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The power of true

DECARBONISATION OF TRANSPORT

The European Commission's Strategy for Low Emission Mobility

20 July 2016

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1. Executive Summary

What happened?

On 20 July, the European Commission published a Communication titled 'A Strategy for a European Low-Emission Mobility'. It builds up on the 2011 White Paper on Transport and EU 2030 Climate and Energy objectives.

Why does it matter?

The Communication provides a framework for the decarbonisation of the transport sector (for all modes but with a focus on mainly road transport) with the view of achieving 20% GHG emission reduction in 2030 (compared to 2008 levels) as indicated in the 2011 Transport White Paper. Although the Communication is not accompanied by legislative proposals, the 'Action Plan' contains a number of initiatives to be presented in the coming months.

Main takeaways

- **Increasing investor confidence, step by step:** The Communication recognises that the transition towards new technology require significant investment by the European transport industry, across its different value chains; it is conscious however that changes will come incrementally as they require time and significant investment. It therefore gives investors a clear long-term direction and stresses that it will engage all the financial instruments at its disposal (namely the European Fund for Strategic Investment, Horizon 2020 (for research and innovation) and the European Structural Funds (for sustainable urban mobility) to reduce risk and attract private investment.
- **Open questions for Renewable Energy and Fuel Quality Directives:** The Commission's approach to the review of the Renewable Energy Directive and the Evaluation and potential review of the Fuel Quality Directive. At the moment, the Commission leaves options of a target-based approach and that of the life-cycle greenhouse gas (GHG) content approach. The transport sector does not fall under the scope of the EU Emission Trading System; it is, along with waste management buildings and agriculture, part of the 'non-ETS' sectors the emissions of which are dealt with under the Effort-Sharing Decision.
- **Efficiency, efficiency everywhere:** In the continuity of the 2030 Framework, the Communication puts great emphasis on the role of efficiency in achieving carbon emission reductions in the transport sector. This time a more holistic approach is preferred, focusing on efficiency at system, fuel, and vehicle level. The Commission also will seek to drive innovation in energy savings through higher standards and possibly new, more stringent targets.
- **Technology neutrality, really?** While the Commission tries to keep the "technology neutrality" mantra, the Communication clearly leans towards electric mobility as the preferred option for the future. The only mention of "technology neutrality" is can be found, on the way to promote low- and zero-emission vehicles. This leaves many industrial stakeholders across the value chain hoping that individual instruments will be promoting a holistic approach, which would focus on results over prioritizing tolls to get to these results. This is particularly salient in the idea of differentiating between low and zero-emission vehicles, and in the push for the development of a harmonized cross-border electric charging station network in the EU. The natural gas industry will be reassured by the role foreseen for LNG in shipping and heavy-duty vehicles and by the recognition of the potential of biogas and synthetic methane.
- **The end of first generation biofuels?** The Strategy's biggest losers are food-based biofuels. In a clear U-turn on the Commission's side, the text not only envisages phasing out subsidies to first generation biodiesel and bioethanol, but also signals the Commission's intention to replace them entirely with advanced biofuels. This is likely to be met by strong opposition from Member States where a food-based biofuels industry (and resulting lobby) has developed.

± **A boost for advanced biofuels**: Producers of advanced biofuels however can rejoice (when they are not the same ones that are going to suffer from first-generation phase out), with the Commission foreseeing heavy support to make them competitive and giving them an important role in road transport and even aviation. In short, Commission seems ready to go again through that dangerous path of supporting a specific technology, instead of providing incentives that rely solely on market incentives to promote more sustainable biofuels.

2. The Winners and Losers

Biofuels

First generation (food-based) biofuels **are clearly the biggest losers of the Strategy.** In a U-turn on the Commission's side, the text not only envisages phasing out subsidies to first generation biodiesel and bioethanol, but also signals the Commission's intention to replace them altogether by advanced biofuels. This is likely to be met by strong opposition from Member States where a food-based biofuels industry has developed. Producers of advanced biofuels however can rejoice (when they do not also produce first-generation biofuels), with the Commission foreseeing heavy support to make them competitive and give them an important role in road transport and even aviation. Food-based biofuels producers will have to make sure EU capitals sympathetic to their industry defend their interests and manage to at least secure their current share of the market.

