January 2024

EU Elections: A Guide to Transport 2024 - 2029

From sketching a blueprint for transport to implementing a greenprint for the EU's economy

As Europe approaches the 2024 EU elections for the 720 member European Parliament, the EU faces a stark choice. The European Green Deal (EGD) was the regulatory kick off for Europe's transition to a green economy. But the job is far from done. Putting on paper and into law a long-term vision is not the same as delivering it. Looking ahead at the next 5 years, from 2024-2029, EU lawmakers need to help make this transition a reality for people and businesses alike. Some would like to slow down or reverse the green deal, but it is EU citizens, not corporate lobbies, who will have the last word.

Transport is the only sector where emissions are still growing. By 2030 transport will account for 44% of all EU carbon pollution. Cleaning it up very rapidly will be complex. But as the electric vehicle (EV) revolution has proven, it is fertile ground for innovative greentech solutions and technologies, creating industries and creating good jobs.

To see this journey continued, future policy-making must build on European industrial leadership, using the synergies between industrial strategy and urgency to comply with climate targets, as other regions in the world have started to do. The rapid roll-out of Europe's EV fleet, the world's first mandated provision of clean fuels for the aviation and shipping sectors, and the rapid scaling up of renewable energy powering transport and heating homes, will be markers of success.

The next 5 years have to build on the foundation of the EGD, to move beyond the fossil age, and address tomorrow's challenges: to rebuild large parts of our economy and make them fit for a climate constrained world. Geopolitical changes put strains on supply chains, challenging Europe to become more independent in its energy production, as well as securing the supply of critical materials for the transition within and outside of Europe, and using the resources we have more wisely. International competition, especially in the automotive sector, challenges European industries on a rapid scale up of green and cleantech technologies that can get us to net-zero economies.

We are entering the decisive decade. The next European Parliament must decide if it is full speed ahead for the Green Deal, or full stop. This is the critical period to not only cement Europe's leadership in addressing the climate crisis, but to transform the Green Deal into an industrial strategy that ensures Europe will lead the cleantech revolution and secure good, well paid jobs in the green economy of the future.

Europe has a race to win and it's the most urgent one for us and future generations; the climate crises cannot be paused. The next five years are our racing car, so we better make sure it drives full speed. Smooth running of the engine via a just implementation of the EGD, ensuring the seat belt is put on by filling in current regulatory gaps, tightening screws to get to the right speed and start the race by putting things into action across Europe.

Will Europe go full speed or full stop?

T&E's Guide on Transport looks back at the last 5 years as well as ahead at the next 5 and what needs to be done. It identifies the 10 key transport areas the EU needs to prioritize, and provides recommendations that, within the next five years, will be critical to Europe winning the race for the green economy and green jobs of the future.

T&E's top 10 new ideas for transport for the next EU policy cycle can be found here.

Contact: Nadine Mingers, EU Election Coordinator (nadine.mingers@transportenvironment.org)

2.1 Only continued ambition gets us there

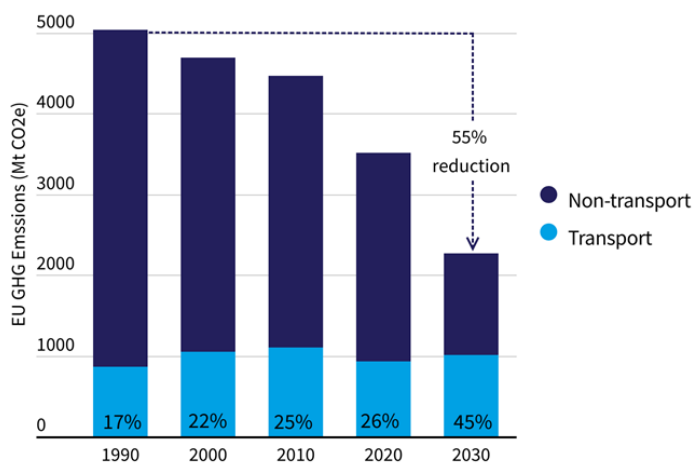
Climate

Transport is the climate delinquent of the EU economy. It is the only sector that grew its emissions since 1990. The European Green Deal has laid the groundwork for a trend break, with for example the agreement to end diesel car sales in 2035. Still, as other sectors decarbonise faster, transport will make up 45% of total EU emissions by 2030. That makes additional transport policies essential to the EU's ability to achieve net-zero emissions by 2050.

Facts & Figures

The EU has committed to reduce its whole-economy emissions by 55% by 2030 (compared to 1990). This will be achieved through increased ambition under the two main pillars of the EU's climate policy "architecture".

The EU's carbon market, or Emission Trading System (ETS), will for example from 2026 also start including shipping emissions. More effort is also expected of each member state, thanks to national target increases under the so-called Effort Sharing Regulation (ESR). Together, EU countries are now required to reduce emissions across their transport, buildings, small industries, agriculture and waste sectors by 40% by 2030 (compared to 2005). Because emissions will go down faster in other parts of the economy, transport is set to rise to nearly half of our emissions by 2030.



From 2027, drivers will pay a 13-14 cents per litre carbon price when they refuel, due the so-called ETS2 for transport and heating fuels. The Social Climate Fund (SCF) was created to ensure people in energy and transport poverty can adapt to this carbon price. Starting 1 year before payments are due, member states will receive a budget to enable their vulnerable citizens to switch to sustainable energy and mobility consumption, or to support them through financial compensation (lump sum climate dividend).

How can Europe deliver on climate neutrality?

