Reducing CO2 and SLCP

September 10 and 16, 2020

#NJPACT

NEW JERSEY
PROTECTING AGAINST CLIMATE THREATS:

Dramatically cut emissions of greenhouse gases.
NOTE:

This meeting will be recorded and made available online. All presented material will also be made available online.
Details for today's meeting

• Asking questions: Raise your hand or type in the chat box.
• When called on, unmute yourself.
• If you're calling in, *6 to mute and unmute.
How Did We Get Here?

- Establishes framework for meeting clean energy and climate goals
- Focused on all energy sources

**2019 EMP**

**EO 100 1/27/20**
- Directs DEP to take regulatory actions to reduce CO2 and SLCP
- Directs DEP to establish monitoring and report to gather additional data

**DEP focuses on further reductions from existing stationary sources – EGU and non-EGU**
- Significant comments received

**Initial Stakeholdering 2/25/20**
What Did We Hear?

CO₂ reductions for existing stationary sources

Why so limited?

Why not mobile sources?

Why not other climate pollutants?
Stakeholdering – Round 2

September 3, 2020
- GHG performance standards for EGUs
- Carbon intensity standard for fuels
- GHG performance standard for boilers

September 10, 2020
- CA’s Clean Truck rules
- Medium-duty inspections
- Trucking contractor initiatives

September 16, 2020
- Cargo handling equipment
- Ships
On January 27, 2020, the New Jersey Board Of Public Utilities released the 2019 Energy Master Plan (EMP), which outlined proposed strategies to reach the 80% reduction in greenhouse gas emissions from 2006 levels by 2050.

The focus of today’s meeting:

September 10:
Advanced Clean Trucks, Heavy-duty Engines and Vehicles, and Fleets
Drayage Trucks and Medium-duty Vehicle Inspections

September 16:
Cargo Handling
Oceangoing Vessels and Harbor Craft
Transportation is the largest single source of climate pollution in New Jersey.
NOx and PM2.5 are still important!

New Jersey 2017 Nitrogen Oxides Projected Emissions Inventory
Tons Per Year

- Nonroad Mobile: 29%
- Area: 16%
- Onroad Mobile: 42%
- Point: 11%

New Jersey 2017 Fine Particulate Matter Projected Emissions Inventory
Tons Per Year

- Area Residential Wood: 31%
- Area Other: 26%
- Onroad Mobile: 14%
- Point: 16%
- Nonroad Mobile: 13%

Note:
Area Source fugitive dust emissions are post-adjustment.
Health effects from diesel emissions

• Premature mortality.
• Increased hospitalization rates for heart and lung disease.
• Increased cancer risk.
• Increased respiratory symptoms for sensitive populations.
• Diesel emissions pose higher cancer risk than any other air toxic emitted in NJ.
• Decarbonizing and electrifying the transportation sector provides outsize benefits to environmental justice communities.
• Transformative step toward elimination of the dominant source of local air pollution, including black carbon, and provides large, direct health savings.
• Climate change is a global concern; air pollution is a local concern, and can be locally measured, assessed, and controlled with the right incentives, regulations, and market structures.
New Jersey Energy Master Plan

100% clean energy by 2050

Reduce GHG emissions 80% below 2006 levels by 2050

Assumes 75% of medium duty and 50% of heavy duty are electric by 2050
Energy Master Plan

• Strategy 1: Reduce energy consumption and emissions from the transportation sector
  • Decarbonize the transportation sector
  • Improve connections between jobs, people and services
  • Reduce port and airport emissions

• Electrification is one of the most cost-effective ways of meeting New Jersey’s 80x50 carbon emissions reduction target.

• Electrification (and reducing vehicle miles traveled) reduces medical visits and time off from work or school due to fewer pulmonary and respiratory illnesses associated with pollution from internal combustion engines.

• Electrification, particularly of medium- and heavy-duty vehicles, will have a disproportionately large impact on environmental justice communities.
Medium- and Heavy-Duty Zero Emission Vehicle MOU


• Commits signatories to work together to foster a self-sustaining market for zero emission medium- and heavy-duty vehicles.

• 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 disadvantaged communities.

• Directs development and implementation of a MHD ZEV Action Plan.
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 [https://apps.bea.gov/itable/iTable.cfm?ReqID=70&step=1#reqid=70&step=1&isuri=1];
Volkswagen Settlement

$72.2 million including
$10.8 million for EV charging
EV Law

- Establish goals for vehicle electrification and infrastructure development that address medium-duty and heavy-duty on-road diesel vehicles and associated charging infrastructure

- 330,000 EVs by December 31, 2025, 2 million EVs by December 31, 2035

- 400 fast chargers available for public use at 200 locations by December 31, 2025

- 1000 Level 2 chargers available for public use by December 31, 2025.

- 25% of state fleet shall be electric by 2025.