



Department of  
Environmental  
Conservation

## **Stakeholder Outreach**

# **Consideration to Revise 6 NYCRR Part 218 to Incorporate California's Advanced Clean Cars II Standards**

September 16, 2022

# Agenda

- History
- Background
- On-going Light-Duty Vehicle Electrification Efforts
- CA Advanced Clean Car II Standards
- Q/A Period

# Part 218 History

- Section 177 of Clean Air Act.
- NY adopted CA mobile source program 1990, revised periodically
- NY adopted CA LEV & ZEV programs 1992
- Adopted CA medium-duty standards 2004 MY
- Adopted CA heavy-duty standards 2005 MY, reverted to federal heavy-duty diesel standards 2008 MY
- Adopted CA ACC I 2012 – LEV III, ZEV, GHG
- Most recent revision 2021 Advanced Clean Trucks standards
- Proposing adoption of CA HD Omnibus Low NOx standards

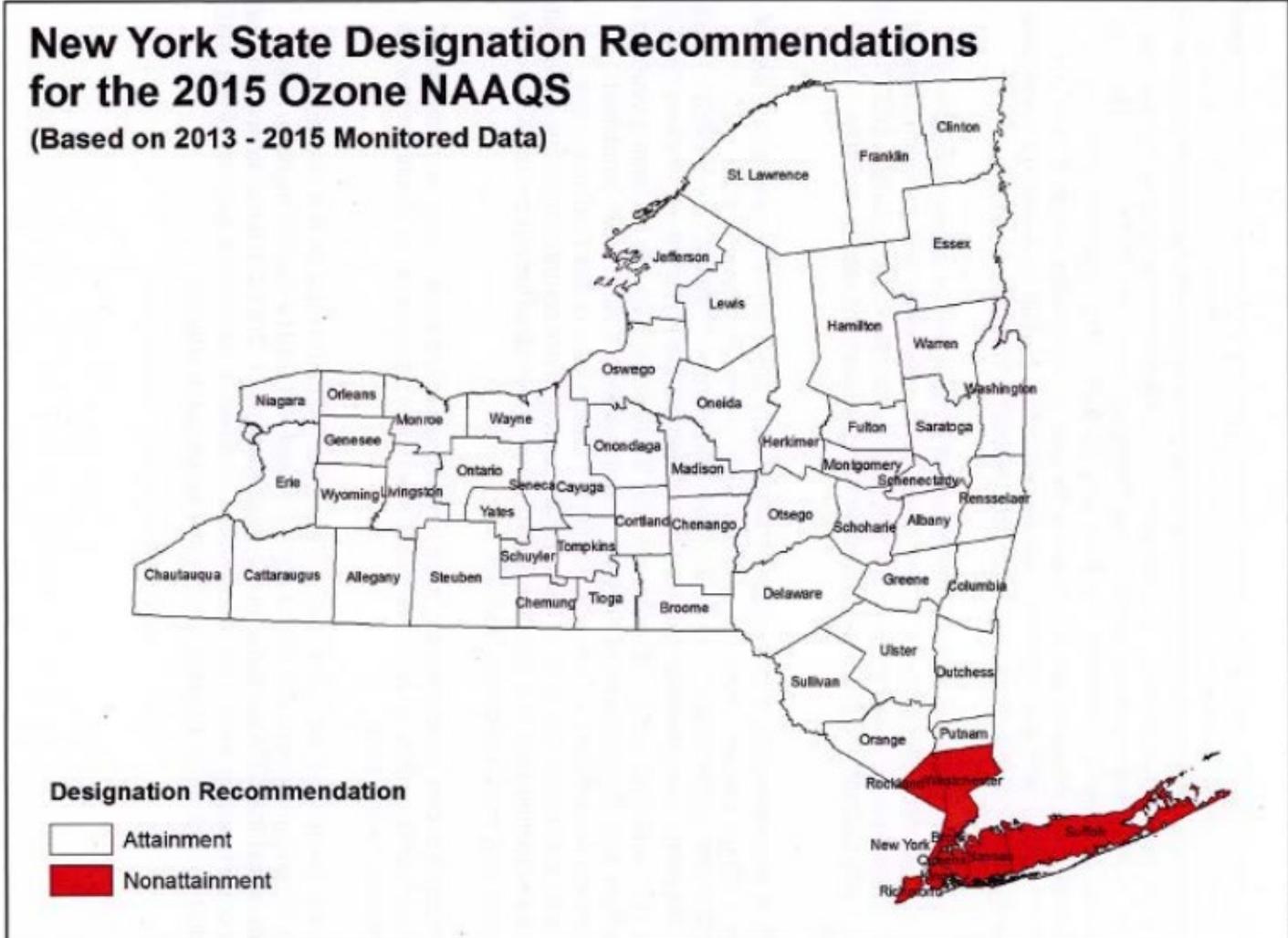


# BACKGROUND

- Ozone National Ambient Air Quality Standards (NAAQS)
  - Oxides of Nitrogen (NO<sub>x</sub>) contribute to ground-level ozone;
  - State Implementation Plan (SIP) commitments
  - NYMA currently designated “serious” non-attainment
    - EPA proposing to reclassify NYMA as “severe” non-attainment
- Community Leadership & Community Protection Act (CLCPA)
  - 40 % greenhouse gas emissions reductions from 1990 levels by 2030
  - 85 % greenhouse gas emissions reductions by 2050



