

【欧州】 【Common, 自動車】

Common - CO₂ emission trading market/Road - Environmentally friendly vehicle: “Fit for 55” Package proposals to reduce CO₂ emissions from road transport

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【概要 : Summary】

Based on the target of the European Green Deal (COM/2019/640 final) to achieve a net-zero carbon emission target by 2050, the mid-term target of 2030 had to be adjusted to a new 55% GHG emission reduction target. Accordingly, the EU’s GHG emission reduction related legislation needed to be revised to meet the new GHG emission reduction related target.

On 14 July 2021, the European Commission presented a package of proposals containing all the necessary revisions of the GHG emission related legislation as part of the “Fit for 55” Package. This Package also includes proposals for road transport related CO₂ emissions reduction measures. The European Commission proposes new standards for passenger cars and vans to bring new and cleaner cars to the market, on the one hand. On the other hand, it is important to reduce the CO₂ emissions from the existing fleet of vehicles in road transport. In this context, the European Commission proposes to introduce an emission trading scheme for fuels, which will serve to reduce the GHG emissions of the existing fleet of vehicles. The new EU fleet-wide CO₂ emission reduction target for new passenger cars and vans in proposal COM (2021) 556 final intends to strengthen the CO₂ emission performance

standards for new passenger cars and new light commercial vehicles (vans).

Compared to the 2021 target, the Commission proposes a 55% reduction of the fleet-wide CO₂ emission reduction target for passenger cars, and 50% for vans from 1 January 2030. This is followed by a fleet-wide CO₂ emission reduction target of 100% for passenger cars, and 100% for vans from 1 January 2035 onwards. These ambitious CO₂ emissions standards for new cars and vans are expected to increase the number of zero- and low-emission vehicles on European roads and to reach the 2050 net-zero carbon emission target.

To decarbonise the existing fleet, the Commission proposes to introduce an emissions trading scheme from 2026 for road transport. Extension of the EU-ETS to road transport puts the responsibility to comply with the new EU-ETS system on fuel producers and suppliers, rather than requiring individual road transport users to take part directly. Fuel suppliers will have to buy and trade emitting permits to meet their CO₂ emission reduction targets. The CO₂ emissions will be capped, and the cap will be reduced over time. Thereby the transport sector’s total CO₂ emissions are expected to fall. However, whether the inclusion of road transport into the EU-ETS will be beneficial for reducing the sector’s GHG emissions is still discussed controversially. To

address the social impacts, the Commission has presented a proposal for a Social Climate Fund.

【記事 : Article】

1. Regulation (EU) 2019/631 to reduce GHG emissions in the transport sector

The EU's transport sector is responsible for around a quarter of the EU's total GHG emissions and a vast majority of about 70% is emitted by the road transport sub-sector. Based on the EU's commitments under the 2015 Paris Agreement and the European Green Deal (COM/2019/640 final) with its net-zero GHG emission target to be reached by 2050, the CO₂ emissions from transport need to decrease by 90% by 2050.

The GHG emissions from road transport were regulated under Regulation (EU) 443/2009 for passenger cars and under Regulation (EU) 510/2011 for light commercial vehicles. This legislation was replaced by Regulation (EU) 2019/631 as of 1 January 2020. The Regulation (EU) 2019/631 sets new CO₂ emission performance standards for new passenger cars and for new light commercial vehicles (vans) in the EU for the period after 2020. For the period 2020–2024, Regulation (EU) 2019/631 confirms the EU fleet-wide CO₂ emission targets set under Regulations (EC) No 443/2009 and (EU) No 510/2011, for passenger cars 95g CO₂/km and vans 147g CO₂/km, based on the former NEDC emission test procedure. From 2021 onwards, the emission targets for manufacturers will be based on the new WLTP emission test procedure. Specific emission targets are set annually for each manufacturer. Those targets are based on the EU fleet-wide targets and consider the average mass of the manufacturer's new vehicles registered each year. For manufacturers of passenger cars, 2020 is a phase-in year as the specific emission targets will apply only to the 95% least emitting new cars in their fleet.

Regarding the years 2025 and 2030, Regulation (EU) 2019/631 sets stricter EU fleet-wide CO₂ emission targets, which are defined as a

percentage reduction from the 2021 figures. For passenger cars, a 15% reduction from 2025 onwards and a 37.5% reduction from 2030 onwards is set. Regarding vans, a 15% reduction is envisaged from 2025 on and a 31% reduction from 2030 onwards.

