

Advanced Clean Cars II: Considerations for New Jersey

Peg Hanna

March 20, 2023





This meeting is for informational purposes only; the concepts and ideas presented and discussed do not reflect any final decision making.

As a courtesy to all, please turn off your microphone and camera.

If you have a question or would like to speak, please raise your hand.. Please wait to speak until you are called.

If we are unable to get to your question, please feel free to send your comments to njaimulesmobile@dep.nj.gov by April 15, 2023.



NEW JERSEY PACT Protecting Against Climate Threats

Climate Pollutant Reduction:

Strengthening air pollution rules to help reduce future greenhouse gas and other climate emissions by improving the State's greenhouse gas reporting and inventory system and reducing emissions of carbon dioxide and short-lived climate pollutants.

Disclaimer: Information presented is for discussion purposes only and does not reflect any final agency decision.

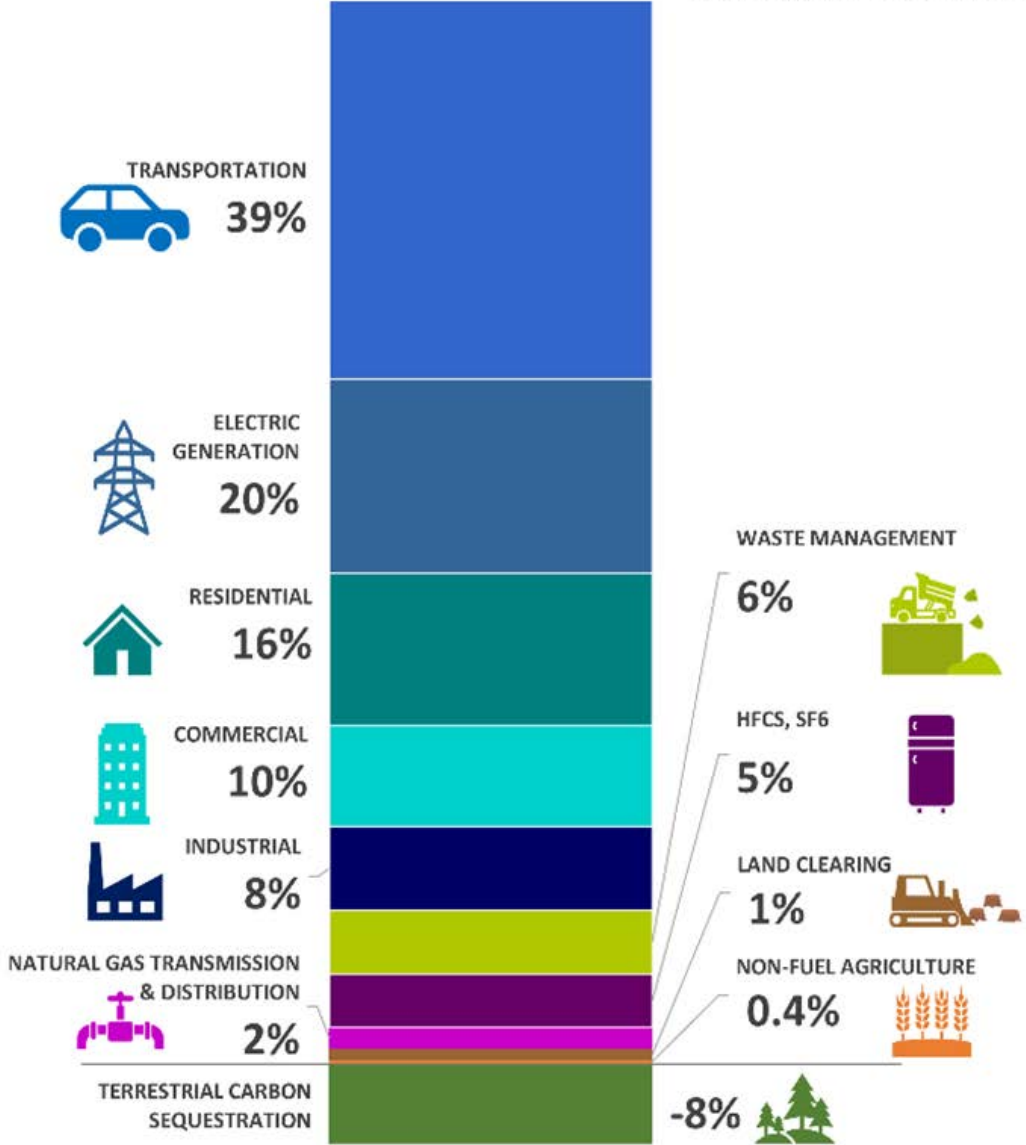
New Jersey's Air Quality





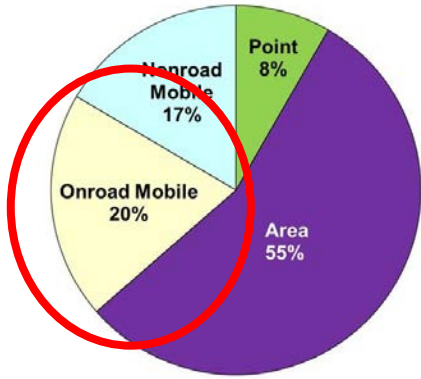
Transportation is the largest single source of climate pollution in New Jersey.

NJ GREENHOUSE GAS SOURCES & SINKS 2019

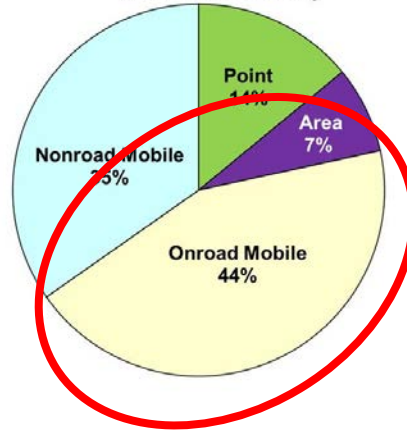


NJ Emissions Inventory

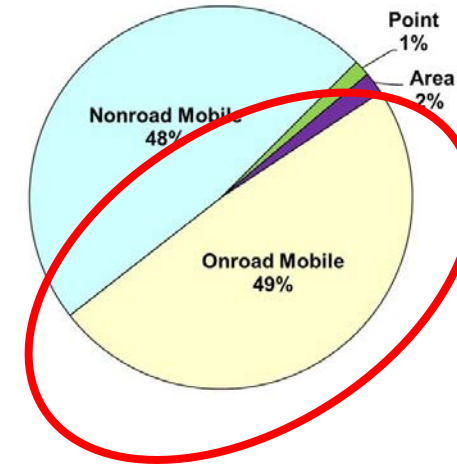
New Jersey 2017 Volatile Organic Compounds Emissions Inventory
Tons Per Summer Day



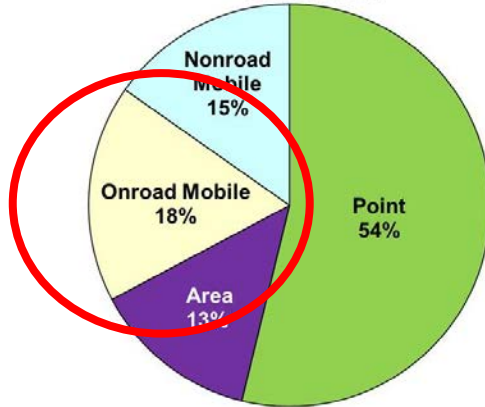
New Jersey 2017 Nitrogen Oxides Emissions Inventory
Tons Per Summer Day



