment recognises that renewables progress remains particularly challenging in the **transport** and heating and cooling sectors. The current pace of growth is insufficient to reach the level needed for the 2040 objective

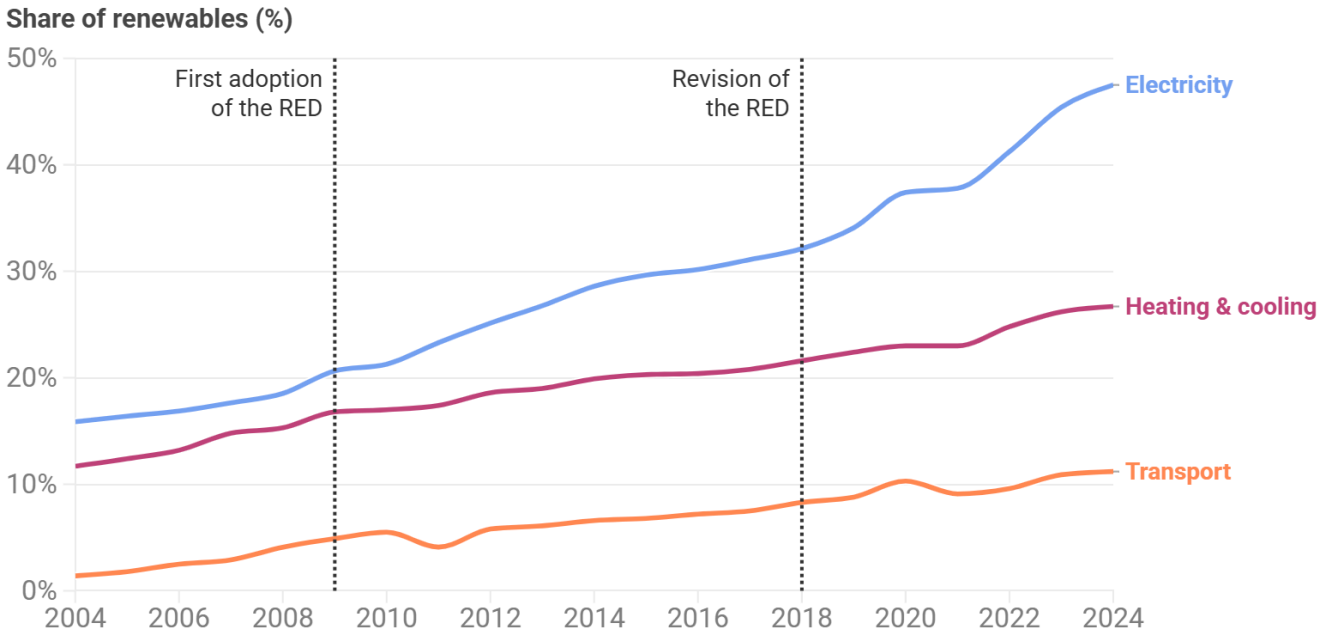
with, as found in a recent report by EPRS, renewables making up about 20% of the EU energy mix in 2024 and oil, gas and coal up to about 67%. To that end, T&E urges the Commission to **set a binding EU renewable only energy target for 2040**, anchoring the Energy Union around domestic renewable energy deployment, while avoiding watering down its ambition with greenwashed climate solutions, such as fossil low-carbon or clean technology. This way it can set a clear and achievable path to climate neutrality.

1.2 Preserve sectoral targets for strong demand signals and delivery

A major strength of REDIII is that it does not rely only on an aggregate EU-wide renewables target. It also includes sectoral targets and sub-targets across transport, heating and cooling, industry and buildings. As the chart below shows, sectoral binding and indicative renewable targets have helped accelerate uptake across the sectors covered. T&E's position is to **maintain the current sectoral approach in the post-2030 framework to preserve a clear decarbonisation and energy security trajectory and strong demand signals across the economy**.

