



Bureau of Air Quality

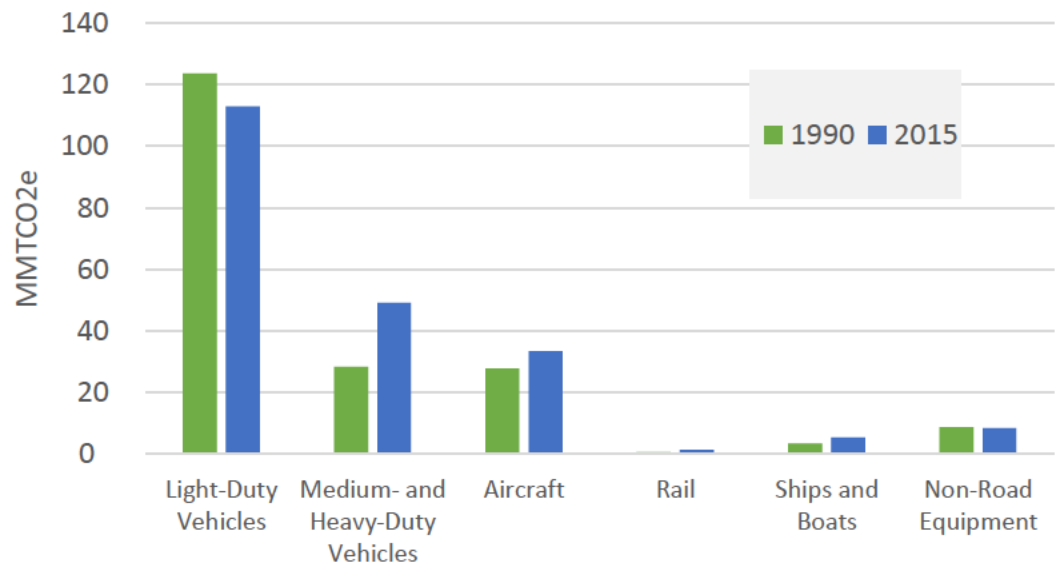
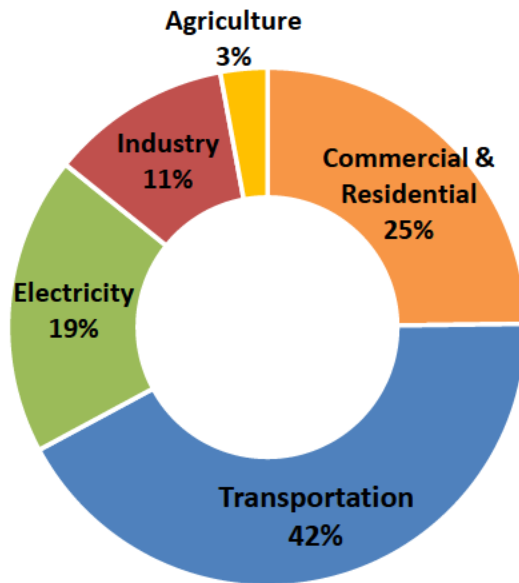
# Medium- and Heavy-Duty Zero Emission Vehicle Memorandum of Understanding