Traditional fuels

One of the Commission's stated objectives being the shift away from oil, diesel and gasoline suppliers are likely to be disappointed by the overall Strategy which seeks to hand out their shares to suppliers of alternative energy sources. The Commission does however see an important role for thermal combustion engines in the near to medium future, giving fuel suppliers an opportunity to stay in the mix for quite some time still. The refining industry will need to keep a close eye on the upcoming review of the Fuel Quality and Renewable Energy Directive which could include additional constraints in their production processes.

Gas as a transport fuel

The Strategy foresees an important role for gas (mostly under its liquefied form) in the near future. The gas industry will be happy to hear that LNG is seen as the fuel of choice for shipping and heavy-duty vehicles. To do so the Commission is counting on Member States to accelerate the deployment of gas filling stations across Europe in order to encourage its use by Heavy Duty Vehicles. To do so, the natural gas industry will also have to convince Member States that gas is indeed an affordable and clean option to reduce truck emissions.

Electric vehicles

Rather unsurprisingly, the Strategy sees a crucial role for electro-mobility in the transport system. The Commission's approach is however pragmatic in the sense that it realizes this will be a long-term effort and that other means (efficiency, biofuels, etc.) will be necessary in the meantime to decarbonize the sector. A number of horizontal and sectorial policies as well as important financial support will be mobilized to allow for electric cars to own a significant share of the road transport mix by 2030. The industry will need to push Member States to actually deliver on their infrastructure commitments and build a dense grid of charging points which would make electro-mobility a competitive alternative and take it beyond urban areas.

Hydrogen

Hydrogen vehicles also stand to win from the Strategy which clearly recognizes their role as low-emission vehicles. The Commission will consider establishing technology-neutral targets for low and zero-emission vehicles which hydrogen cars industry are part of, alongside full-electric cars and hybrids. The hydrogen industry was also dealt a good hand with the opportunity to help balance the energy and transport systems and integrate renewables through off-peak hydrogen production. As for electric cars, developing a grid of charging points will be crucial for the hydrogen automobile industry if it is to become a real alternative – so far this is only optional under the Alternative Fuels Directive.

Fuel efficiency

The Strategy applies the 'efficiency first' principle to the transport sector, opening the way for solutions providers ranging from engine manufacturers and lorry designers to the digital industry. Fuel efficiency is the number one step in the Commission's Strategy, ahead of alternative energy sources and low and zero emission vehicles.

3. A detailed breakdown per topic

Transport System Efficiency

- **Multimodality**: The Commission slightly changed the language on this topic to include more transport modes. Clear preference is still towards modal shift to rail, but now the strategy also mentions inland waterways, short-sea shipping as well as action to strengthened public transport contribution to emissions cutting.
- **Digital mobility:** Digital technologies are expected to drive efficiency gains across the transport value chain. A 'Master Plan' on the deployment of Intelligent Transport Systems is under preparation according to the Communication. Such plan will provide the guiding principles to ensure both funds are lifted and Member States make cost-efficient use of their resources and innovation to facilitate the transition.
- **Road charging**: The Commission advocates for a switch to distance-based road charging (away from time or place-based systems), which it considers more in line with the 'polluter/user pays' principle. At the moment, the Commission is consulting on the "Eurovignette" and the European Electronic Toll Service (EETS) Directives. The European Electronic Toll Service (EETS) assesses how tolling can be imposed from a technological point of view versus a procedural point of view which is covered by the "Eurovignette". Going forward, the Commission is considering CO_2 differentiated charging for passenger cars and its inclusions in the new 'Eurovignette Directive', for Heavy Duty Vehicles. This should incentivize the renewal of the fleet, the switch to lower-emission energy sources, and more efficient driving.