How EU Renewable Energy Directive sectoral targets accelerated the bloc's renewables uptake

Transport continues to lag behind, failing to match the rapid expansion seen in the electricity and heating sectors



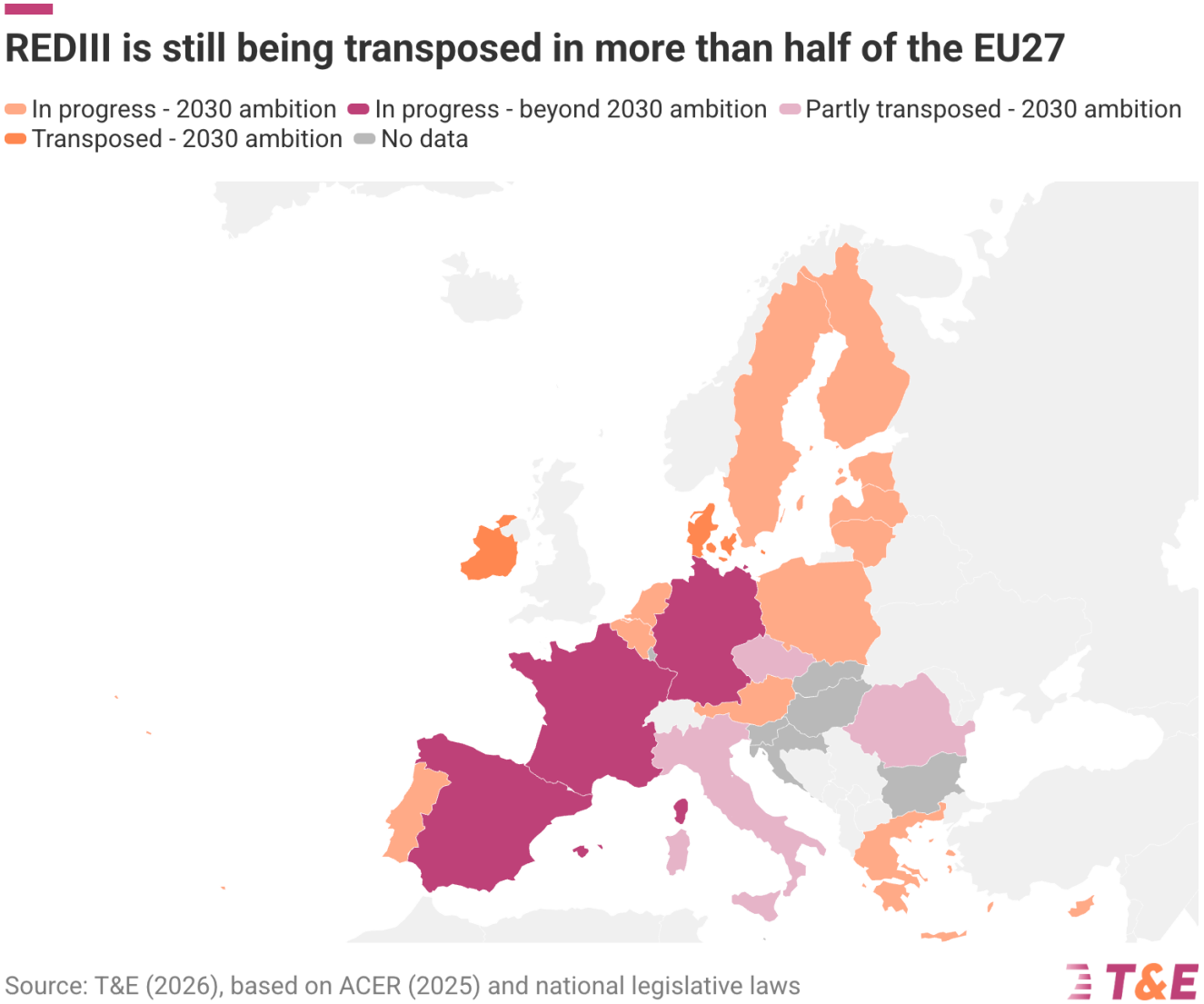
Source: T&E, based on Eurostat's SHARES data (2026)

Aggregate targets alone can hide weak performance in the sectors where the transition is most difficult. Hence sectoral targets force delivery not only where it is easiest. They also give greater visibility to national governments, investors and industrial actors planning. Therefore, preserving sectoral targets is not about defending complexity against the narrative of simplification, but

about maintaining the decarbonisation trajectory for the post-2030 Energy Union.