- Create long term clarity and investment certainty for European companies and citizens by adopting a climate target of **at least -90% for 2040** (compared to 1990). Define separate goals for mitigation and carbon removals. Transport should contribute to this effort by reducing its emissions by at least 70% by 2040. This will entail a combination of new laws for technological change, as well as behavioral change policies.
- Set a **2035 intermediate climate target**, and start policy cycles of 5 years in order to ensure more frequent assessment and review of policies. Maintain accountability and shared responsibility by member states through economy-wide national climate targets.
- **Bolster the Social Climate Fund** budget with additional resources, so as to create a solid social pillar for a just transition as part of a new EU climate investment plan. Ensure member states invest in a just mobility transition well before the carbon price kicks-in, by setting up a lending facility under the European Investment Bank, allowing countries to borrow against their future ETS2 revenues.
- Adopt **additional measures** to ensure the EU delivers on its **existing 2030 target of -55%**. For example, a measure to ensure all large business fleets shift to electric by 2030 would deliver large additional savings without reopening the Fit for 55 package.

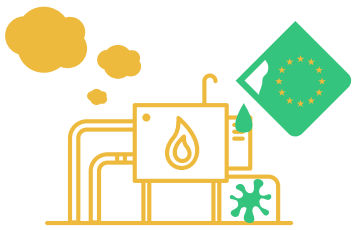
Contact: Sofie Defour, Freight and Climate Director (sofie.defour@transportenvironment.org)

2.2 Supported by a finance for people and industry

Finance

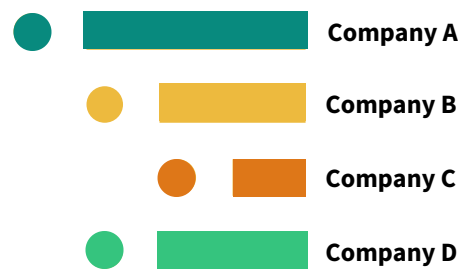
With the EGD as groundwork the EU has made wide and far-reaching regulatory efforts to decarbonise the economy underpinned by its climate targets and leading to a net zero-emission continent mid-century. A long-term financial framework is needed as a logical next step, addressing increasing competition in core cleantech sectors from China and the US as well as massive tax benefits challenge the business case for cleantech production ‘Made in Europe’. Investing into cleantech and sustainable industries such as battery value chains, renewable hydrogen, renewables, and grids in the next years with complementary sectoral policies allows Europe to accelerate its path to climate neutrality and boost its economy.

Facts & Figures



The European taxonomy creates for the first time a single binding definition of what is considered environmentally sustainable based on the latest available science. Despite its initial promises, it has largely become a greenwashing exercise. In 2022, it misleadingly classified fossil gas as ‘sustainable’, and in 2023 similarly labelled fossil-powered ships as 'best in class' on environmental grounds. It is now urgent to remedy these flaws, and then expand the taxonomy to define business activities that are harmful, those that contribute to the transition, and those that are socially sustainable.

The EU is currently discussing the scoring system for companies' performance on 'Environmental, Social and Governance' matters, short ESG ratings. The objective to guide investors to steer their money into future-fit and fair businesses is however still out of sight. Main reason being that high ESG scores today are no guarantee of true sustainability and are deeply opaque. This holds true especially for the transport sector where automotive giants, polluting truck makers and airlines obtain generous ratings, portraying themselves as green companies despite their problematic climate credentials.



For financial flows to be steered towards sustainable investments , new standards under the Corporate Sustainability Reporting Directive need to make it compulsory for companies to fully disclose information about their alignment with a 1.5°C climate pathway and international labor and human rights standards. The transparent sharing of information not just on the financial performance of companies, but also their social and environmental impacts, is often referred to as the principle of double materiality. Citizens and investors alike need a crystal clear picture - still missing to date - of the climate risks and impacts of companies before taking investment decisions.

How can Europe finance a sustainable and fair transport transition?

- A major **climate investment plan worth €1 trillion by 2030** within the Commission's first 100 days in office, creating a successor of the NextGeneration EU fund.
- The future **European green industrial strategy** should be backed by significant and focused investments aligned **with the objectives of the Paris Agreement** and supporting the battery value chain, renewable hydrogen for off-take in aviation and shipping, renewables and grids.
- The EU needs to put in place a stronger system of economic governance and environmental safeguards. A strong **EU regulatory framework for sustainable finance** will consolidate the shift of capital allocation towards green activities. This is instrumental for the green transition to happen.
- The **EU's Sustainable Finance Agenda** should be **revived**, delivering on sustainability disclosures for the financial sector and corporates (CSRD, Sustainable Finance Disclosure Regulation), regulating ESG ratings so that they better portray the impacts of transport investments, and steering investments away from carbon-heavy assets.