Initiatives

Digital mobility:

- Master Plan for the deployment of Interoperable Cooperative Intelligent Transport Systems

Fair and efficient pricing in road transport:

- Revision of the Eurovignette Directive (1999/62/EC)
- Revision of the European Electronic Tolling Service (EETS) Directive 2004/52/EC and Commission Decision on the definition of the European Electronic Tolling Service and its technical elements (Commission Decision 2009/750/EC)

Promoting multi-modality:

- Proposal for a Regulation of the EP and Council on streamlining measures for swifter implementation of the projects of common interest on the Trans European Transport Network
- Revision of Regulation 913/2010 concerning a European rail network for competitive freight
- Proposal for the amendment of the Council Directive 92/106/EEC on the establishment of common rules for certain types of combined transport of goods between Member States
- Revision of Regulation (EC) No 1073/2009 on common rules for access to the market for coach and bus services

Low-Emission Alternative Energy Sources

- **Regulatory framework**: The Commission will prioritise the deployment advanced biofuels (central to the strategy), renewable electricity and synthetic fuels. In order to accelerate the transition away from oil, the Commission is considering two options: 1) the obligation for fuel suppliers to provide a certain share of alternative fuels (or blend them), though it is unclear which regulatory instrument will mandate such requirement and 2) reducing the GHG content of the supplied energy sources; this does not necessarily considers so-called "well-to-wheel" emissions providing incentives to all members of the value chain to increase their products' efficiency. The Commission is considering phasing out support for first generation biofuels post-2020 in order to favour the deployment of advanced ones. This means investment will be supported in order, in the Commission's mind, to increase competition with traditional fuels and first generation biofuels. The Communication also foresees a bigger role for natural gas in shipping and Heavy Duty Vehicles as replacement in an effort to move away from bunker fuel and diesel.
- **Infrastructure:** To accelerate the deployment of alternative charging/refueling stations, the Commission will rely on the Alternative Fuels Infrastructure Directive. Member States are expected to transpose the Directive and notify their national policy frameworks to the Commission by 18 November 2016. In parallel, the Commission will develop a legislative proposal for price comparison for alternative energy sources and will explore measures to support the installation of electric charging points in public buildings.
- **Standardisation and interoperability for electric vehicles:** The Commission encourages the establishment of an electro-mobility services market, particularly across borders. New standards beyond cars (electric buses, motorbikes, induction chargers, etc.) will be developed with an aim to extend the harmonization at an international level, under the United Nations framework.

Initiatives

Master Plan for the deployment of Interoperable Cooperative Intelligent Transport Systems

- Legislative package on Renewable energy sources
- Methodology for fuel price comparison

Standardisation and inter-operability for electro-mobility in the context of the European Standardisation Organisations

Low and Zero Emission Vehicles

- **Emissions testing**: The Volkswagen emissions scandal sped up the EU process to reform the emissions testing system both for carbon dioxide and other pollutants. CO_2 targets for 2021 for new cars will be based on an improved test, the WLTP (Worldwide harmonised Light Vehicles Test Procedure) which will enter into force in September 2017; the Commission does not rule out complimentary measures 'to fully reflect real world data'. In addition, Real Driving Emission (RDE) Package 3 (on hybrid vehicles) and 4 (in-service conformity/market surveillance) will contain additional testing criteria to ensure that RDE regulation will close the gap between laboratory and real world emissions.

