



Europe's chance to say bye to fossil fuels

Top priorities for the REpowerEU strategy

May 2022

REpowerEU is the EU's flagship strategy to reduce Europe's energy dependence on Russia, planned for publication in May. The strategy provides the perfect opportunity for the EU to not only wean itself off Russia energy but to also cut the fossil fuel umbilical cord by slashing demand for fossil energy. This is critical as simply shifting the EU's energy dependency from one autocratic regime to another will do nothing to fix the EU's energy security problems.

The EU is reliant on imports for 95.9% of its crude oil supply¹, spending around \$1 billion a day. As the EU's biggest supplier, a quarter of that money flows into Russia, which gets 75% of its energy revenue from oil². When the price of oil goes up, so does Russia's military spending with EU oil money funding the atrocities which are occurring in Ukraine everyday³. To slash the EU's oil demand, tackling transport's thirst for oil is key. The oil consumed by cars, vans, trucks, airplanes, and ships makes up two thirds of total EU oil consumption⁴.

REpowerEU is an opportunity to create an EU level strategy and support mechanisms to lower oil demand in the near term. To be successful, Key measures should include:

Short term measures:

- **Implement IEA measures to reduce oil demand:** In response to the war in Ukraine the International Energy Agency (IEA) published a ten point plan⁵ to reduce oil demand through measures such as reducing corporate travel and car free days. These can be implemented quickly and provide almost immediate reductions in oil use, if implemented across the EU

¹In 2020, the EU produced 18.7 Mt of crude oil and imported 440.3 Mt. [Eurostat \(2022\) Oil and petroleum products - a statistical overview](#).

²T&E (2022) [How Russian oil flows to Europe](#).

³T&E (2018) [How Europe's oil addiction funds the Russian military](#).

⁴T&E (2022) [How Russian oil flows to Europe](#).

⁵IEA (2022) [A 10-point plan to cut oil use](#).

they could save 11.8% of oil used in transport. To encourage Member States to take action, **REpowerEU should issue guidance to Member States to implement IEA's 10-point plan.**

- **Introduce measures to reduce truck fuel consumption:** In particular, **REpowerEU should ask Member States to immediately reduce truck speed limits from 90km/h to 80km/h.** This is one of the most effective and easiest to implement measures proposed by the IEA and would reduce fuel consumption by 5%. To reduce consumption by up to another 5%⁶, the **EU should introduce an incentive programme to retrofit aerodynamic devices to trucks with a legal in-use obligation to equip trucks operating in the EU by 2025** (a similar incentive scheme is already in place in Germany).

Medium term measures:

Medium term measures are essential for locking in a rapid and systemic transition away from oil in the transport system and these should be central to the REpowerEU strategy.

- **Accelerated corporate fleet electrification:** Cars are responsible for 30% of the EU oil consumption and corporate cars consume the majority share due to their higher mileage (2x private cars) and lack of incentives to drive sparingly. The business case for fleets is already there and REpowerEU should help unlock action faster across all companies. Rapid electrification of corporate fleets is the most effective tool for reducing oil demand from cars and vans faster.

REpowerEU should propose a new EU regulation to require large fleets (more than 20 cars) to rapidly electrify new corporate registrations (50% electric by 2025) with a view to achieving 100% zero emission corporate car registrations in 2030. Alternatively (but less effectively) the same could be achieved by including corporate fleets in the Energy Efficiency Directive and requiring member states to put in place national measure to achieve similar ambition.

- **Ambitious truck CO2 targets:** Trucks and buses together consume 19% of EU oil demand from transport. To reduce demand, CO2 standards are most effective, driving both innovation to reduce fuel consumption and bringing ZEVs to the market as CO2 standards have done for cars. Yet the current targets (-15% in 2025, -30% in 2030) hamper rather than accelerate the market, falling behind voluntary commitments made by truck makers (almost 50% ZEV in 2030). Voluntary announcements are not enough to guarantee that ZEV trucks hit EU roads quickly, only strong regulation will ensure investments are made and production lines adjusted to scale up supply, as is currently seen with electric cars. The review of the truck CO2 standards is planned for late 2022.

