

## **Preparing automotive workers for a climate-neutral transport future: Who leads, who pays?**

Summary of the 42<sup>nd</sup> Round Table on Sustainable Development<sup>1</sup>  
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The 42nd Round Table on Sustainable Development focused on how the climate transition is affecting the automotive industry, and more specifically how to manage worker displacement, including opportunities for their re- and upskilling, as well as financing aspects. More than fifty high level participants, including three ministers, two deputy ministers and two state secretaries, along with representatives from the industry, NGOs/IGOs and unions discussed ways to address the challenge of the accelerating transition to carbon-neutral transportation and the need to facilitate a just transition for workers in the combustion engine industry. Due to the COVID-19 pandemic, the meeting was conducted as an online videoconference, which allowed for both verbal debate and parallel interventions in the chat window.

As the transport sector accounts for 24% of global CO<sub>2</sub> emissions from fuel combustion (with most coming from passenger vehicles, including buses and taxis), there is growing policy pressure and consumer demand for zero and low emission vehicles, in particular electric vehicles (EVs). Beyond its contribution to achieving net zero carbon targets, the decarbonisation of passenger transport will bring additional benefits such as improved air quality and noise reduction, thereby improving health, well-being and labour productivity.

However, the transition to climate neutrality will affect millions of workers worldwide and shift employment patterns throughout the automotive industry. To reach net-zero targets by 2050, the scale and pace of transformation in the automotive industry will be immense: 60% of all passenger vehicle sales will need to be electric or other zero/low-emission vehicles, compared to 6% today. In the course of this transition, many jobs will be displaced, require new skills, or disappear entirely. At the same time, new jobs will be created, but not necessarily by the same companies or in the same countries, regions and cities as today. There will also be a need for a rapid extension in the charging infrastructure and for accelerating the decarbonisation of electricity generation.

Governments thus face an urgent triple challenge: 1) supporting displaced auto workers and facilitating their redeployment through reskilling, active labour market policies and financing arrangements; 2) providing the necessary social protection to workers and communities unable to adapt to the transformation of the automotive industry; and 3) up- and re-skilling workers staying in the sector and ensuring that higher education and vocational education and training (VET) systems are adequate to prepare workers for new jobs, including those emerging in the green economy. The green transformation will also disproportionately affect certain regions and demographics, requiring careful consideration of regional policies, multi-level governance and international co-operation. Failure to address these challenges adequately and at an appropriate pace will hinder the objectives of a just transition, and could

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<sup>1</sup> This summary does not reflect the views of the OECD Secretariat nor OECD member countries. It is prepared under the authority of the Chair of the Round Table on Sustainable Development. The European Climate Foundation's support of the 42<sup>nd</sup> Round Table on Sustainable Development is gratefully acknowledged.

potentially lead to industrial, social and even political unrest, which in turn could slow the adoption of climate policies.

Ensuring a just transition in the sector will require a gamut of policies that ensure that the current workforce is sufficiently prepared to take on new technologies and processes, that redundant workers unable to adapt to new technologies are provided commensurate protection, and that future demand for skills and labour is met with targeted education programmes. Such policies need to be complemented with support for innovation and technological progress to ensure value-added in countries' contributions to automotive supply chains, in particular in relation to the production, maintenance and recycling of electric batteries, which account for more than 30% of the cost of EVs.

The Round Table discussion centred on three questions, which led to vivid exchange of views:

- What expected impacts of the shift to electromobility are already being experienced by individual markets and countries, and what actions are car manufacturers taking to maintain leadership in the electromobility sector?
- How can policy makers best support a just transition in the automotive sector? What type and combination of measures (social protection, training programmes, infrastructure investment, innovation and R&D support, etc.) will be most effective?
- How are responsibilities to be shared between different stakeholders, including with regard to financing?

A background note that supported the discussion is available [here](#).

### **Main messages**

- The automotive sector is undergoing rapid technological change, which is driven by the climate transition as well as other factors (e.g. digitalisation and changes in industry patterns). **The pace at which the transition is taking place in the transport sector differs enormously across countries, markets and regions.** This needs to be taken into account when designing and implementing policy measures by sector. There are different life patterns and types of mobility needed around the world, hence it is necessary to look into different markets and regions in detail. One-size-fits-all solutions will not work.
- There needs to be a **regional approach and perspective when determining and analysing challenges and opportunities** in the transition of the automotive sector. Although national governments will channel and provide the funding and policy frameworks, regional and local authorities will be directly involved in tackling the change and of how the public funds are eventually spent.
- While **electric vehicles are growing rapidly in the automotive sector**, depending on the type of transport, other options are also being considered (e.g. hydrogen fuel cells). As with all new technologies, there are trade-offs to be made with regards to speed and cost of development. Over , in the short term (next 5-10 years), electric vehicles seem to be the most viable solution to reduce vehicle emissions.
- The **existing infrastructure (e.g. charging infrastructure) is far from adequate to keep pace** with the accelerating transition to electric vehicles and to ensure that the transition continues at a pace consistent with the Paris Agreement. It is of critical importance to massively ramp up investments in infrastructure and provide for more charging stations - electric vehicles are ready, but the charging infrastructure is not. Accelerating the deployment of infrastructure will also provide new job opportunities.
- **There are important trade and value chains' implications that need to be properly managed.** For instance, the production of batteries, a major part of the value of an electric vehicle, is currently concentrated in Asia. Electric batteries also use a high amount of certain metals that are sourced from

a few countries. Mining such metals has raised concerns over human and labour rights, as well as over negative impacts on the surrounding environment. The sustainable and socially responsible production and recycling of electric batteries is thus a major challenge for the new industry.

