



Bureau of Air Quality

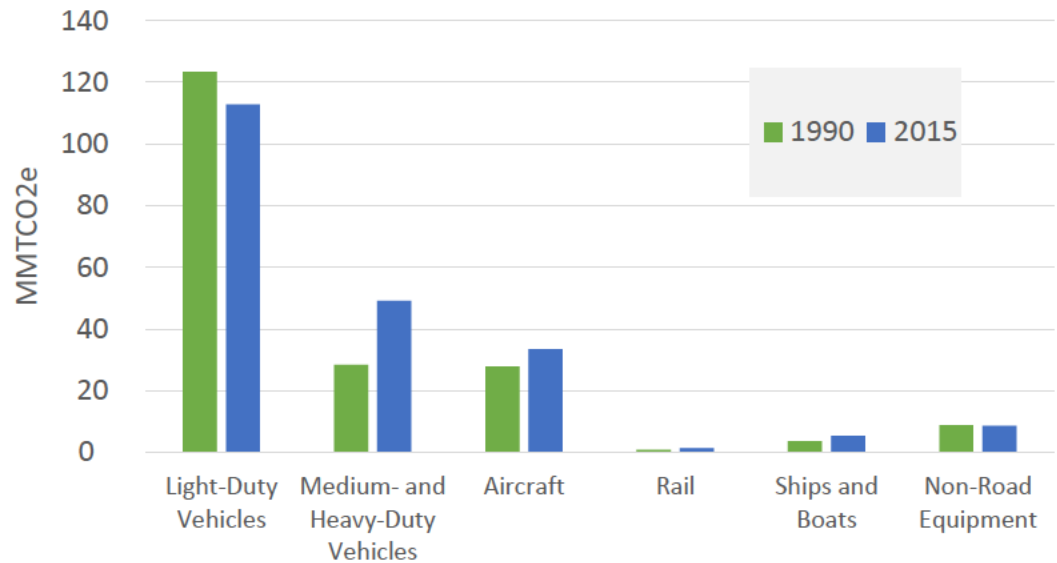
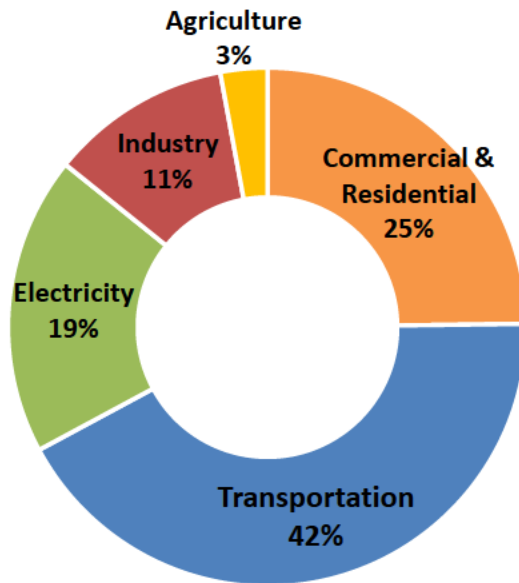
# Medium- and Heavy-Duty Zero Emission Vehicle Memorandum of Understanding

