Delegations will find attached a Presidency note on ‘The future of the industrial mobility ecosystem in the context of the green transition’ for the policy debate in the Competitiveness Council on 24 February 2022.
The European Green Deal\(^1\), presented by the President of the European Commission on 11 December 2019, set the target for the European Union (EU) to become climate neutral by 2050. In keeping with the 2015 Paris Agreement, this binding target was enshrined in the European Climate Law in June 2021, as was the EU’s ambitious interim target to reduce greenhouse gas (GHG) emissions by at least 55% (previously 40%) from 1990 levels by 2030.

Against this background, the ‘Fit for 55’ package\(^2\) presented by the European Commission on 14 July 2021 contains a set of 13 proposals to update EU legislation and introduce new initiatives to achieve this increased climate ambition.

The industrial mobility ecosystem will be used extensively to meet these targets. Transport (including international maritime transport and aviation) accounted, in fact, for 32% of EU GHG emissions in 2019, compared with 24% in 2000\(^3\). As set out in the Sustainable and Smart Mobility Strategy, the transport sector should reduce its emissions by 90% by 2050 in order to reflect the EU’s climate ambitions.

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\(^1\) COM(2019) 640 final  
\(^2\) COM(2021) 550 final  
1. ‘Fit for 55’: an ambitious package of crucial measures for the ecological transition of European industry and for climate protection

The ‘Fit for 55’ proposals will lead to a radical shake-up of the regulatory framework applied to the mobility ecosystem. Mobility will be affected by the proposed revision of the national effort-sharing targets for the non-ETS sectors, the proposal to extend the ETS to the road sector, the proposal for a carbon border adjustment mechanism (CBAM), the revision of RefuelEU Aviation and FuelEU Maritime, the revision of the Alternative Fuels Infrastructure Directive (AFID), as well as revisions in the energy sector, such as that of the Renewable Energy Directive (RED II), as the transformation and electrification of transport increases overall energy demand. The automotive sector will also be affected by the revision of the Regulation on CO2 emissions from new light-duty vehicles and future texts on gaseous pollutant emissions (Euro7) and vehicle data.

In order to adopt and implement the package, the mobility industry must therefore accelerate the transformation of its growth model and production methods and support its employees. During the Slovenian Presidency, the Council began work on better identifying the impact of the package on industry, in addition to negotiating legislation in the relevant sectors. The Competitiveness Council held a first policy debate on the industrial competitiveness package on 29 September 2021, in connection with the update on the European industrial strategy presented by the Commission on 5 May 2021. Furthermore, on 26 November 2021 the Competitiveness Council (Research) held a debate on the contribution of research and innovation to achieving cross-sectoral objectives, including the ‘Fit for 55’ targets in transport, industry, land use and forestry. Lastly, the Competitiveness-Growth HLG began to analyse the implications of the package for the industrial sectors concerned. These debates highlighted EU Member States’ concerns regarding the impact of the package on industry, particularly for the mobility ecosystem.
Moreover, the European industrial strategy update\(^4\) reaffirmed the high priority of the twin green and digital transitions for all EU policies. This strategy proposed creating roadmaps for the sustainable and digital transition of the 14 industrial ecosystems presented by Thierry Breton, Commissioner for the Internal Market. For this reason the Commission, in the context of the Industry Forum, sought to define these green and digital transition pathways by involving all stakeholders in each ecosystem. In January 2022, it initiated the co-creation of a transition pathway for the mobility ecosystem, which will play a key role in achieving our climate ambitions.

On 29 October 2021, the Commission brought together economists from each Member State to analyse the impact of the package’s proposals on industry and to refine investment needs. More in-depth work could be undertaken in this regard, through conducting pilot case studies and sharing best practices and methodologies, so as to build a common understanding of the impact of the transition on industry and identify business cases and priorities for action.

\(^4\) COM(2021) 350 final
2. The industrial mobility ecosystem is at the heart of the transformation challenges

The mobility ecosystem is a key EU industrial sector and will face numerous challenges before it can reap the benefits of its transition, including technological and digital adaptation, the adaptation of value chains, command of supply sources for critical materials and components, training and support for employees and competition on new market segments in new forms of mobility (autonomy, sustainable mobility, etc.). In the automotive sector, European companies are currently facing supply shortages (particularly of semiconductors) that are hampering their recovery, and need to radically transform their production machinery, as the equipment needed to produce thermal vehicles differs considerably from that for electric vehicles. Also, the increase in climate targets affects not only manufacturers, but also subcontractors, component manufacturers and, more generally, all SMEs and ecosystem workers. Around 15 million European jobs are affected by the transformation of the automotive sector. In terms of the challenges facing employee training, EIT InnoEnergy, for example, anticipates that some three to four million jobs will be created in the EU in the electric battery sector, 800 000 of which will require supported re-skilling and upskilling of employees.

