

Statement on the Transition to Zero Emission Commercial Vehicles

JCLP calls for more ambitious targets, robust government support, and a flexible regulatory framework to make zero emission vehicles practical and cost-effective.

Japan Climate Leaders' Partnership (JCLP) welcomes the on-going initiatives by both the public and private sectors to accelerate the shift to zero emissions vehicles (hereafter, ZEVs¹), including the release of the revised growth strategy², which includes a new target for commercial vehicles and additional measures to increase EV uptake, as well as the commitments by Japanese automotive makers to set or increase their ZEV sales targets.

The transition to ZEVs is an urgent issue, in terms of both overcoming the climate crisis and sustaining the foundation of Japan's economy, and we acknowledge that user companies are expected to play their part in this transition, along with automotive firms and infrastructure companies. Based on this recognition, JCLP puts forward the following statement, in the hope that Japan will be able to take a lead in the ZEV transition that is accelerating globally.

Accelerating the shift of commercial vehicles to ZEVs: Why does it matter?

1. Commercial vehicles are one of the primary sources of Japan's carbon emissions. Shift to zero emission vehicles, therefore, is critical for Japan to unflinchingly meet its emissions reduction target and overcome the climate crisis.

The latest report from the Intergovernmental Panel on Climate Change (IPCC) reconfirms the importance of achieving the 1.5°C goal to avoid the dire and irreversible consequences of the climate crisis. The report also indicates that the shift to ZEVs is an essential and effective measure to achieve this ambition.³ The IEA and other organizations also note that to attain the 1.5°C goal, ZEVs need to account for 100% of sales of new light-duty cars (e.g. passenger cars and vans) by 2035, and of medium- and heavy-duty cars by 2040.⁴

Carbon emissions from automobiles account for about 16% of the total emissions in Japan, making it the third largest source of emissions after the industrial sector and the commercial sector. Commercial vehicles used for distribution and sales activities are major contributors of this, emitting almost as much as passenger cars.⁵

Therefore, it is an imperative for Japan to commit to the shift to commercial ZEVs as the country works to fulfill its pledges ("a carbon neutral society by 2050" and "a 46% cut in greenhouse gas emissions by 2030 from 2013 levels with continuous effort toward the higher goal of 50%") and contribute to the achievement of the 1.5°C goal.

2. Falling behind the globally booming ZEV transition will have serious implications for the competitiveness of the Japanese automotive industry and the national economy as a whole.

The shift to ZEVs is accelerating across the world in line with the above-mentioned timeline (i.e. all new light-duty cars to be zero emission by 2035, and all new medium- and heavy-duty cars to be zero emission by 2040). An increasing number of countries are making pledges to complete the phase-out of sales of petrol vehicles and hybrid vehicles between 2025 and 2040⁶, and more and more foreign automotive manufacturers are aiming to make new car sales 100% electric (excluding

hybrids) by around 2030.⁷ Moreover, many national governments and businesses signed and endorsed the ZEV-related memorandums at COP26, committing to achieve 100% ZEVs sales between 2035 and 2040.⁸

Considering that a large portion of the Japanese automotive industry's revenues come from the international market,⁹ the industry has no other choice but to adapt to this global movement. Any delay will not only undermine the competitiveness of the industry but also have detrimental effects on related industries, GDP, employment, and the entire Japanese economy.¹⁰

3. With the increase of companies looking to decarbonize their entire supply chains, the demand for ZEVs is growing

Globally, there has been a growing trend towards supply-chain decarbonization, and more and more Japanese companies are setting their targets to decarbonize their whole supply chains.¹¹ As a result, companies in various sectors, including but not limited to logistics, are in urgent search for ZEVs. However, commercial ZEVs that are both practical and economically viable are yet to be available in the market, and companies are struggling to clearly see their way to the ZEV transition.

Especially, as leasing (usually for a five-year period) has become mainstream for commercial vehicle procurement, companies aiming to shift to ZEVs by 2030 are facing pressing needs to procure ZEVs by around 2025.

Statement on accelerating the transition to commercial ZEVs:

1. We call for more ambitious numerical targets for Japan to spearhead the global ZEV transition.

The government of Japan has set a goal of shifting to electric vehicles but they are far from the global standard for various reasons. For example, their numerical targets include hybrids, which are not internationally recognized as ZEVs. Also, there is no target for electrification of heavy-duty vehicles (8t or above).¹²

Thus, it is important for the government to come forward with more ambitious targets and ensure continuous and predictable policy support. This will incentivize Japanese automotive manufacturers to develop ZEVs and put Japan front and center of the global effort to accelerate the ZEV transition. We urge the government to review and update Japan's ZEV targets to exclude hybrids and to set one for heavy-duty vehicles.

2. Robust government support is urgently needed for the development and rollout of ZEVs and charging infrastructure.

To enable a swift ZEV transition and achieve the ambitious targets, public assistance for the development of vehicles and charging infrastructure will be critical. Assistance for the rollout of charging stations and incentives for ZEV uptake in the early phase of market deployment will also be vital for further expanding the market and driving down prices. More specifically, we propose the following public assistance schemes.

- **Providing automotive manufacturers with multiple types of ZEV development support:**

The majority of companies lease their vehicles for commercial use. This implies that if suitable models of ZEVs are not available on the market at the time of their contract renewal, user companies' transitions to ZEVs will be delayed. Therefore, public assistance should be provided to encourage automakers' efforts to develop ZEVs and introduce them to the market earlier than currently scheduled. Considering users' wide-ranging needs, the assistance should be conducive to development of various models, including those for snow-prone areas and FCEV for heavy-duty transportation.