⁶ Per fitted device.

REpowerEU should already signal Commission's ambition to scale up zero emission trucks to ensure most trucks become zero emission from 2035. In addition, faster ramp up in the mid-term is key to allow truckmakers save fuel fast, so a new 30% reduction target 2027 target should be introduced and the 2030 target increased to 65%. The higher ambition would reduce fuel consumption from trucks by 2% in 2025 and 19% in 2030 compared to 2019. Buses should also be included in the targets, with only ZEV buses sold from 2027.

Long term measures:

- **Reduced energy demand and e-fuel targets for shipping** Ships consume 12% of all oil used in transport. Shipping's oil demand can be reduced through efficiency measures such as speed reductions and through bringing fossil free e-fuels to the market.

To ensure efficiency measures take place REpowerEU should require an amendment to the Energy Efficiency Directive to require a 41% reduction in fuel consumption by 2030 for both new and existing ships. It should also ensure e-fuels mandate a 6% sub-target for e-fuels in 2030 as part of FuelEU maritime to provide a business case for shipping e-fuels.

- **Increased e-kerosene target for aviation:** Aviation consumes 4.1% of the oil used in transport and the most effective way to reduce the demand in the long term is to transition to fossil free e-kerosene.

To enable a quicker transition than is currently envisaged, REpowerEU should include earlier and higher targets for e-kerosene of 0.04% in 2025 and 2% in 2030 than currently proposed by the Commission.

Alongside the measures proposed to reduce oil demand outlined, REpowerEU must stay away from fake solutions which will do little to secure the EU's energy future but will have other potentially disastrous consequences. In particular **biofuels should not be included within REpowerEU as their use risks exacerbating the food crisis and damaging land set aside for rewilding. Instead, the Commission must recommend member states to suspend the use of crop biofuels immediately.**

REpowerEU should also ensure the EU's fossil free transport future by securing materials needed to decarbonise transport as China and the U.S. are already doing for key raw materials like nickel and lithium. For the EU to not fall behind REpowerEU must:

In the short term:

- Secure more sustainably sourced lithium and nickel short-term (to 2025) through diplomacy with resource rich democratic partners including Australia, Canada and Indonesia

- Convene businesses including the mining sector, to work together and ensure max volumes of planned supply are available on spot markets at competitive prices
- Consider joint purchasing and price guarantees if necessary

In the longer term, a centralized EU body on the supply and sustainability of critical metals should be set up.

Only by implementing measures now to reduce oil demand and securing the raw materials needed for clean transport can the EU end its fossil fuel addiction and dependency on non-democratic regimes.

1. Introduction

REpowerEU is the EU's flagship strategy to reduce Europe's energy dependence on Russia, planned for publication on the 18th of May. The strategy provides the perfect opportunity for the EU to not only wean itself off Russia energy but to also cut the fossil fuel umbilical cord by slashing demand for fossil energy. Russia's invasion of Ukraine has highlighted the Bloc's dependence on fossil fuels from countries with a high geopolitical instability index and the risk that this poses to the EU's energy security. Simply shifting fossil fuel supply from one autocratic regime to another will do little to fix the problem. Only a rapid reduction in fossil fuel demand and move to clean, secure renewable energy sources will secure the EU's energy future and allow the EU to reach its climate goals.

For REpowerEU to be effective it is imperative that it includes oil and not only gas. In 2020, the EU was reliant on imports for 95.9% of its crude oil supply⁷, spending around \$1 billion a day. The dependency is particularly acute when it comes to Russia which is the EU's biggest oil supplier, responsible for a quarter of the EU's imports and earning Russia \$285 million a day. Oil exports are also critical to Russia's economy- 75% of the revenue that Russia gets from EU energy exports come from crude oil and its products, only a quarter come from gas⁸. Russia's oil revenues also fund the war in Ukraine, when oil revenues go up so does Russia's military spending⁹. Tackling the EU's oil dependency in REpowerEU is critical to making the EU energy independent.

