



# Electrifying Trucks and Buses: Multi-State MHD ZEV Initiative

October 22, 2020

#### 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 lightduty 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 (NOx), 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;

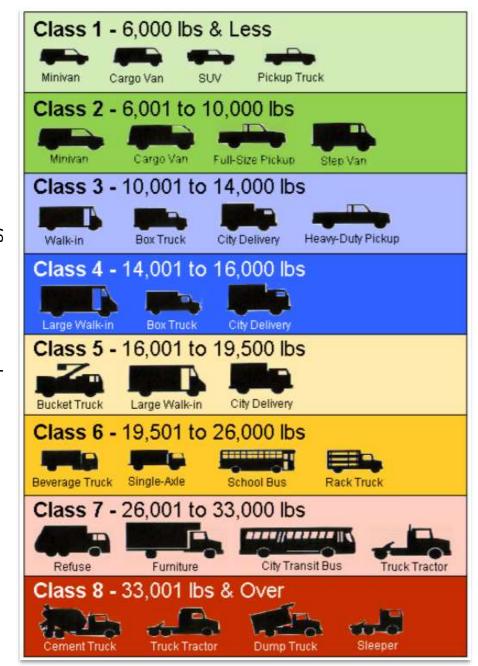
#### Medium- and Heavy-Duty Zero Emission Vehicle MOU

- Builds off success of 2013 governors MOU and subsequent Action Plans for light-duty vehicles.
- Commits signatories to work together to foster a selfsustaining market for zero emission medium- and heavyduty vehicles.
- Calls for 30% of new truck and bus sales to be zeroemission by 2030 and 100% by 2050.
- Emphasizes need to accelerate deployment of zeroemission trucks and buses in disadvantaged communities.
- Directs development and implementation of a MHD ZEV Action Plan.



#### **Truck Classifications**

- Vehicle classes are based on gross vehicle weight rating (GVWR).
- Class 2 is subdivided into:
  - Class 2a vehicles with a GVWR of 6,001-8,500 lbs.; and
  - Class 2b vehicles with a GVWR of 8,501-10,000 lbs.
- MHDVs consist of classes 2b-8.



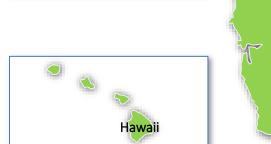
Source: U.S. Department of Energy



## MHD ZEV MOU Signatories

Colorado





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

#### Sources:

U.S Bureau of Economic Analysis <u>https://apps.bea.gov/itable/iTable.cfm?ReqID=70&step=1#reqid=70&step=1&isuri=1;</u> FHWA Freight Analysis Framework <u>https://faf.ornl.gov/faf4/Extraction1.aspx</u>

Washington

Oregon

California



Maine

Massachusetts Rhode Island

Connecticut

New Jersey

Washington DC

Vermo

**New York** 

Maryland

Pennsylvania

North Carolina

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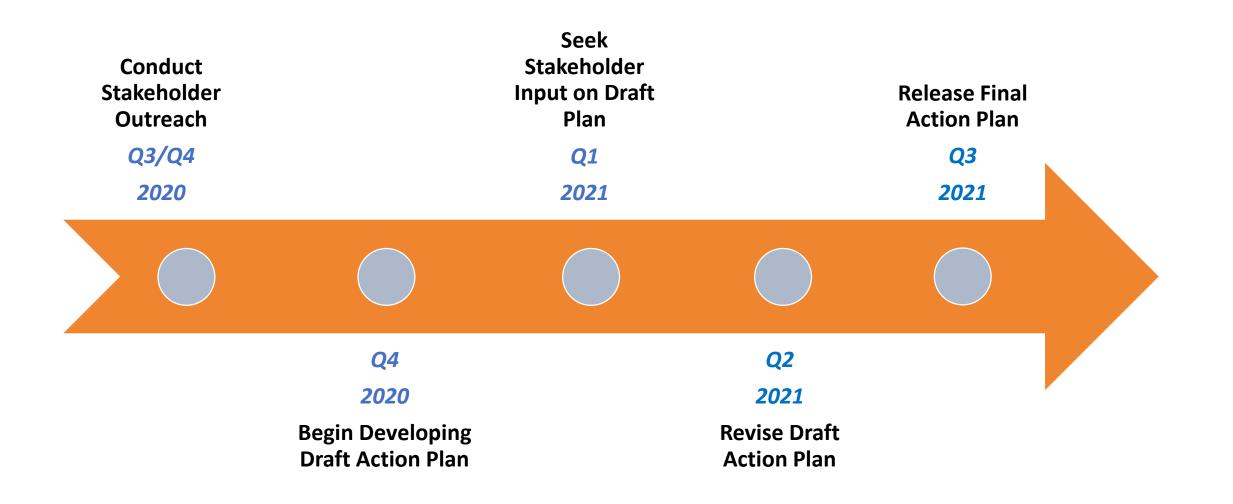
### **NEXT STEPS**

The ZEV Task Force will conduct stakeholder outreach and develop a multi-state Action Plan that considers the need for 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**





### **REQUEST FOR INPUT**

- What are you concerned or excited about?
- What data or studies do you have?
- Are there model or pilot programs we should know about?
- Are there experts we should talk to?
- Are there particular strategies we should consider for the Action Plan?



Questions? Please contact: Colton Brown <u>coltbrown@pa.gov</u> PA Department of Environmental Protection