

# **Memorandum of Understanding on Zero-Emission Medium- and Heavy-Duty Vehicles**

The signatories to this Memorandum of Understanding (MOU), hereinafter referred to as the “Participants”, in their collective ambition to accelerate zero-emission medium- and heavy-duty vehicles (ZE-MHDVs),<sup>1</sup> recognizing that:

- Transport is a large and fast growing source of greenhouse gas (GHG) emissions globally, and that MHDVs are a large source of transport sector GHG emissions;
- Current MHDVs are a major source of local air pollutants, including nitrogen oxides, particulate matter, and toxic air emissions, and that these pollutants negatively impact urban air quality and human health, disproportionately affecting disadvantaged communities located near freight corridors, ports and distribution centers;
- ZE-MHDVs offer a viable pathway to decarbonize the road transport sector as technology has advanced greatly over the last decade and can deliver its full potential through aligned global ambition, enabling implementation action, and market incentives;
- ZE-MHDVs are essential to reducing transport emissions, mitigating climate change, improving air quality, reducing the use of fossil fuels and energy costs;
- Commercial deployment of ZE-MHDVs remains limited, and further advancements in the state of technology and deployment stand to benefit from global collaboration and coordination, which can also result in accelerated private sector investment in the ZE-MHDV sector;
- Investments in ZE-MHDVs could help to stimulate economic growth by creating new jobs in the zero-emission vehicle and charging/fueling equipment manufacturing, supply chain, energy and service sectors;
- It is strategically important to decarbonize MHDVs and urgently begin the adoption of ZE-MHDVs given long fleet turn-over times;
- Clean mobility solutions aspire to improve public health and work toward meeting our shared climate goals by providing clean, reliable, safe, and affordable mobility solutions to everyone; and
- The adoption of ZE-MDVs might require different approaches and enabling conditions in different parts of the world.

Have reached the following understanding:

## **1. OVERALL AMBITION**

The Participants intend to work together to identify viable pathways and supportive implementation action for deployment of ZE-MHDVs and related infrastructure that enable ZE-MHDVs to reach 30% of sales of new MHDVs by 2030, as well as enable a full transition to ZE-MHDVs in new fleets by 2040 to facilitate achievement of net-zero carbon emissions by 2050. The Participants are invited to publicly share a higher ambition when signing this MOU where applicable.

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<sup>1</sup> For purposes of this MOU, MHDVs are vehicles with gross vehicle weight above 3,500 kilograms used for freight and passenger transport. ZE-MHDVs are MHDVs with zero tailpipe emissions.

## **2. MOU IMPLEMENTATION**

- 2.1 The Participants plan to meet annually to discuss progress and share experiences to accelerate the deployment of ZE-MDHVs.
- 2.2 The Participants intend to share plans with current and potential actions to support the ambitions described in Section 1 of this MOU, and to share MHDV registration data annually, within available capabilities.
- 2.3 The Participants plan to participate in the Global Commercial Vehicle Drive to Zero program and campaign of the Clean Energy Ministerial's Electric Vehicle Initiative, which serves as a forum for coordination, collaboration and information sharing on ZE-MHDVs. Through their participation in the Global Commercial Vehicle Drive to Zero forum, the Participants intend to facilitate the development of plans and consolidate Participants' annually reported MHDV registration data to understand progress made and discuss ways to accelerate progress where needed.

## **3. ADDITIONAL PROVISIONS**

- 3.1 This MOU becomes effective for each Participant upon its signature.
- 3.2 This MOU is not an international agreement and does not create any legally binding rights or obligations between or among the Participants. In addition, implementation of the ambitions stated in this MOU is within the discretion of each Participant and is not conditioned upon reciprocal actions by other Participants.
- 3.3 Each Participant intends to conduct any cooperative activities under this MOU in accordance with applicable laws, regulations and policies to which it is subject.
- 3.4 The Participants may discontinue participation in this MOU at any time by providing six months advance written notice to the other Participants.
- 3.5 This MOU may be modified by mutual written decision of all Participants.
- 3.6 Additional Participants may join this MOU after its announcement at COP26.