Transport has a defining role to play in Europe's oil dependency. The oil consumed in transport - that is the fuel consumed by cars, vans, trucks, airplanes, and ships - makes up two thirds of total EU oil consumption. Road transport in particular consumes 50% of all of the EU's oil¹⁰. To reduce the EU's oil consumption it is critical to slash transport's oil demand in the short, medium and long term. To achieve this the Commission must present concrete plans for reducing transport's oil demand in the REpowerEU

⁷ In 2020, the EU produced 18.7 Mt of crude oil and imported 440.3 Mt. [Eurostat \(2022\) Oil and petroleum products - a statistical overview](#).

⁸ T&E (2022) [How Russian oil flows to Europe](#).

⁹ T&E (2018) [How Europe's oil addiction funds the Russian military](#).

¹⁰ T&E (2022) [How Russian oil flows to Europe](#).

strategy. This paper outlines the most important strategic objectives and policy recommendations which need to be included within REpowerEU to set the EU transport on a swift trajectory away from oil.

2. Key Strategic objectives:

2.1 Biofuels should not be included in the strategy

Europe's biofuel lobby groups, namely the European Biodiesel Board (EBB) and European Renewable Ethanol (ePure) claim that increasing the use of food based biofuels will improve food and energy security¹¹, helping the EU move away from imports of Russian oil.

Yet studies have repeatedly shown that biofuels are not a solution for powering transport with use of crop based biofuels driving deforestation and increasing CO2 emissions. In the aftermath of Russia's invasion of Ukraine, global grain and vegetable oil prices have reached record highs due to the country's leading global role in food production, exacerbating the food price crisis. The ongoing uncertainty caused by the war has kept prices high and is causing serious concern for food security across the world, risking food shortages and pushing millions of people into food poverty. At a time when the world is struggling to eat there is no room for the EU to burn food as fuel.

Europe currently turns 10,000 tonnes of wheat - the equivalent of 15 million loaves of bread- into ethanol for cars every day¹². The Commission has already recognized the harm caused by biofuels on food security, in its recent Food security strategy¹³: "The Commission supports Member States in using possibilities to reduce the blending proportion of biofuels which could lead to a reduction of EU agricultural land used for production of biofuel feedstocks, thus easing pressure on the markets for food and feed commodities."

There is also definitely no room to increase biofuel use or production especially if this involves farming land previously set aside for rewilding. Already today the EU's current biofuels consumption is estimated to require 4% of the EU's land area and 7.5% of the EU and UK's total copland combined. Replacing only 6.5% of the EU's crude oil, gasoline and diesel imports from Russia with biofuels made from rapeseed, corn and wheat- common biofuel and food crops in the EU- would require doubling this land area¹⁴, this is neither scalable or sustainable.

As biofuel use is not a sustainable strategy for reducing reliance on Russian fossil fuels, biofuels should not be included within the REpowerEU strategy. Instead, the Commission must recommend member states to suspend the use of crop biofuels immediately.

¹¹ Vackeová, S., (ePURE) and Noyon, X. (EBB) (2022) [RePowerEU: Biofuels play a strategic role in boosting Europe's energy independence.](#)

¹² T&E. (2022) [Food not fuel: Why biofuels are a risk to food security.](#)

¹³ European Commission. (2022) [Safeguarding food security and reinforcing the resilience of food systems.](#)

¹⁴ T&E. (2022) [Food not fuel: Why biofuels are a risk to food security.](#)

2.2 EU must secure raw materials to decarbonise transport

Since the invasion of Ukraine by Russia became a realistic possibility at the beginning of 2022, the EU has been fully focused on securing fossil fuel supplies from other non-democratic regimes including Saudi Arabia¹⁵ and Qatar¹⁶ in order to diversify supply from Russia. Yet focusing only on securing supplies of fossil fuels is short sighted; what is needed to wean the EU off fossil fuels altogether is securing supply of raw materials which are critical for building a fossil fuel free transport system. In this aspect the EU is falling behind in the geopolitical race.