# Ozone NAAQS Attainment Status



# Ongoing NYS Light-Duty ZEV Activities

SEPTEMBER 8, 2021 | Albany, NY

# In Advance of Climate Week 2021, Governor Hochul Announces New Actions to Make New York's Transportation Sector Greener, Reduce Climate-Altering Emissions



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# Light-Duty Zero Emission Vehicle MOU

- Commits signatories to work together to expand and foster a self-sustaining market for zero emission vehicles (2013).
- Calls for 35% of new light-duty vehicle sales to be zero-emission by 2030.
- Increase consumer awareness.
- Develop charging and hydrogen infrastructure.
- Financial and non-financial incentives.
- Electrify public and private fleets.
- Action Plan completed 2014; updated 2018

<https://www.nescaum.org/documents/multi-state-zev-action-plan.pdf/>

<https://www.nescaum.org/documents/2018-zev-action-plan.pdf>



## State Zero-Emission Vehicle Programs Memorandum of Understanding

WHEREAS, the Signatory States have adopted regulations requiring increasing sales of zero-emission vehicles (ZEVs), or are considering doing so; and

WHEREAS, accelerating the ZEV market is a critical strategy for achieving our goals to reduce transportation-related air pollution, including criteria air pollutants, mobile source air toxics and greenhouse gas emissions (GHGs), enhance energy diversity, save consumers money, and promote economic growth; and

WHEREAS, our states are committed to reducing air pollution, including the emission of GHGs and other air pollutants from the mobile source sector; and

WHEREAS, many of our states have obligations or otherwise seek to reduce GHGs consistent with science-based targets by 2050; and

WHEREAS, motor vehicles are among the largest sources of GHGs and criteria air pollutants that adversely affect the health and well-being of our citizens in all of our states; and

WHEREAS, providing transportation alternatives such as ZEVs will help improve air quality, reduce the use of petroleum-based fuels in the transportation sector, protect consumers against volatile energy prices, and support the growth of jobs, businesses and services in a clean energy economy; and

WHEREAS, an increasing variety of vehicles that operate on hydrogen and low-cost electricity are commercially available and have the potential to significantly reduce emissions of criteria pollutants and GHGs, enhance consumer choice, and allow for home fueling; and



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- Plan allocates 15% (max. allowable) of settlement funds to light-duty EVSE
- Level 2
  - NYSERDA Charge Ready NY
- DCFC
  - NYSERDA DCFC Regional Economic Development Councils (statewide; 3 funding rounds)
  - NYPA – Jamestown BPU (4 DCFC)

# NYS Incentive Programs

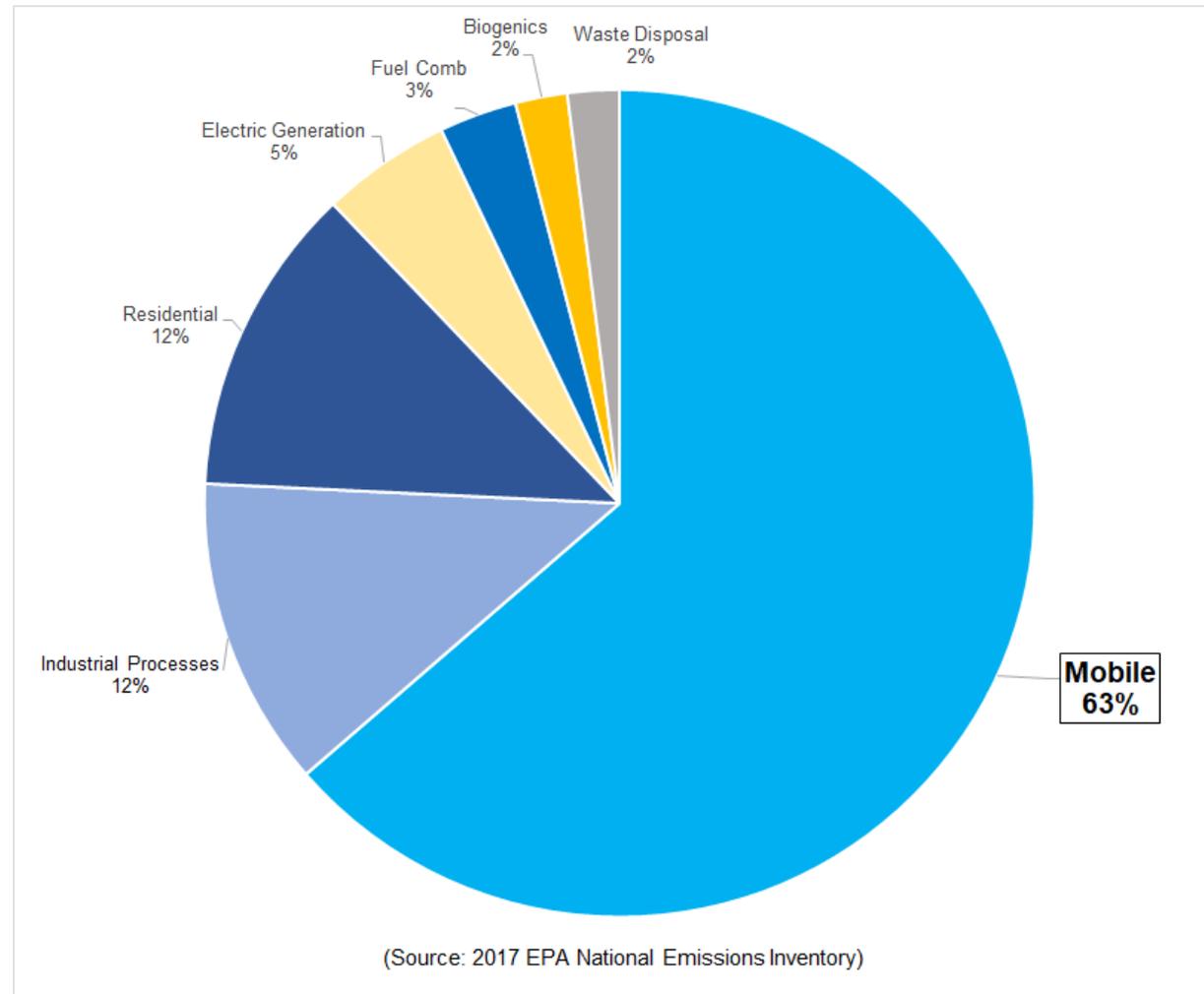
- Support development of DCFC infrastructure while utilization relatively low to accommodate increase EV deployment
- PSC Per Plug Incentive
  - Offset electric delivery cost
  - Annual declining per-plug incentive to qualifying public DCFC operators
- PSC Make Ready Program
  - Offset large portion of infrastructure costs associated with preparing site for EV charger installation
  - \$701M allocated to support make ready programs by NY Joint Utilities
  - \$206M must directly benefit disadvantaged communities