Contact: Xavier Sol, Sustainable Finance Director (xavier.sol@transportenvironment.org)

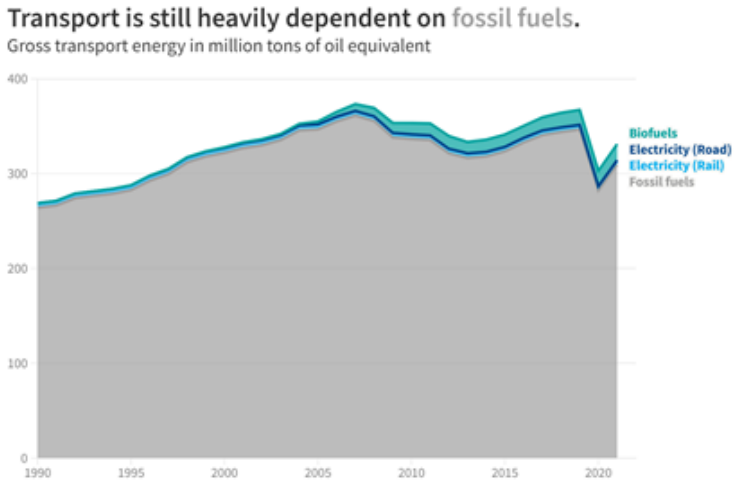
2.3 Powered by truly sustainable energy

Energy

For the transport sector to fully decarbonise and slash oil demand, significant amounts of renewables will be needed, especially renewable electricity for direct electrification of cars, trucks or ferries as well as for the production of hydrogen and e-fuels in ships and planes. Electricity grids need to be upgraded and reinforced, while hydrogen and e-fuel production ramped up with additional wind and solar. Europe's energy mix will need careful fine-tuning, using first the most energy-efficient form of powering transport - direct electrification - as the leading solution and renewable fuels like e-fuels to be used where electrification is not yet an option.

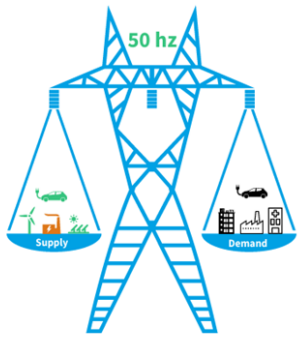
Facts & Figures

2023 has seen a massive regulatory push for replacing oil in cars and trucks by electricity via the CO2 standards, for using hydrogen and e-fuels in aviation and shipping (A&S) and for limiting the support to unsustainable biofuels. 93% of energy used to power road transport, aviation and shipping still came from fossil sources in 2021.2022 has been a good year for electricity with 41% of electricity consumed in the EU coming from renewables - but more is needed.



The third revision of the RED levels up the overall share of EU's renewables to 42,5% 2030. But the latest changes still promote false solutions such as palm and soybean oil, advertised as sustainable but increasing deforestation and putting pressure on food prices. Around 60% of rapeseed oil and around 50% of palm oil consumed in the EU are used for biodiesel, which leads to drastically increasing emissions Europe is transitioning to 'waste'-based biofuels such as Used Cooking Oil (UCO) but that comes with high risk of fraud and a heavy reliance on the 80% imported UCO for biofuels.

Renewable hydrogen,often seen as a silver bullet to decarbonise almost all sectors, needsa reality check and used only where more efficient and cheaper options are not possible. For transport, it means steering hydrogen and e-fuels to ships and planes. EU laws have created the world's first regulated and most important lead markets for the production of e-fuels in aviation and maritime, with measures to ensure the fuels deliver real climate benefits. If EU lawmakers can avoid the temptation to apply the hydrogen miracle to everything, they have a chance of decarbonising hard-to-abate sectors.



The total electricity demand in the EU is expected to at least double by 2050, additional demand from road transport could account for more than 12% in. Demand side flexibility options, such as bidirectional EVs, will play a major role in maximising the existing grid capacities and integrate an ever growing share of renewables, by storing energy when generation is high and releasing it when it is low. The EU has started to address these issues in its grid action plan, promising to address the shortening and harmonising of grid connection procedures to not slow down the energy transition.

How can Europe power up the transition?

- Create a **European Grid Act** to strengthen grids and make them more efficient and smarter. This means more flexibility and ability to control/reduce demand, as well as strengthening grids to enable faster build-up of renewables and electrification of buildings and transport.
- **Remove barriers for EVs to play their energy storage** role as 'batteries on wheels' by means of smart charging and Vehicle-to-Grid/Home/X connections.
- Target **policy and financial support for renewable hydrogen and e-fuels for sectors where direct electrification is not possible** - to ships and planes for transport. In parallel, reward the use of renewable electricity in transport through a dedicated support system.
- **End** the use of **biofuels produced from crops like palm oil or soy by 2030** and limit the use of problematic 'waste' based biofuels such as imported Used Cooking Oil, to incentivize only truly sustainable solutions.

Contact: Laura Buffet, Energy Director (laura.buffet@transportenvironment.org)

2.4 Cities serving as transport solution incubators

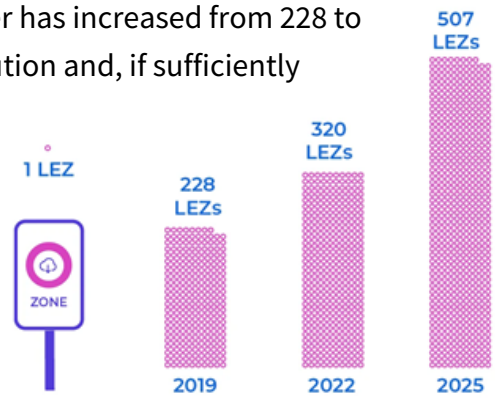
Cities

Cities are at the heart of the transition to zero-emission transport: Almost 3 in 4 Europeans live in urban areas and urban mobility is responsible for 23% of EU transport emissions. Motorised vehicles remain dominant in most cities, occupying public space, causing toxic air pollution, and increasing the risk of collisions. However, European cities also serve as incubators for transport solutions: High population density means most trips are short, making walking, cycling, public and shared transport more attractive. Many local leaders have embarked on the path to liveable, healthy and climate-friendly cities by, for example, adopting low- and zero-emission zones or joining the EU 'Mission for 100 Climate-Neutral Cities by 2030'.