In contrast to the EU' focus on fossil fuels, China is already using its diplomacy¹⁷ and political clout to solve the current high raw materials costs of lithium, needed for batteries used in electric vehicles and electronics. In March 2022, the government convened lithium refiners, battery makers and OEMs to discuss lithium supply in order to balance the market and ensure prices return to sustainable levels for the domestic electric vehicle industry. Similarly the U.S. has invoked the Defense Production Act¹⁸ to boost domestic production of metals needed to build electric vehicles including for lithium, nickel, cobalt, graphite and manganese to secure supply for the country's EV production.

Europe is falling behind and must take action, it is currently the 2nd biggest EV market globally and predicted to account for 33% of global sales in 2025 and 36% in 2030¹⁹. For EU car makers to succeed in the global EV race they must have access to the raw materials needed at prices which do not slow down the emobility momentum. **Therefore actions to secure critical raw materials for decarbonising the transport sector must be included within the REpoweEU strategy including:**

In the short term:

- **Secure more sustainably sourced lithium and nickel short-term (to 2025) through diplomacy with resource rich democratic partners including Australia, Canada and Indonesia**
- **Convene businesses including the mining sector, to work together and ensure max volumes of planned supply are available on spot markets at competitive prices**
- **Consider joint purchasing and price guarantees if necessary**

In the longer term, a centralized EU body on the supply and sustainability of critical metals should be set up.

¹⁵ SBS News. (2022, 05, 03) [The European Union is set to ban Russian oil. Who is still buying and who has stopped?](#)

¹⁶ Fortune. (2022, 04, 30) [This tiny country is making big money from Europe's desperate search for natural gas to replace Russian imports.](#)

¹⁷ Bloomberg. (2022, 03, 21) [China tells EV battery chain it wants 'rational' lithium prices.](#)

¹⁸ CNBC. (2022, 04, 01) [Biden to invoke the Defense Production Act for electric vehicle battery materials.](#)

¹⁹ LMC Automotive's Global Hybrid & Electric Vehicle Forecast (Q4 2021 update).

3. Short term measures

Quickly reducing oil use is no longer purely a climate objective, it is an urgent moral imperative given the scale of human suffering being witnessed in Ukraine everyday. Short term measures are ways that we can rapidly reduce transports's oil consumption that can have an impact this year. Policies have been successfully applied during past energy emergencies (e.g. 1970's oil crisis) to achieve quick and sizable reductions. While many short term solutions are most effectively actioned at local, individual and corporate levels, European policies complemented by public awareness raising are needed to lead implementation of the measures across Europe.

3.1 International energy agency measures to reduce oil demand

In response to the oil crisis brought on by the war in Ukraine the International Energy Agency (IEA) published a ten point plan²⁰ to reduce oil demand through short term measures which could be implemented quickly and providing almost immediate reductions in oil use. Recommendations include reduced speed limits, car-free Sundays and reduced corporate travel and if implemented could reduce transport oil demand by 11.8%²¹. Yet implementation of the measures across Europe has been limited to date with governments predominantly relying on individuals to take action. While many citizens want to show solidarity with Ukraine by saving energy, the primary responsibility to act lies with the EU and Member States. Only by enforcing measures across the EU, rather than relying on voluntary commitments, can the greatest oil saving can be achieved.

Therefore, T&E recommends that **the REpowerEU issues guidance to Member States to implement IEA's 10-point plan to cut oil use ahead of the peak summer travel period** when, under a business as usual scenario, oil use is set to soar and the proposed measures will have the largest impact.