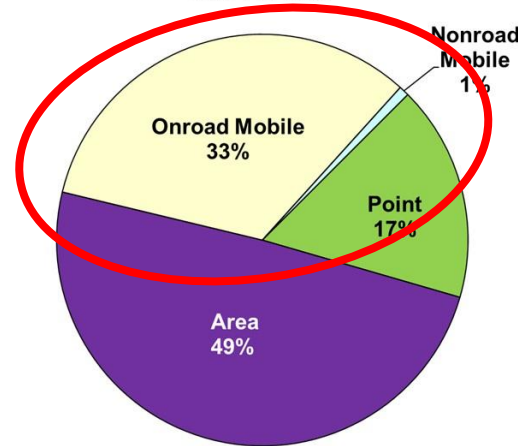
New Jersey 2017 Carbon Monoxide Emissions Inventory
Tons Per Summer Day



New Jersey 2017 Sulfur Dioxide Emissions Inventory
Tons Per Year



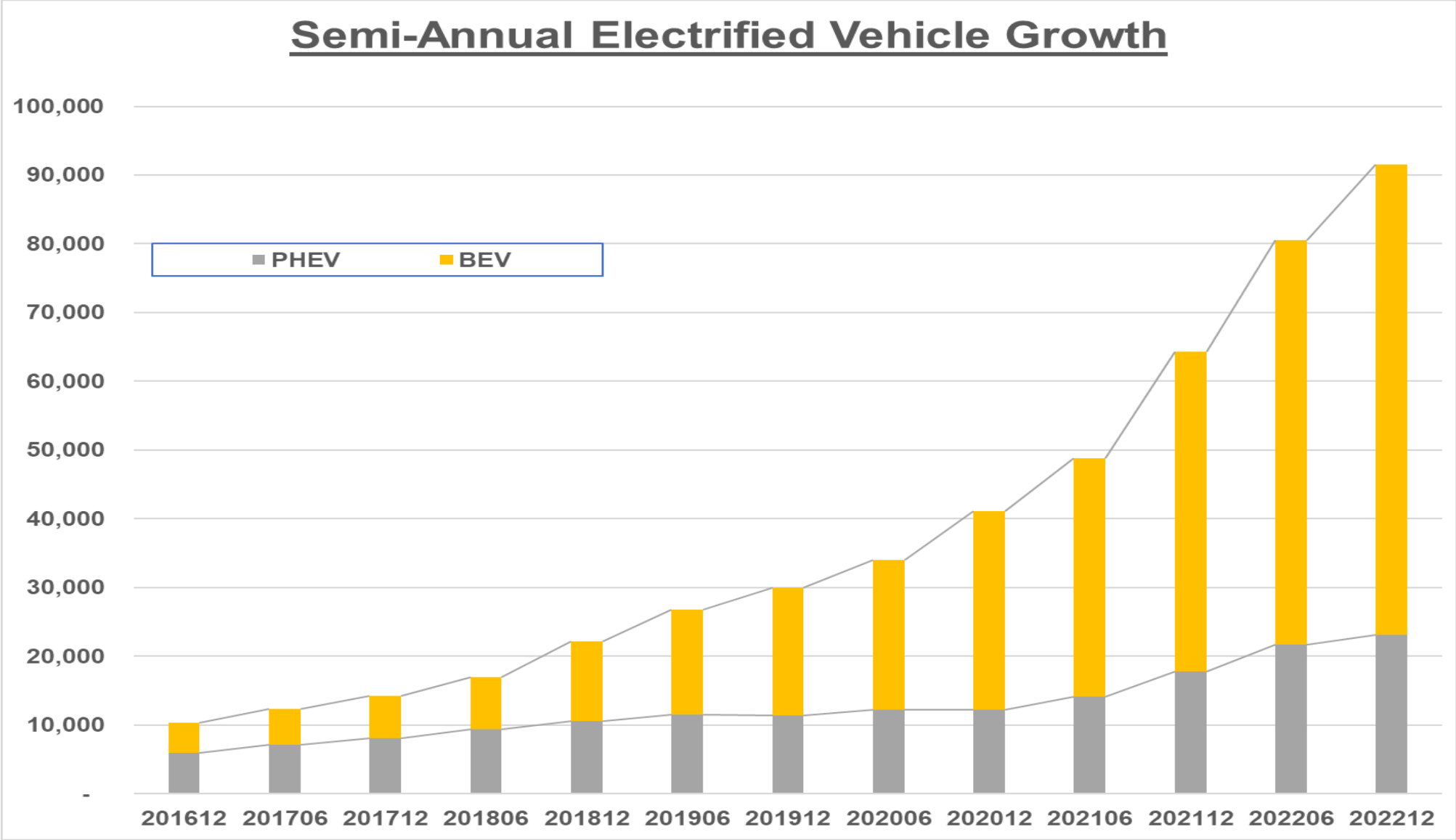
New Jersey 2017 Ammonia Emissions Inventory
Tons Per Year