The European Commission also identified the target to have at least 30 million zero-emission vehicles in the EU's market by 2030, as CO₂ emission standards for cars and vans are key drivers for reducing CO₂ emissions in the road transport sector. In 2020, despite the shrinking overall market for new cars due to the COVID-19 pandemic, the total number of electric cars registered tripled, reaching for the first time over 1 million a year.

However, to achieve the European Green Deal target to reduce the transport system's GHG emissions by 90% by 2050, the CO₂ emissions performance standards for new passenger cars and light commercial vehicles under Regulation (EU) 2019/631 needed to be tightened regarding the 2025 and 2030 CO₂ emissions reduction targets. Therefore, the European Commission proposed new CO₂ emissions reduction standards for passenger cars and light commercial vehicles under the revisions in the "Fit for 55" Package. Furthermore, the CO₂ emissions of the existing fleet of passenger cars and vans should be reduced by including road transport into a revised EU-ETS scheme, based on the Proposal for a Directive amending Directive 2003/87/EC on the EU-ETS (COM(2021) 551 final) under the "Fit for 55" Package of 14 July 2021.

2. The "Fit for 55" Package

To achieve the 2050 climate neutrality, the European Climate Law (COM/2020/80 final) of 4 March 2020 sets the intermediate target of reducing net GHG emissions by at least 55% by 2030, compared to 1990 levels, according to its amendment COM/2020/563 final of 17 September 2020. To reduce the GHG emissions under the European Climate Law by at least 55% by 2030, the European

Commission presented 13 legislative proposals for the revision of several laws in the “Fit for 55” Package on 14 July 2021.

Regarding the reduction of CO₂ emissions from road transport, the “Fit for 55” Package includes the revision of the Regulation (EU) 2019/631 and the CO₂ emission performance standards for new passenger cars and vans (COM(2021) 556 final).

The Commission also proposed to include the road transport sector into the EU-ETS to cover the CO₂ emissions of the existing fleet of vehicles. These CO₂ emissions from road transport fuels will be covered by a new, self-standing EU-ETS for fuels in road transport. The proposal EU-ETS (COM (2021) 551 final) intends to incentivise fuel producers and suppliers to provide cleaner fuels for cars and trucks as of 2026. Furthermore, to avoid the social impact of the measures connected to the EU-ETS for road transport, the European Commission proposes a Social Climate Fund.

The proposal for an Alternative Fuels Infrastructure Regulation (COM(2021) 559 final) of 14 July 2021 will repeal Directive 2014/94/EU and will require EU Member States to expand charging capacity for zero-emission cars.

Moreover, the amended Renewable Energy Directive (RED) COM(2021) 557 final) will set an increased target to produce 40% of energy from renewable sources by 2030. All Member States will have to contribute to this goal, and specific targets are proposed for renewable energy use in transport, among others. The revision of the RED increases the mandatory share of renewable transport fuels, in parallel to an increased objective under the Proposal for the Effort Sharing Regulation (COM (2021) 555 final).

3. Revision of the CO₂ emission performance standards for new passenger cars and vans (COM (2021) 556 final)

Under the “Fit for 55” Package of 14 July 2021, the European Commission proposed a revision of Regulation (EU) 2019/631, and to set more

ambitious CO₂ emissions targets for new passenger cars and vans from 2030 onward. With this “Proposal for a Regulation of the European Parliament and of the Council amending Regulation (EU) 2019/631 as regards strengthening the CO₂ emission performance standards for new passenger cars and new light commercial vehicles in line with the Union’s increased climate ambition” (COM(2021) 556 final), the Commission proposes new EU fleet-wide CO₂ emission reduction targets for new passenger cars and vans, set at a 55% reduction of CO₂ emissions from passenger cars by 2030 and a 50% reduction of CO₂ emissions from vans by 2030. Finally, by 2035, a zero-emission target for new passenger cars should be reached. With this target of a 100% CO₂ emission reduction by 2035 compared to 2021 levels, all new passenger cars registered as of 2035 will have to be zero-emission vehicles.

Furthermore, specific emission targets are set annually for each manufacturer, based on the EU fleet-wide targets and the average mass of the manufacturer’s new vehicles registered each year, using a limit value curve.

Considering the effect of the introduction of these new CO₂ emission performance standards under proposal COM (2021) 556 final, it is expected to increase the supply of zero-emission vehicles by car manufacturers, and with that increased supply, consumers can benefit from more affordable zero-emission vehicle models with significant energy savings from the use of zero-emission vehicles. It is also expected to stimulate innovation in zero-emission technologies in the EU.