3.2 Fuel efficiency measures for trucks

Particularly effective in slashing oil demand are short term measures aimed at trucks due to the high mileage of these vehicles, which are responsible for 17% of transport's oil use²². The following measures could be implemented almost immediately and both reduce fuel use and reduce freight costs supporting the EU logistics industry at a time of high fuel costs:

1. **Speed limits reduction from 90/km to 80 km/h, coupled with better enforcement:** This is the number one recommendation from the IEA's 10 point emergency programme and **can deliver up to 5% fuel savings**²³. It is easily implementable with many EU countries already having a truck

²⁰ IEA (2022) [A 10-point plan to cut oil use](#).

²¹ T&E analysis of IEA measures for the EU.

²² T&E analysis of Eurostat data.

²³ According to a 2014 study by TNO, Transport & Mobility Leuven (TML), CE Delft, in real world conditions, limiting the speed from 90 km/h to 80 km/h would reduce the consumption by 4%-6% (EU27 wide fleet average excluding urban roads).

speed limit of 80 km/h, however in many cases this is poorly enforced²⁴ partly due to truck speed limiting devices being set at 90 km/h as per the EU directive²⁵.

RePower EU should issue guidance on Member States to immediately reduce and effectively enforce a lower speed limit of 80 km/h for trucks and for a review of the Directive for speed limiting devices²⁶ to reduce the speed limit from 90 to 80 km/h permanently.

2. **Trailer modernisation programme:** Trailers can be fitted with aerodynamic devices on the sides, rear and cab these **can deliver a 2-5% saving each**²⁷. EU rules have allowed for the use of these devices since 2019. Yet contrary to the U.S., few EU hauliers have so far invested in these fuel saving devices²⁸. With a payback period of less than 1 year, there is a clear need to address this market failure as soon as possible with regulation.

RepowerEU should introduce an incentive programme, similar to a scheme already implemented in Germany which covers up to 60% of the cost²⁹ for aerodynamic devices, combined with a legal requirement to equip trucks operating in the EU with aerodynamic devices by 2025 to ensure whole fleet coverage. The estimated cost of the incentive programme would be €450 million and could be funded from the Just Transition Fund or another programme from the EU budget³⁰.

3. **Efficient tyres:** The best performing tyres can save up to 5%-8% compared to a mid-range tyre³¹ and when combined with a tyre pressure monitoring the savings by a few additional percentage points³².

RepowerEU should require the mandatory use of the most fuel efficient performing tyres by 2025 via the Tyre Labeling Regulation³³.

²⁴ For example, in Brandenburg, Germany, trucks averaged 88 km/h on selected road sections despite the 80 km/h speed limit. See: https://brandenburg.de/cms/media.php/lbm1.a.2239.de/studie_tempolimit.pdf

²⁵ Directive 92/6/EEC

²⁶ Directive 92/6/EEC

²⁷ ICCT. (2017) [Market penetration of fuel efficiency technologies for heavy-duty vehicles in the European Union, The United States and China.](#)

²⁸ ICCT. (2017) [Market penetration of fuel efficiency technologies for heavy-duty vehicles in the European Union, The United States and China.](#)

²⁹ BMDV (2022) [BMDV legt nationales Flottenaustauschprogramm für Lkw auf.](#)

³⁰ The scheme should be limited to 500,000 of the latest vehicles (new or less than two years old) to maximize lifetime fuel savings. The scheme should issue a €900 voucher per aerodynamic device. Total incentive should be capped at €500k per fleet to ensure accessibility for SME's.

³¹ According to ICCT, class A for both tractor and trailer would get you between 5% (RD) and 8.4% fuel reduction (LH) compared to class C today. ICCT. (2017) [Fuel efficiency technology in European Heavy-duty vehicles: baseline and potential for the 2020-2030 timeframe.](#)

³² OptiTire from ZF can deliver up to 2%: https://www.zf.com/products/en/cv/products_64587.html

³³ (EU) 2020/740

4. **Eco-driving:** Putting in place a training programme on eco-driving could **reduce oil consumption by an average of 5%**³⁴. The payback period of an eco-driving training seminar for individual drivers is less than a year and therefore represents a very cost effective measure.