Facts & Figures

Under the impetus of EU clean air laws, cities have stepped up efforts to tackle polluting transport, especially by introducing new and stricter low-emission zones. Since 2019, their total number has increased from 228 to 320. More zones are planned. These policies can significantly reduce toxic air pollution and, if sufficiently stringent, also curb motorised transport.

At the EU level, a new 'Urban Mobility Framework' was adopted in 2021. It signalled a paradigm shift, acknowledging the important role of cities and the need for EU support. For the first time, the strategy set a goal of 'zero-emission urban mobility'. It highlighted the need for better data collection as well as for better urban planning.



Source: Clean Cities, 2022

Source: European Commission, 2022

As part of a new 'Zero Pollution Action Plan', stricter air pollution limits were proposed and are currently being negotiated between Parliament and Council. The outcome will determine how clean the air in European cities will be after 2030.

Translating the 'Urban Mobility Framework' into legislation, the revised Trans-European Transport Networks (TEN-T) agreed in December 2023 will require 430 major cities to adopt 'Sustainable Urban Mobility Plans' by 2027 and to collect urgently needed data on urban transport.

The EU has also started to support frontrunner cities by setting up the EU 'Mission for 100 Climate-Neutral and Smart Cities by 2030'. The initiative requires participating cities to adopt 'Climate City Contracts' and to act as experimentation hubs. In return, the mission provides funding, expertise and opportunities to connect with like-minded cities.

How all Europeans can live and move in clean cities?

- **Enforce** the new rules for the **Trans-European Transport Networks**, which require all major cities to adopt Sustainable Urban Mobility Plans (SUMPs) by 2027. This will also accelerate the roll-out of low- and zero-emission zones.
- Earmark **new and additional EU funding** to deliver on the ambition of the **EU 'Mission for 100 climate-neutral and smart cities by 2030'.** This should include setting binding targets on zero-emission transport.
- Adopt **binding requirements for child-friendly urban mobility.** As part of the mid-term review of the EU Road Safety Policy Framework, measures such as 'school streets', lower speed limits and better walking and cycling infrastructure should be made a priority with regard to investment and enforcement.

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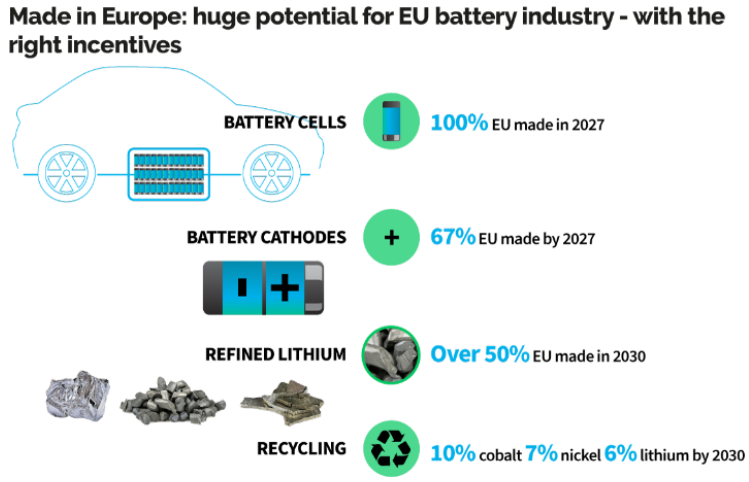
2.5 Racing to secure sustainable critical minerals

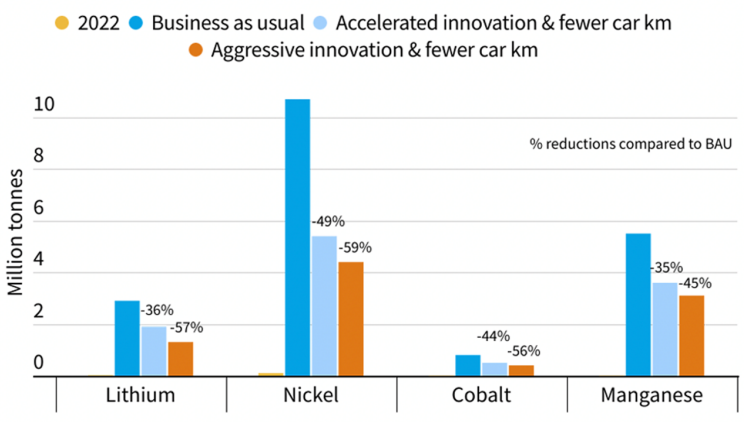
Raw materials & batteries

Europe's green transition, including the automotive shift to electrification, will require many critical minerals, the responsible supply of which is instrumental for Europe to address the climate emergency on time. Securing sustainable supply and a diversified market to avoid supply bottlenecks are challenges in the coming years. Delays and competition for batteries, steel or minerals can hamper decarbonisation, notably the EV value chain in Europe, while environmental scandals risk damaging consumer acceptance. EU policy and companies play a big part in doing things better, be it environmental stewardship in sourcing raw materials or commercialising green steel and aluminium to reduce vehicle GHG footprint.

