

Advanced Clean Cars II: Considerations for New Jersey

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March 14, 2023



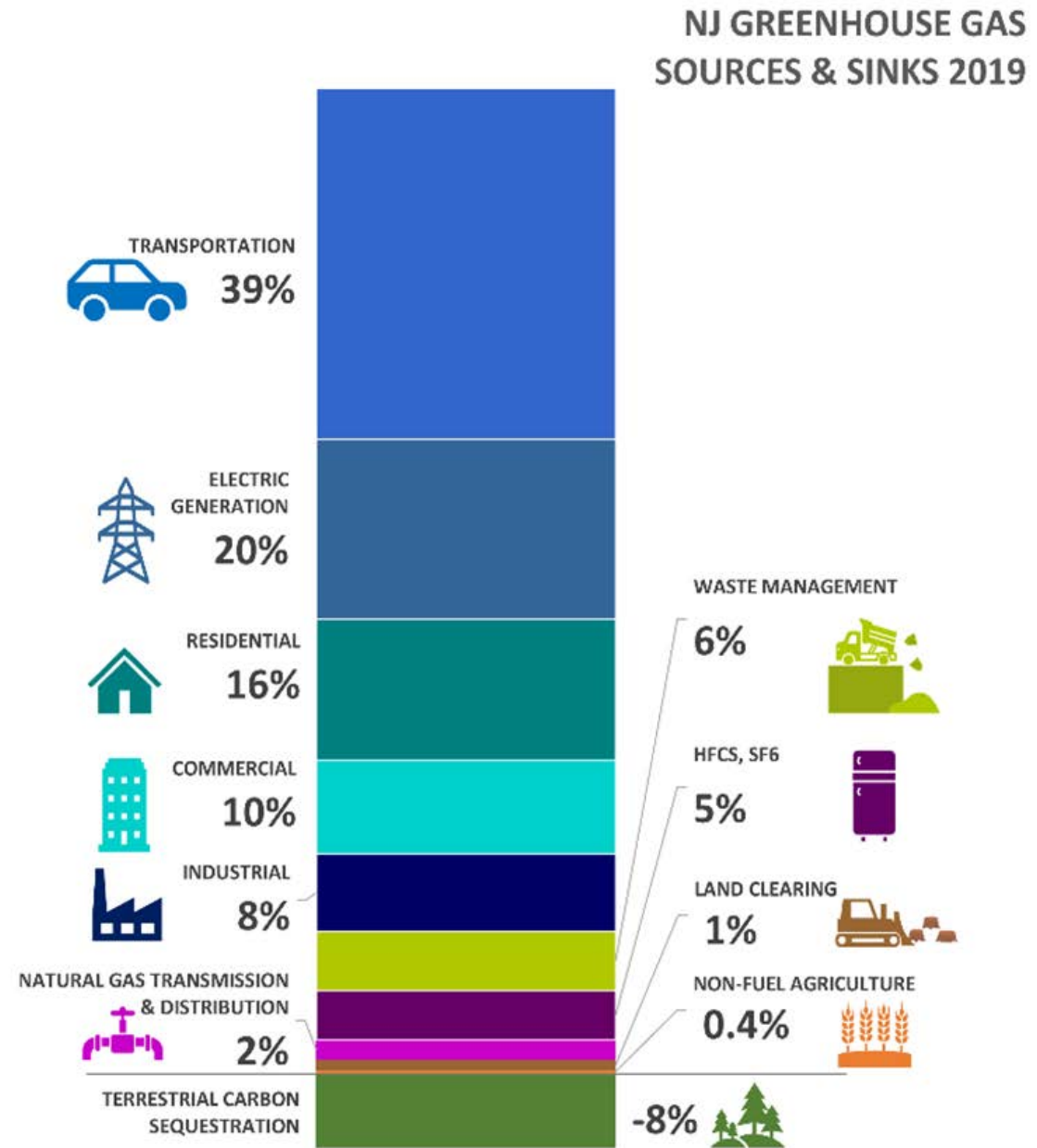
NEW JERSEY PACT Protecting Against Climate Threats

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.

