

## Position Paper

# National Energy and Climate Plans: how to deliver zero emission transport

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NECPs are 10-years planning tools (2021 to 2030) with which member states define how they are going to contribute to the achievement of the European Union's climate and energy objectives and which policies and measures they will put in place to reach those objectives.

Following the ramp-up of the EU's climate ambition (EU Climate Law, Fit for 55), EU countries are called to refresh their National Energy and Climate Plans with a first draft to be submitted to the European Commission by the end of June 2023.

This document presents the essential actions that member states should plan in their new NECPs to align with the EU's new climate ambitions and deliver a zero emission transport sector. It also recommends the adoption of minimum governance standards at national level to ensure national and public ownership of the planned policies and to provide solid policy implementation, monitoring and reviewing.

The needed policies and measures are presented per transport mode and topic:

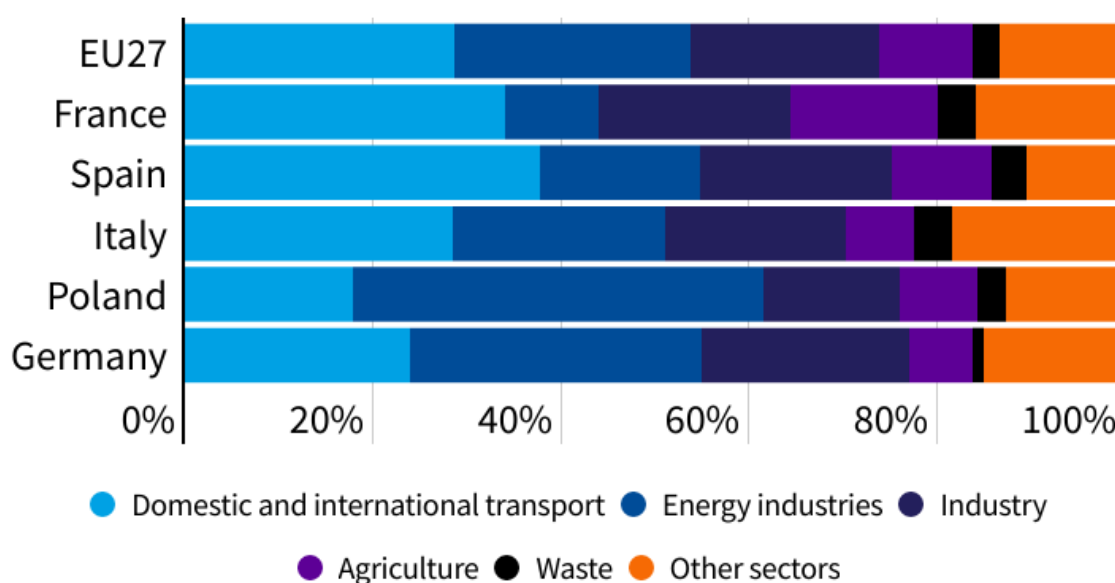
- [Road transport](#)
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## Transport is the largest source of GHG emissions in the EU and its member states and must decarbonise faster

Between 2013 and 2019<sup>1</sup> emissions of transport have increased steadily. Among domestic transport modes, domestic navigation and railways are the only two that have cut their emissions since 1990. Projections show that **without additional and timely action, emissions from the transport sector will continue growing until 2025** and still be 9% above 1990 levels in 2030. If member states don't start prioritising aviation and maritime sectors in their national policies, the largest emission increase up to 2030 will come from these two sectors<sup>2</sup>.