Facts & Figures

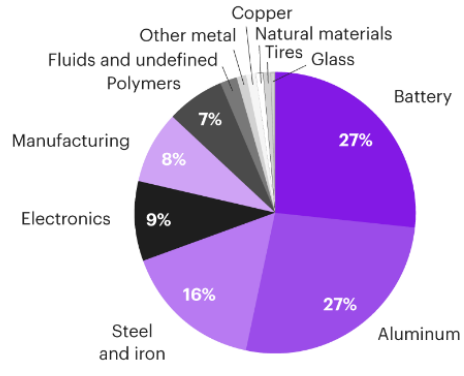
Key EU laws have been passed in the last few years to both improve sustainability and resilience of supply chains. The EU Battery Regulation is a first- ever global law to mandate circularity, lower carbon footprint and sustainable sourcing of batteries, whilst the EU Critical Raw Materials Act is designed as a response to Chinese and US policies and accelerates best-in-class extraction, refining, processing and recycling projects. Much potential to source minerals and produce batteries exists in Europe, including up to a tenth of battery materials, that can come from recycling this decade already.





As Europe is catching up in the race to secure critical minerals, it can leverage its strengths in innovation and product design. Demand for lithium, nickel, cobalt and manganese can be reduced significantly through policies such as compact cars and smaller batteries, resource-light battery chemistries (e.g. sodium-ion) and fewer private cars in favour of public, shared & active transport modes. Going for more compact EVs alone - that are also more affordable and key to the EV mass market in Europe - can reduce the demand for minerals by up to a quarter.

Europe has a unique opportunity to become a global green steel hub leveraging its premium automakers as a launch pad. Requiring carmakers to produce cars with green steel will increase the purchase cost by less than 1%. As steel and aluminium together make up the biggest part of a vehicle's production emissions, setting a solid threshold for low carbon steel and aluminium can kick off the market and its supply. Increased and better quality recycling is another lever to decarbonise cars' footprint effectively, while reducing a big chunk of heavy industry's own GHG emissions.



Source: Kearney, 2023

How to make key supply chains resilient and sustainable?

- Launch a **European Green Industry Fund** to support scaling of best in class battery and critical minerals projects, including recycling. This should build on the current Battery Fund announcement under the EU Innovation Fund.
- Scale **European recycling** capacity for battery materials, notably **lithium**, as part of the EU Critical Minerals agenda beyond 2030, as well as introducing **green aluminium and steel mandates** in automotive sectors of at least 10% by 2030.
- Review the EU Extractive Waste Directive to **update Europe's outdated provisions on mining waste** and bring it in line with global best practice of filtered tailings.

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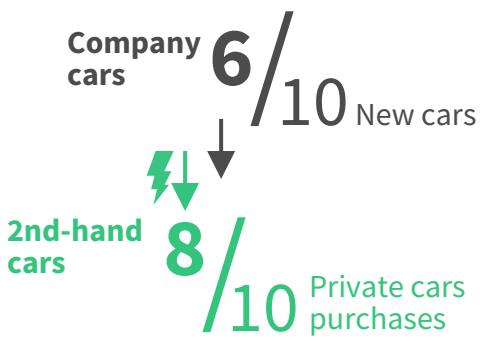
2.6.1 Clearing the air for the EV transition

Passenger road transport

In 2023 the EU made the historic decision that by 2035 all new cars will have to be emissions free. New EU law will ensure a worldclass EU fast charging network that grows in line with the number of electric cars on our roads. What's left to do? Ramping up production of affordable compact EV models in Europe, and cleaning up the production of those. The EU should finally take action on corporate fleets to accelerate electrification and promote social leasing to make EVs available to low income people. Now is the time to accelerate electric car uptake and build green leadership in the automotive industry.

Facts & Figures

The last few years have seen a rapid uptake of electric car sales in the EU: from less than 2% in 2019 to around 15% in 2023. The EU is considering creating a loophole which would allow expensive, scarce and polluting efuels in cars registered after 2035, whilst these fuels are urgently needed in hard-to-abate sectors such as shipping aviation. As the purchase price of EVs is still higher than their combustion counterparts, continuous efforts are needed to ramp up the production of affordable electric cars 'Made in Europe'. One way to do it is by expanding the second-hand market for electric vehicles as 80% of Europeans buy used cars.



With 6 out of 10 new cars sold in the EU being company cars, companies are currently lagging behind for electrification but can expand the used EV-market rapidly by electrifying their corporate fleets, which will flow into the private second hand market after their leasing period is over. Corporate giants have not just a bigger responsibility but also a stronger shoulder to carry the higher upfront costs, benefitting EU citizens via the used car market. Today 58% of new cars in the EU are corporate, accounting (due to their high mileage) for 74% of CO2 emissions from new cars.

A small electric car 'Made in Europe' for €25k is the clean equivalent to flagship models like the Volkswagen Beetle or Fiat Punto, yet currently European carmakers are slow to bring these to market. Whilst electrification is gaining ground, the trend towards polluting big SUVs is a risk to the climate and a barrier for clean and affordable models. Large SUVs emit 2x as much CO2 than the average new car and cancel part of the emission savings from moving to electric. We have to reverse the trend - the smaller, the better. We need an EU strategy for affordable, compact EVs. Carmakers' current efforts put low cost EVs at risk to competition with increasing imports from China. Finally, EVs can reduce their environmental impact and lifecycle emission by using resources and critical minerals more efficiently, reducing overall energy footprints as well.

How to get Europe ready for the race to electric cars?