What Steps Has New Jersey Taken to Prepare for EVs?



Electric Vehicle Growth in New Jersey Since 2016



Relevant EV Incentives

[NJDEP | Drive Green NJ |
Affordability/Incentives](#)

\$70.37 million awarded since 2019 to support adoption, access to, and charging of light duty EVs

Light-duty EVs

330K LD EVs

80,583 registered EVs as of June 2022, a 25% increase in 6 months

12,252 vehicles incentivized for private / personal use

1000 L2 locations

655 L2 locations with 2690 chargers and 4901 ports

Utilities will fund Make-Ready for over 6000 chargers

200 DCFC locations

91 locations with 181 chargers and 273 ports

Utilities will fund Make-Ready for over 1500 chargers

Alternative Fuel Corridor Designations

- FHWA approved NJ's Alternative Fuel Corridor designations for EV charging:
 - 759 miles of highways and segments, including the NJ Turnpike, AC Expressway, and Garden State Parkway.
- FHWA approved NJ's deployment plan for over \$100 million worth of fast charging stations.
 - Fast chargers are required every 50 miles, but funding will allow us to achieve every 25 miles.

NEW JERSEY'S NATIONAL ELECTRIC VEHICLE INFRASTRUCTURE (NEVI) DEPLOYMENT PLAN

August 1, 2022



Scope and Background



Advanced Clean Cars I

- CA adopted ACCI in 2012.
- Covers light-duty LEV, ZEV, and GHG requirements for model years 2015-2025.
- Ramps up to a 22 % annual ZEV requirement in 2025.

Advanced Clean Cars II

- CA adopted in 2022
- Refinements to LEV standards.
- ZEV program starts with 35% annual ZEV requirement in 2026, ramping up to 100% by 2035.
- Reclassifies vehicles eligible for ZEV values to include battery electric vehicles, hydrogen fuel cell vehicles, and, significantly, PHEVs that meet certain minimum criteria.
- Introduces EJ flexibilities for manufacturers to earn additional ZEV values.

Revolutionizing Passenger Vehicles

Continue emission reductions from combustion vehicles

LEV Regulations

Benefit equity and environmental justice

High-Quality ZEVs

Ensure ZEVs are full replacements for combustion vehicles

Maximize ZEV sales

ZEV Stringency

ACC II regulations keep combustion engine vehicles on the right path

- Require manufacturers to meet criteria emission fleet average requirements without including ZEVs
- New light-duty vehicle standards to reduce tailpipe emissions during aggressive driving and cold-starts
- More stringent evaporative emission standards
- Better emission control for medium-duty vehicles