**Small Business Compliance Advisory Committee  
October 28, 2020  
Harrisburg, PA**

Tom Wolf, Governor

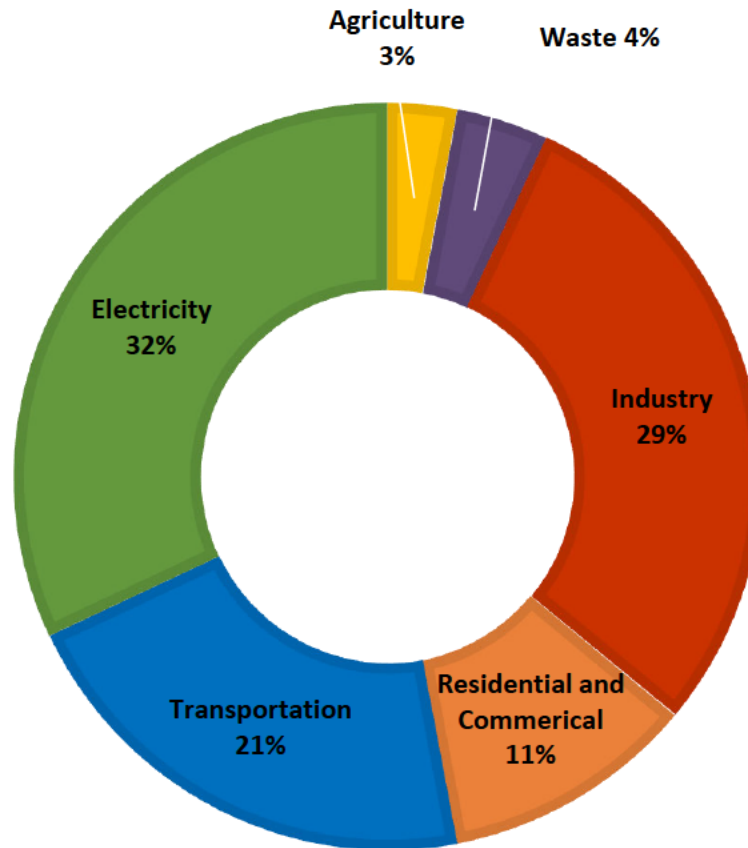
Patrick McDonnell, Secretary

# Greenhouse Gas Emissions in the Northeast



Source: State Inventory Tool (2015 emissions excludes Pennsylvania)

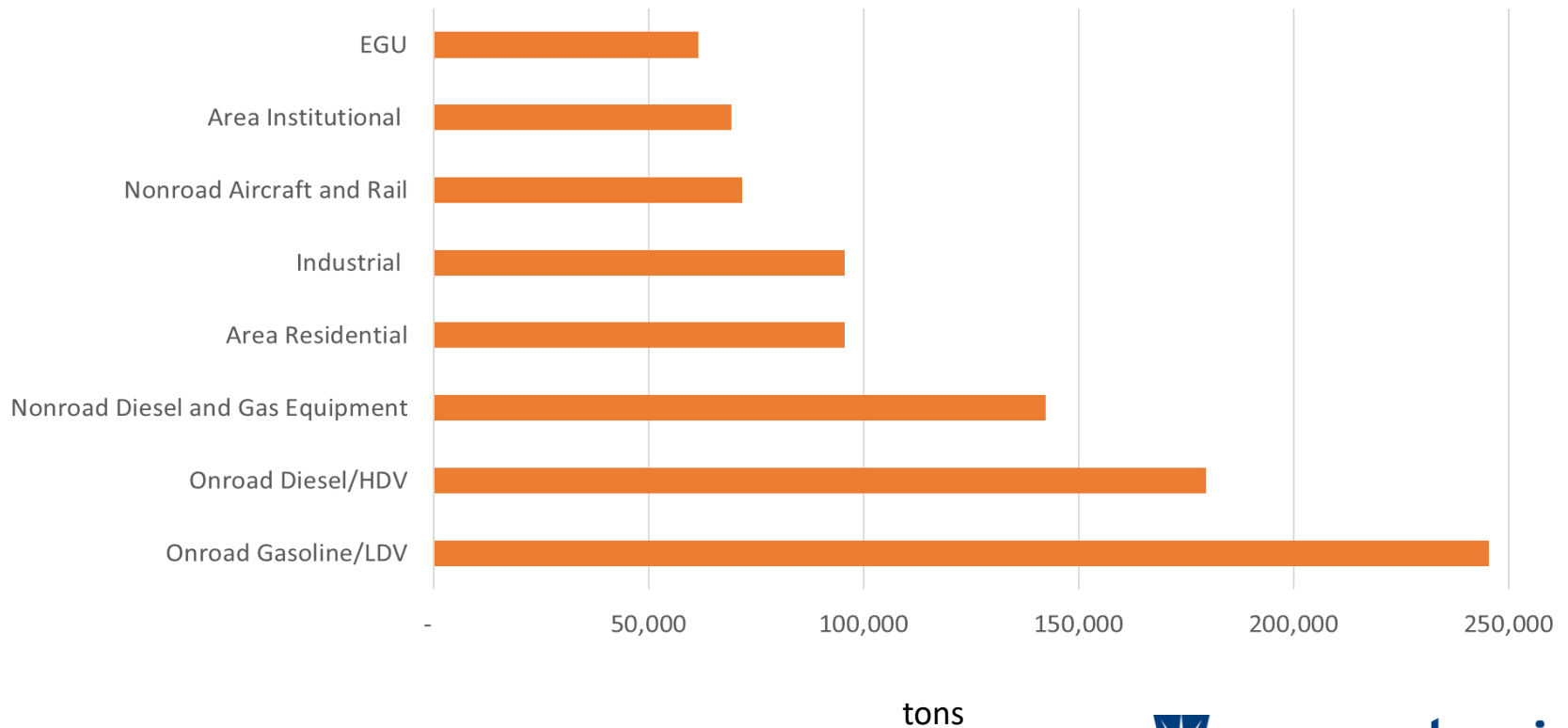
# Greenhouse Gas Emissions in Pennsylvania