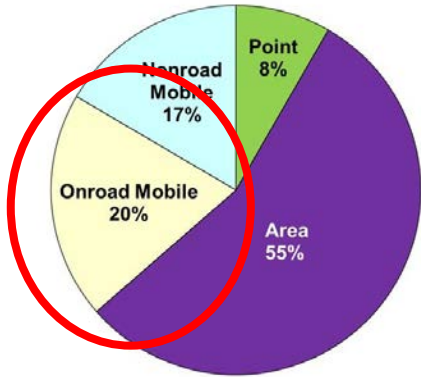
Disclaimer: Information presented is for discussion purposes only and does not reflect any final agency decision.

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

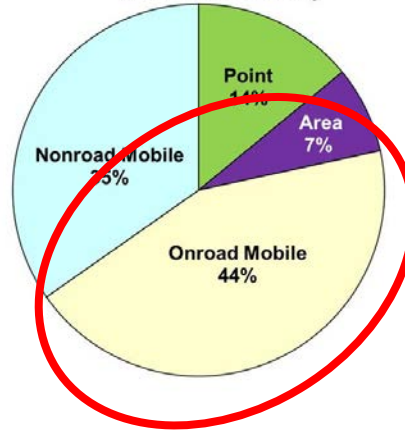


NJ Emissions Inventory

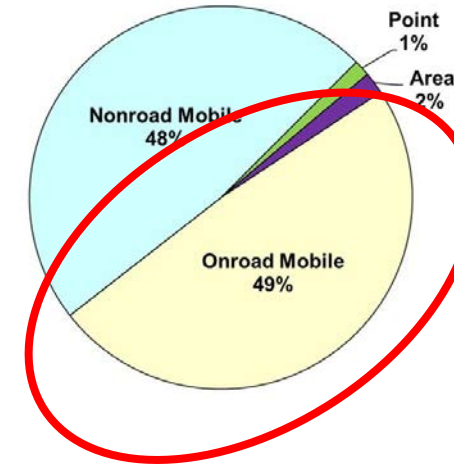
New Jersey 2017 Volatile Organic Compounds
Emissions Inventory
Tons Per Summer Day



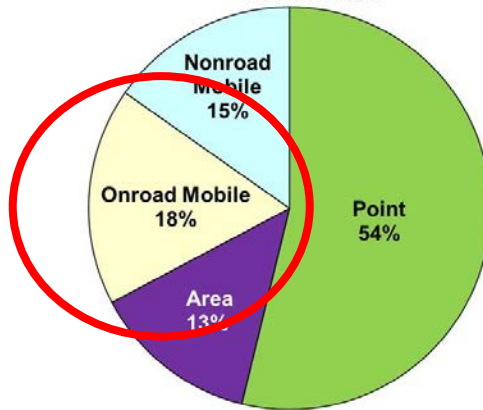
New Jersey 2017 Nitrogen Oxides
Emissions Inventory
Tons Per Summer Day



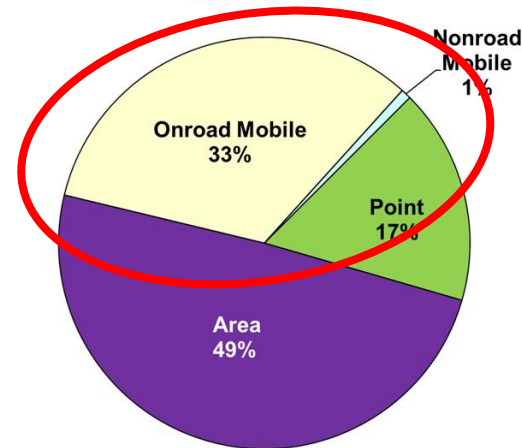
New Jersey 2017
Carbon Monoxide Emissions Inventory
Tons Per Summer Day