- **Type approval**: The Commission's market surveillance proposal, which covers the homologation of vehicles, market surveillance and oversight of homologation authorities' work, is going through co-decision. The proposal's objective being to ensure that vehicles placed on the market not only complied with the rules, but also that the rules were applied uniformly across the EU and that vehicles were controlled in the same manner by the type approval authorities.
- **Post-2020 strategy for cars and vans**: The European Commission is preparing a proposal for post-2020 CO_2 standards for new cars, which is expected to be made in the first quarter of 2017 and will be based on the WLTP test. The objective would be to improve vehicle efficiency. It will be very interesting to assess how the sectoral standards will feed into the Effort Sharing Decision, which sets objectives for Member States. Setting specific targets for the deployment of low and zero-emission vehicles will also be considered, among other measures. The definition of low-emission vehicles will be reviewed, and potentially differentiate zero-emission ones from low-emission ones (currently all technologies under 50g CO_2/km). The Commission is working on the review of the Clean Vehicles Directive which will among other things aim at accelerating the deployment of non-fossil fuel vehicles through new requirements or targets for public procurements. The Commission also encourages phasing out tax incentives (fuel, company cars, etc.) which could discourage low-emission mobility.
- **Post-2020 strategy for Heavy Duty Vehicles**: The Commission will put forward a proposal on the certification of CO_2 emissions and fuel efficiency of heavy-duty vehicles, and another on the monitoring and reporting of this data, based on the VECTO tool. A consultation on design options for Heavy Duty Vehicles will prepare the ground for a legislative proposal on the issue. Priority will be given to the fuel efficiency of heavy-duty vehicle engines, in a step-by-step approach. However, at the moment, in spite of pressure from NGOs and some industrial stakeholders, it is unclear when the Commission will put forward CO_2 targets for new Heavy Duty Vehicles.

Initiatives

Post-2020 strategy on vehicle efficiency for cars and vans

- Revision of Regulation (EU) No 443/2009 and Regulation (EU) No 510/2011 setting emission performance standards for cars and vans
- Review of Directive 1999/94/EC relating to the availability of consumer information on fuel economy and carbon dioxide emissions in respect of the marketing of new passenger cars

Action on heavy-duty vehicles

- Proposal for certification procedure of carbon dioxide emissions from heavy-duty vehicles (based on VECTO simulation tool)
- Proposal for monitoring and reporting system for heavy duty vehicles (lorries and buses)
- Proposal to set fuel efficiency standards for heavy duty vehicles o Review of Directive 2009/33 on the Promotion of Clean and Energy Efficient Road Transport Vehicles

Horizontal measures

- **Linking transport and energy systems:** In order for the distribution segment to cope with the arrival of electric vehicles on the market, the upcoming legislative proposal for the Electricity Market Design will encourage vehicle charging at off-peak times, reduce barriers to self-generation and consumption from renewable electricity. This will naturally put under great pressure the power system to both accommodate the increasing demand coming from transport and to decarbonize under the ETS, to ensure that electricity used for transport is actually cleaner than fossil fuels.
- **Research, Innovation and Competitiveness:** Resources will be concentrated on 'disruptive low-emissions options' and biofuels are expected to be the focus of research, as the Commission has identified potential in multiple modes, such as road and aviation. However, as EU companies are

global leaders in improving the efficiency of existing technologies, the Commission will have to account for costs linked to a re-set in production models.

- **Industrial policy:** In an effort to create incentives for the European industry, across the transport value chain, the Communication calls on the EU to take the global lead on patents on alternative energy sources for road transport. Industrial policies across the EU should include low-emissions mobility and innovation, as this could lead to jobs creation and improve the competitiveness companies regardless of their size.
- **Digital agenda:** The Commission will aim to establish a regulatory framework for digital technologies which allows for the integration of the energy and transport markets.
- **Skills:** Through its New Skills Agenda for Europe, the Commission will seek to address the issue of new skills necessary for the low-carbon transition of the transport sector, starting with the automotive and maritime sectors.
- **Investment:** Investors are expected to be supported by three financing streams: the European Fund for Strategic Investment, Horizon 2020 (for research and innovation) and the European Structural Funds (for sustainable urban mobility). These will hopefully help bridge the 3 billion euro investment gap and support efforts to increase energy efficiency and help the uptake of alternative fuels and low/zero-emission vehicles.
- **Cities:** Considering the targets set in the Effort Sharing Decision and the National Emissions Ceilings Directive, the delivery of the Communication's objectives will rely for a large part on cities, where smaller scale projects could be tested. Initiatives such as the Covenant of Mayors and Smart Cities will allow for the exchange of best practices, such as in areas such as modal shifts and shared mobility.
- **International transport:** The EU will consider reintegrating the aviation sector into its Emissions Trading System depending on the International Civil Aviation Organization's ability to reach an agreement (39th Assembly, 27 September - 7 October 2016) on a global Market-Based Mechanism to reduce carbon emissions in the sector. This could impact the competitiveness of the EU aviation sector, it could become subject to a double scheme with separate, overlapping measures and duplicated administrative obligations.

