Reducing CO2 and SLCP

September 10 and 16, 2020

NEW JERSEY PROTECTING AGAINST CLIMATE THREATS:

Dramatically cut emissions of greenhouse gases.

#NJPACT

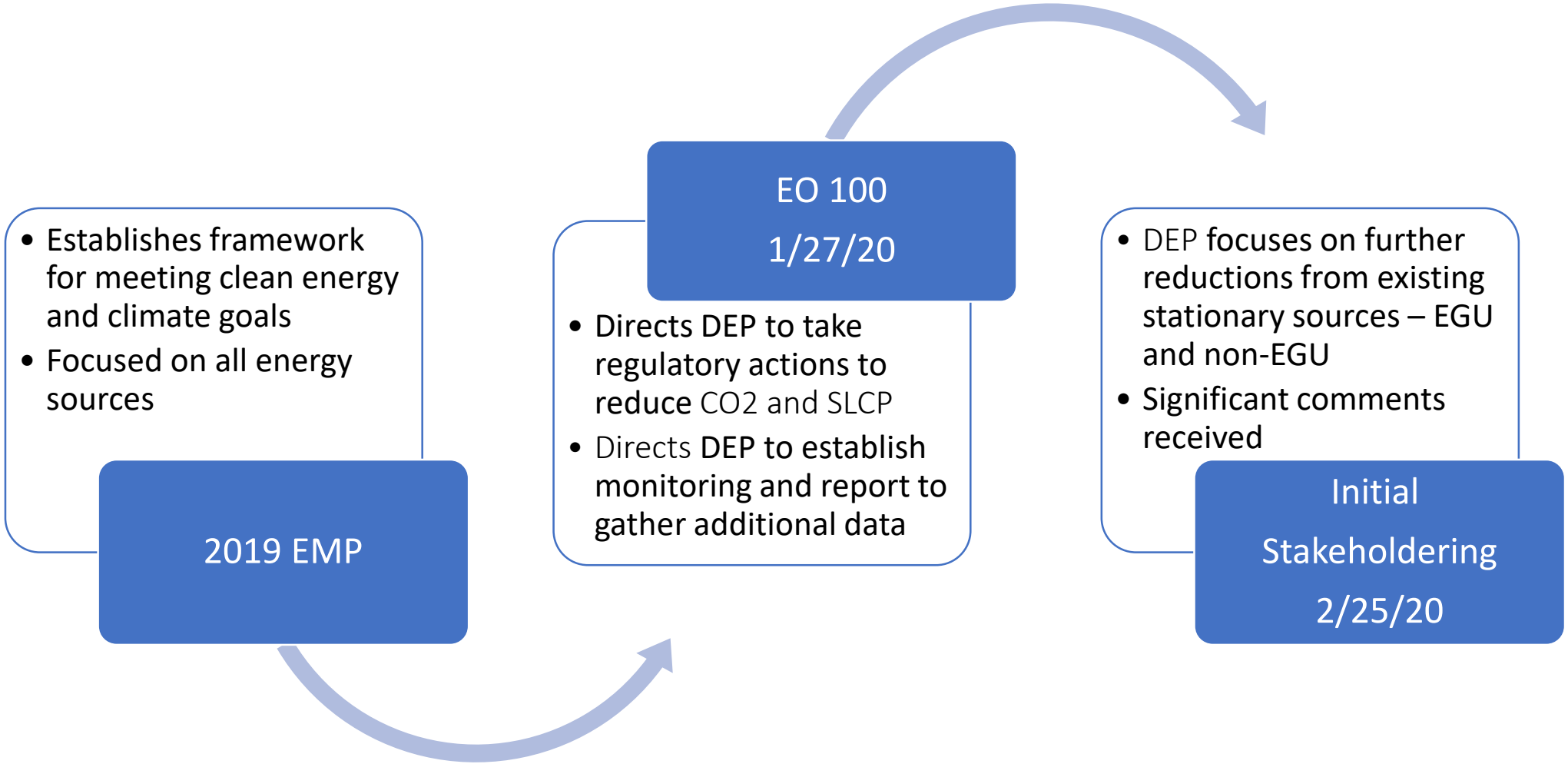
NOTE:

This meeting will be recorded and made available online. All presented material will also be made available online.