Source: Pennsylvania Climate Action Plan



# 2017 NOx Emissions in Mid-Atlantic/Northeast




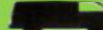

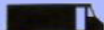






# MOU Concepts

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

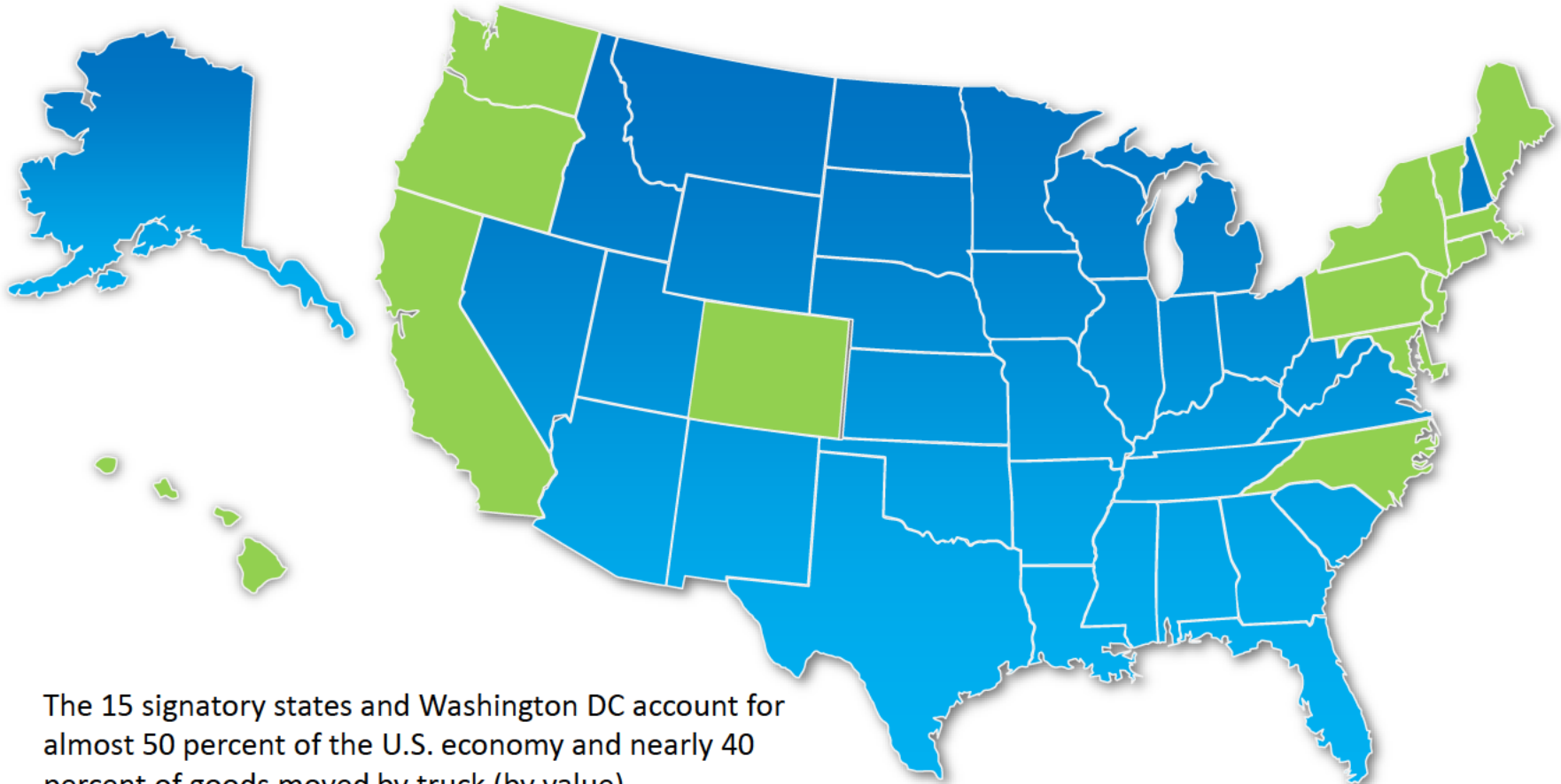