# NYS Incentive Programs Continued

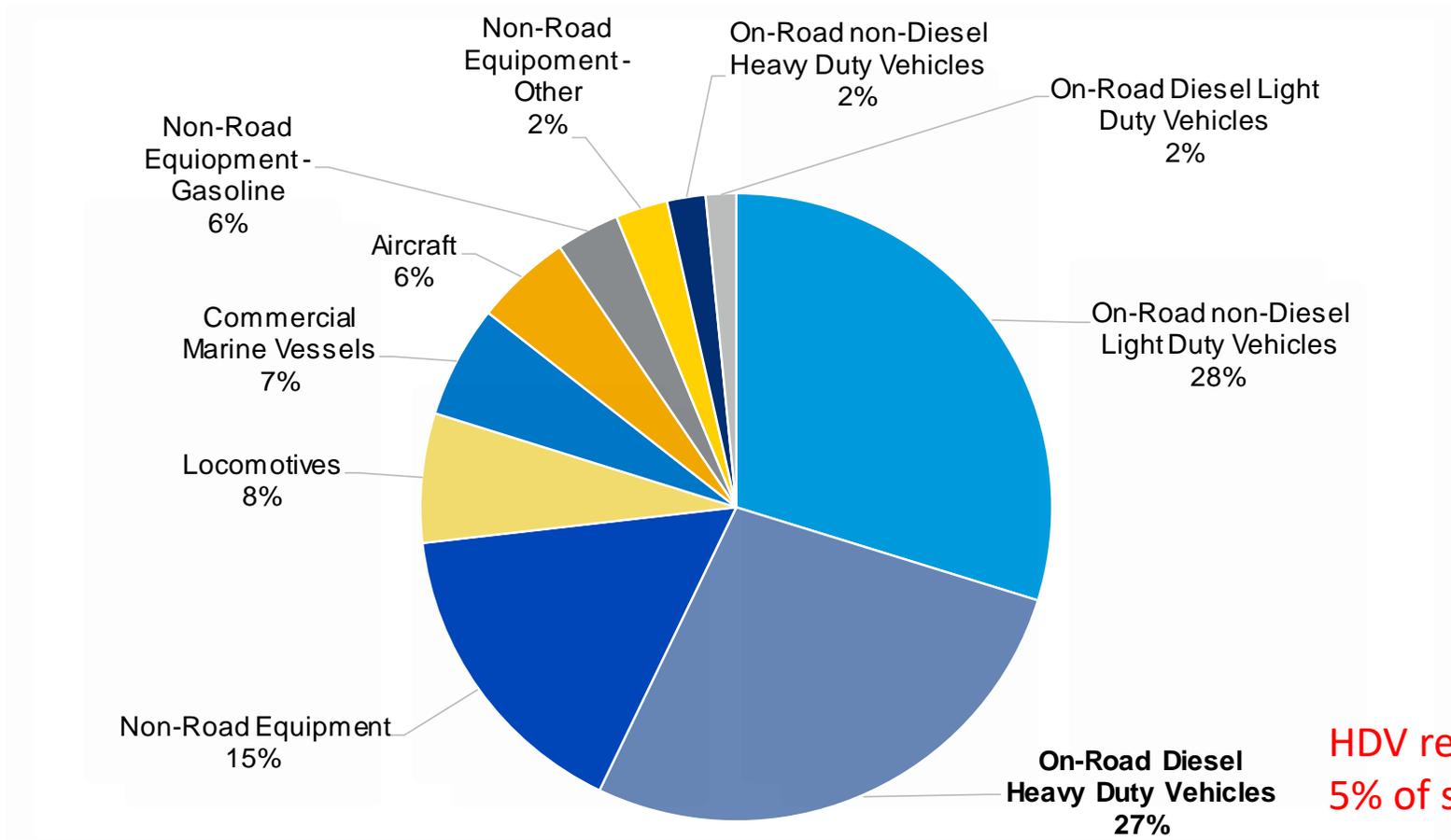
- NYSERDA Drive Clean Rebate Program
  - BEV and PHEV
  - Point of sale rebate through participating dealerships
  - Up to \$2,000
  - May be combined with federal ZEV rebate (up to \$7,500)
- DEC Municipal EV Rebate and Infrastructure Grant Programs
  - Open to all municipalities (county, city, town, or village)
  - Up to \$7,500 per vehicle for purchase or lease of eligible ZEV
  - Up to \$250,000 per site/\$500,000 per municipality to purchase/install eligible electric vehicle chargers or hydrogen fuel cell refueling equipment