- Maintain the **2035 100% zero emission sales target** and do not reopen the car CO2 standards in 2026.
- Propose an **EU regulation to electrify all new sales of corporate fleet cars by 2030** at the very latest and set earlier targets for big fleets.
- Secure **small, affordable EVs** for the EU market by supporting **social leasing via the EU's Social Climate Fund.**
- Introduce **new environmental standards for EVs** to minimise the climate, energy and resource impact from the production of EVs.
- **Regulate or tax the size and weight of new car and SUV** sales to ensure market delivery of small and medium EVs, and stop the over-sizing of new cars. EU lawmakers should support examining the maximum width of light duty vehicles in revising the Weights and Dimensions Directive.
- The EU should propose additional frameworks and policies to ensure that CO2 emissions from cars reach at least -80% in 2040 (vs. 2015) and zero emission in 2050. This includes **support for low income drivers** (e.g. via scrappage schemes and e-retrofits), increased BEV production and avoiding car activity growth.

Contact: Lucien Mathieu, Cars director (lucien.mathieu@transportenvironment.org)

2.6.2 A Delivering the goods

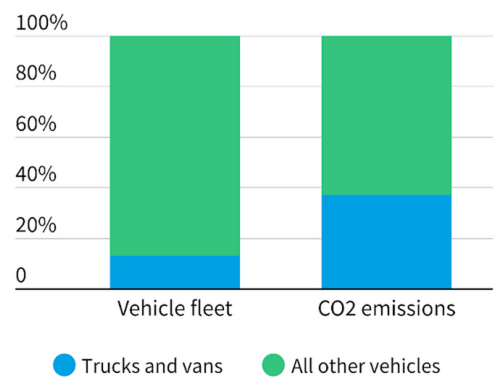
Commercial road transport

Did you know that we rely on trucks and vans for many of our basic daily needs? They carry over 77% of the EU's inland freight. While representing 13% of vehicles on our roads, trucks and vans are responsible for 37% of CO2 emissions from road transport in Europe. With freight activity projected to increase by 27% between 2025 and 2050, this scenario risks persisting for many years to come. To reach climate neutrality by 2050, trucks and vans need to be entirely decarbonised.

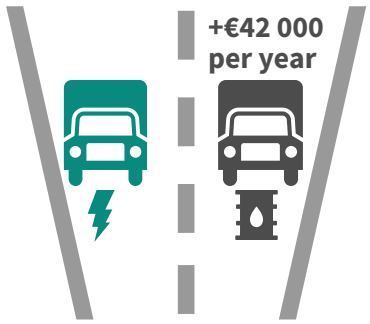
Facts & Figures

Battery electric (BEVs), and for trucks also fuel cell vehicles running on green hydrogen (FCEVs), emit zero climate emissions and cause no air pollution, making these the only truly zero-emission technologies available to decarbonise the vehicles carrying our goods.

EU law requires truckmakers to reduce the CO2 emissions of their new sales by -15% by 2025, -45% by 2030, -65% by 2035 and -90% by 2040. This near phase-out will make it uneconomical for vehicle manufacturers to still produce a diesel truck in 2040. However, given that it is only a near phase-out, emissions will only decrease by 56% by 2050, which is still far away from a full decarbonisation of the sector. Van makers have to decarbonise more quickly, with targets of -50% by 2030 and no more diesel sales by 2035.



Who runs on less (money)? in 



The EU's charging law requires EU member states to install a charging point for electric trucks every 60km along their main highways, and every 100km along their secondary motorways.

Electric trucks are more expensive to buy, but much cheaper than diesel trucks to own and operate. Thanks to the EU's road tolling law, the total cost of ownership will further tilt in favour of electric trucks. For example, in Germany, a 40t diesel truck driving 120,650 km/year on tolled roads would pay €42,000 more per year than its electric counterpart.

Electric bus sale in the 
in 2022

City buses are the poster child of the heavy-duty transition in Europe: Already one year ago, in 2022, already 30% of new sales were electric.

How to transport us into the future?

- **Introduce a zero-emission fleet mandate for big freight buyers and transporters**, requiring them to own or use an increasing share of zero-emission trucks and vans until they reach 100%.
- Introduce **zero-emission targets for** currently unregulated construction vehicles such as forklifts, cranes, excavators, port tractors, bulldozers, etc. (so-called non-road mobile machinery or **NRMM**).
- **Zero-emission zones for freight and deliveries** in cities, and a fixed **contribution from large online shops** for the sale of physical goods involving delivery to a location other than a relay point or shop.
- Ensure all trucks and buses become subject to CO2 targets under the **revision of Europe's CO2 standards** for heavy-duty vehicles in 2027, increase the intermediate target for 2035 and set a 100% target for the sector to become fully zero-emission.
- Bring forward total cost of ownership (TCO) parity between electric and diesel trucks through **cross-EU tolling systems that fully internalise the pollution caused by diesel rigs**, as Germany already introduced in 2023.

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2.7 Clear skies ahead

Aviation

Flying is the most carbon-intensive mode of transport. The CO2 and non-CO2 emissions continue to increase, whilst solutions to address this - technological or demand- management- are not expected to reach scale in the short-term without action. Recent EU laws have given an additional push to use and further invest into decarbonization solutions by incentivizing the development and production of clean fuels as well as by putting a price tag on some of the climate emissions for at least inner-EU flights.

Facts & Figures

CO2 emissions from aviation are a significant contributor to climate change by emitting more than a third of Europe's transport emissions. Non- CO2 emissions were responsible for two-thirds of aviation's climate impact in 2018. In 2023 demand for aviation is back to pre-covid times, avoiding unnecessary frequent business travel can reduce 15-20% of global air travel.