New Jersey 2017 Sulfur Dioxide
Emissions Inventory
Tons Per Year



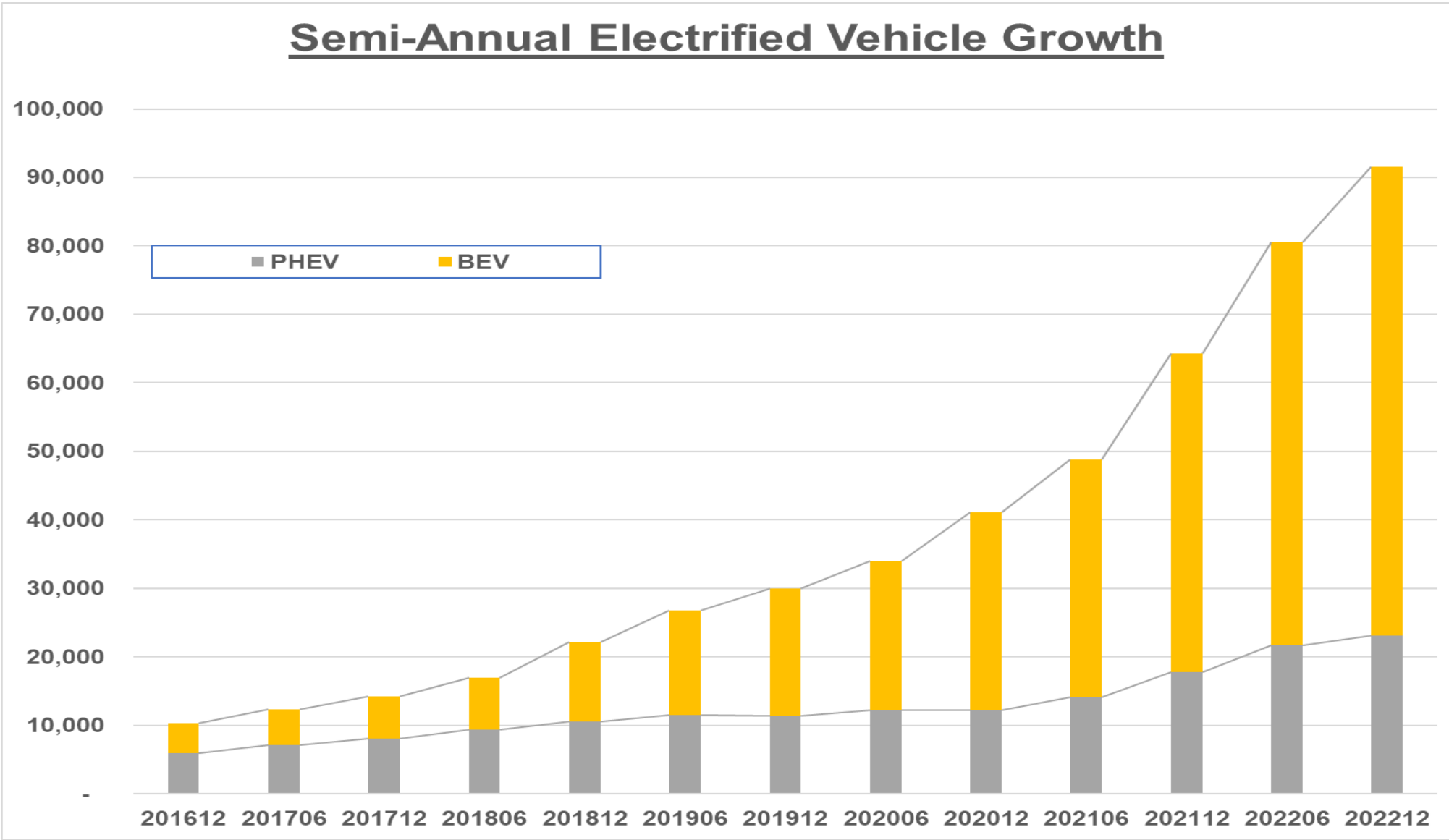
New Jersey 2017 Ammonia
Emissions Inventory
Tons Per Year