## 2017 New York State NOx Emissions Inventory



# 2017 New York State NOx Emissions by Transportation Sector

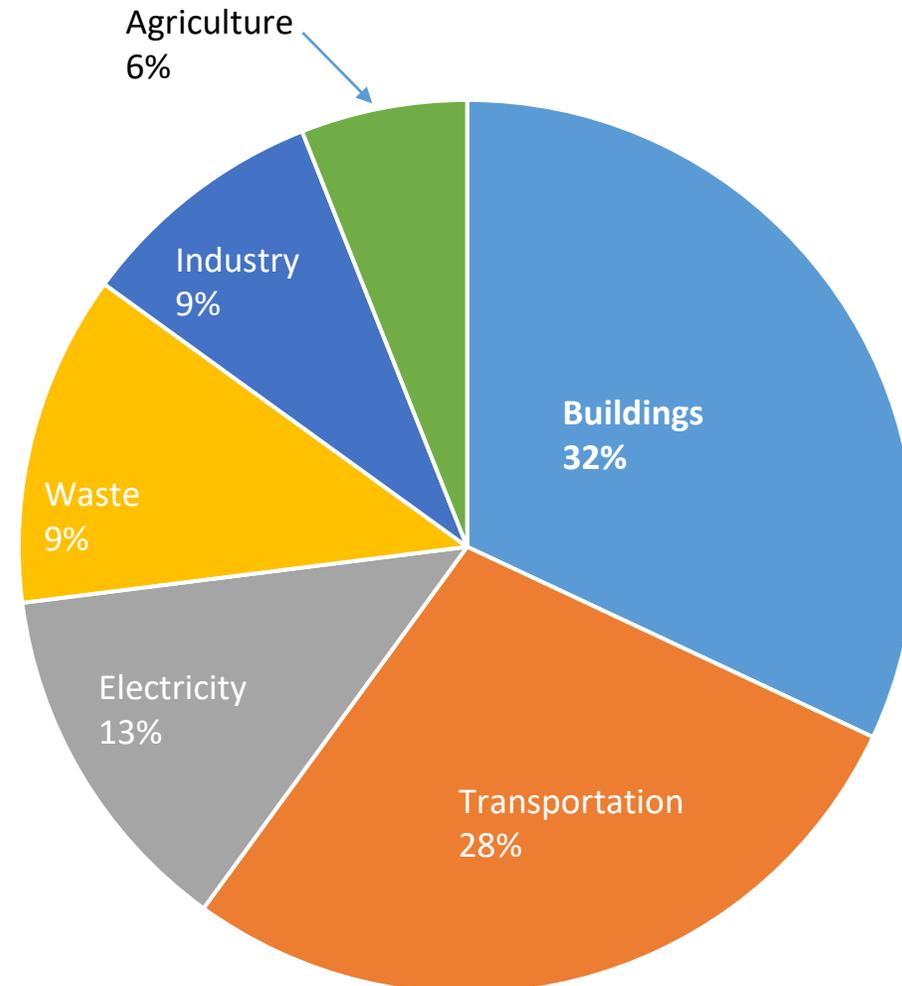


HDV represents approx. 5% of statewide fleet

(Source: 2017 EPA National Emissions Inventory)