Finalized and open for signature by each Participant on the 5<sup>th</sup> of October of 2021, in the English language.

For AUSTRIA:



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Leonore Gewessler  
Federal Minister for Climate Action, Environment, Energy, Mobility, Innovation and  
Technology  
27<sup>th</sup> of October 2021

The next page includes the signature of Jonathan Wilkinson, Minister of Natural Resources on behalf of Canada.

For [NAME OF PARTICIPANT]:

  
Participant Representative's Name and Title  
Date

For Ministry of Energy, Chile:



  
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Juan Carlos Jobet  
Bi-minister of Energy and Mining

October 28th, 2021

For Denmark:

A handwritten signature in blue ink, appearing to read 'Benny Engelbrecht', is written over the printed name.

Benny Engelbrecht – Minister for Transport of the Kingdom of Denmark

31 October 2021

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For [NAME OF PARTICIPANT]:

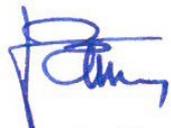
A handwritten signature in black ink, appearing to read 'T. Harakka', written in a cursive style.

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Timo Harakka  
Minister of Transport and Communications, Finland

28 October 2021

For the Grand-Duchy of Luxembourg:



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François BAUSCH  
Deputy Prime Minister,  
Minister for Mobility and Public Works,  
8th November, 2021

For the Netherlands:

A handwritten signature in blue ink, appearing to read 'Steven van Weyenberg', written in a cursive style.

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Steven van Weyenberg, Secretary of State of Infrastructure and Water Management  
November 3, 2021

For NEW ZEALAND:

A handwritten signature in blue ink, appearing to read 'M. Woods', with a stylized flourish at the end.

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Hon Dr Megan Woods  
Minister of Energy and Resources  
4 November 2021

For Norway:

A handwritten signature in black ink, reading "Jon-Ivar Nygård". The signature is written in a cursive style with a large initial 'J'.

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Minister of Transport, Jon-Ivar Nygård

For Scottish Government:

A handwritten signature in black ink, appearing to read 'Stuart Greig', written in a cursive style.

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Stuart Greig, Director of Low Carbon Economy, Transport Scotland, Scottish Government,  
2 November 2021

For [NAME OF PARTICIPANT]:

Bern 19. November 2021

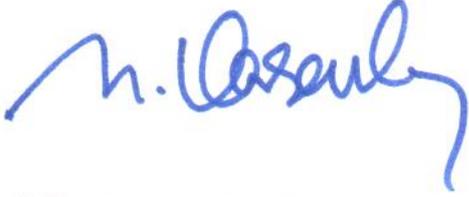
S. Somany

Participant Representative's Name and Title  
Date

Eidg. Departement für Umwelt  
Verkehr, Energie und Kommunikation  
Bundeshaus Nord  
3003 Bern

For [NAME OF PARTICIPANT]:

Ministry of Industry and Technology  
Republic of Turkey



H.E. Mr. Mustafa VARANK  
Minister of Industry and Technology  
05.11.2021

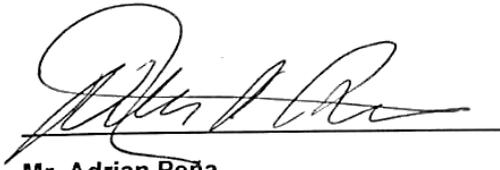
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For the United Kingdom of Great Britain and Northern Ireland

A handwritten signature in black ink, appearing to be 'Trudy Harrison', written over a horizontal line.

02/11/2021

Trudy Harrison MP, Parliamentary Under Secretary of State for Transport, UK

A handwritten signature in black ink, appearing to read 'Adrian Peña', is written over a solid horizontal line.

**Mr. Adrian Peña**  
Minister of Environment  
República Oriental del Uruguay

November 8<sup>th</sup> 2021

For Welsh Government:

A rectangular box containing a handwritten signature in black ink. The signature is stylized and appears to read 'Lee'.

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Lee Waters MS  
Deputy Minister for Climate Change  
Welsh Government  
8 November 2021