2/3 of aviation's climate-warming impact caused by non-CO2 emissions

2023 demand
(= 2019 levels)

2020 and 2021 demand

Zero emission planes are not expected in the short-term future, requiring focus on increasing the efficiency of traditional aircrafts and switching to clean fuels. As the world's first green fuel mandate for planes has been adopted by the EU, production and supply need to rapidly increase as well as financing the R&D for large-scale zero emission aircraft deployment in the mid-term future. Companies have started to change their business travels, but policy action is needed to ensure lower levels of emissions in this decade.

EU governments lost out on €34.2 billion in 2022 without an adequate carbon price for all flights departing and arriving in the EU, a fuel tax on kerosene and ticket taxation. A rapidly growing sector that also has been largely and notoriously untaxed poses a massive threat to our climate and societal well-being.

€34.2 billion of tax loss = **Budget of the SK government**

How to fly Europe sustainably into the future

- Implement **jet fuel quality standards** at the EU level to reduce non-CO2 warming effects and reduce air pollution for citizens.
- Put an **end to aviation's taxation privileges**, by finally imposing a fuel tax on polluting jet fuel kerosene, and expanding the EU's carbon market to cover aviation's largest climate problem: all flights departing from Europe and non-CO2 effects.
- **Strengthen the clean fuel mandate** for synthetic and power-to-liquid fuels to incentivize the uptake of e-kerosene and renewable hydrogen for aviation.
- **Complement fuel taxation with national ticket taxes** to counter the lack of VAT applied on most flights, differentiated per passenger class and distance covered
- **Ban the use of fossil powered private jets by 2030**, the super polluting elite should only be allowed to fly if powered by renewable fuels (such as hydrogen or electricity).
- **Phase in zero-emission aircraft mandates** for short distance ranges including on Public Service Obligations (PSO) routes as well as zero emission fleet targets for aircraft leasing companies.
- **Stop airport expansions and limit traffic growth** at airports by considering caps on CO2 emissions, banning short flights with a rail alternative below 5 hours, in order to put an end to exponential growth in aviation emissions. Set a mandate for businesses to halve travel emissions by 2030, to eliminate unnecessary and high-polluting frequent flying in a shift to purposeful travel.

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2.8 Set sail for sustainable waters

Shipping

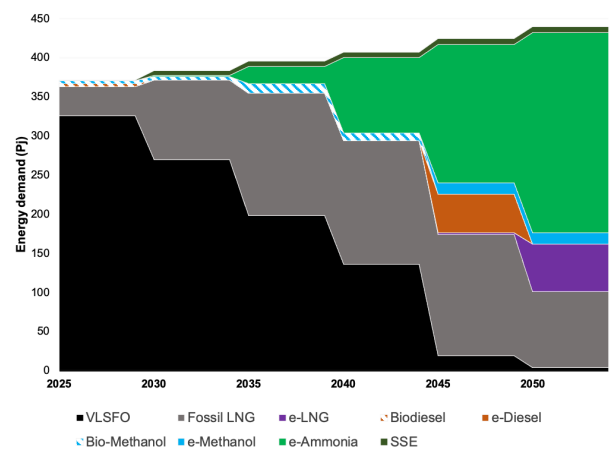
European shipping emits about 15% of Europe's transport CO2 emissions and this share is forecasted to reach above 30% by 2050 despite the implementation of the FF55 package. While the International Maritime Organisation (IMO) has recently adopted indicative/aspiration global targets for shipping, binding global regulatory measures are still lacking to deliver sectoral decarbonisation. EU shipping emits about 160 Mt of CO2 every year, of which about 40% is not covered by FF55. After a small dip in during the COVID-19 pandemic, shipping emissions in 2022 quickly overtook the pre-pandemic levels and are currently on the rise.

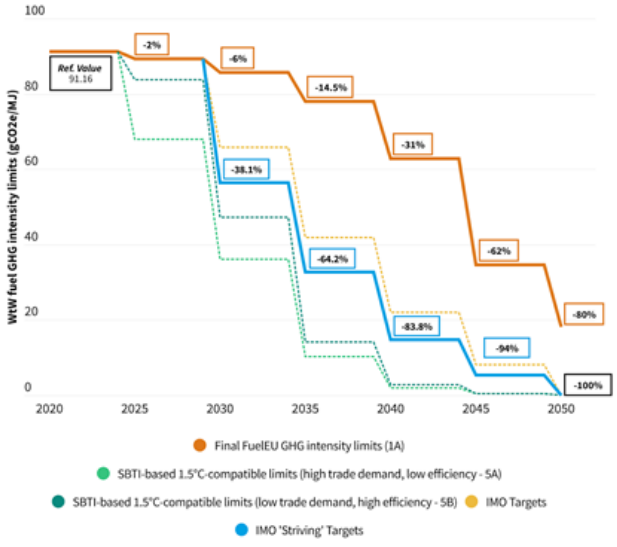
Facts & Figures

If shipping were a country, it would be Europe's 8th largest emitter of CO2. European shipping represents about 15-20% of global shipping emissions. To address the sector's growing climate impact, Europe included emissions from large ships in the EU ETS from 2024 onwards. The EU also mandates ships under the FuelEU Maritime law to use sustainable fuels from 2025 onwards. These decisions coincide with an increasing shipping activity in Europe, resulting in an almost 6% increase in large cargo and passenger vessels emissions when compared to pre-pandemic 2018 levels. Container ships rank at the top of the polluter list, and are increasingly powered by climate-warming LNG.