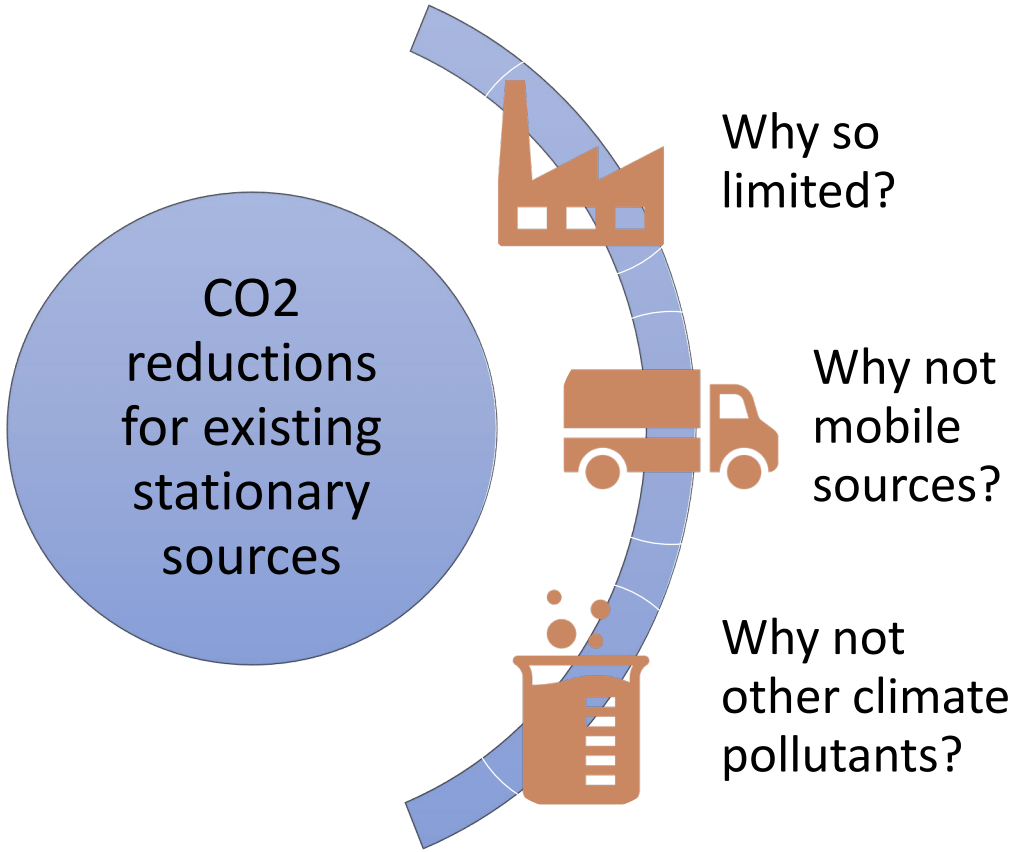
Details for today's meeting

- 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?



What Did We Hear?



Stakeholdering – Round 2

September 3, 2020

- GHG performance standards for EGUs
- Carbon intensity standard for fuels
- GHG performance standard for boilers