ACC II regulations will result in improved ZEVs to reduce emissions

Range



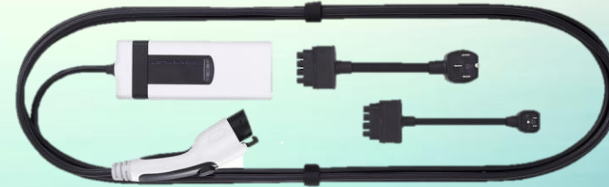
Added Durability



Warranties



Capable charging cords



Streamlined fast charging



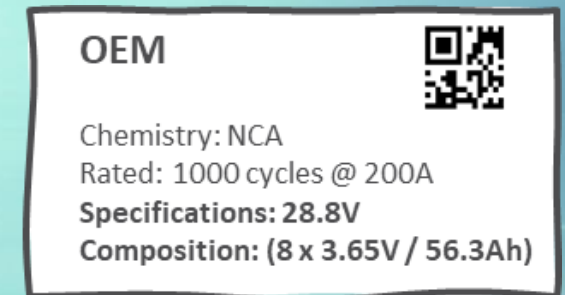
Standardized Data



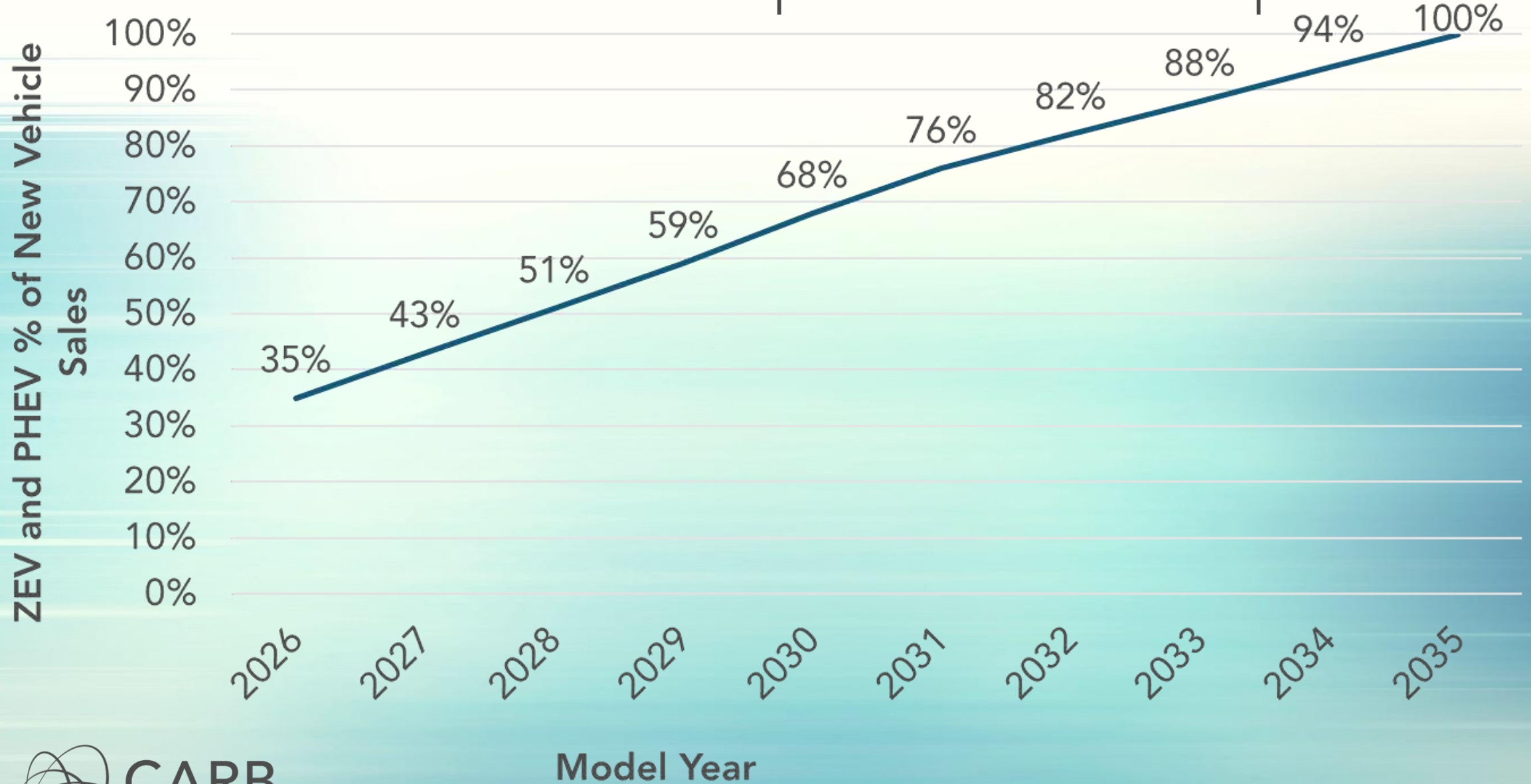
Repair Information



Battery Labeling

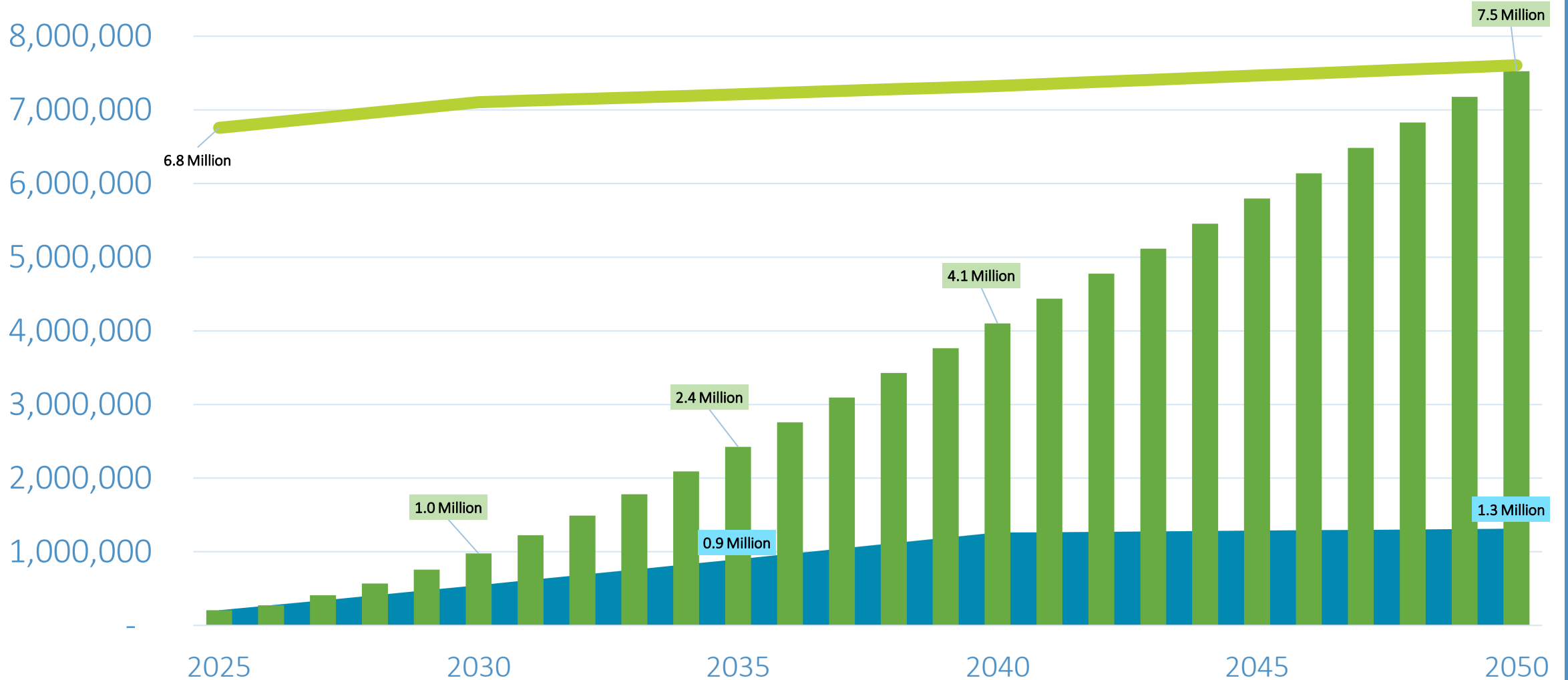


ACC II: ZEV Requirement Proposal



ACCII and Business-As-Usual Light-Duty ZEV Population Projections

Business-As-Usual ACC II Total Light-Duty Vehicle Population



Estimated Environmental Benefits From ACCII in New Jersey

Cumulative NO_x and greenhouse gas emission reductions

	NO _x	CO ₂ e
2030	910 tons	8.5 million metric tons
2040	9,083 tons	97.1 million metric tons
2050	26,179 tons	272.3 million metric tons

Non-EJ flexibilities

- Can use converted historical ZEV credit balances until 2030 (caps).
- Can pool - overcomply in one state and apply excess credits to another state – until 2030 (declining caps).
- Can earn credits for early compliance (15% cap)
- Can use some plug in EVs to meet goals (20% cap).
- Can use fuel cell vehicles to partly meet goals until 2030 (10% cap).
- Can bank and trade with other OEMs in participating Section 177 states.