Since the proposal provides a clear and long-term signal towards the introduction of zero-emission vehicles into the mass market, it is expected to guide both, the automotive sector’s investments in innovative zero-emission technologies, and the rollout of the necessary recharging and refuelling infrastructure. The proposal is technology neutral and will be accompanied by measures to boost zero-emission fuels and the

charging infrastructure. (COM (2021) 556 final). Accelerating the transition towards zero-emission mobility and stimulating innovation in zero-emission technologies will offer opportunities for the European automotive value chain to modernise and develop new products and services. This should also lead to a reduction of the fuel imports, with cumulative diesel and gasoline savings of around 900-1100 Mtoe achieved over the period 2030-2050, compared to the baseline.

According to the proposal (COM (2021) 556 final), by 31 December 2025, and every two years thereafter, the Commission shall report on the progress towards zero emission road mobility. The report shall monitor and assess the need for possible additional measures to facilitate the transition, including through financial means.

In 2028, the Commission shall review the effectiveness and impact of this Regulation, building on the planned two-yearly reporting.

4. New EU-ETS for road transport fuels and the Climate Social Fund

The EU-ETS was introduced in 2005 and covers the CO₂ emission of more than 11,000 entities, including energy-intensive industry sectors among others. Since 2012, the EU-ETS also covers the aviation sector for the flights within the European Economic Area (EEA).

Under the Commission's proposal COM(2021) 551 final, road transport will be covered by the new, separate self-standing emissions trading scheme from 2025 onwards, based on Chapter IVa of COM(2021) 551 final.

According to Chapter IVa of COM(2021) 551 final, the issuance of allowances and compliance obligations for the fuel supplying entities covered by the scheme will be applicable from 2026, which will allow the new system to start functioning in an orderly and efficient manner (Articles 30c, 30d and 30e of COM(2021) 551 final). The rationale behind the inclusion of the road transport into the EU-ETS is the need to

decarbonise the existing fleet of transport vehicles, which is not covered by the Regulation (EU) 2019/631 or the succeeding law, based on the proposal COM(2021) 556 final). Therefore, to decarbonise the existing fleet of transport vehicles, the Commission proposed to introduce an EU-ETS for fuels in road transport. However, rather than putting the burden on individual road users, the new ETS for road transport will regulate the CO₂ emissions at the fuel suppliers' level. The fuel suppliers will be responsible for monitoring and reporting the quantity of fuels they place on the market and for surrendering emission allowances each calendar year depending on the carbon intensity of the fuels. This approach incentivises the fuel suppliers to decarbonise their products as this will reduce the cost of compliance with the emissions trading system. The regulated entities are defined in line with the system of excise duty of Council Directive (EU) 2020/262, since a robust monitoring and reporting mechanism for the quantities of fuels released for consumption already exists for tax purposes in the Council Directive (EU) 2020/262 of 19 December 2019 laying down the general arrangements for excise duty (recast) (OJ L 58, 27.2.2020, p. 4-42).

The European Commission plans to make the new ETS operational by 2025 and set a cap on emissions from 2026 onwards (European Commission 2021a). This emissions cap for the new emissions trading system will be based on data collected under the Effort Sharing Regulation and ambition level and decrease to reach emission reductions of 43% in 2030 compared to 2005 for road transport, among others (Article 30c and Annex IIIa of COM(2021) 551 final).

The Commission will monitor the application of the rules of the new emissions trading and, if necessary, it will propose a review by 1 January 2028 to improve its effectiveness, administration, and practical application (Article 30i of COM(2021) 551 final).

Sectors outside the EU-ETS are covered by the Effort Sharing Regulation¹¹ (ESR), which establishes an overall EU-wide GHG emission reductions target, as well as binding annual targets for individual Member States to be achieved by 2030. The ESR covers among others the road transport sector. Contrary to the EU-ETS, the sectors covered by the ESR are not subject to an EU-wide carbon price signal. By providing the additional economic incentives (through carbon pricing) necessary to achieving the cost-efficient emission reductions in road transport, the new EU-ETS would complement the ESR in the current scope.

A specific mechanism is also proposed to contain excessive increases in the carbon price. One year ahead of the introduction of carbon pricing for the buildings and road transport sectors, a Social Climate Fund will start operating to address the social challenges that vulnerable groups in society may face because of the new emissions trading system. The Commission proposes a Social Climate Fund to finance the relevant Member States' plans to address social aspects of the emission trading for road transport users among others, with a specific emphasis on vulnerable households and micro-enterprises.

While in the medium- to long-term benefits of EU climate policies clearly outweigh the costs of the transition, the new coverage of road transport within the ETS bears the risk of putting extra financial pressure on vulnerable households. Therefore, the new Social Climate Fund is proposed to provide dedicated funding to Member States to address the social impacts of the extension of emissions trading to road transport and buildings on vulnerable households, micro-enterprises, and transport users. among others (COM (2021) 556 final, European Commission 2021b, European Commission 2021c).