1.3 Prioritise implementation and legal clarity rather than weakening the framework

As the map below shows, more than half of the EU27 are still transposing REDIII, with a couple of Member States already extending their approach beyond 2030. Any simplification exercise by the Commission should focus on making the future Directive easier to implement and monitor, and not on weakening its ambition or enforceability. It should not at this stage undermine regulatory certainty for Member States, investors and industry, all of whom need **clear rules, compliance pathways and demand signals**. Predictability is a precondition for investment and should take priority over "technological openness".



If the Commission were to start changing or dropping core elements of the 2023 Renewable Energy Directive before Member States have fully implemented it, it would send exactly the wrong signal. It could weaken national ambitions by the adoption of unsustainable lock-in solutions, create disparity between Member States and penalise early movers.

While T&E acknowledges that most Member States are almost one year late in transposing REDIII, we also note that the revision is taking place one year earlier than the legislative text states (i.e., *by 31 December 2027, the Commission shall submit, if appropriate, a legislative proposal on the regulatory framework for the promotion of energy from renewable sources for the period after 2030*). With the revision now planned for the end of 2026, **the priority should be providing regulatory certainty for Member States in the implementation of REDIII, not reopening the key provisions.**

Key recommendations

On the post-2030 renewable energy framework architecture, T&E urges the Commission to;

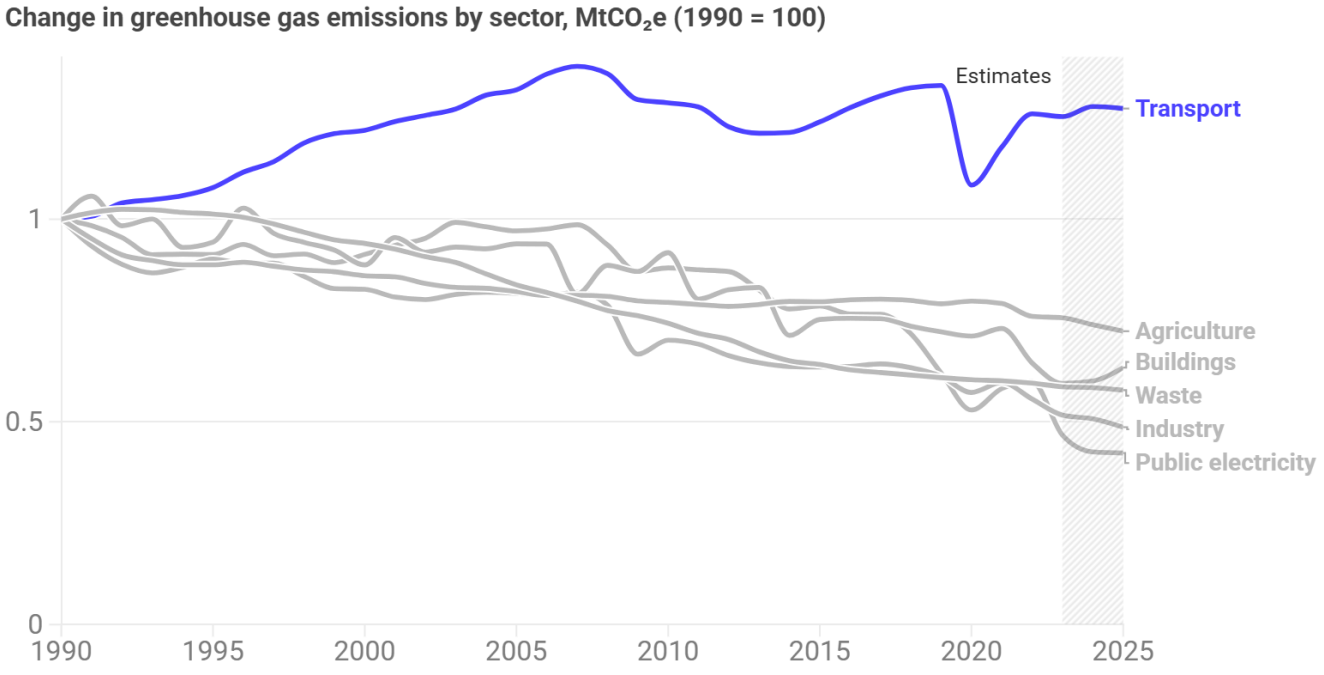
- Keep **RED as the backbone of the post-2030 Energy Union**, in parallel with the Energy Efficiency Directive and the Governance Regulation;
- Set **a binding 2040 EU target for the share of renewable energy** in gross final energy consumption across sectors;
- **Maintain the current sectoral targets approach** of the REDIII (i.e. transport, industry, heating & cooling, etc) to ensure clear decarbonisation trajectory and demand signals across the EU;
- Priority should be **providing regulatory certainty for Member States in the implementation of REDIII**, not changing or dropping key elements in the revision.