September 10, 2020

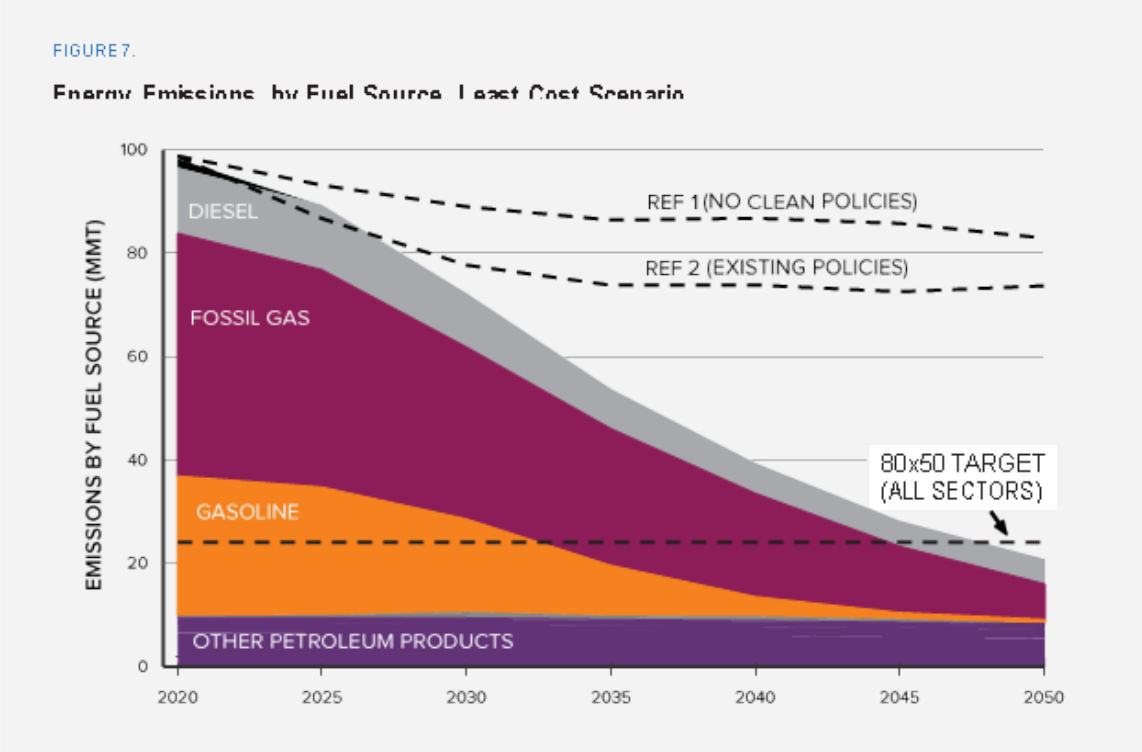
- CA's Clean Truck rules
- Medium-duty inspections
- Trucking contractor initiatives

September 16, 2020

- Cargo handling equipment
- Ships

2019 Energy Master Plan

Figure 1, p. 23



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.

-2019 New Jersey Energy Master Plan, https://www.bpu.state.nj.us/bpu/pdf/publicnotice/NJBPU_EMP.pdf

The focus of today's meeting:

September 10:

Advanced Clean Trucks, Heavy-duty Engines and Vehicles, and Fleets

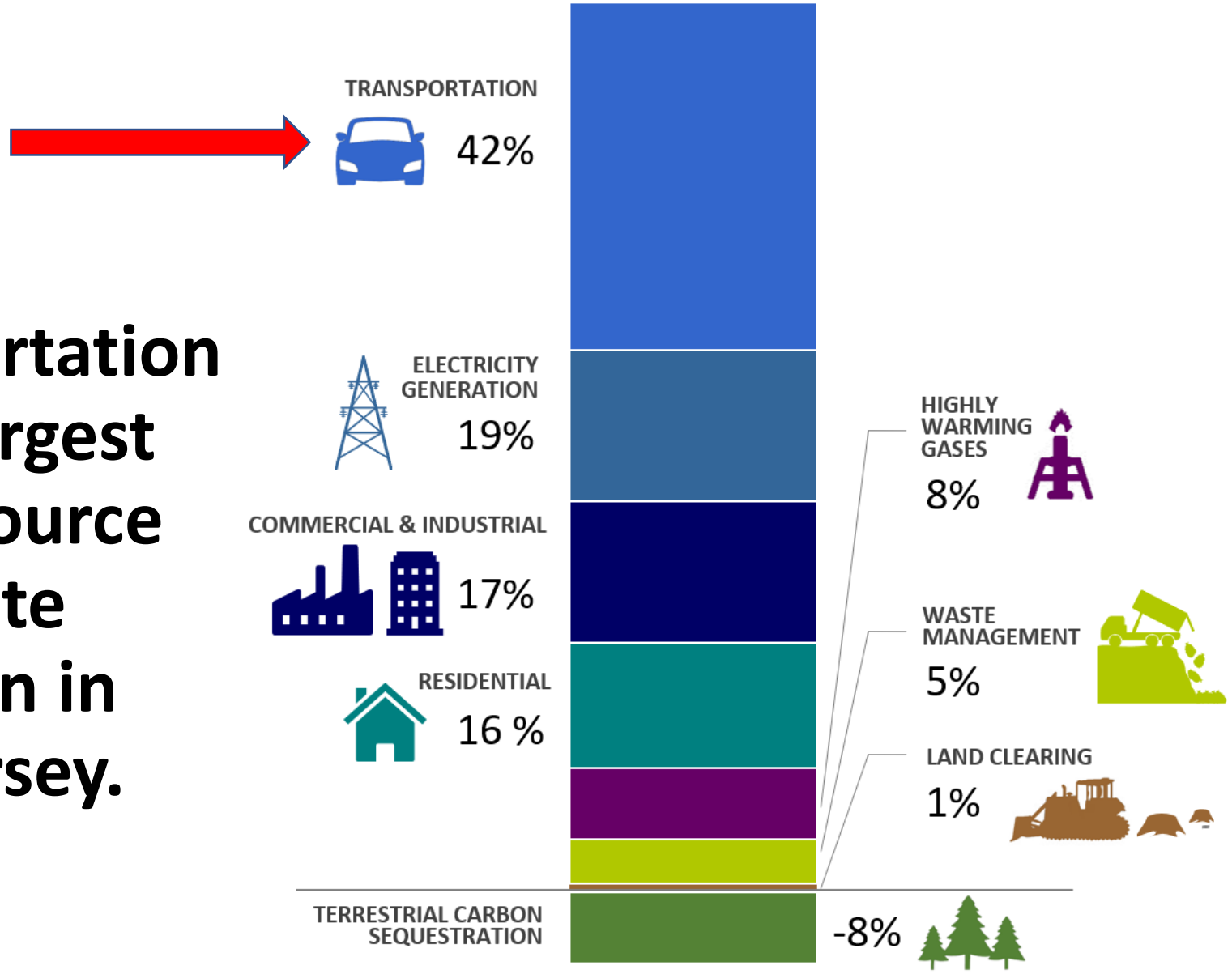
Drayage Trucks and Medium-duty Vehicle Inspections

September 16:

Cargo Handling

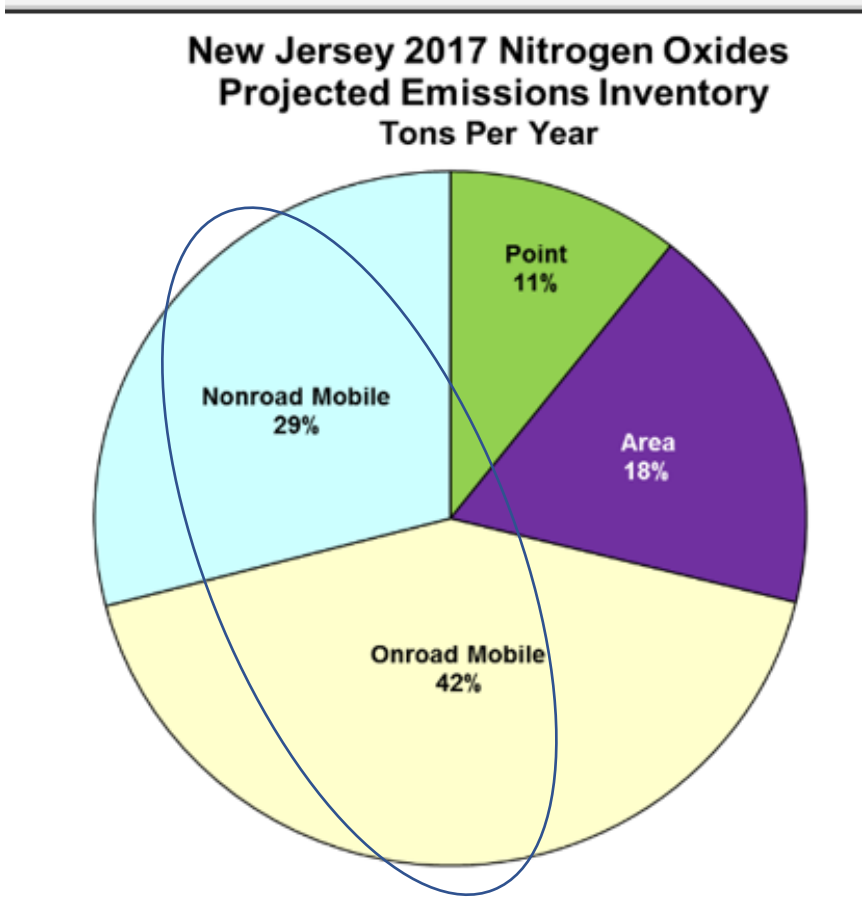
Oceangoing Vessels and Harbor Craft

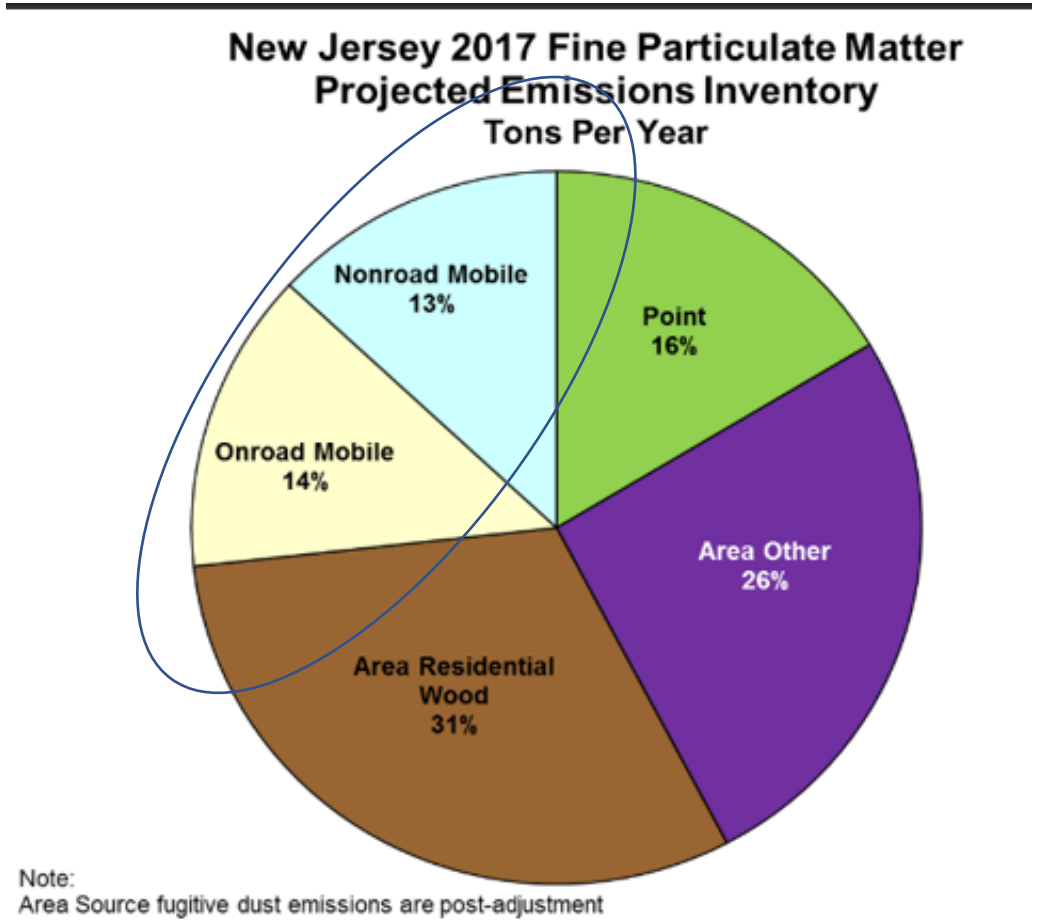
Transportation is the largest single source of climate pollution in New Jersey.