The Social Climate Fund would be financed by the EU budget, using an amount equivalent to 25% of the expected revenues of the new emissions

trading for building and road transport fuels. It will provide €72.2 billion of funding to Member States, for the period 2025–2032. Member States should use their auction revenues from the emissions trading for building and road transport fuels to finance parts of their national contributions to the Fund (European Commission 2021b, European Commission 2021c).

5. Alternative fuels Infrastructure and the amendment of the renewable energy directive (RED)

The new CO₂ emission standards are intended to increase the supply of zero-emission vehicles and to reduce the CO₂ emissions of the existing fleet in road transport. However, to expand the fleet of new low to zero carbon emission vehicles, the Alternative Fuels Infrastructure Directive 2014/94/EU must be revised to further incentivise the rollout of recharging and refuelling infrastructure, as a complementary instrument to address one of the market barriers of low emission vehicles. To ensure that drivers can charge or fuel their vehicles at a reliable network across Europe, the Alternative Fuels Infrastructure Regulation of 14 July 2021 will repeal Directive 2014/94/EU (COM(2021) 559 final) and will require Member States to expand charging capacity in line with zero-emission car sales. They will have to install charging and fuelling points at regular intervals on major highways, every 60 kilometres for electric charging and every 150 kilometres for hydrogen refuelling (COM (2021) 559 final). The Commission's proposal COM (2021) 559 final on the alternative fuels infrastructure will ensure the timely availability of the recharging and refuelling infrastructure for the zero-emission vehicles across the EU. In each Member State, sufficient public charging capacity will be in place to meet the demands of the bigger fleet of zero emission cars. Furthermore, the new proposal COM (2021) 559 final will also ensure that aircraft, ships, and barges have access to

electricity supply in major airports and ports. In addition, hydrogen refuelling stations will be deployed for light, but also for heavy duty vehicles. Public charging and hydrogen refuelling stations will be widely available, interoperable, also along Europe's major transport corridors (COM (2021) 559 final).

Furthermore, the Commission presented a proposal on the amendment of the Renewable Energy Directive (COM (2021) 557 final) on 14 July 2021. The amended Renewable Energy Directive COM(2021) 557 final) sets an increased target to produce 40% of energy from renewable sources by 2030. All Member States will have to contribute to this goal, and specific targets are proposed for renewable energy use in transport, heating and cooling, buildings, and industry.

The revision of the RED increases the mandatory share of renewable transport fuels, while with the increased emission reduction objective under the Commission's proposal for the Effort Sharing Regulation COM(2021) 555 final, Member States will have to do more at national level to decarbonise transport.

6. Outlook

To pave the way for achieving the target of net-zero GHG emissions by 2050 and to introduce mid-term targets for 2030 to achieve it, the European Commission presented the set of 13 interconnected legislative proposals under the "Fit for 55" Package. All legislative proposals target significant CO₂ emission reductions within the EU's economy towards the European Green Deal's target of achieving climate neutrality by 2050.

Putting a price on carbon for road transport by including the sector into the EU-ETS and setting more ambitious CO₂ standards for new vehicles can be expected help to reducing GHG emission from road transport quickly. In parallel, the proposal for a Climate Social Fund is expected to help avoiding the social disadvantages of including the road transport's CO₂ emissions into the ETS.

Infrastructure obligations for putting in place the necessary charging and refuelling stations will serve a quicker uptake of low to zero emissions vehicles. A higher mandatory share of renewable transport fuels under the revision of the RED will also support the decarbonisation of the transport sector.

It can be expected that the target of having only new passenger cars with zero CO₂ emissions entering the market by 2035 will be a challenging target. However, considering the typical lifespan of passenger cars of 10 to 15 years, it might be the only way to achieve the complete carbon neutrality of the EU fleet of passenger cars and vans by 2050.

The legislative proposals of the "Fit for 55" Package will be considered by the European Parliament, the Council, the Economic and Social Committee and the Committee of the Regions under the ordinary legislative procedure. Within this process, it can be expected that the targets might be discussed controversially. Usually, the European Parliament calls for more ambitious targets and measures, whereas, in contrast, the European Member States are more inclined to weaken environmental targets.

However, since the 2030 and 2050 targets are already set under the European Green Deal and the European Climate Law, this time, the EU Member States might be inclined to approve the proposals' targets without weakening them, as all efforts focus on the overarching goal of achieving net-zero GHG emissions in the EU by 2050.

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