RePower EU should issue guidance on Member States to immediately put in place eco-driving programme guidelines which transport companies above a certain size would have the obligation to put in place within 1 year.

4. Medium term measures

Medium term measures are essential for locking in a rapid and systemic transition away from oil in the transport system with the implementation of measures most effective at the EU level so these measures should be central to the REpowerEU strategy.

4.1 Accelerated corporate fleet electrification

Cars are responsible for 30% of the EU oil consumption³⁵ and corporate cars consume the majority share. On average, they are driven over twice as many kilometers in a year as private cars (27,000 km vs 12,000 km)³⁶, are larger, heavier vehicles and as fuel is often paid for by the corporation there is no incentive to drive sparingly. Therefore, to reduce oil demand from the EU's car fleet specifically targeting corporate cars would be the most effective. Since electric cars are the most effective option for reducing car oil demand, regulation to swiftly increase the uptake of electric vehicles within corporate fleets is needed. **REpowerEU is the opportunity to implement this either through a new EU Fleets Regulation mandated through the car CO2 standards or the Emergency Efficiency Directive:**

1. **EU Fleets Regulation:** Just as the CO2 standards have worked to ensure a supply of BEVs in the EU, a Zero Emission Vehicle (ZEV) mandate for corporate fleets would ensure strong demand for BEVs. This demand will be from corporate fleets who are best placed to make the upfront investments and benefit from the lower total cost of ownership generated by electric vehicles.

REpowerEU should require any company with a vehicle fleet size of 20 cars or more to reach 50% zero-emission vehicles in its new purchases by 2025, and 100% by 2030. For vans and LCVs, all companies (of any size) should be mandated to reach the same level of 50% zero-emission vehicles by 2025, and 100% by 2030. This should be implemented via a new ZEV Fleets Regulation mandated in the car CO2 standards. This would reduce oil demand by 16% vs. proposed CO2 standards.

³⁴ ICCT literature review of eco-driving pilot programs and studies found that fuel savings for truck fleets can range from 3.5% to 30%. This wide variance in results can be explained by differences in driver experiences and profiles, data collection, monitoring and reporting methods, choice of metrics and goals, time frame of studies, and baseline measurements. For Europe the meta-study finds even higher potential (9.4%). ICCT (2021) [Truck eco-driving programs](#).

³⁵ T&E analysis of Eurostat data.

³⁶ Dataforce (2020). [Transport & Environment Company Car Report](#).

- 2. Energy Efficiency Directive (EED):** While a ZEV mandate presents the most straightforward instrument for electrifying corporate fleets, an alternative instrument is a specific mandate for corporate fleets in the EED. In addition to the existing obligation placed on public bodies' to reduce their total final energy consumption found in Article 5 of the EED, a specific measure should target the fuel consumption of new light-duty vehicles operated by all public bodies as well as corporate fleets with more than 20 vehicles.

REpowerEU should require a fuel consumption reduction of 50% by 2025 and 100% by 2030 (i.e. a zero-emission fleet) for light-duty vehicles operated by public bodies. Moreover, the EED should also require member states to put in place measures targeting corporate fleets with more than 20 vehicles: the fuel consumption from the light-duty and heavy-duty vehicles should be equivalent to a 20% reduction by 2025 and a 50% reduction by 2030 compared to the fuel used by those vehicles in 2021. This would reduce oil demand by 14 % vs. proposed CO2 standards

While these policies are more ambitious than the Commission's CO2 proposal, many companies have already committed to 100% zero-emission vehicles for their new registrations by 2030. Some companies - including very large fleets - have gone further to commit to 100% zero-emission vehicles for their entire fleet of existing vehicles by 2030 (e.g. ABB, Austrian Post, Deloitte, EDF Group, GlaxoSmithKline, Iberdrola, Novo Nordisk, Siemens) and leading companies have raised the bar higher by committing to an entirely electric fleet by 2025 (e.g. AstraZeneca, IKEA, Orsted, T-Systems). Placing regulation on corporate fleets ensures that these commitments go ahead and fleet operators which have yet to make electrification commitments take action.