### 2019 GHG emissions per sector, selected countries



Source: UNFCCC

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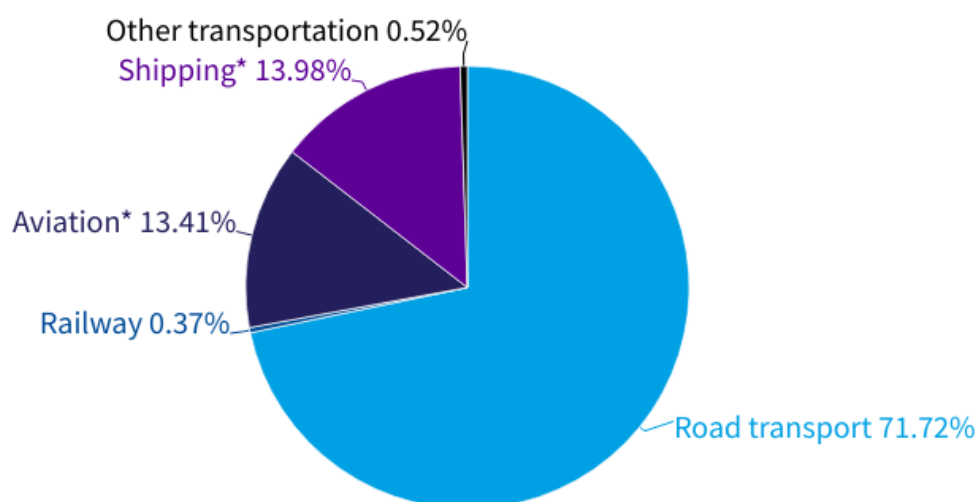
<sup>1</sup> Reference period considered up to 2019 as to exclude the exceptional impact of Covid-19 on emissions.

<sup>2</sup> EEA, 2022, Greenhouse gas emissions from transport in Europe. [Link](#)

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Emissions from road transport are the greatest concern as they made up three quarters of all transport EU GHGs emissions in 2019<sup>3</sup>

## Percentage of emissions per transport mode in EU27, 2019



\*Include domestic and international aviation and shipping.

Source: UNFCCC

The above figures lead to two main conclusions. Firstly, it is necessary to **accelerate the pace of transport decarbonisation**. Secondly, **member states must start tackling emissions from all modes of transport in their national plans** and providing solutions for cross-cutting issues impacting transport. Thus, it is crucial that the analytic assessment, goal setting and policy planning made by member states in their Plans doesn't leave any transport mode out.

The risk of poor NECP planning and implementation is to miss the climate challenge in 2030 and long-term

Member states tend to consider the NECPs as an administrative burden without showing true commitment to this crucial policy planning moment. However, the Plans are essential to implement the EU legislation and their impact even goes beyond that. Their update presents a key opportunity for countries to identify the national pathway to a zero emission economy and to develop a coherent strategy with a systemic and cross-sectoral approach. For instance, countries are also called to assess resource requirements and availability to

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<sup>3</sup>Domestic transport and international aviation and shipping included.

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avoid sectors' competition for scarce resources. Moreover, NECPs create a stable and predictable framework for business investments and planning for the green transition. Not less importantly, a good plan to move to a clean economy would be the appropriate answer from governments to the 93% of EU citizens who believe climate change is a serious problem (see the [2021 Eurobarometer survey](#)).

## Governance is essential to ensure that climate mitigation doesn't remain a theoretical concept

[A recent survey](#) highlighted a serious lack of transparency and accessibility for civil society to the NECP drafting process, while some member states are on track to miss the submission deadline and some others don't have national scientific advisory bodies in place to inform the Plans with independent scientific advice. Similarly, the [assessments of the previous NECPs](#) highlighted a lack of public involvement, of data transparency, of systemic and cross-sectoral approach and the inadequacy of the monitoring and reviewing structure in place.

Inclusive governance ensures that the whole government (including national parliaments), subnational levels of government, the civil society, stakeholders and citizens take ownership of the fundamental decisions made to clean up the transport sector and the economy. Rules to conduct regular monitoring, progress checks, and policy review, are essential to correct the course of action if this results to be insufficient. The following sections provide key recommendations on how to reduce emissions in all transport modes.

## T&E recommends to plan policies and measures for all transport modes in the NECPs

### Road transport

- **Accelerate the uptake of zero-emission vehicles** by setting a date for phasing-out sales of CO<sub>2</sub>-emitting new passenger cars and light commercial vehicles prior to 2035 via smart taxation measures such as bonus-malus CO<sub>2</sub> taxation with higher taxes on polluting vehicles supporting the adoption of battery electric cars and vans;
- Provide **targeted support and incentives for low-income households** to access zero-emission vehicles, such as social leasing schemes for BEVs;
- **Adopt measures to electrify all corporate fleets by 2030**, for instance by setting national mandates or adopting [tax mechanisms](#) such as low benefit-in-kind taxation on battery electric company cars and removal of tax depreciation on internal combustion engine company cars and PHEVs;