New Jersey Greenhouse Gas Sources & Sinks 2018

NOx and PM2.5 are still important!





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.

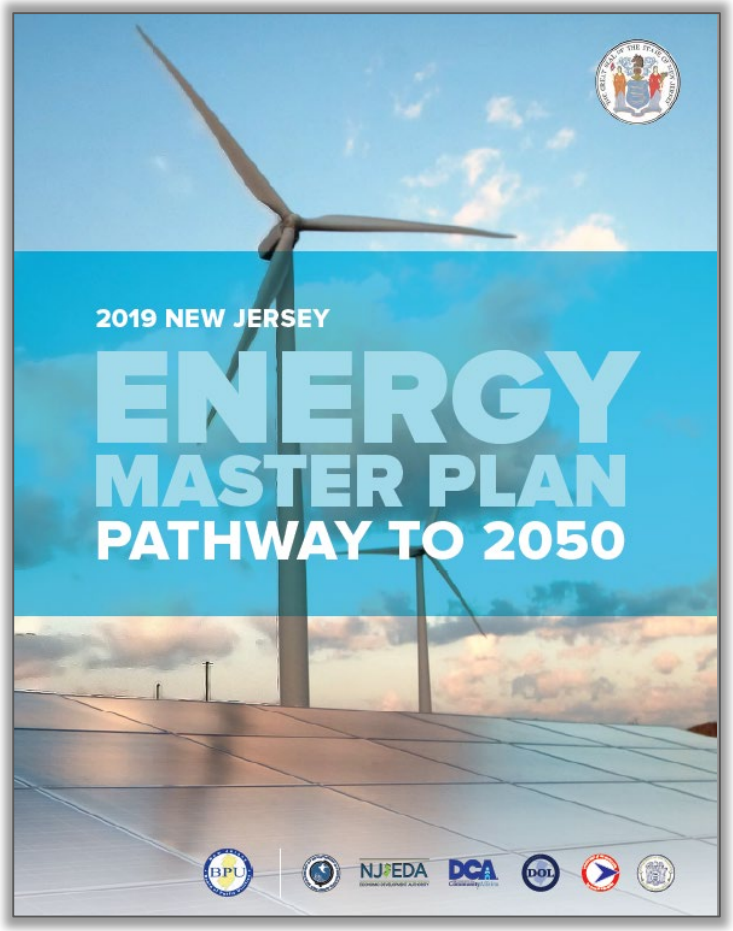
Credit to H. Thonet, BPU

New Jersey Energy Master Plan

100% clean energy by 2050

Reduce GHG emissions 80% below 2006 levels by 2050

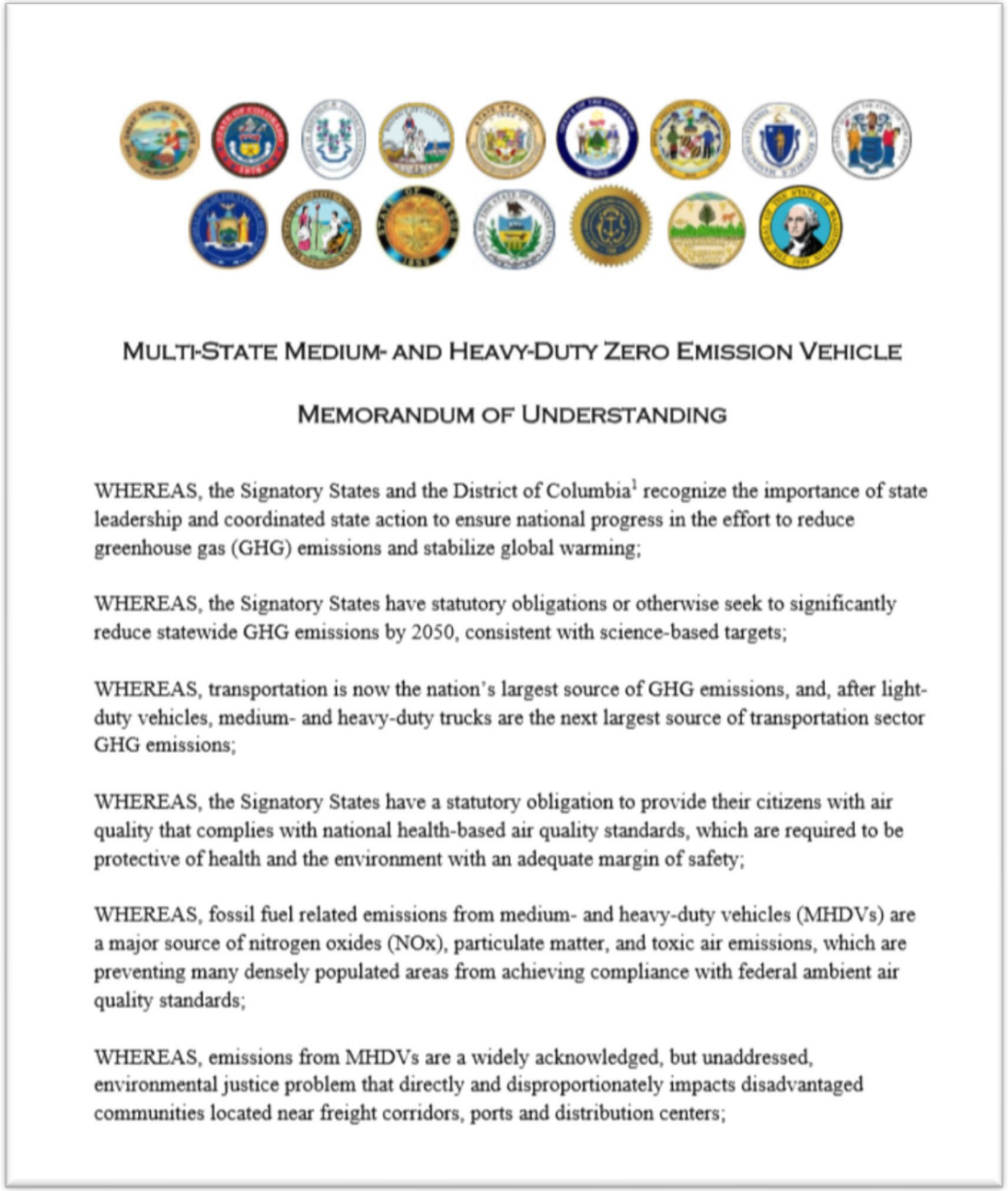
Assumes 75% of medium duty and 50% of heavy duty are electric by 2050



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.



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

MEMORANDUM OF UNDERSTANDING

WHEREAS, the Signatory States and the District of Columbia[1] 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;