4.2 Ambitious truck CO2 targets

Trucks and buses together consume 19% of EU oil demand from transport³⁷. To reduce this demand in the mid and long term, CO2 standards for trucks and buses are key, driving both innovation to reduce fuel consumption and bringing zero emission trucks to the EU market as CO2 standards have done for cars.

Yet the current CO2 targets for trucks hamper rather than accelerate the market, requiring only a 15% reduction in fuel consumption by 2025 and 30% by 2030 which falls far short of the electrification announcements made by truckmakers. All major truckmakers (including Scania, MAN, Daimler, Volvo) have announced series production of electric trucks with 400-500 km range and fast charging ability from 2024 and aim to sell around 50% of zero emission trucks in 2030. This is equal to over 600,000 zero emission trucks on the road by 2030³⁸.

However, the voluntary announcements are not enough to guarantee that sufficient zero emission trucks hit EU roads in the mid to late 2020's. Only strong regulation can ensure these trucks are placed on the

³⁷ T&E analysis of Eurostat data.

³⁸ T&E (2022) [Review of the HDV CO2 standards](#).

market and reduce the EU's oil dependency in this segment. Critically, a phase out data for internal combustion engine trucks, as has been proposed by the Commission for cars, is needed to decarbonise the sector and wean it off fossil fuels by 2050 in line with the EU's net zero targets. Since the average age of a EU truck is almost 15 years^{39,40}, the last combustion engine truck should not be sold later than 2035, this is feasible from a technological and cost perspective, including for long-haul trucks⁴¹.

REpowerEU should ensure that the 2022 review of CO2 standards significantly increases regulatory ambition. The 2027 target should be increased to 30%, the 2030 target to 65% and in 2035, all new trucks need to be zero emission. The higher ambition would reduce fuel consumption from trucks by 2% in 2025 and 19% in 2030 compared to 2019.

The HDV CO2 standards should also be extended to cover all heavy duty vehicle categories, including buses. **RePowerEU should ensure that the 2022 review of the CO2 standards covers buses and that by 2027 all new urban buses should be zero emission.**

5 . Long term measures

Long term measures are needed to completely eliminate EU oil demand from the transport sector by 2050 at the latest. Setting these policies now is key to prepare and give ample time to the EU industry to deliver a truly sustainable transport system which no longer depends on fossil fuel imports. Here we outline the three key policies that should be included within REpowerEU to set shipping and aviation on the correct trajectory. For these sectors a full transition away from fossil fuels will require an ambitious strategy for hydrogen electrolyzers powered by dedicated renewable electricity sources to create the sustainable and scalable fuels the sectors need.

5.1 Fuel efficiency for shipping

Ships are a significant source of oil consumption and emissions in the EU. In 2019, EU shipping consumed 12.2% of all transport fuel⁴². The shipping sector can be inefficient compared to technological and operational potential, with ships sailing quickly to their destination only to join a queue outside the port and the sector demonstrates a lack of willingness to uptake other energy saving technologies such as wind-sails. Shipping fuels will be regulated by the upcoming FuelEU regulation. However, as the regulation only considers fuels and in its current form only requires a 6% reduction in fuel GHG intensity in 2030 compared to a 2020 baseline, it misses the large potential that efficiency measures can make to reduce oil or gas consumption⁴³.

³⁹ European Commission (2013). [Transport data collection supporting the quantitative analysis of measures relating to transport and climate change \(TRACCS\)](#).

⁴⁰ ACEA (2022). [Report – Vehicles in use, Europe 2022](#).

⁴¹ T&E (2022). [Why the future of long-haul trucking is battery electric](#).

⁴² T&E analysis of Eurostat data.

⁴³ T&E. (2022) [FuelEU Maritime: T&E analysis and recommendations](#).