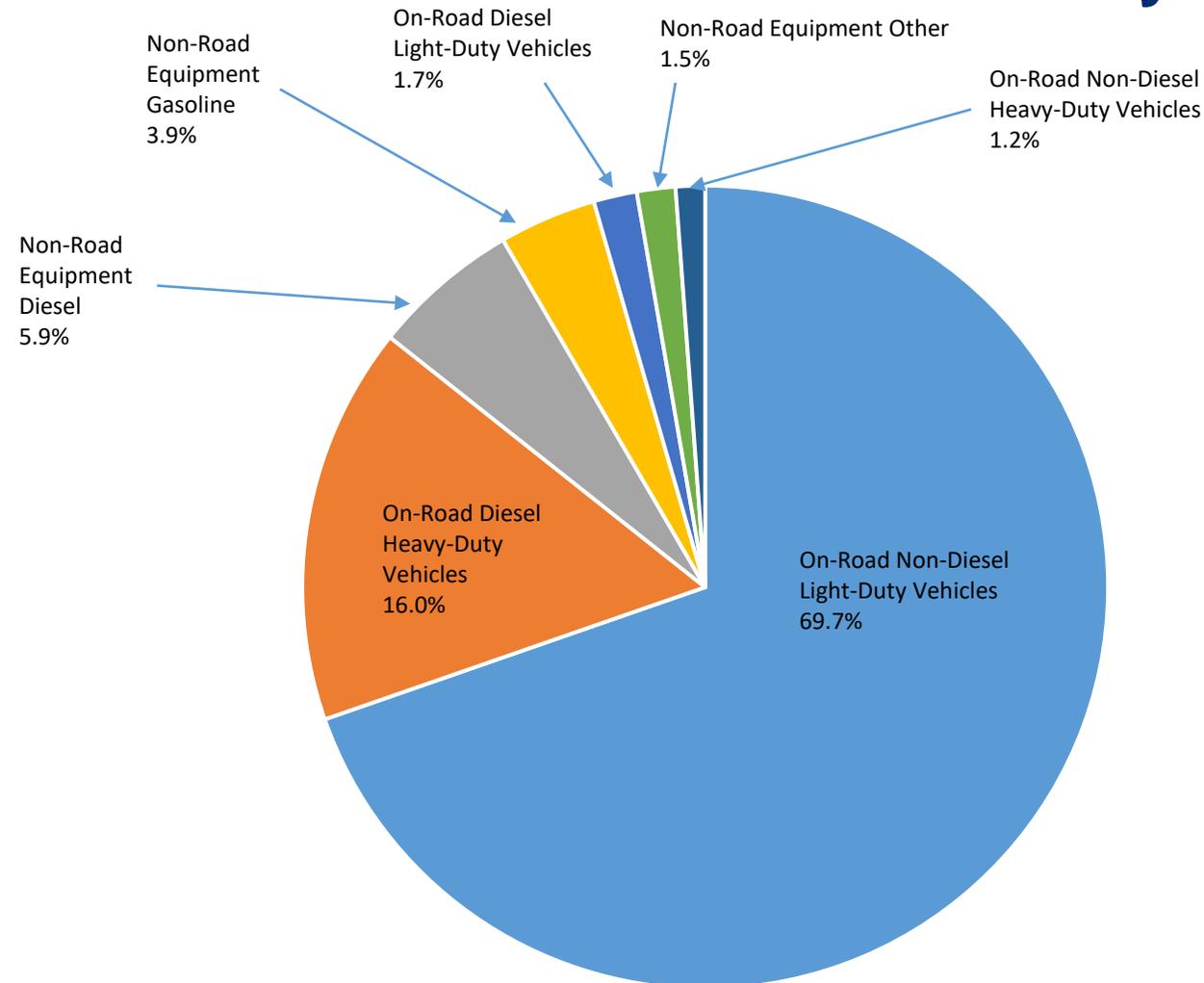


# New York State GHG Emissions by Sector



Note: Percentages shown comply with CLCPA requirements. UNFCC format results in transportation being largest source of GHG emissions in NY.