Huge investments are required to meet the need for a rapid transition. According to the roadmap for the transition of the mobility ecosystem, an additional investment of an estimated EUR 130 billion per year is needed from 2021 to 2030, compared with the previous decade, in order to meet the EU’s climate targets for road transport, rolling stock, ships, aircraft and the deployment of renewable and low-carbon fuels infrastructure. A further EUR 100 billion per year is then needed for investment in the green and digital transformation of infrastructure. Given the impact of the transition on the sector, the levers it currently has for investment purposes need to be identified, so that it can meet these challenges. The roadmap for the transition of the mobility ecosystem paves the way for such a reflection.

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5 COM(2020) 562 final
6 SWD(2020) 98 final, based on TEN-T related estimates and EIB calculations
Moreover, as discussed at the informal meeting of competitiveness ministers in Lens on 1 February, the sustainable transition of European industry cannot be achieved without securing the raw materials needed for the new green technologies. The OECD forecasts a 110% increase in our consumption of raw materials between 2011 and 2060, driven in large part by the needs of the sustainable and digital transition: the World Bank, for example, anticipates a 1000% increase in demand for the metals used in batteries alone (cobalt, lead, lithium, manganese, nickel, etc.) in a scenario of limiting temperature increases to 2 degrees.

However, the EU is heavily dependent on certain third countries for their supply, which makes it vulnerable: the Democratic Republic of Congo alone accounts for 60% of the world’s cobalt production, and China for 98% of our rare earth metal imports. Ensuring a stable supply of these raw materials is therefore crucial: the EU must analyse and implement a wide range of actions to that end, in particular securing its external supplies, developing recycling and innovation, and encouraging the production of primary raw materials in Europe. The Commission has been active in the latter area: in September 2020, for example, it published an action plan for raw materials and established the European Raw Materials Alliance (ERMA). It recently announced a EUR 400 million fund, co-managed by the ERMA and the EBA, to secure our supplies of raw materials for manufacturing electric vehicle batteries. The European regulation on batteries currently being negotiated in the Council’s environment committees is also intended to promote the emergence of a sustainable European industrial sector based on the principles of the circular economy, aimed at reducing Europe’s dependence on imports.
However, these challenges should not overshadow the opportunities that these transitions will bring about relating to the circular economy and raw materials, hydrogen, or zero-carbon mobility, for example, which will create new jobs in new sectors, as happened following the creation of a battery recycling sector, a zero-carbon aircraft sector, a sustainable fuels sector and even a sector for freighters operated by wind power. The decarbonisation of mobility should open up new commercial opportunities, setting European manufacturers apart, particularly in terms of exports, and the legislative advance in Europe may put them in a position to support the decarbonisation of their partners.

3. **European levers to support industry in the green transition**

In order to make a success of this transition, which is more far-reaching and ambitious than anything in the history of European industry, a number of conditions must be met. These include incentives and framework conditions to strengthen the competitiveness of European industry within the internal market, to support its implementation – not only for the benefit of large corporations, but also for SMEs and mid-sized companies throughout the value chain – and to address the technological challenges of this transformation. Regulatory predictability and stability will be key to enabling industry to make the right investment decisions in the long term.
Policy levers at European level do exist and could be developed to better support the transition of the mobility ecosystem and strengthen European leadership, not only through electrification but also through automation and connectivity. Industrial alliances, the Horizon Europe framework programme, investments financed by the European Investment Bank, European public procurement, important projects of common European interest (IPCEI) and Member States’ contributions to accelerating the transition through investments regulated by European State aid rules are all tools for enabling Europe’s industrial potential to be fully exploited in a context of strong international competition. To meet the needs of industry, the European Recovery Plan, NextGenerationEU and the EU budget for 2021-2027 provide for unprecedented levels of investment in the green and digital transitions. More than 40% of recovery expenditure relates to the mobility ecosystem. In addition, the European Commission’s legislative proposals provide for mechanisms to support the transition (innovation and modernisation funds in the ETS, proposal for a social climate fund in parallel with the proposed extension of the ETS). Workers, particularly those employed by SMEs, will need to be trained and upskilled to take advantage of the new job opportunities that will be created. The creation of new value chains will be heavily dependent on the capacity to provide a skilled workforce to support this development and guarantee European competitiveness, as reflected in the work of the European Battery Alliance Academy. Lastly, increasing our influence on standardisation of new technologies could stimulate innovation and facilitate access to markets.

In the context of this policy debate, Member States will be invited to respond to the following three questions:

– Have you taken steps to estimate the investment needs related to the industrial transformation in the context of the implementation of the ‘Fit for 55’ package? Could you give concrete examples of the needs for the mobility sectors, in particular the automotive sector?

– In addition to the private investments needed for the green transition of the industrial mobility ecosystem, what measures do you consider necessary to facilitate and accelerate the development of this transition, particularly in terms of innovation, infrastructure and training?

– What levers should be activated as a priority to strengthen the resilience and future competitiveness of Europe’s industrial mobility ecosystem, in particular to allow for the development of electric and autonomous vehicles and to secure access to critical raw materials?