

【欧州】 【Common】

Common - Environmental issues: The European Commission presents the Sustainable and Smart Mobility Strategy

Andrea Antolini Former Researcher JTTRI

【概要:Summary】

All transport modes need to become more sustainable, in order to achieve the European Green Deal's targets and to reduce the transport sector's GHG emissions by 90% by 2050.

"Sustainable and Smart Mobility Strategy putting European transport on track for the future" (COM(2020) 789 final) of 9 December 2020 the basis for achieving the necessary transformation of the EU transport system towards a green, digital and more resilient future. It puts in place concrete milestones for all modes of transport. The strategy includes an Action Plan of 82 initiatives for achieving the strategy's target, which is the foundation for how the EU transport system can achieve its transformation towards the 90% reduction of GHG emissions by 2050. The digitalisation makes the transport system seamless and more efficient, and thereby helps to reducing GHG emissions. In addition, the impact of the COVID-19 pandemic has a temporary positive impact on GHG emissions, but it shows also the vulnerabilities of the EU's single market. It will also be one of the strategy's aims to create momentum after the end of the pandemic to achieve a smarter, safer, more competitive, accessible, affordable and also more resilient transport system in the future. Meanwhile, the European Parliament's Committee Transport and Tourism (TRAN Committee)

examined the roadmap for a future transport policy and Action Plan in the Commission's Strategy on Sustainable and Smart Mobility.

【記事: Article】

 Background of the sustainable and smart mobility strategy

The EU and its Member States committed to reduce their GHG emissions under the 2015 Paris Agreement and in December 2019, the European Commission presented the European Green Deal (COM/2019/640 final) as a roadmap toward ensuring the EU's climate neutrality by 2050. While the transport system is critical for a functioning European economy and society, the GHG emissions in the transport sector represent a major challenge for EU Member States to achieve the climate neutrality target. The GHG emissions of the transport sector represent around one quarter of the EU's total GHG emissions and they still continue to increase. According to European Environment Agency (EEA), the EU's transport emissions increased in 2019 by 0.8% including shipping) compared to 2018. follows a 0.9 % increase in 2018. Moreover, projections indicate that transport emissions could further increase by 32% by 2030 compared with 1990 levels. This further increase of the GHG emissions in the transport sector jeopardise the EU's 2030 and 2050 GHG emission reduction



targets. In fact, the transport sector's GHG emissions should be reduced by 90% by 2050. Consequently, all transport sub-sectors will need to reach more ambitious targets if the sector wants to contribute to the 2050 climate neutrality goal. However currently, the transport sector remains the only main economic sector in the EU, which shows a significant increase in the GHG emissions.

The need to transform the transport system is also affected by the impacts of the COVID-19 pandemic. The COVID-19 crisis is expected to lead to an unprecedented fall in emissions in 2020. However, as experienced in past crisis, once the pandemic will be overcome, a swift economic recovery could also lead to a strong rebound in GHG emissions, unless policy measures are taken to avert it and to achieve the transition towards lower GHG emissions in transport. The measures to avert the impacts of the COVID-19 pandemic could also offer a historic opportunity to make European transport sector more sustainable.

2. The use of renewable energy sources in the transport sector

The use of renewable energy has some potential benefits as it can help to reduce GHG emissions, to diversify the energy supplies and to reduce the dependence on fossil fuels among others. Based on data reported by EU Member States to Eurostat and early estimates from the EEA, the assessment confirms that the EU renewable energy sources (RES) share continues to be in line with the indicative trajectory. Based on individual national targets of each EU Member State, the Renewable Energy Directive (2009/28/EC, RED I) requires the EU to cover at least 20% of its total energy needs with renewables by 2020. In the transport sector, the use of renewable energy sources is seen as the most effective tool to reduce not only GHG emissions but also to reduce dependence on imported fossil fuels. Therefore, the EU agreed to set a common target

of 10% for the share of renewable energy in its Renewable Energy Directive (2009/28/EC, RED I), to be used in transport by 2020. Renewable energy sources including liquid biofuels, hydrogen, biomethane and 'green' electricity, generated from renewable energies, and others are seen as important mitigation options. Infrastructural changes, such as for public transport and electric charging stations, are also important elements for developing a more climate-compatible transport sector.