# 2017 New York State CO2 Emissions by Transportation Sector

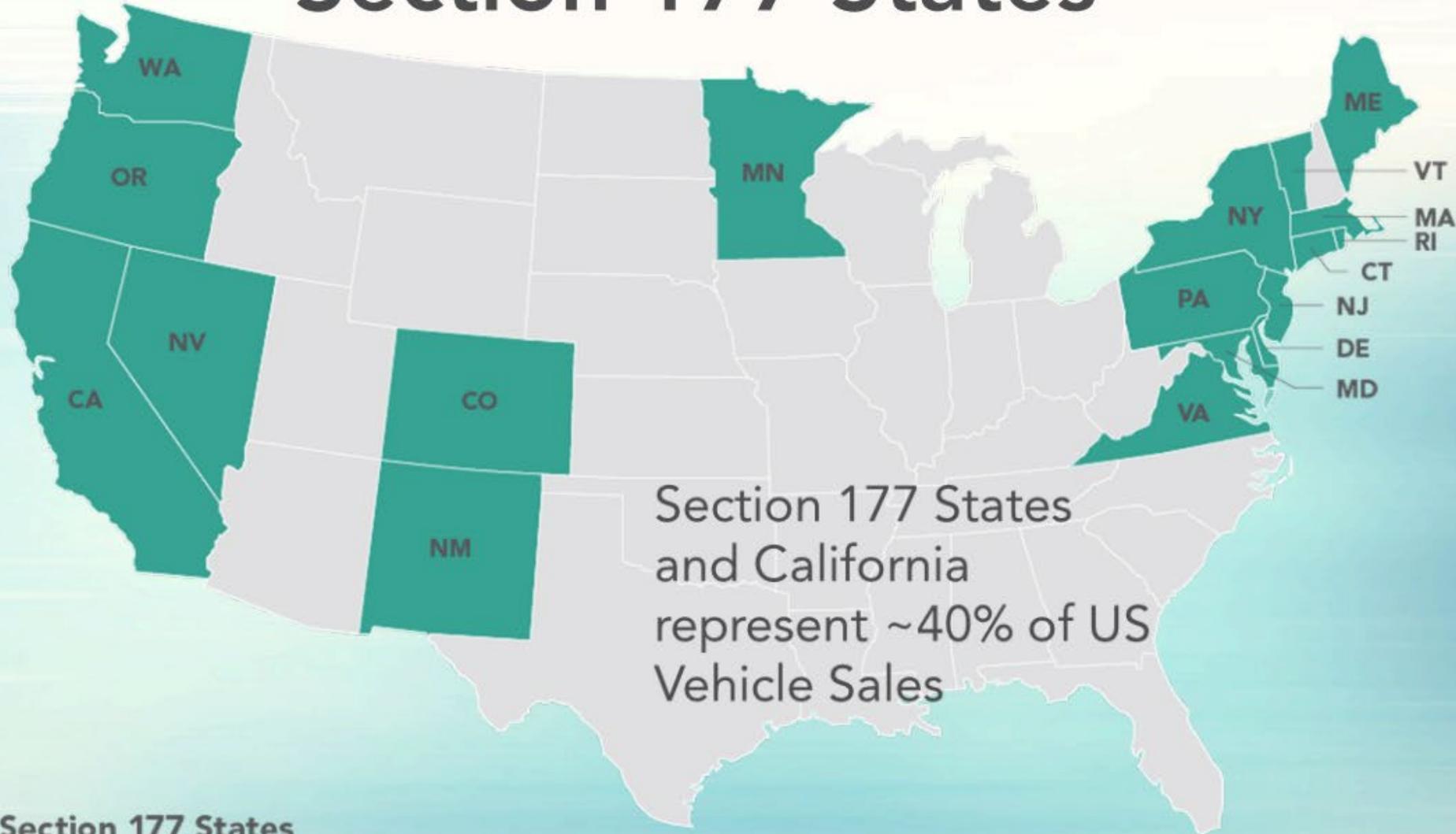


(Source: 2017 EPA National Emissions Inventory)