Projected fuel mix for container fleet

FuelEU Maritime positive, but allows fossil fuel use into the 2050s





Green fuels produced from renewable hydrogen (such as e-ammonia, e-methanol), battery-electric technology, as well as wind power can help clean up shipping. While recent laws encourage ships to switch to alternative fuels, it is projected that false solutions, such as fossil LNG will be making up most of the alternative fuel demand till 2030. This will considerably slow down the sectoral energy transition and risks leading to considerable stranded assets. The FuelEU goes some way to provide demand certainty for green (H2-based) fuels with a mandate to use at least 2% RFNBOs from 2034 onwards and reducing overall GHG intensity of fuel use every 5 years. Currently, the law's weak overall targets do not deliver full decarbonisation of European shipping by 2050 and, should be urgently aligned with science-based climate targets compatible with IPCC recommendations.

Operational and technical efficiency options exist in order to reduce shipping's fuel consumption. Optimising vessel speeds and using wind-assisted technologies can help the transition to green fuels less disruptive.

Smooth sailing for the EU's green shipping fleet

- **Align FuelEU Maritime's** decarbonisation trajectory with the science-based targets (SBTi) and the **EU Climate Law.** Set dedicated additional green hydrogen (RFNBO) sub-targets under FuelEU Maritime for the post-2030 period, rapidly increasing to 70-100% by 2050.
- **Extend the scope of FuelEU Maritime Regulation and ETS directive** to cover all the vessels below 5000 gross tonnage and therefore, address all shipping emissions.
- Develop and implement **a new energy efficiency standard** to reduce fuel consumption for all ships calling at European ports to increase the uptake of wind-assist technologies. This can be achieved by allowing only A and B energy-efficiency rated ships (using IMO's CII labeling) to call at European ports.
- Develop and **deploy green hydrogen (-based fuel) refuelling hubs** in key EU ports for rapid clean fuel deployment.

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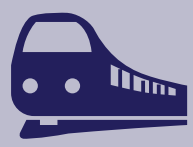
2.9 Making European rail great again

Rail

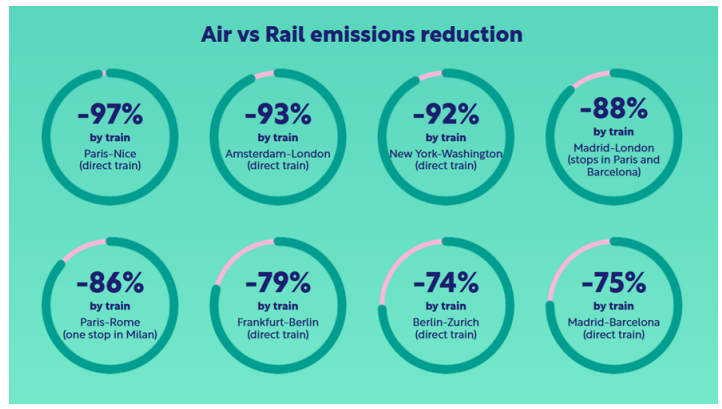


Rail in Europe can replace an important percentage of passenger flights and car journeys, making it a complementary approach to electrification and e-fuels to reduce the climate impact from aviation and road transport. The sector suffers from high pricing, system inefficiencies, stark infrastructures and regulatory differences between EU countries and complex cross-border ticketing. It also suffers from being dominated by historic monopolies lagging in ambition to make the sector more attractive. For rail to be a competitive alternative for people, the EU needs to double down on incentivising a modal shift to rail.

Facts & Figures

The rail sector in the EU has been notoriously underfunded for decades, resulting not only in higher prices but inefficiencies and delays in rail transport. This resulted in insufficient means to simply maintain and upgrade the existing rail network. 22,238 km of rail lines have been temporarily or permanently closed since 1995.

The benefits of rail journeys are striking, being the cleanest passenger transport. According to the EEA, on average in Europe rail emits 33g CO2eq per passenger-km whereas passenger flights emit 160g CO2eq and passenger cars 143g CO2eq (excluding non-CO2 emissions from contrails). On some specific journeys, the emissions savings by shifting to rail are considerable: -93% between Amsterdam and London or -86% between Paris and Rome Yet tickets for cross border connections are on average twice as expensive as their aviation pendant, making it a significant barrier for citizens to shift to rail.



The last EU cycle has resulted in little action for the sector even though a financial and regulatory push can bring out the benefits of a clean, reliable, and affordable transport mode. The 2021 European Year of Rail and Action Plan were small steps to improve rail and haven't led to the major changes to increase the modal share of rail. Planning the development of the trans-European rail network (TEN-T) has been in the centre in recent EU policy-making to ensure higher capacity, with an objective to have trains running at least 160 km/h by 2040 on major corridors connecting urban centres in Europe. An opportunity to increase accessibility of cross-border rail tickets was awaited in vain: the MDMS law. The failure to propose came to the detriment of European citizens not benefitting from easier multi-modal and cross-border ticket bookings.

How to get the European rail sector up to speed

- **Increase rail infrastructure investments** in the next EU budget (MFF) to improve rail efficiency by renovating, upgrading and finally extending the rail network across Europe. The EU budget should fully exclude funding for new roads and airports.
- Improve governance at EU level to **fast-track the roll-out of rail infrastructures and rolling stocks** and empower the European Railway Agency with more resources.
- Require rail operators to **fairly communicate their train offer inventory** to enable booking platforms to sell rail journeys and single multi-modal tickets (MDMS Regulation), ending monopolistic behavior in the distribution of tickets.
- **Reduce rail tolls** (called track access charges) **for international trains and exempt them from VAT** to kick-off the offer and reduce the price of the train tickets, particularly for night trains. Direct support via (cross-border) Public Service Obligations should also be accelerated in lower population-density areas.

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