

# Medium- and Heavy-Duty Zero Emissions Vehicle Memo of Understanding

Oregon Stakeholder Meeting  
Dec. 15, 2020

# Background and purpose of the MOU

- Zero emission vehicle technology for the medium- and heavy-duty sector continues to grow
- Builds off success of 2013 multi-state, light-duty ZEV MOU and subsequent Action Plans for light-duty vehicles
- Commits states to work together to foster a market for zero emission medium- and heavy-duty vehicles





## MULTI-STATE MEDIUM- AND HEAVY-DUTY ZERO EMISSION VEHICLE

### MEMORANDUM OF UNDERSTANDING

WHEREAS, the Signatory States and the District of Columbia<sup>1</sup> recognize the importance of state leadership and coordinated state action to ensure national progress in the effort to reduce greenhouse gas (GHG) emissions and stabilize global warming;

WHEREAS, the Signatory States have statutory obligations or otherwise seek to significantly reduce statewide GHG emissions by 2050, consistent with science-based targets;

WHEREAS, transportation is now the nation's largest source of GHG emissions, and, after light-duty vehicles, medium- and heavy-duty trucks are the next largest source of transportation sector GHG emissions;

WHEREAS, the Signatory States have a statutory obligation to provide their citizens with air quality that complies with national health-based air quality standards, which are required to be protective of health and the environment with an adequate margin of safety;

WHEREAS, fossil fuel related emissions from medium- and heavy-duty vehicles (MHDVs) are a major source of nitrogen oxides (NO<sub>x</sub>), particulate matter, and toxic air emissions, which are preventing many densely populated areas from achieving compliance with federal ambient air quality standards;

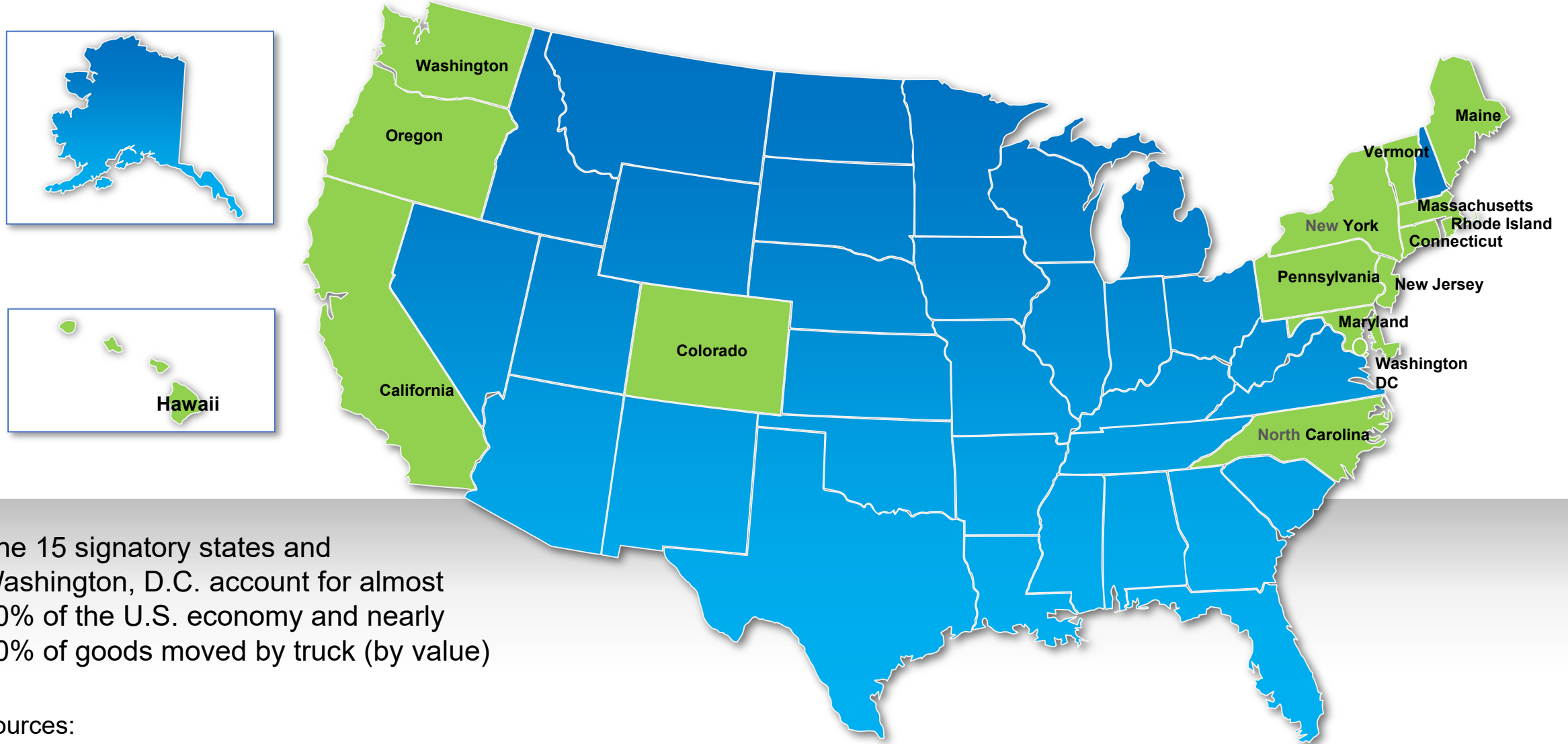
WHEREAS, emissions from MHDVs are a widely acknowledged, but unaddressed, environmental justice problem that directly and disproportionately impacts disadvantaged communities located near freight corridors, ports and distribution centers;