EJ Flexibilities

1. Discounted ZEVs in community programs
 2. Lower MSRP ZEVs
 3. Used ZEVs to dealerships participating in financial assistance programs.
- EJ values earned in one state may not be transferred to another state.
 - Manufacturers can only use EJ allowances for 5% of their annual ZEV sales requirement and only until 2031.

EJ Flexibility 1: LMI community mobility pgms

- Manufacturers may earn an additional 0.5 value/ZEV or 0.4 value/PHEV by providing vehicles at a 25% MSRP discount to community-based clean mobility programs which:
 - Provides access to clean mobility other than vehicle ownership;
 - Serve a community in which >75% are disadvantaged or low income; and
 - Are implemented by a community organization or a public agency with support from a community org.
- Effective in CA for new MY 2024 -2031 vehicles.



EJ Flexibility 2: Low MSRP ZEVs

- Manufacturers may earn an additional 0.1 value/vehicle by selling ZEVs or PHEVs at lower MSRPs.
- \leq \$20,275 for passenger cars
- \leq \$26,670 for light-duty trucks
- MSRP values adjusted annually for inflation.
- Effective in CA for new MY 2026 through 2028 vehicles.

EJ Flexibility

3: Used ZEVs to dealerships with financial assistance programs

- Manufacturers earn an additional 0.10 value/vehicle by selling ZEVs or PHEVs at end-of-lease to dealerships participating in a financial assistance program (e.g., point of sale incentive).
 - An additional 0.15 value/vehicle is earned if the vehicle is sold to a qualifying lower income consumer.
- Effective in CA for MY 2026-2031 vehicles.
- Vehicles must have had an MSRP \leq \$40,000, adjusted annually, when new.



EJ Flexibilities – an example

- Average annual NJ sales = 42,000.
- Use 2030 as example. ZEV sales requirement is 68%.
 - 68% of 42,000 is 28,560 ZEVs.
- Use of EJ values is capped at 5% of sales requirement.
 - 5% of 28,560 is 1,428 ZEV values.
- Under Option 1, Community Mobility Programs, EJ values are earned at 0.5 extra value per ZEV.
- By selling 952 vehicles to the Program, an OEM could max out their allowance of 1,428 ZEV values.
- Other EJ flexibilities provide fewer values.

General Questions



Discussion questions for Enviro & EJ focus group

- *EJ Flexibility 1: LMI community mobility programs*
 - Is this flexibility appealing to you? Elaborate on pros and cons.
 - What is needed to get clean mobility programs started in areas that don't have them (education, funding, charging stations, utility upgrades, etc.)? Please be specific.
 - Are there existing clean mobility programs that are successful & if so, what makes them successful?
 - How can clean mobility programs be better publicized or otherwise improved to make them more effective?

**Discussion
questions for
Enviro & EJ
focus group**

*EJ Flexibility 2: Low
MSRP ZEVs*

Discussion questions for Enviro & EJ focus group

*EJ Flexibility 3: Off lease ZEVs
used in financial assistance
programs at dealerships*

- Is this flexibility appealing to you? Elaborate on pros and cons.
- Would NJ's cash on the hood program (ChargeUp NJ) be a useful starting point?

www.state.nj.us/dep/njpact

www.drivegreen.nj.gov

[Send additional comments or questions to njairrulesmobile@dep.nj.gov](mailto:njairrulesmobile@dep.nj.gov) by April 15, 2023



Thank you!

NJDEP

Air Monitoring and Mobile Sources