In 2018, renewable energy represented 8.3% of

energy consumption in the transport sector, which is nearly 2 percentage points under the 10% target of the RED I share target for the transport sector in 2020. The renewable shares in the transport sectors of Finland and Sweden exceeded 10% in 2018. In 26 other EU Member States, the shares ranged from 2.7% (Cyprus) to 9.8% (Austria). The Eurostat results for the year 2019 show that the share of energy from renewable sources used in transport activities in the EU-27 reached 8.9% in 2019. Considering the 2020 target, while it is not expected that the 10% target will be reached by measures taken so far, the COVID-19 pandemicrelated reduction in transport volumes in 2020 could coincidentally have helped to achieve the 2020 renewable energy target, reduction of consumption of energy in general. However, some EU Member States will need to make additional efforts to meet their obligations regarding the overall share of renewable energy sources in the gross final energy consumption and the specific share of energy from renewable sources in transport. In 2019, the share of renewable energy in transport fuel consumption varied significantly among the EU-27 Member States, ranging from 30.3% in Sweden, 21.3% in Finland and 12.5% in the Netherlands to 4% or less in Greece and Lithuania (both 4.0%) and Cyprus (3.3%).

In December 2018, the revised RED II Directive (2018/2001/EU) entered into force in order to



helping the EU to meet its GHG emissions reduction commitments under the Paris Agreement. The RED II establishes a new binding renewable energy target for the EU for 2030 of at least 32% and includes a sub-target for transport, which requires the EU Member States and the fuel suppliers to supply a minimum of 14% of the energy consumed in road and rail transport by 2030 as renewable energy. Biofuels used in transport must comply with the RED II's sustainability and GHG emission criteria to be counted towards the overall 14% renewable energy target and to be eligible for financial support by the state authorities.

3. The European Commission's strategy for a sustainable and smart transport system

As outlined in the European Green Deal, the transport system's GHG emissions should be cut by 90% by 2050. This can only be achieved if the transport was transformed into smart, competitive, safe, accessible and affordable system. In order to achieve this, on 9 December the European Commission presented the "Sustainable and Smart Mobility Strategy putting European transport on track for the future" (COM(2020) 789 final). This Sustainable and Smart Mobility Strategy intends to achieve a transformation of the EU transport system towards a green, digital and more resilient future. It sets up the plan towards greener and smarter EU transport system with the aim to achieve the planned 90% GHG emission cut in transport by 2050. In the new Sustainable Mobility Strategy, there are mainly three measures mentioned to make all transport modes more sustainable, including the reduction of the EU's dependence on fossil fuels, making alternative choices available, and adapt the pricing to reflect environmental impact.

The strategy includes an Action Plan of 82 initiatives in 10 key areas for action ("flagships"). The key areas for action include the uptake of zero-emission vehicles, vessels and aeroplanes as well as renewable and low-carbon

fuels. Furthermore, it includes the creation of zero-emission airports and ports and making interurban and urban mobility more sustainable. The greening of freight transport by doubling rail freight transport by 2050 is also envisaged, as well as an improvement in pricing carbon by providing better incentives for users as well as the use of data and artificial intelligence (AI) for achieving smart transport, among others.

In order to transform the EU's transport system towards high sustainability, the uptake of zeroemission vehicles, vessels and aeroplanes, as well as renewable & low-carbon fuels need to be accelerated. In order to decarbonise aviation, a "basket of measures" is needed. In fact, aviation is facing similar decarbonisation challenges to those of waterborne transport. For aviation, the Commission will present a proposal to reduce the EU-ETS allowances, which are allocated for free to airlines. The Commission will also propose to implement the ICAO Carbon Offsetting and Reduction Scheme for International Civil Aviation (CORSIA) through the revision of the EU-ETS Directive in 2021. Finally, a fair and efficient pricing for carbon needs to be introduced for all users across all transport sub-sectors because carbon pricing is key to internalising the cost of CO2 emissions. The internalisation of external costs of transport at the latest by 2050 will ensure that those who use transport will bear the full costs rather than leaving others in our society to meet them.