# Medium- and Heavy-Duty Zero Emission Vehicle MOU

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- Calls for 30% of new truck and bus sales to be zero emission by 2030 and 100% by 2050
- Emphasizes need to accelerate deployment of zero emission trucks and buses in underserved communities
- Directs development and implementation of a MHD ZEV Action Plan
- Encourages opportunities for public fleet purchases and fueling stations

# MHD ZEV MOU signatories



The 15 signatory states and Washington, D.C. account for almost 50% of the U.S. economy and nearly 40% of goods moved by truck (by value)

Sources:





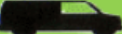
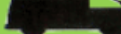

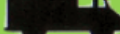


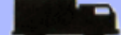
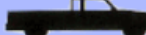
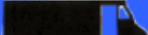

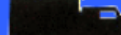

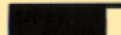

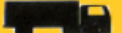
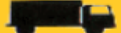


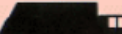

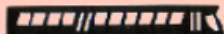





U.S Bureau of Economic Analysis

<https://apps.bea.gov/itable/iTable.cfm?ReqID=70&step=1#reqid=70&step=1&isuri=1;>

FHWA Freight Analysis Framework <https://faf.ornl.gov/faf4/Extraction1.aspx>

# Medium- and heavy-duty truck classifications

Truck classifications are based on gross vehicle weight rating.

<b>Class 1 - 6,000 lbs &amp; Less</b>     Minivan    Cargo Van    SUV    Pickup Truck
<b>Class 2 - 6,001 to 10,000 lbs</b>     Minivan    Cargo Van    Full-Size Pickup    Step Van
<b>Class 3 - 10,001 to 14,000 lbs</b>     Walk-in    Box Truck    City Delivery    Heavy-Duty Pickup
<b>Class 4 - 14,001 to 16,000 lbs</b>    Large Walk-in    Box Truck    City Delivery
<b>Class 5 - 16,001 to 19,500 lbs</b>    Bucket Truck    Large Walk-in    City Delivery
<b>Class 6 - 19,501 to 26,000 lbs</b>     Beverage Truck    Single-Axle    School Bus    Rack Truck
<b>Class 7 - 26,001 to 33,000 lbs</b>     Refuse    Furniture    City Transit Bus    Truck Tractor
<b>Class 8 - 33,001 lbs &amp; Over</b>     Cement Truck    Truck Tractor    Dump Truck    Sleeper