Renewable electricity first and liquid fuels where unavoidable

Transport remains Europe's biggest climate challenge. In 2025, transport emissions in the EU flatlined, with emissions from cars plateauing and increased emissions from aviation undermining a drop in shipping emissions. It is central that the new renewable energy framework works towards reducing emissions and strengthening energy independence, notably by phasing out reliance on fossil fuels. And by prioritising the simplest and most energy efficient decarbonisation pathways when available.

Transport largest source of emissions in Europe

EU27



Source: UNFCCC, EEA, Eurostat, IPCC, Ember, CREA • Transport includes int. aviation and maritime; Non-transport estimates linearly extrapolated. *Estimates with higher uncertainty.

The post-2030 RED should prioritise moving away from exposure to fossil price volatility and structural dependence on imported energy and focus instead on the simpler options. T&E found that cars alone cost the EU €67 billion in oil imports in 2025. But electric cars are already cutting oil imports. Nearly 8 million electric cars in the EU will save around 46 million barrels of oil in 2025, equivalent to **€2.9 billion in avoided oil import costs**.

The transport target should also be clear about which compliance routes it prioritises. T&E calls the Commission to adopt a "**renewable electricity first and liquid fuels where unavoidable**" approach, with stronger incentives for renewable electrification in all transport modes. As electrification accelerates across the EU, this should become the key principle of the transport chapter in RED IV: *direct electricity should be the primary pathway, while liquid fuels should be reserved for sectors where electrification is not yet viable*.

2.1 Renewable electricity at the center of the transport target

Since REDIII was adopted, the regulatory landscape for transport has changed substantially. The EU now has dedicated regulations for shipping and aviation fuels through FuelEU Maritime and ReFuelEU Aviation, while road transport is increasingly shaped by the cars and vans CO_2 standards and the rollout of charging infrastructure via AFIR. In that context, the post-2030 RED should focus on providing a clear, EU-wide demand signal for renewable energy in transport, while avoiding overlap and unnecessary complexity across instruments and within the RED.

REDIII already recognises renewable electricity as a core decarbonisation pathway for transport: electricity counts towards the target, benefits from favourable multipliers (4x) and is supported through a dedicated crediting mechanism – binding for public charging and voluntary for private charging. REDIII itself recognises that **electromobility will be essential, while aviation and maritime will remain more reliant on liquid fuels for longer.** But the current framework still does not reflect this reality well enough. Renewable electricity is not accounted for consistently across transport modes, which risks undervaluing its contribution and weakening incentives for the most efficient decarbonisation pathway. Prioritising renewable electricity is straightforward, as Europe cannot reduce its structural exposure to imported fossil fuels if transport continues to rely on combustion-based pathways where direct electrification is available.

Electrification is also already happening in the EU transport sector. Recently, T&E found that:

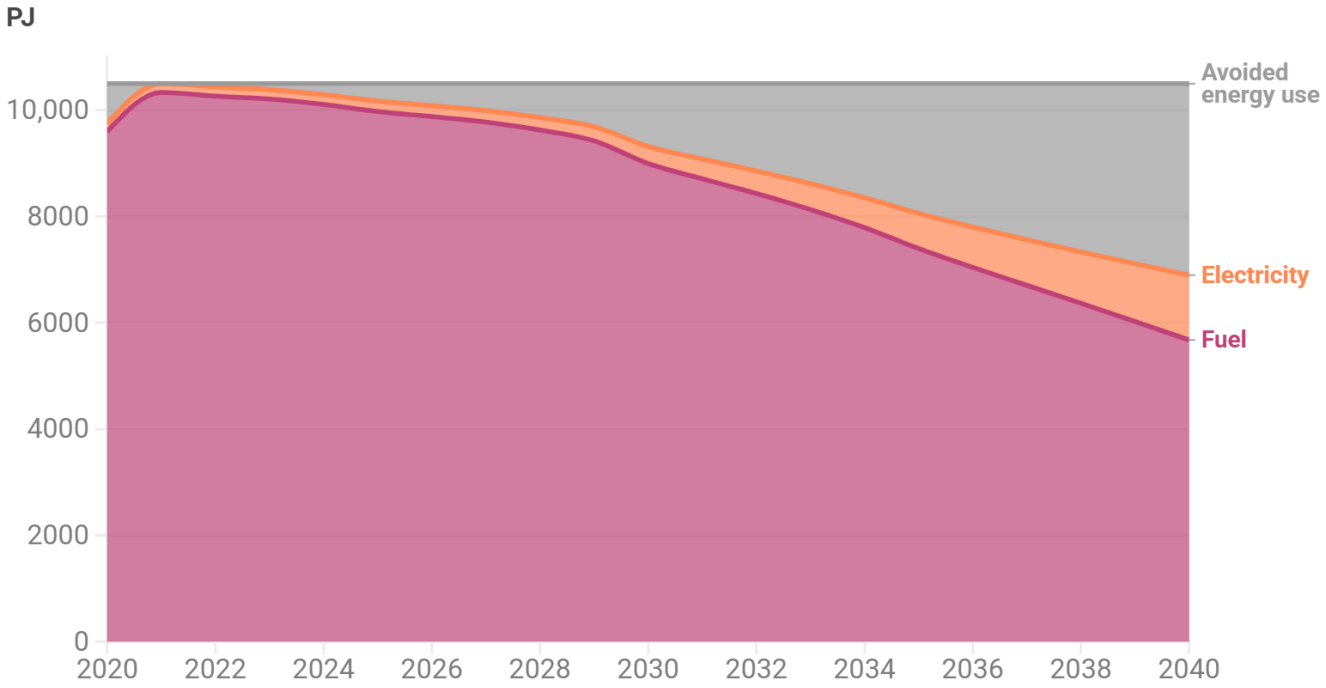
- Nearly 8 million electric cars in the EU will save around €2.9 billion in avoided oil import costs in 2025;
- With today's battery technologies, more than half of Europe's ferries can be electrified by 2035;
- The market uptake of zero-emission trucks is also accelerating, with a peak increase of 5.6% in new electrified truck registrations recorded since July 2025;
- Ports are increasingly electrifying their operations, including through the deployment of onshore power supply, providing power to vessels at berth;

- Electric aircrafts are starting to emerge, with entry into service of small aircraft expected around 2030, and are set to support the decarbonisation of European aviation, particularly on regional and short-distance routes.

T&E calls on the Commission in the transport chapter to follow a **"renewable electricity first, and liquid fuels where unavoidable"** approach, because electrification is simpler, readily-available, cleaner and reduces import dependency, whereas liquid fuels are more complicated and limited in availability. As the T&E graph below shows, electrification also reduces overall transport energy demand, as electric vehicles require far less final energy than combustion engine vehicles for the same distance.

Electricity, driving energy demand destruction

Development of EU 27 final transport energy demand by energy carrier, assuming the current policy implementation and no reduction in transport volume



Aggregation of sector specific T&E scenarios based on Eurostat.

To continue to incentivise renewable electricity in the transport sector, T&E recommends the Commission to

- **Retain and expand the current credit mechanism** under Article 25 by **making it mandatory for Member States to include public and private charging for vehicles, onshore power supply for ships at berth and rail operators**. Several Member States are already moving in this direction with regard to private charging: the Netherlands, Austria

and Germany already have it in place, while France, Italy and Spain are developing it as part of their national RED transposition;