**Air Quality Technical Advisory Committee Meeting  
October 17, 2020  
Harrisburg, PA**

Tom Wolf, Governor

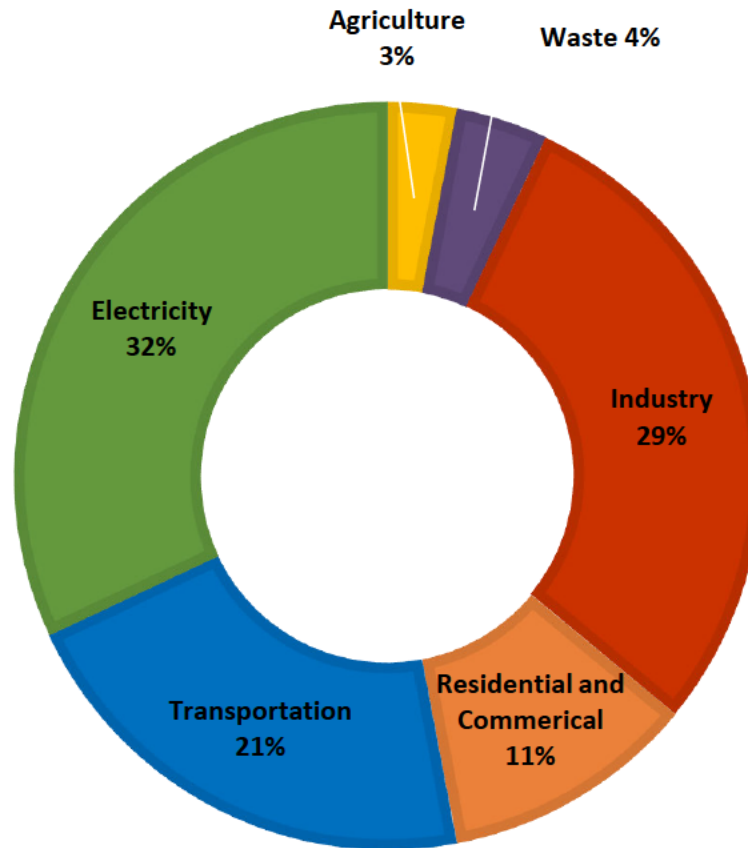
Patrick McDonnell, Secretary

# Greenhouse Gas Emissions in the Northeast



Source: State Inventory Tool (2015 emissions excludes Pennsylvania)

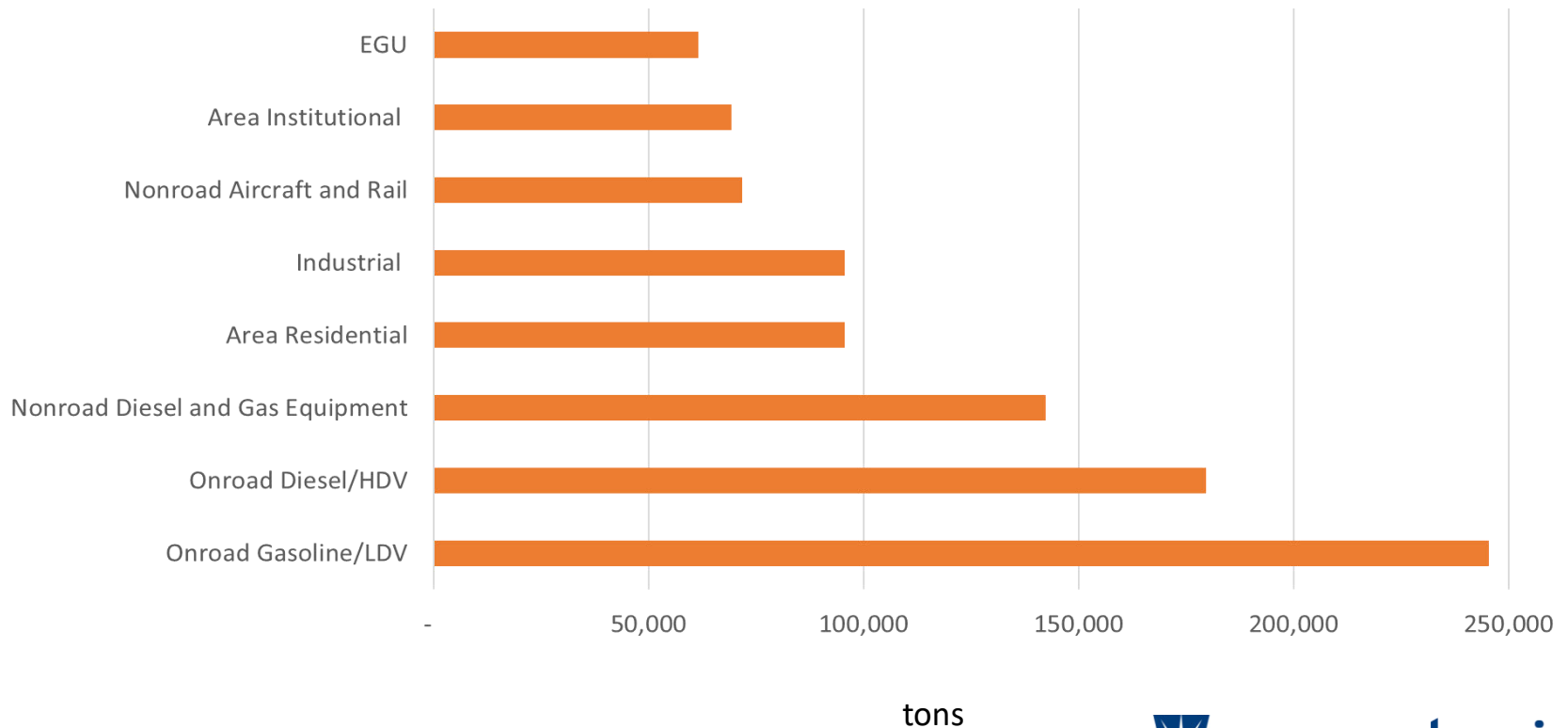
# Greenhouse Gas Emissions in Pennsylvania