Initiatives

- Energy Union Strategy, including the initiative on Electricity Market design that aims at increasing consumer engagement
- EU Research, Innovation and Competitiveness Strategy for the Energy Union
- Implementing the Single Market and the Digital Single Market Strategy, including the digitising industry, free flow of data and standardisation policy initiatives
- Implementing the New Skills Agenda
- Maximising the impact of available finance and financial instruments
- Global action on international transport

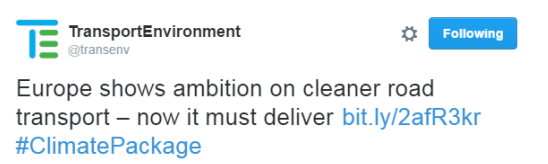
4. Stakeholders Reactions

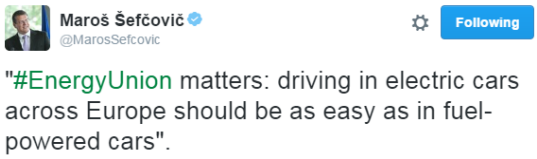
Environmental stakeholders were split on the new strategy, with some welcoming the new measures, especially the inclusion of trucks. However, both industry and NGOs were unhappy about the lack of action targeted at aviation and maritime transport.

- **Gas:** Transport and Environment found continuing support of natural gas trucks "surprising, given new evidence highlighting the high cost and low potential". However, the European Automobile Manufacturers Association (ACEA) welcomed the report as enshrining technology neutrality, "key to supporting innovation". Friends of the Earth Europe warned that proposed support for gas infrastructure "risks locking Europe into decades of fossil fuel use".

- **Biofuels:** Cautiously accepting of the plans to phase out food based biofuels after 2020; stakeholders nonetheless are waiting on detailed plans due the end of 2016 to fully support the Commission's strategy.
- **Aviation and Shipping:** Transport and Environment were frustrated that "emissions reductions in vehicles could be offset by increases in aviation and shipping". This was echoed by ACEA, who called for a "more balanced approach" which took some of the burden off road transport.
- **Technology Neutrality:** As was expected, industry welcomed continuing commitment to technology neutrality, while NGOs worried it left holes in the decarbonisation strategy. The European Association of Automotive Suppliers stressed that "technological advances to improve ICE efficiency must be maintained as well as electrification in its various forms." Meanwhile, FoE argued that without singling out specific conditions, Europe is leaving a "gaping tar-sands shaped hole in this strategy".