- **allow electricity supplied to land transport - road, rail, trucks - to be counted as fully renewable** where the user, supplier, fleet operator or charge-point operator demonstrates renewable electricity procurement through the grid including through the use of a power purchase agreement (PPA). T&E supports **an approach aligned with the RFNBO methodology for demonstrating renewable sourcing over the grid**. Additionality should apply only where an operator seeks to claim fully renewable electricity procured over the grid, as an alternative to the default grid-average method in the previous 2 years;

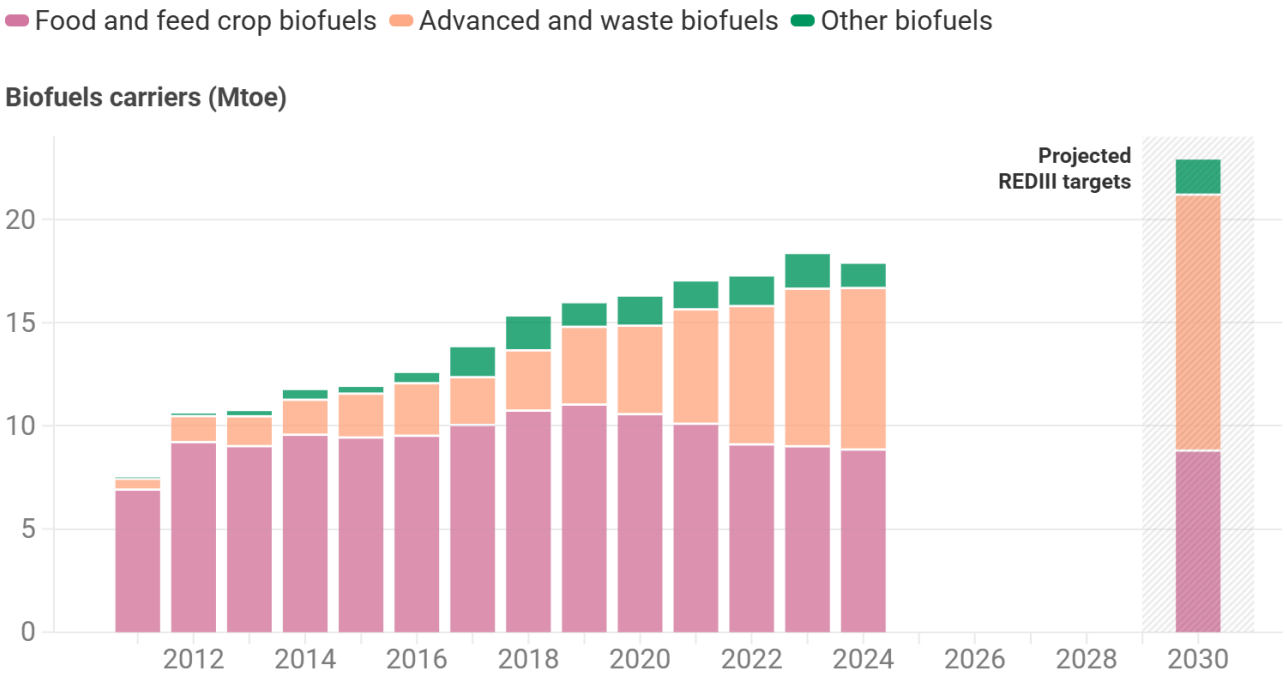
- **revise Article 27(1)(b) and the accounting rules for renewable electricity (RES-E) in the GHG-based target**. After 2030, only the EF(t) should continue to be used in the denominator. The energy-based multiplier for RES-E is now 4, while the GHG savings-based multiplier ECF_e is less generous with 183g CO2/MJ. **Given the growing role of electricity, this should be reassessed and adapted to transport** since this fossil fuel comparator is based on bioliquids used for the production of electricity. In addition, **the multipliers should be awarded to all transport sectors.** Now article 27.2 (d)(iii) of RED III limits the 4x multiplier to 'road vehicles'. This restriction should be removed to include all electrified transport modes, including ships and planes.

2.2. Limited role for biofuels in the transport sector

By 2040, a growing share of transport energy demand will be met through direct electrification, while **the role of liquid fuels should decline because of their higher cost, lower system efficiency and limited availability.** Biofuels are expected to retain a role in transport after 2030, such as in mandates for the aviation and maritime sectors (ReFuelEU and FuelEU Maritime, respectively). However, the EU must ensure that only truly sustainable feedstocks are used.