- **Financially supporting users' ZEV procurement:**

Provision of assistance for ZEV procurement is important particularly in the early phase of ZEV deployment to drive the market expansion and price fall. Its provision process should be simple and practical in order to achieve a high take-up rate. A fully online process is an example.

- **Assisting in the installation of public quick-charging infrastructure:**

Public fast charging points should be installed in every municipality across the nation to spur the mass uptake of ZEVs. Support from the central government is critical especially at an early phase of ZEV deployment in rural areas, where the demand hasn't reached the level for charging businesses to be profitable.

- **Assisting in the installation of charging infrastructure for commercial use:**

In order for companies to operate their freight trucks efficiently, charging infrastructure should be installed at their distribution centers so that trucks will be charged while loading/unloading. Therefore, the government should consider assisting the rollout of charging points for commercial use as well as the rollout of the aforementioned public charging infrastructure.

- **Supporting renewable energy introduction to charging points:**

To ensure we are on track to achieve decarbonization ambitions, vehicles should be powered by renewable energy. We call on the government to expand renewable energy-based charging infrastructure.

3. Policy and regulatory frameworks should be flexible in order to allow for new business models and effective energy management.

An increasing number of companies across the world are ramping up their efforts to make ZEVs practical and cost-effective. These efforts go beyond merely reviewing/updating conventional practices based on petrol vehicles and launch into new business models, such as battery swapping for EVs. As these new business models have potential to make ZEVs more practical and make the transition economically fruitful, we urge the government to create an enabling environment with a flexible policy and regulatory framework.

A flexible regulatory framework is also a prerequisite for an effective energy management system that optimizes EV charging behavior to minimize the risks of power shortage posed by increased EV uptake. Such system will also enable steady and efficient freight truck operation, if real-time vehicle and charger data becomes available to user companies. Allowing access to data of this kind, for instance through launching online platforms¹³, is a key component that needs to be considered in policy and regulatory frameworks.

END

References

- 1 According to IEA's definition, ZEV refers to battery-powered vehicles (BEV) or fuel-cell vehicles (FCEV) and does not include hybrid vehicles.
 - IEA (2021) '[Net Zero by 2050](#)'
- 2 The Ministry of Economy, Trade and Industry (June, 2021) '[Green Growth Strategy Through Achieving Carbon Neutrality in 2050](#)'
- 3 IPCC (2022) '[Climate Change 2022: Mitigation of Climate Change](#)'
- 4 Refer to the following reports for further details
 - IEA (2021) '[Net Zero by 2050](#)'
 - Bloomberg NEF (2021) '[Electric Vehicle Outlook 2021](#)'
- 5 Japan's national CO2 emissions in FY 2019: 1,108 million tonnes
 - The Ministry of Land, Infrastructure and Tourism '[運輸部門における二酸化炭素排出量 \(CO2 Emissions from the Transport Sector\)](#)'
- 6 For example, Norway, the Netherlands, the UK, and Canada have set official targets to limit new car sales to EVs and FCVs by 2025, 2030, 2035, and 2040, respectively.
 - ICCT (2021) '[Update on government targets for phasing out new sales of internal combustion engine passenger cars](#)'
- 7 A German automotive firm Daimler; for example, has announced that its Mercedes-Benz brand will go all electric by 2030. Honda has set the most ambitious target among Japanese automotive manufacturers, pledging that all of its sales will be EVs or FCVs by 2040.
 - The Climate Group '[Japan and the global transition to zero emission vehicles](#)'
- 8 At COP26, global memorandums were signed for passenger vehicles and vans to be 100% ZEV by 2035 and for medium- and heavy-duty cars to be 100% ZEV by 2040. 39 governments, companies, and investors signed the former, and 15 governments signed the latter. Japan failed to sign neither of them. References :
 - UK Government (2021) '[COP26 DECLARATION ON ACCELERATING THE TRANSITION TO 100% ZERO EMISSION CARS AND VANS](#)'
 - Global Commercial Vehicle Drive to Zero '[Memorandum of Understanding on Zero-Emission Medium- and Heavy-Duty Vehicles](#)'
- 9 75% of the total revenue of the Japanese automotive industry comes from overseas production and sales. Refer to 7 The Climate Group '[Japan and the global transition to zero emission vehicles](#)'
- 10 It has been predicted that should Japan fall behind the global ZEV trend, the employment population in the Japanese automotive industry will drop from 5.42 million in 2020 to 4.82 million in 2030, and its revenue will decrease by about 65%, or 14.1% loss of GDP. Refer to 7 The Climate Group '[Japan and the global transition to zero emission vehicles](#)' .
- 11 239 Japanese companies have / are slated to set 1.5°C -aligned Science Based Targets (as of 12 May, 2022).
- 12 The Ministry of Economy, Trade and Industry (June, 2021) '[Green Growth Strategy Through Achieving Carbon Neutrality in 2050](#)'
- 13 OEM companies in Europe have been promoting accessibility of the traffic control information by

providing telematics equipment compatible with multi brands and online telematics platforms.

- The Ministry of Economy, Trade and Industry (April, 2020) “[物流分野におけるモビリティサービス（物流 MaaS）勉強会とりまとめ説明資料](#) (A summary report of a Logistics MaaS study sessions)”