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- Introduce incentives and targets for public authorities to purchase only zero-emission vehicles by 2030 (e.g. national and sub-national governments, public agencies and administrations);
  - **Adopt measures to drive demand for electricity-based zero-emissions trucks (ZETs)**, such tax exemptions or financial support for the purchase of ZETs, deployment of public charging for electric trucks at the urban nodes and along the main highways. Avoid supporting on highly polluting gas-powered trucks and on biomethane<sup>4</sup>;
  - **Implement the CO<sub>2</sub>-varied tolls by 2024** as mandated by EU law to ensure trucks' contribution to meeting the NECP objectives. A 50% to 75% toll reduction for zero emission trucks, while providing higher CO<sub>2</sub> charges on internal combustion engine trucks is needed to switch to clean trucks;
  - For light duty vehicles, the fleet based targets set out in the Alternative Fuel Infrastructure Regulation (AFIR) should cover all regions of a member state. For heavy duty vehicles (HDVs), member states should base their plans for public charging infrastructure on AFIR and ensure to adapt them to anticipated HDV-fleet on the road and traffic volumes;
  - Mandate that only zero emission buses are deployed in cities in 2027.

## Shipping

- **Prioritise bunkering infrastructure for green hydrogen and e-ammonia** in the development of the AFIR plans for clean fuels consumption in shipping. To that end, invest in shore-side charging stations, hydrogen/ammonia production plants and new port bunkering infrastructure;
- **Set targets for electric charging ports for all ship types in all ports by 2030** (not only for container and passenger ships in limited parts of ports as set in AFIR);
- **Stop all investments in new LNG bunkering infrastructure** in ports. Justifying these investments through synthetic methane is disingenuous; it is one of the least sustainable and enforceable solutions;
- **Don't allocate biofuels to shipping** as fraud related to the origin and sustainability of the biofuels from marine bunker suppliers inside and outside Europe is so rife;
- **Publish a national decarbonisation roadmap and a national zero emissions target for all shipping voyages** calling at each country's port and the land-based supply chain.

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<sup>4</sup> Biomethane cannot be sufficiently scaled due to its limited feedstock potential and high cost and would be better allocated to industry

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- **Set phase-out dates for emissions in ports**, so that by 2035 or 2040 all ships must be zero-emissions when at berth or manoeuvring in port areas;
  - Ensure the share of **renewable fuels of non-biological origin (RFNBOs)** in the total amount of energy supplied to the maritime sector is **at least 1.2%** as part of Member State's implementation of the Renewable Energy Directive (RED);
  - **Implement subsidy schemes like Contracts for Difference (CfDs)** to cover the cost gap between clean and conventional fuels for innovative zero-emission e-fuels;

More on decarbonisation of shipping [here](#).

## Aviation

- **Include all departing aviation emissions** into the country's national climate goals;
- Mandate corporations with most frequent flyers to set a target to reduce their air travel emissions by 50% compared to 2019 levels;
- **Increase ticket taxes and apply a kerosene tax** to tackle the lack of effective pricing applied to the sector;
- Introduce ticket taxes with a **higher tax rate for longer flights** (> 6,000km), including transfer passengers and extra-EU flights. Multipliers increasing the tax should be applied to address the disproportionate impact of premium & business classes and private jet flights;
- **Mandate the use of zero emissions technology by 2030** (i.e. no fossil fueled powered aircraft) **for private jets** flying in and out of the country;
- Develop **industrial support roadmaps for SAF** with priority public investment to support e-kerosene from Direct Air Capture (DAC) and zero-emission aviation technologies. Any public aid given to the aviation sector should be conditioned to the uptake of technologies that substantially reduce the sector's emissions, such as the use of e-fuels and zero emissions aircraft and financed through the polluter pays principle;
- **Develop national strategies to ramp-up zero emission aviation infrastructure** (electricity and hydrogen) at airports;
- **Introduce a non-CO2 effects reduction strategy**, including introducing a pilot project to reduce aromatic content in jet fuel.

More on decarbonisation of aviation [here](#).

## Railway

**Rail transport should become more relevant in national decarbonisation plans.** Shifting from passenger cars, trucks and aviation to trains contributes greatly to decreasing the

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sector's emission intensity, without considering the benefits of a modal shift in terms of decongestion of urban and extra-urban roads. The following actions would increase rails' contribution to sustainable transport. NECPs should include measures to:

- Renewal and availability of rolling stock;
- Promotion of passenger trains for urban and regional mobility;
- Promotion of freight trains;
- Promotion of intermodality with cycling and public transport;
- Improve cross-border connections;
- Further electrification.