Despite their climate, environmental and socio-economic harms, 1G biofuels will still make up 38% of EU biofuels by 2030

The EU should implement an immediate phase out of first generation biofuels post-2030



Source: T&E, based on EU SHARES historical data and own modelling of REDIII targets, assuming industry growth scenarios

- The EU should now go beyond the current 7% cap on first generation food and feed biofuels, and **implement an immediate phase out of first generation biofuels post-2030.** In 2024, these biofuels still accounted for around half of total EU biofuels use. However, the graph below shows that the market is shifting. Advanced and waste biofuels have grown steadily over the past decade and are projected to increase by 58% by 2030 compared with 2024, overtaking crop-based biofuels. This shift should be accelerated. First generation biofuels are responsible for a litany of climate, environmental, and socio-economic issues. These include: loss of carbon-stock land caused by both direct and indirect land use change due to increased agricultural demand, as has been long-acknowledged by EU policy[1]; significant biodiversity loss and environmental damage, due to monocultures and agricultural run-off from intensified fertiliser use; a heightened risk of food insecurity and food price volatility, which is amplified by increased market competition. Additionally, first generation biofuels carry a high water footprint which could drive up competition for this critical resource.
    - The current supply chain crisis caused by the closure of the Strait of Hormuz is a strong example of why the EU should be focused on significantly reducing its dependence on all crop-based biofuels, **as the crisis is set to have a significant**

[1] Policy references for DLUC / ILUC

impact on fertiliser supply chains, and therefore, food security and food price volatility. Indeed, 40% of Europe's biofuels come from outside the EU.

- The EU should preserve the current environmental safeguards and sustainability architecture rather than reopen it in the name of simplification. T&E calls upon the Commission to **retain the existing delegated and implementing acts framework, which remains relevant for maintaining important safeguards, including, but not limited to, management of the Union Database, the high ILUC-risk feedstock phase out, Annex IX part B feedstocks and cap, and greenhouse gas emissions values methodologies** that have long been negotiated. Weakening those rules, or restricting the Commission's exercising of the delegation, would not simplify the transition but it would simply make it easier for unsustainable feedstocks to benefit from policy support.

- On a similar line, the revision should also **address the growing issue of problematic feedstocks in the Annex IX list** or at least limit their contribution to the RED targets. In the last year, T&E has shed light on the fraud risks associated with some of the Annex IX feedstocks, including, but not limited to, palm oil mill effluent (POME) and empty fruit bunches. On one hand, T&E welcomes the Commission's initiatives to strengthen its efforts against fraud, including the implementation of the Union Database and updating Implementing Regulation 2022/996. On the other hand, T&E urges the Commission to

    - amend Article 28(6) to **enable the removal of feedstocks from the list so that problematic ones can also be withdrawn and not only added**, and refocus Annex IX part A on advanced wastes and residues with clearer sustainability benefits and limited competing uses. In addition, intermediate crops used for aviation should be excluded from the part A list of feedstocks, and move to part B, as is already the case for other sectors;

    - explore creating a separate category for high-risk feedstocks, many of which were already recognised in the EU-commissioned 2022 assessment report on advanced biofuels feedstocks.[2] Considerations for competing uses with other sectors should also be considered for Annex IX feedstocks, as increased reliance on feedstocks, such as used cooking oil and animal fats, can result in increased reliance on less sustainable feedstocks in other sectors;

    - maintain **a strict cap on Annex IX part B**;

    - consider how it can **better incentivise domestically-sourced advanced feedstocks over imports from third countries**, such as changing eligibility for multiple counting mechanisms, while still paying attention to the limited availability, competing uses and priority of non-energetic use. Domestically-sourced advanced feedstocks

[2] European Commission: Directorate-General for Energy, Consentec, SCS Global Services, Guidehouse, Wageningen Research, The International Council on Clean Transportation (ICCT) and E4tech, Assessment of the potential for new feedstocks for the production of advanced biofuels – Final report, Publications Office of the European Union, 2022, https://data.europa.eu/doi/10.2833/719121

present less verification challenges, due to better supply chain oversight and intervention capabilities from Member States.