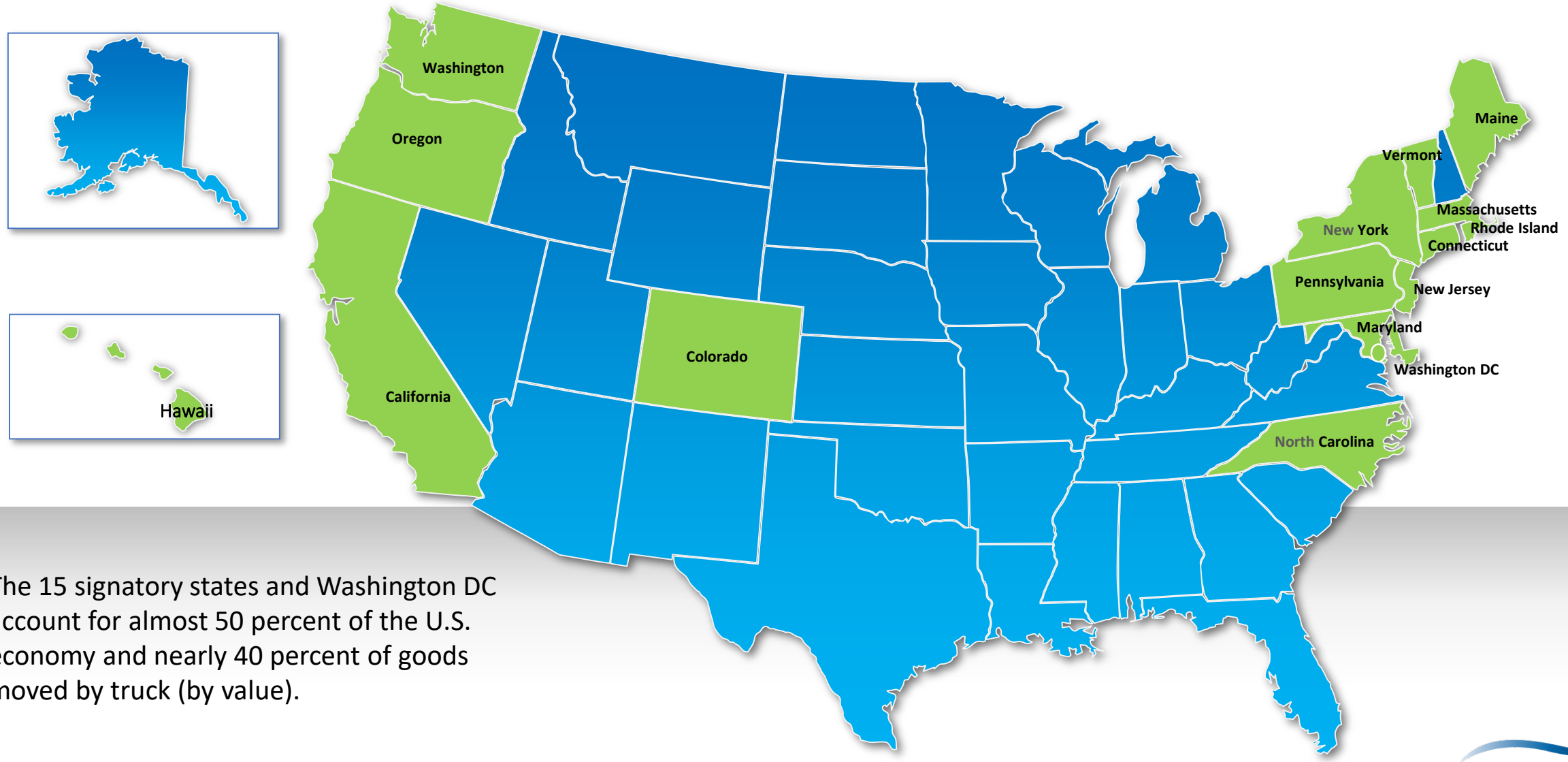
WHEREAS, fossil fuel related emissions from medium- and heavy-duty vehicles (MHDVs) are a major source of nitrogen oxides (NOx), particulate matter, and toxic air emissions, which are preventing many densely populated areas from achieving compliance with federal ambient air quality standards;

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 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.

MHD ZEV MOU Signatories



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

NESCAUM

Volkswagen Settlement

$72.2 million including
$10.8 million for EV charging

BOSCH
Invented for life
VIOLATION
FIAT

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.