Source: Pennsylvania Climate Action Plan



# 2017 NOx Emissions in Mid-Atlantic/Northeast


























# MOU Concepts

- Commits signatories to work together to foster a self-sustaining market for zero emission medium- and heavy-duty duty (MHD) vehicles.
- Call 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 MHD ZEV Action Plan.

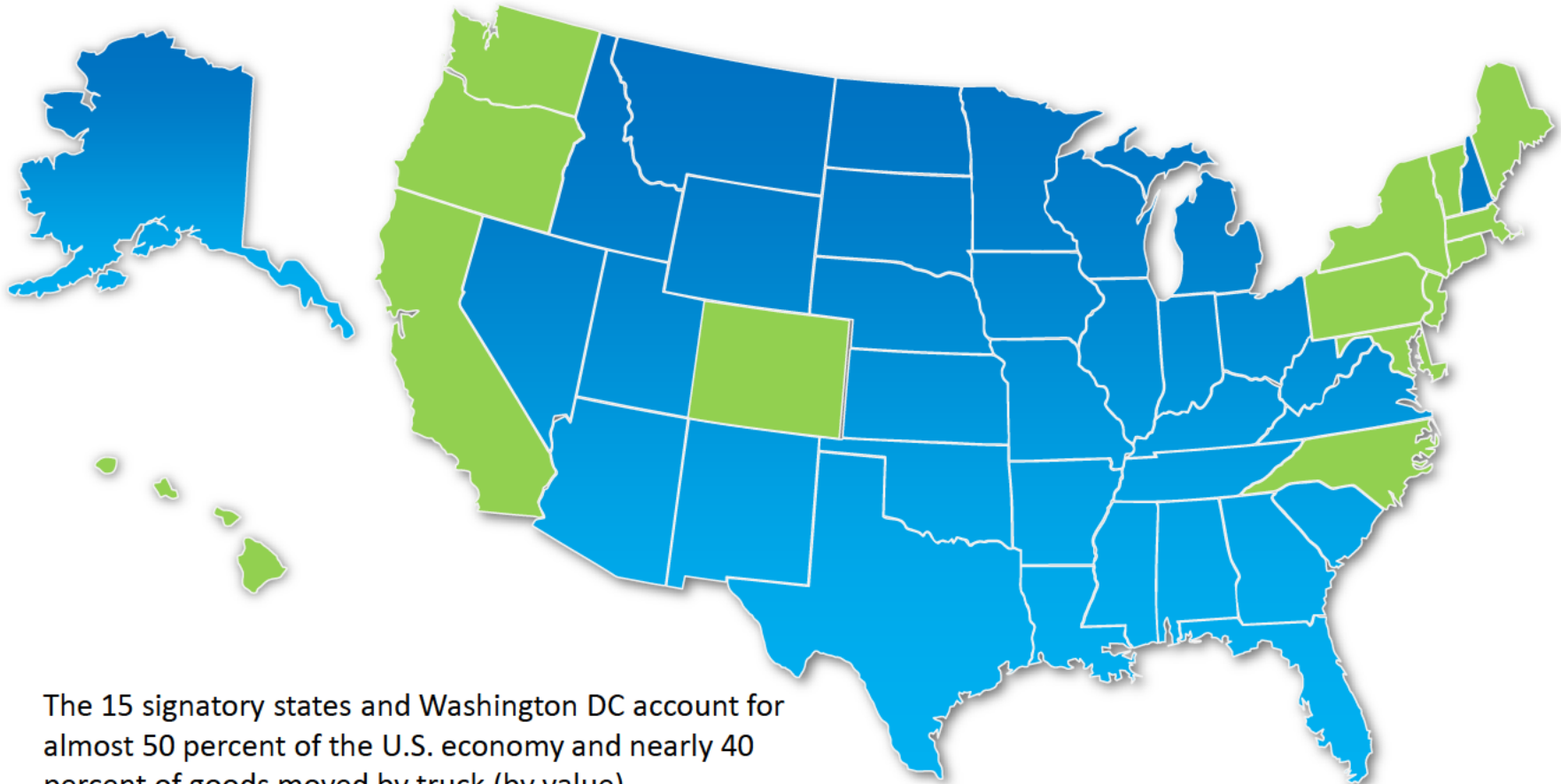
# Affected Vehicles

## Truck Classifications

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

<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

# 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).

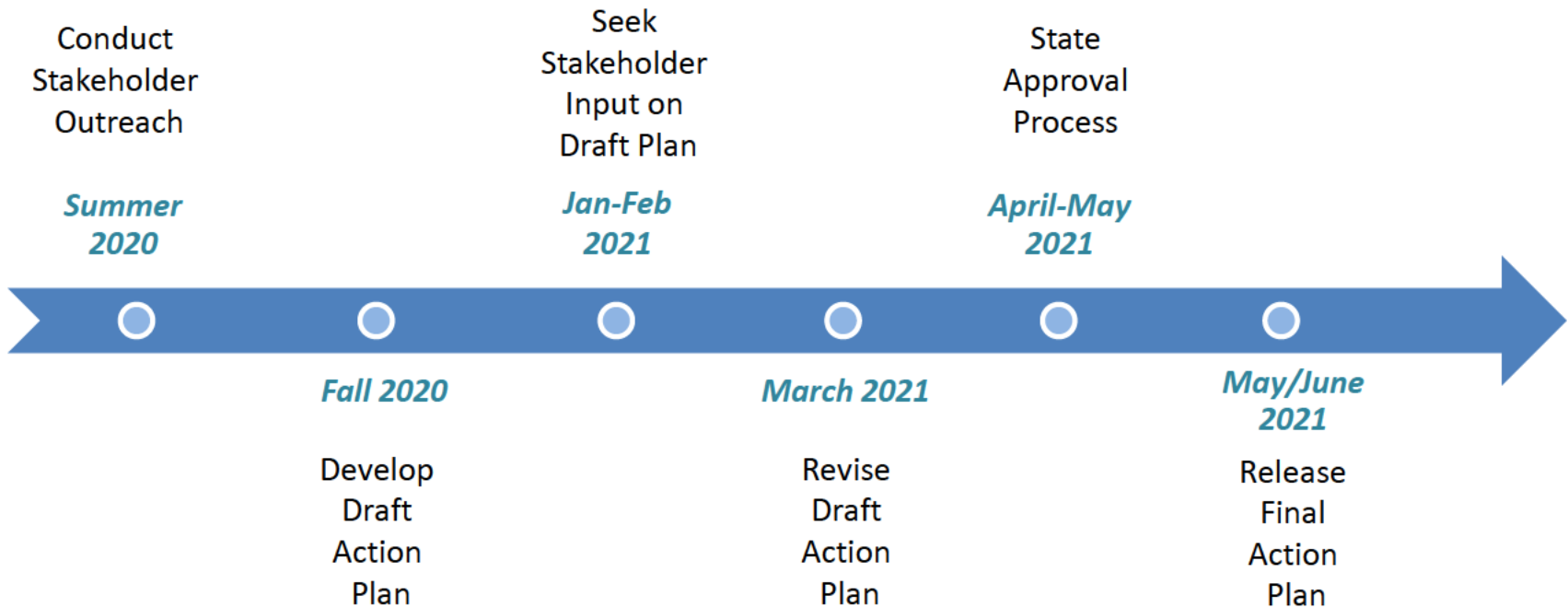
Sources:

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

U.S. Bureau of Economic Analysis <https://apps.bea.gov/itable/iTable.cfm?ReqID=70&step=1#reqid=70&step=1&isuri=1>



# Tentative Timeline





# Outreach

- NESCAUM is speaking with national leaders in the fields of electric vehicles and infrastructure such as:
  - Automobile Manufacturers
  - Electric Utilities / PUCs
  - Environmental Justice Advocates
  - NGOs
  - Electric Vehicle Supply Equipment Providers
  - Commercial Truck Fleets
- DEP will continue outreach efforts to engage similar types of Pennsylvania-specific stakeholder groups.



**pennsylvania**  
DEPARTMENT OF ENVIRONMENTAL PROTECTION



Bureau of Air Quality

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