2.3 Prioritise renewable hydrogen and e-fuels for aviation and shipping

Since REDIII was adopted, the hydrogen debate has become more grounded in market realities. Expected supply volumes have not yet materialised and renewable hydrogen remains significantly more expensive than fossil-based alternatives - more than 3x the price. However, the EU's aviation and shipping e-fuels mandates have led to the emergence of a multitude of projects across the continent; for example, there are more than 40 large-scale e-SAF projects under development in Europe, with a combined production capacity accounting for more than half of the production capacity of all projects under development in the world. In shipping, 80 e-fuels projects that target primarily or in part the maritime sector are being considered, and the first e-fuel project Kasso became operational in 2025 delivering e-methanol to Maersk. More recently, a power-to-ammonia plant in Lemvig, Denmark, started operating with its production used to test shipping ammonia engines. In transport and industry, renewable hydrogen and RFNBOs have a strategic role to play where direct electrification is not viable.

The post-2030 RED should therefore preserve a clear hierarchy for transport decarbonisation: renewable electricity first, but also renewable hydrogen-derived fuels where unavoidable. In that context, the role of the Directive is to provide long-term certainty for investors. To that end, REDIV should:

- **Maintain the hydrogen sustainability safeguards with RED as the legal basis**. The recently agreed low-carbon hydrogen delegated act should be preserved to avoid reopening rules that have only just been settled. At the same time, the RFNBO delegated acts on additionality and temporal and geographical correlation should remain in place because they are necessary to protect the climate integrity of renewable hydrogen, provide regulatory certainty and support first movers investing under the current rules. Strong maritime examples of the latter recently include, ETfuels which signed an offtake agreement with RFOcean for long-term e-methanol supply in February 2026, and Titan Clean Fuels which inked an offtake agreement with Munich-based Turn2X to deliver e-methane by 2028 end of March.
- **Fossil low-carbon hydrogen should not count towards renewable energy targets in transport**. This includes blue hydrogen produced from fossil gas combined with carbon capture and storage technology. At a time of renewed energy price volatility and persistent concerns over energy security and supply, it would be counterproductive to expand support for gas pathways under the renewable transport framework. The economic case is also weak: studies have highlighted the uncertain cost of blue hydrogen, while T&E's analysis shows that, depending on the source of natural gas and the level of capture achieved, its emissions can exceed currently possible thresholds.

- **Narrow down the scope of the 1% RFNBO target for the transport sector to include the aviation and shipping sectors only, with a specific binding RFNBO supply obligation for the shipping sector** to be met solely with e-fuels. T&E's latest shipping e-fuels observatory reveals that the European shipping e-fuels market is developing too slowly and requires stronger policy incentives and mandates in the short term on both the supply and demand side. FuelEU is expected to clarify and strengthen RFNBO uptake mandate, whereas RED should provide for supply certainty.

Key recommendations on the 2040 RES-T target

For the future of the renewable energy transport target, T&E urges the Commission to:

- Adopt a **renewable electricity first and liquid fuels where unavoidable approach** and **maximise the contribution of renewable electricity** in all transport modes;
- **expand the current Article 25 credit mechanism**, making it mandatory for Member States to cover public and private charging, onshore power supply for ship at berth and rail operators;
- allow electricity supplied to land transport to be **fully renewable where renewable procurement through the grid** can be demonstrated, including via PPAs;
- **phase out 1G food and feed crops biofuels immediately**, going beyond the current 7% cap to address food competition, land-use impacts, water issues and widen environmental harms
- **preserve the current environmental safeguards and sustainability architecture of the Renewable Energy Directive** rather than weakening them for the stake of simplification;
- **strengthen safeguards on problematic Annex IX feedstocks**, including by enabling the removal of feedstocks from the list and limiting support for those linked to high fraud and sustainability risks;
- **maintain the current RFNBO sustainability safeguards**, including additionality and temporal and geographical correlation rules, to protect climate integrity and regulatory certainty and **ensure that fossil low-carbon hydrogen does not count towards renewable energy targets** in transport;
- **narrow the scope of the RFNBO transport target to aviation and shipping only**, with a specific binding RFNBO supply obligation for shipping to be met solely with e-fuels.

Further information
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