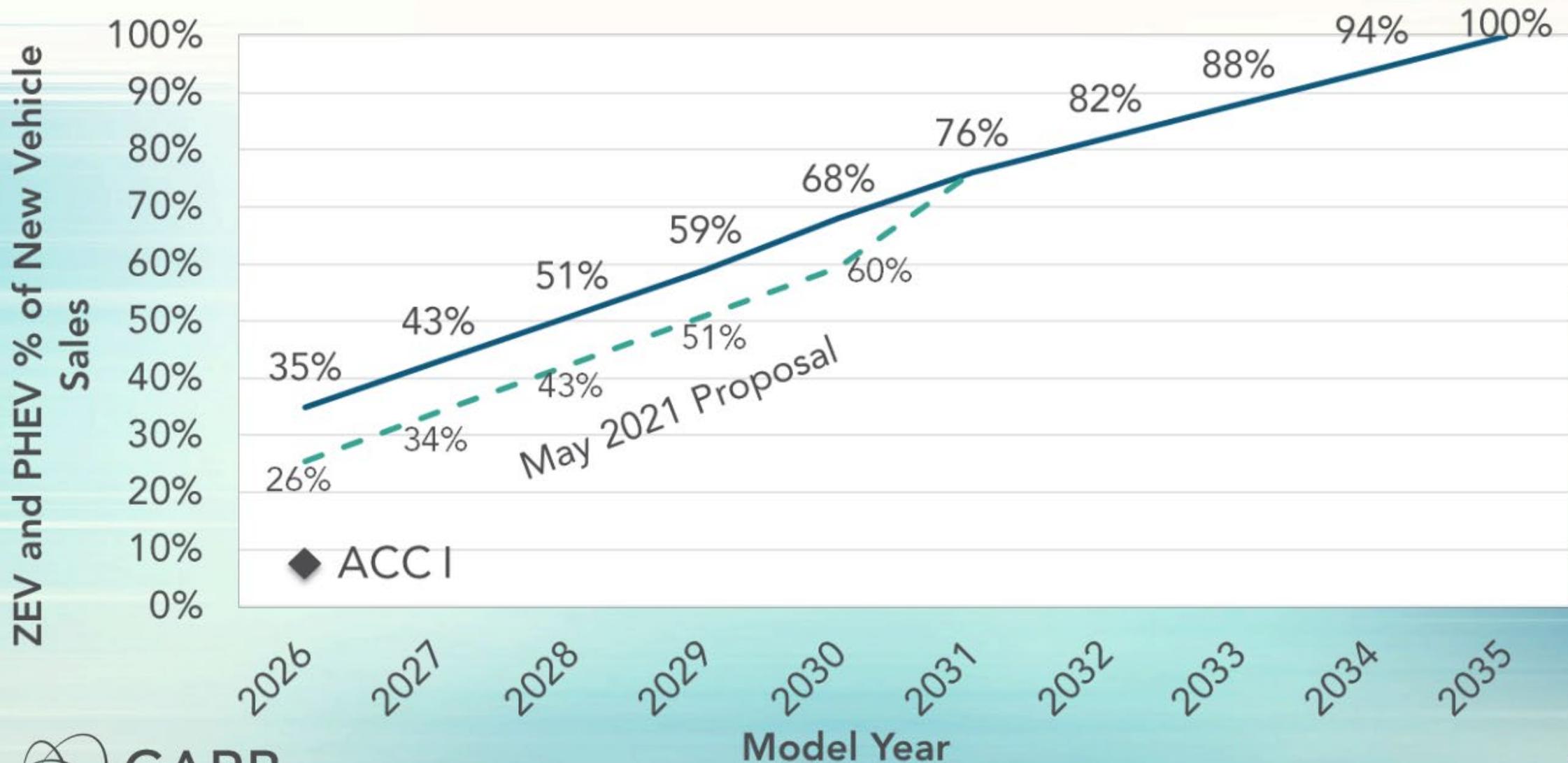
# Advanced Clean Cars II Standards

- ZEV standards
- LEV IV standards

# California is not alone: Section 177 States



# ACC II: ZEV Requirement Proposal



# Revised ZEV Regulation

- Revised credit calculation – single MY requirement mimicking structure of LEV & GHG calculations
- Simplified accounting – 1 value per vehicle
- Revised credit life – 5-year life
- Revised credit banking – can't simultaneously bank/spend

# ZEV Flexibilities

- Historical credits
- Early compliance credits
- Pooling
- FCEV travel
- Environmental Justice (EJ) Credit Programs

# Historical Credits

- ACC I ZEV & PHEV credits earned through MY 2025
- Credits converted to ACC II values
- Can only used to offset a compliance deficit
- Cumulative cap MY 2026-2030
  - Capped at 15% per year
  - 75% total
- Cumulative cap linked to EJ programs
  - Additional 0.5% of annual requirement to unlock 3 years of cumulative cap
  - Additional 0.5% in additional 1 or 2 years to unlock additional 1 or 2 years of cumulative cap
- Sunset after MY 2030

# Early Compliance Credits

- MY 2024-2025 ZEV & PHEV that meet ACC II standards
- Voluntarily deliver sales in excess of 7% of sales volume
- Offset compliance deficit MY 2026-2028
- Capped at 15% per year
- Sunset after MY 2028

# Pooling

- Maintains overall stringency while allowing for minor state to state variability where vehicles are delivered for sale
- Allows OEMs to transfer excess credits to state(s) where they may have compliance issues
- Single pool including CA, CO, CT, ME, MD, MA, MN, NV, NJ, NM, NY, OR, RI, VT, and VA
  - Previously under ACC I had Eastern and Western Pools
    - Eastern Pool – all Section 177 ZEV states east of Mississippi River
    - Western Pool – all Section 177 ZEV states west of Mississippi River excluding CA
- Declining cap starting at 25% MY 2026. Declines 5% per year
- Sunset after MY 2030

# Fuel Cell Electric Vehicle Travel

- FCEV not viable yet
- Lack of sufficient infrastructure in Section 177 states
- FCEV sale results in a proportional value in each Section 177 state
- Capped at 10% of annual ZEV requirement
- Sunsets 2030

# Environmental Justice Credit Programs

- **Community Car Share programs**
  - 0.50 value/ZEV; 0.40 value/PHEV
  - Vehicles sold at minimum 25% discount off MSRP to community mobility programs
- **Used EVs**
  - 0.25 value/ZEV; 0.20 value/PHEV w/capacity  $\geq$  6 passengers
  - Off-lease vehicles registered in NY in DACs
- **Lower MSRP EVs**
  - 0.10 value/ZEV or PHEV
  - PC MSRP < \$20,000
  - LDT MSRP < \$27,000
- Tied to historical credits
- Each Section 177 state will have to standup their own programs and may use state-specific definitions for EJ, DAC, etc.

# ZEV Assurance Measures

- Minimum range
  - 150 miles ZEV
  - 50 miles PHEV
- Durability
  - MY 2026-2029 minimum 70% range 10 years/150,000 miles
  - MY 2030+ minimum 80% range 10 years/150,000 miles
- Repair information access
- Battery labeling
- Charging convenience cord

# LEV IV standards

- Changes to fleet average requirements
- New standards for aggressive driving and cold-starts
- More stringent evaporative standards
- Better emission control for medium-duty vehicles

# LEV IV Fleet Average Standards

- Fleet average standard remains 0.030 g/mile NMOG+NO<sub>x</sub> MY 2026+
- Phase out ZEVs from the fleet average calculations
  - 50% ZEVs MY 2026
  - 25% ZEVs MY 2027
- 100% ICE vehicles must meet fleet average starting MY 2028
  - Prevents backsliding
- Remove the “dirtiest” certification bins
  - LEV160 (0.160 g/mi) sunsets MY 2025
  - ULEV125 (0.125 g/mi) sunsets MY 2028
- New, more stringent bins
  - New ULEV60 (0.060 g/mi), ULEV40 (0.040 g/mi), SULEV25 (0.025 g/mi) and SULEV15 (0.015 g/mi)



# Aggressive Driving & Cold-Start Standards

- New standards for aggressive driving
  - NMOG+NOx aggressive driving standards equivalent to urban driving standards
  - Reduce PM standard from 6 to 3 mg/mi
  - New PM standards phased in MY 2027-2030 at 25% per year
- New standards for cold-starts
  - Partial soak standards phased in
  - Early drive-away standards
    - ✓ Reduce from 20 sec. to 8 sec.
  - High-power cold-start emission standards for blended PHEVs