In its strategy, the Commission also presented concrete milestones to keep the European transport system on track towards a smart and sustainable future. In order to reduce the EU's dependence on fossil fuels, by 2030 there should be at least 30 million zero-emissions cars in operation on European roads and 80,000 zero-emission lorries, among others. The 2050 target will be to have nearly all cars, vans, buses as well as new heavy-duty vehicles at a zero-emission level, while rail freight traffic should



have doubled.

Furthermore, smart mobility, innovation digitalisation will shape how passengers and freight will move in future. The Commission's strategy aims at making the connected and automated multimodal mobility including the introduction of tickets multimodal journeys in passenger transport and freight to seamlessly switch between transport modes. By 2030, automated mobility at large scale and integrated electronic ticketing is expected to facilitate seamless multimodal passenger transport and freight transport should become paperless.

Considering the impact of the COVID-19 pandemic on the transport sector and considering the aim to improve resilience against future crisis, the EU has now an opportunity to build a mobility system that is sustainable, smart, and resilient.

4. The TRAN Committee's considerations on the Sustainable and Smart Mobility Strategy

Meanwhile, on 25 January 2021, the European Parliament's Transport and Tourism (TRAN) Committee MEPs discussed the Sustainable and Smart Mobility Strategy and the steps planned by the Commission with the Commissioner for Transport Adina Vălean.

The Transport Commissioner outlined the main elements of the strategy and stressed the transport sector's important role for the EU's economy, contributing 5% to the EU's GDP and employing over 10 million workers. However, she underlined that transport mobility has also negative effects, including about 22,000 annual road fatalities, still increasing GHG emissions as well as air, noise and water pollution. She added that a sustainable path is needed, firstly, to overcome the EU's current economic crises caused by the COVID-19 pandemic, and secondly, to achieve the target of a 90% reduction in the transport sector's GHG emissions by 2050.

The European Parliament's TRAN Committee welcomed the Commission's proposal of the new mobility strategy. However, some MEPs were concerned about some of the Commission's goals which they interpreted as being too ambitious, given the current situation of an ongoing pandemic and the given constraints in further technological innovations. The MEPs debated also other concerns, including the social conditions for workers, in particular in the aviation sector, the adequate EU financing for new goals, the need for further incentives for cyclists and for the establishment of electric vehicle charging infrastructure, as well as a fair competition in

5. Conclusion

the railway sector.

The Sustainable and Smart Mobility Strategy is expected to help the EU transport sector to transform towards a green, digital and more resilient future. In order to achieve the 2050 GHG emission reduction target for the transport sector, almost all cars, vans, buses as well as new heavy-duty vehicles will have to arrive at a zero-emission level and the resilience of the transport system against future crisis will have to increase. The momentum of the recovery from the COVID-19 pandemic should be used to accelerate the decarbonisation and modernisation of the entire transport and mobility system.

Therefore, the European Commission is expected to put forward a comprehensive set of measures listed in this strategy's Action Plan of 82 initiatives in order to put the EU on the path to create a future sustainable, smart and resilient mobility system and to reach the fundamental changes needed to achieve the objectives of the European Green Deal.

In 2021, the Commission is also expected to propose an action plan to boost long-distance and cross-border passenger rail services as well as to further reduce GHG emissions in rail transport. The European Year of Rail of 2021 is seen as an



excellent opportunity to put these rail transport related issues in the centre of attention.

References

COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS Sustainable and Smart Mobility Strategy - putting European transport on track for the future.

COM/2020/789 final. In:

https://eur-lex.europa.eu/legal-

content/EN/TXT/?uri=CELEX%3A52020DC0789, retrieved 25
January 2021

DIRECTIVE 2009/28/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC. In:

https://eur-lex.europa.eu/legal-

content/EN/TXT/HTML/?uri=CELEX:32009L0028&from=EN,

retrieved 25 January 2021

European Commission: A fundamental transport transformation: Commission presents its plan for green, smart and affordable mobility. In:

https://ec.europa.eu/commission/presscorner/detail/en
/ip_20_2329, 9 December 2020, retrieved 26 January
2021