- An effective **just transition must consider implications for other parts of the economy and benefits from cooperation from all stakeholders**. A social dialogue must be established between different actors and stakeholders that can produce appropriate solutions for different regions. In that regard, social participation and coordinated actions by different stakeholder groups are needed at an early stage, ensuring as far as possible early intervention to speed up and smooth the adjustment process. As the automotive workforce has traditionally been heavily unionised, the early and active engagement of labour unions may play a key role for the successful deployment of just transition plans.
- To achieve better outcomes and more effective solutions, **anticipation of the skills needed** throughout and after the transition is critical. If the demands on the required workforce change too quickly, the industry may not be able to keep up. Anticipating skills needs the collaboration of government, business, labour and the academic community. The transformation is broader than transportation, therefore the shift in skills and resources needed will have to be analysed from a broader perspective.
- The **policy measures implemented must be coherent** and pave the way toward decarbonisation of the industry. Since the change is cross-sectoral, it is important that the package of measures is robust and efficient. In addition to employment and social protection policies, fiscal and innovation policy must be fully integrated into the policy package.
- A **holistic and integrated industrial policy and strategy should be implemented** to support companies in the transition. Policy measures should encompass all parts of production processes, including education, investments in R&D, access to raw materials and finance. The automotive sector is a leader in R&D investments and high value skills, therefore it requires a dedicated strategic focus by governments. Smart specialisation is needed, at the country and regional level, based on good analysis of capabilities and assets to identify opportunities for value added and skilled jobs.
- **Governments need to have sufficient financial resources to manage a just transition and to be able to facilitate the necessary changes in the private sector**. While carbon pricing may generate the necessary revenues to finance the just transition in the short term, in the end a low-carbon economy could eliminate important sources of revenue for states. Ministries of finance need to prepare for these upcoming changes, and look for alternative sources of revenue (e.g. road use and congestion charges).
- **Skills and labour force re- and upskilling are a current bottleneck of the transition**. Not only governments, but also the private sector need to invest heavily into the development of skills such as data analysis, software development, artificial intelligence, chemistry, robotics or electric engineering. Given the growing demand for such skilled workers, there is a need for better skills recognition and worker mobility across countries.
- **Effective training and active labour market programmes will be critical in getting as many people as possible into the new employment opportunities created by this transition**. Targeted government spending has to go into the promotion of certain jobs and university degrees that can facilitate job changes at the core of the transition.
- A solution should be found **to formalise years of experience** (rather than formal education) to allow workers to use transferable skills in new sectors. There are examples of countries that focus on talent rather than on formal education to lower the threshold for new employment opportunities.
- **Managing a just transition in the transport sector (or indeed in all sectors) is also an opportunity to more fundamentally reimagine mobility patterns**. The speed and scale necessary to achieve net-zero emissions will likely require systems that by design reduce emissions whilst also improving overall well-being. In this regard, the move towards shared mobility and the growing focus on accessibility

and proximity in sustainable urban planning will bring about additional challenges and opportunities for the automotive sector.

### **Suggestions for next steps**

Round Table participants concluded that the accelerating climate transition is creating major employment and social challenges for certain strategic sectors, like the automotive one, that require urgent action by policymakers and other stakeholders. The debate allowed participants to become more aware of the magnitude and urgency of the challenge and discuss the different perspectives and approaches to the just transition.

The following possible next steps are proposed:

- There is a need for governments to develop a mapping of regions and places likely to be most affected by the changes happening in the automotive and related sectors. Governments must plan to anticipate skills needs and prepare programmes to facilitate reskilling and upskilling of workers, in coordination with business and labour. The OECD carries out country reviews of skills needs which could be tailored to specific sectors and regions. It could offer a comprehensive analysis of the key areas where policy action is required to spur the development of an efficient system for skills assessment and anticipation to inform policy.
- Countries and regions affected by major industrial transformations can rely on a *smart specialisation* approach. It would combine industrial, educational and innovation policies to identify and select a limited number of priority areas for knowledge-based investments, focusing on their strengths and comparative advantages. Further analysis, international dialogue and development of good practices on such approaches would be welcome.
- Good social dialogue is critical to a successful just transition. Case studies on the role of collective bargaining in just transition programmes could be developed to understand how stakeholder coordination and engagement operates in practice and can be applied to the automotive sector. Such work could be developed, for instance, in the context of the [Global Deal](#), a multi-stakeholder initiative for social dialogue and inclusive growth, consisting of a partnership of governments, businesses and employers' organisations, trade unions, civil society and other organisations.

By conducting this meeting virtually, 10.3 metric tonnes of carbon emissions were saved. This is equal to:

- 25,886 miles driven by an average passenger vehicle
- 1,159 gallons of gasoline consumed
- 11,384 pounds of coal burned
- 1,252,919 smartphones charged

To sequester the same amount of emissions, 170 tree seedlings would need to grow for ten years.

Source: [My Climate calculator](#) (2021)