Source: U.S. Department of Energy

# Next steps – Stakeholder outreach

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- Underserved/EJ Community Advocates
- Truck and Bus Manufacturers
- Battery Manufacturers
- Trucking Companies
- Electric Vehicle Supply Equipment (EVSE) Providers
- Utilities
- Utility Regulators and Consumer Advocates
- Commercial Fleets
- Environmental Advocates
- Labor Unions





# Next steps – Action plan development

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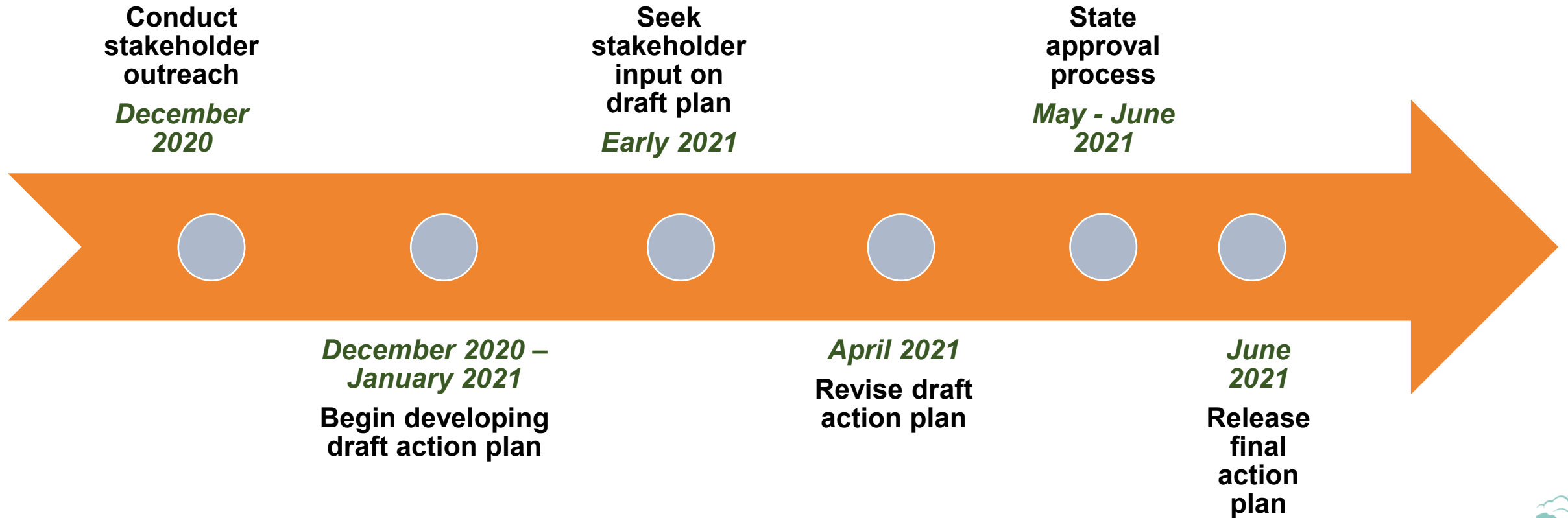
The MHD ZEV Action Plan developed by the Multi-State ZEV Task Force will consider the need for a range of market-enabling actions, such as:

- Incentives for vehicles and infrastructure;
- Adoption of regulatory standards (e.g., California's Advanced Clean Trucks Regulation);
- Utility actions to support infrastructure buildout and beneficial rate design;
- Measures to increase the use of zero emission trucks and delivery vans in densely populated areas;
- Innovative financing models and new funding sources;
- Actions to encourage fleet purchases; and
- Uniform standards and data collection requirements.



# Tentative timeline – MHD ZEV Action Plan

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# Action plan considerations and request for information

- What MHD ZEV programs or policies currently exist?
- What are the challenges and barriers to MHD ZEV adoption? What considerations can the Action Plan include to minimize or resolve them?
- What actions can be taken, with specific consideration of environmental justice issues?



# Comments on action plan development

- Submit comments and information to:

<https://www.nescaum.org/files/mhd-zev-input.php>

## **Contact**

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