European Commission: Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of Regions: Sustainable and Smart Mobility Strategy – putting European transport on track for the future. COM(2020) 789 final. In:

https://eur-lex.europa.eu/legal-

content/EN/TXT/?uri=CELEX%3A52020DC0789, 9.12.2020,

retrieved 26 January 2021

European Commission: EU greenhouse gas emissions fell in 2019 to the lowest level in three decades. In: https://ec.europa.eu/commission/presscorner/detail/en/ip_20_2182, 30 November 2020, retrieved 26 January 2021

European Commission: Factsheet - The Transport and Mobility Sector. In:

https://ec.europa.eu/commission/presscorner/detail/en/fs_20_2350, 9 December 2020, retrieved 25 January 2021

European Commission: Kick-starting the journey towards a climate-neutral Europe by 2050. EU climate action progress report. In:

https://ec.europa.eu/clima/sites/clima/files/strategi es/progress/docs/com_2020_777_en.pdf, November 2020, retrieved 25 January 2021

European Commission: Questions and Answers: Sustainable and Smart Mobility Strategy. In:

https://ec.europa.eu/commission/presscorner/detail/en/qanda_20_2330, 9 December 2020, retrieved 26 January 2021

European Commission: REPORT FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS. Renewable Energy Progress Report. In: https://ec.europa.eu/commission/sites/beta-political/files/report-progress-renewable-energy-april2019_en.pdf, 9.4.2019 COM(2019) 225 final,

European Commission: Share of renewable energy in the

EU up to 19.7% in 2019. In:

retrieved 25 January 2021

https://ec.europa.eu/info/news/share-renewableenergy-eu-2020-dec-18_en, 18 December 2020, retrieved
25 January 2021

European Environment Agency: Share of renewable energy in gross final energy consumption in Europe.

In:

https://www.eea.europa.eu/data-and-

maps/indicators/renewable-gross-final-energyconsumption-4/assessment-4, retrieved 26 January 2021 European Environment Agency: The EU Emissions Trading System in 2020: trends and projections. Briefing no. 20/2020. In:

https://www.eea.europa.eu/downloads/3013b20fc16945dd8
72c724b35deb95a/1607952211/the-eu-emissions-tradingsystem.pdf , 10 December 2020, retrieved 26 January
2021

European Environment Agency (EEA): Trends and projections in Europe 2020. Tracking progress towards Europe's climate and energy targets. In:



https://www.eea.europa.eu/publications/trends-and-projections-in-europe-2020, EEA Report No. 13/2020, retrieved 26 January 2021

EEA: Transport: increasing oil consumption and greenhouse gas emissions hamper EU progress towards environment and climate objectives. In:

https://www.eea.europa.eu/themes/transport/term/increasing-oil-consumption-and-ghg, retrieved 26 January 2021

EEA: Average CO2 emissions from new cars and new vans increased in 2018. In:

https://www.eea.europa.eu/downloads/d1474c4b84cb43528
7f2a092ec07b37d/1561367883/average-co2-emissionsfrom-new.pdf, 24 Jun 2019, retrieved 28 June 2019
EEA: Greenhouse gas emissions from transport in
Europe. In:

https://www.eea.europa.eu/data-and-maps/indicators/transport-emissions-of-greenhouse-gases-7/assessment, 18 December 2020, retrieved 25 January 2021

EEA: Renewable energy in Europe 2020 - Recent growth and knock-on effects

cme/products/etc-cme-reports/etc-cme-report-7-2020-renewable-energy-in-europe-2020-recent-growth-and-knock-on-effects/view, retrieved 26 January 2021 EEA: Total greenhouse gas emission trends and projections in Europe. In:

https://www.eionet.europa.eu/etcs/etc-

https://www.eea.europa.eu/data-and-maps/indicators/greenhouse-gas-emission-trends-6/assessment-3, 19 Dec. 2019, retrieved 15 June ETC/CME Report 7/2020: Renewable energy in Europe 2020 - Recent growth and knock-on effects. In: https://www.eionet.europa.eu/etcs/etc-cme/products/etc-cme-reports/etc-cme-report-7-2020-renewable-energy-in-europe-2020-recent-growth-and-knock-on-effects, 12 January 2021 https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Glossary:Renewable_energy_s

ources, 12 January 2021, retrieved 26 January 2021