## Renewable energy

The Renewable Energy Directive (RED III) is being updated by the EU. It will then be up to member states to implement it, adopting ambitious policies without negative impact on the environment (especially land use and forestry). Member states should:

- **Lower the overall target for renewables in transport** to a maximum 16% share of renewable energy or a - 8% GHG intensity target, only allowing truly sustainable advanced fuels (renewable electricity, green hydrogen and e-fuels (so-called Renewable Fuels of Non-Biological Origin) and advanced biofuels) to contribute towards the overall RED transport target; the RED allows member states to lower the target by phasing out support that was awarded for food and feed-based biofuels;
- **Phase out biofuels from palm oil earlier than 2030 and remove soy and other crop-based biofuels from the RED III target**, including by removing any fiscal incentives for food and feed based biofuels;
- **Don't set too high targets for advanced biofuels** (from sustainable waste and residues, and animal fats and used cooking oil) to avoid the risk of using unsustainable materials as feedstocks. Before setting a target for advanced biofuels, it is recommended to conduct an environmental, climate and economic impact assessment of the different technology options before setting the targets, including considering the domestic availability of the resources;
- **Include private charging in the crediting system for the use of renewable electricity** in transport that must be implemented under the recently agreed RED III;
- **Promote the use of electrofuels (aka RFNBOs) in transport modes which are more difficult to electrify such as aviation and shipping**, while preferring more efficient direct consumption of electricity whenever possible such as in the case of road transport (battery electric vehicles) and railway.

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## Cross-cutting issues

- **Change the tax system to encourage the use of renewable energy sources in transport**, in particular driving supply of e-fuels and green hydrogen to the aviation and shipping sectors and avoiding incentivising biofuels. Tax fuels on the basis of their CO<sub>2</sub> and energy content;
- **Get rid of fossil fuel subsidies** which deviate public finances from future and climate proof energy;
- **Adopt operative indicators of energy poverty and transport poverty** and a national roadmap to eradicate these issues;
- **Implement effective [Low-Emission Zones \(LEZs\)](#)** to clean cities' air and make urban transport less emissions intensive and more efficient. Set also a binding and progressive calendar to transition to a zero-emission zone (ZEZ) by 2030 at the latest. LEZs should be complemented with alternatives such as active mobility (cycling, walking) as well public and shared transport. Moreover, targeted financial support to the most vulnerable groups (e.g. low-income households) should be provided to access clean mobility;
- **Innovate on zero emission technology** such as more efficient battery chemistries and recycling technology, green hydrogen, synthetic fuels, Direct Air Capture, technology to reduce aviation's non-CO<sub>2</sub> effects, and power storage for grid balancing. Translate the identified innovation priorities into concrete measures with adequate allocation of funds.
- **Promote additional renewable energy to electrify transport** via easier permitting, grid interconnection and improvements, smart grids development.

## Governance

There are a number of legislative fixes that member states could undertake in order to improve their climate and energy governance:

- Make the **technological assumptions, the data and the analysis underpinning the Plan transparent, accessible and open to stakeholders' input**;
- **Ensure [meaningful and early public consultation](#)** by setting reasonable time frames, guaranteeing equal participation, providing all necessary information (also via a dedicated website), and giving due account to the outcome;
- **Involve the whole-of-government**, including national parliaments, in the drafting of the NECP;



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- **Conduct Multilevel Climate and Energy Dialogues** to discuss with different stakeholders and levels of government the scenarios and options for the short and long term;
  - **Set a permanent structure within the government** composed of all sectoral administrations involved in the implementation and monitoring of the Plan, including national agencies;
  - **Take in due account the advice of the national scientific advisory body.** All countries should set one up as a guarantee of science-based policy making;
  - **Align the NECPs with the national long-term strategy for net zero**, updating it through regular and shorter policy review cycles;
  - **Align planning instruments required by sectoral legislation with the NECPs.** This is especially necessary for the Social Climate Plans (submission by June 2025 under the Social Climate Fund Regulation) and the Alternative Fuel Infrastructure Plans (submission by 1 of January 2025 according to AFIR);

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