There are several ways to achieve operational efficiency improvements, which can reduce fuel use in the sector by up to 30%. Speed reductions is a compelling measure to quickly cut fuel use in the sector. A 20% reduction in operational speed would reduce fuel consumption by around 34%⁴⁴, that can be further increased by more digitalisation of journeys and port capacities. Installation of technology such as propeller optimisation, hull optimisation, and improvements to engines and boilers can further reduce consumption and can be achieved by mandating EU-level operational energy efficiency standards that define maximum permissible energy consumption per tonne nautical mile (MJ/t-nm) per ship type and size⁴⁵.

To deliver energy efficiency improvements in shipping, REpowerEU should require an amendment to the Energy Efficiency Directive or propose alternative mechanisms to require a 41% reduction in fuel consumption by 2030 for both new and existing ships, to apply at fleet level⁴⁶.

5.2 E-fuel sub-quota for shipping

Alongside shipping efficiency measures sustainable and scalable renewable fuels are needed to phase out the sector's fossil fuel dependency. Yet the Commission's current proposal for a FuelEU Maritime Regulation- the legislation ostensibly aimed at increasing the use of sustainable fuels in EU shipping undermines the REpowerEU objective of reducing dependency on fossil fuels by switching shipping dependency from oil mainly to gas instead of renewables. This will deliver little if any real world climate benefit, only locking shipping into a fossil fuel dependency. This is because until 2039 (and sometimes until 2046), the proposed Commission greenhouse gas reduction target can be met with LNG powered ships, a cheaper alternative than switching to fossil free e-fuels. The result is that in 2035 almost 40% of shipping might be be reliant on gas⁴⁷.

It makes no sense to swap one fossil fuel dependency for another. To put shipping on a pathway which reduces its energy dependence on fossil fuels, bringing sustainable shipping e-fuels to the market is key. To do this a sub-target for shipping e-fuels is needed to provide a business case for shipping e-fuels kicking-off the industry and providing an alternative to fossil fuels.

To achieve this REpowerEU must commit to mandating a 6% sub-target for e-fuels in 2030 as part of FuelEU maritime to provide a demand guarantee. This would ensure the business case for shipping e-fuels, kick off the supply chains and provide a sustainable alternative to fossil fuels-based pathway. This would also contribute to cutting at least 2 Million tonnes of oil equivalent of Russia-originated fuel oil and/or LNG supplies for European shipping and deliver investment in 7.5-8.6 GW of electrolyser capacity by 2030.

⁴⁴ CE Delft (2019) [Study on methods and considerations for the determination of greenhouse gas emission reduction targets for international shipping](#).

⁴⁵ Transport & Environment (2021) [Decarbonising European Shipping. Technological, operational, and legislative roadmap](#).

⁴⁶ The baseline should be set based on data from EU MRV Regulation (2015/757).

⁴⁷ T&E. (2022) [FuelEU Maritime: T&E analysis and recommendations](#).

5.3 Increased ambition for aviation e-kerosene targets

Aviation is responsible for 14.7% of EU transport oil consumption⁴⁸. Similarly as for shipping, to reduce aviation's fossil fuel demand it is critical to scale up the availability of e-kerosene as it is the only fuel type which can be scaled up sustainably to meet the sector's energy demands and shift it away from fossil fuels. However, the Commission's proposal for scaling up kerosene production in the REFuelEU proposal is simply not ambitious enough to set aviation on the right trajectory, requiring only 0.7% e-kerosene use in 2030⁴⁹.

To set the EU aviation on the right pathway to reducing its dependence on fossil fuels e-kerosene production must be increased beyond what the Commission has proposed in REFuelEU.

REpowerEU should include earlier and higher targets for e-kerosene of 0.04% in 2025 and 2% in 2030 to ensure that scale up of sustainable fuels for aviation starts as soon as possible.

Further information

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⁴⁸ T&E analysis of Eurostat data.

⁴⁹ T&E. (2021) [REFuelEU Aviation: T&E'S recommendations](#).