# Evaporative Emission Standards

- Reduce running loss standard from 0.05 to 0.01 g/mile
  - Phase in 30% 2026; 60% 2027; 100% 2028
- Minimize puff emissions during refueling
  - Sealed, non-integrated refueling canister only systems (NIRCOS)
  - Commonly installed on PHEVs
  - Carbon canisters often undersized

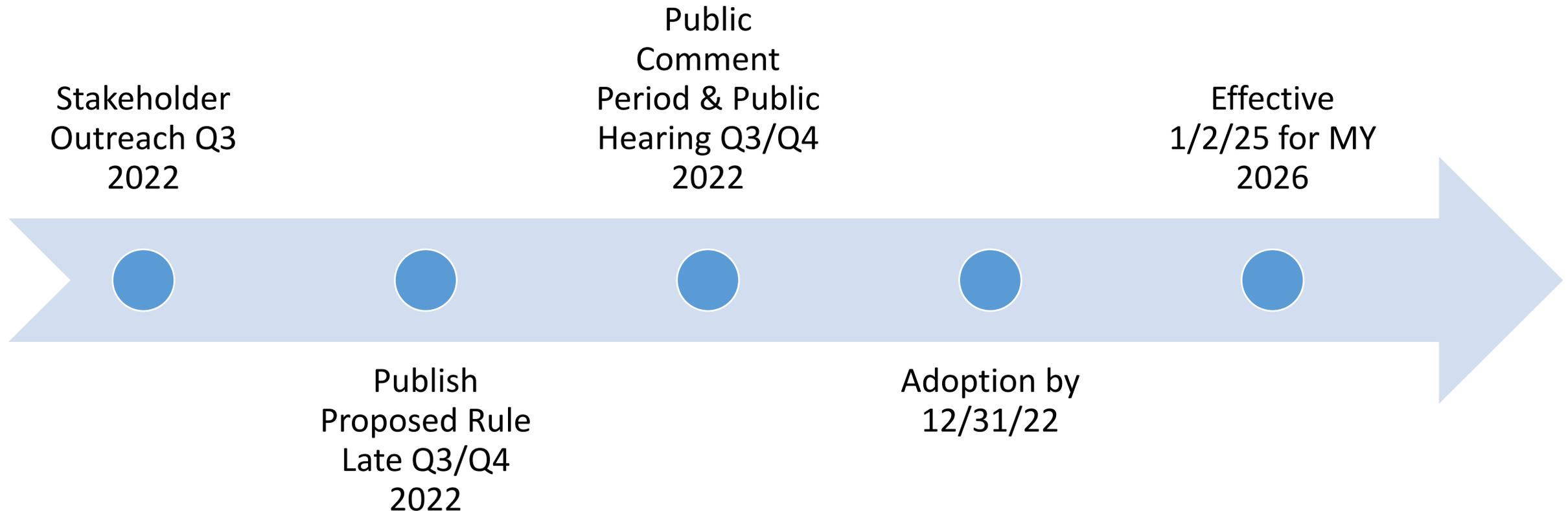


# Medium-Duty Vehicle Standards

- More stringent fleet average standards
  - Class 2b and Class 3 medium-duty vehicles
  - Remove ZEVs from the fleet average (same phase-in as LDV)
  - Remove dirtiest emission bins and add more stringent emission bins
    - ULEV250 (0.250 g/mi) and ULEV200 (0.200 g/mi) sunset MY 2027
    - New SULEV125 (0.125 g/mi), SULEV100 (0.100 g/mi), SULEV85 (0.085 g/mi) and SULEV75 (0.075 g/mi)
- Aggressive driving standards
  - New stand-alone standards for NMOG+NO<sub>x</sub>
  - Tighten PM emission standards
- Control emissions during towing
  - New standards during towing operation
  - Equivalent to ACT standards
  - Applicable to vehicles with tow capacity of 14,000 lb. or more GCWR

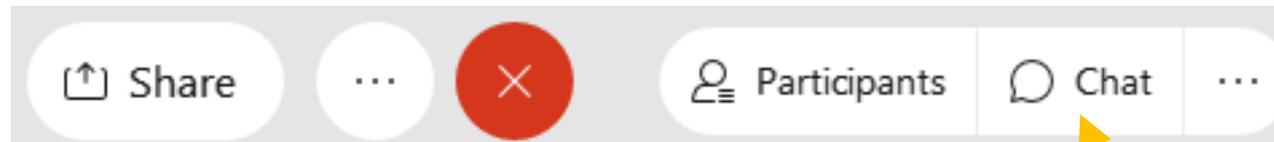


# Potential 218 Adoption Schedule



# Question and Answer

- Send questions/comments in the Chat box



Click to open  
Chat box

## DEC Panelists

- Jeff Marshall, NYS DEC
- James Clyne, NYS DEC

# Thank You

To get more information and updates, go to the DEC Website:

(Light-Duty ZEV MOU): <https://www.nescaum.org/documents/2018-zev-action-plan.pdf>

(NYS VW App D): <https://www.dec.ny.gov/chemical/109784.html>

**Stakeholder Comments** for possible New York adoption of California's ACC II Standards may be submitted to:

[name@dec.ny.gov](mailto:name@dec.ny.gov)

Contact us using the DEC email:

[air.regs@dec.ny.gov](mailto:air.regs@dec.ny.gov)