# Affected Vehicles

## 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 Sleepers

# 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).

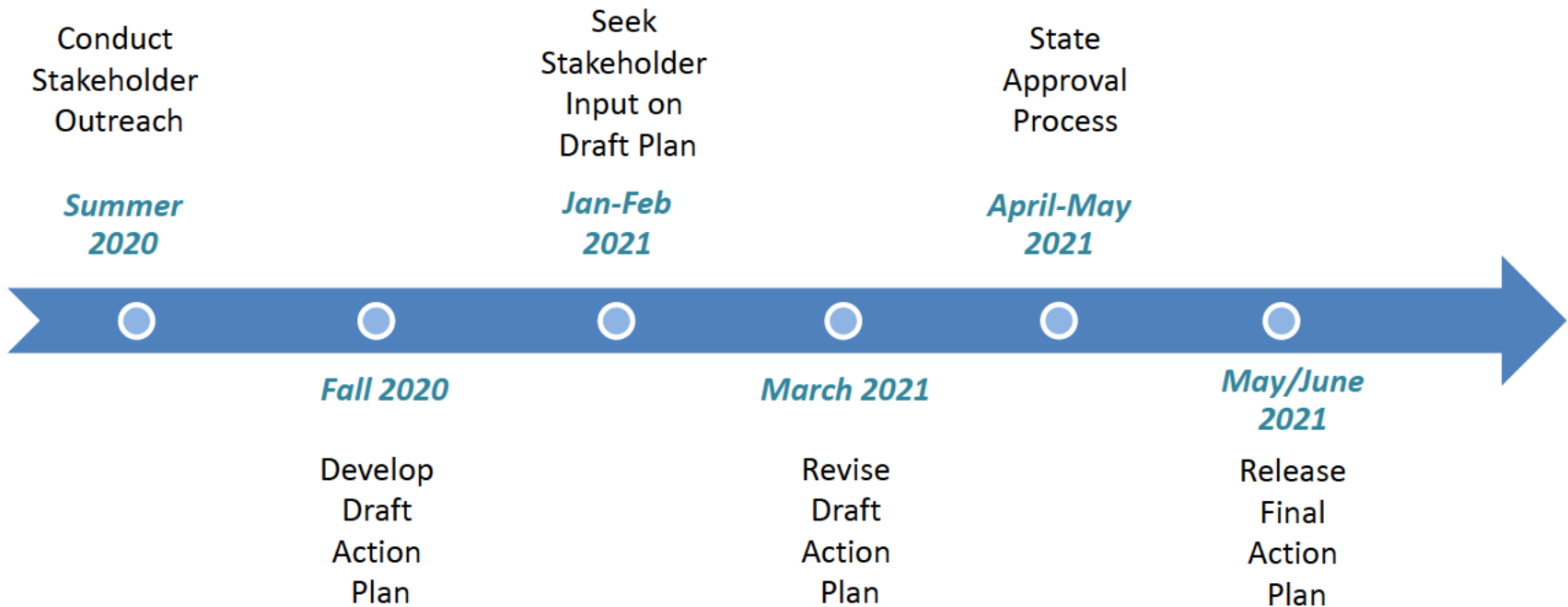
Sources:

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

# Contact

Chris Trostle  
Mobile Sources Section  
717-772-3926  
[dtrostle@pa.gov](mailto:dtrostle@pa.gov)