Tweets

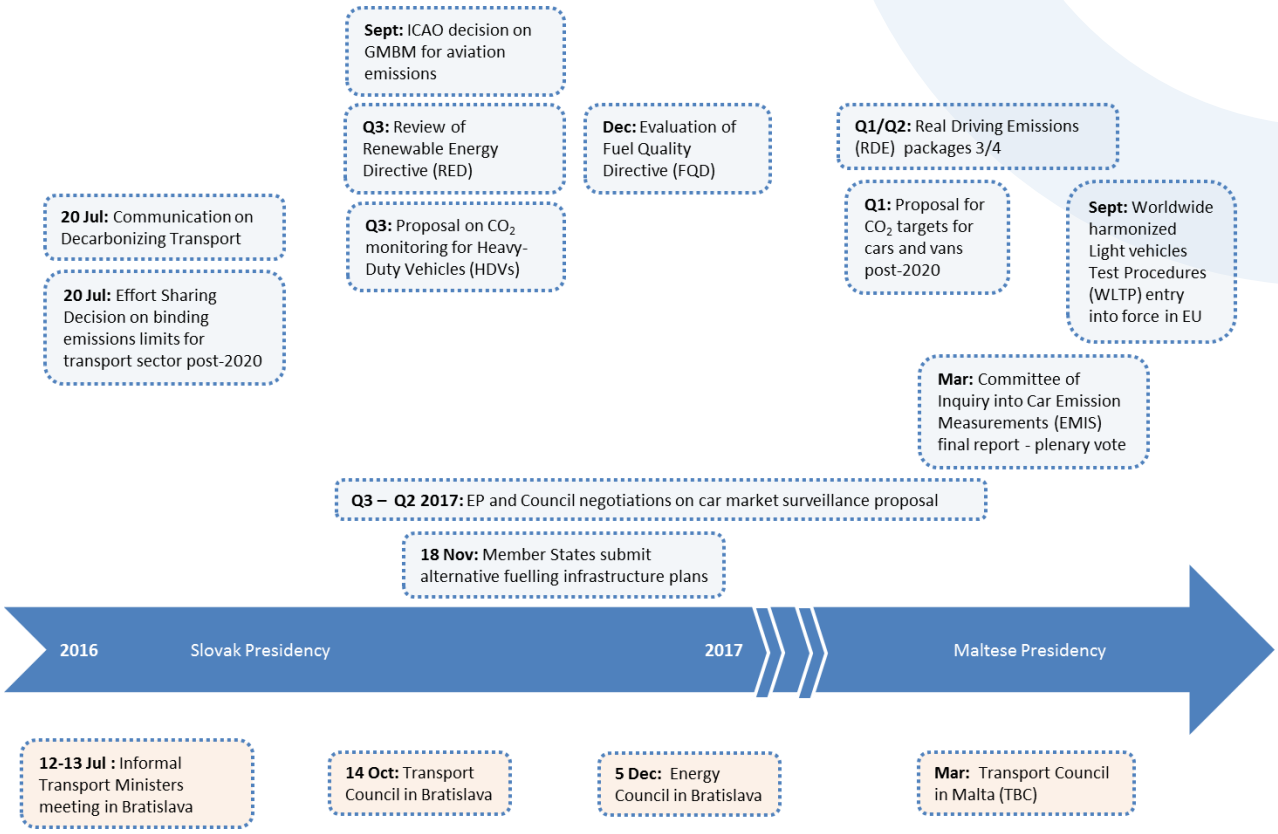




Press Releases

- EUROBAT
- European Association of Automotive Suppliers
- European Automobile Manufacturers Association
- Friends of the Earth Europe
- Platform for Electro-Mobility
- Transport & Environment

5. Timeline



6. Documentation

- The Communication on a European Strategy for Low-Emission Mobility can be found here
- The Annex to the Communication can be found here

FH Brussels Energy Practice

Energy has become one of the most important policy areas in the European Union. Business critical issues like market regulation, energy security, climate change, infrastructure, energy efficiency and the development of new technologies (renewable, nuclear, CCS) are shaped by the European Union and its policies. The FleishmanHillard energy team has specific experience on communicating on energy issues, working with clients across the sector (gas, nuclear, renewable energies, electricity production, etc.). Our team is an excellent combination of strategic sector expertise with a strong public affairs and communications track-record.

For more information about our company and the services the energy team offers, contact Matt Hinde at Matt.Hinde@fleishmaneurope.com

FH Brussels Transport Practice

Our Transport team is an experienced combination of senior, strategic, sector expertise with practical hands-on communications and public affairs support. The team has specific experience of communicating on transport issues, working with clients across the sector and across the different transport "modes". More specifically, we have developed a unique expertise in the aviation, express and logistics sector. Our team currently advises a number of blue-chip clients and associations on their public affairs and communications strategies and helps implement both national and international advocacy campaigns.

For more information about our company and the services the transport team offers please contact Robert Anger at Robert.anger@fleishmaneurope.com