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

NJDEP

- ZEV sales tax exemption
- It Pay\$ to Plug In –corridors, communities, MUD, workplace, fleet
- Emobility grants
- Drive Change. Drive Electric (consumer awareness)
- Ride & Drives (consumer experience)
- PlugStar (dealer education)

BPU

- Charge Up NJ (cash on the hood)
- EV charging at MUDs
- EV charging at tourist attractions
- Clean Fleet program (LD EVs and charging for govt)
- Utility EV charging and make ready programs

Federal tax credits

- Up to \$7500

Light-duty EVs

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



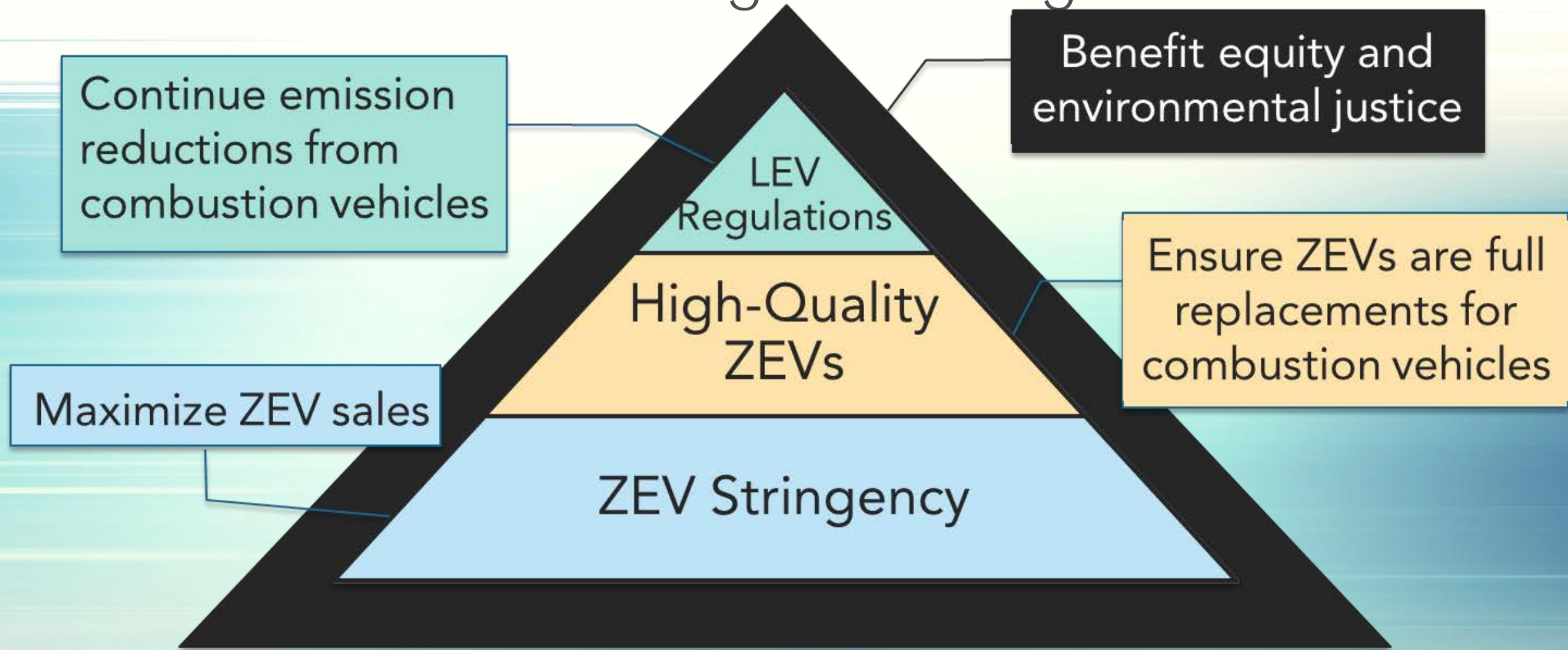
Advanced Clean Cars I

- CA adopted ACCI in 2012 for MY2015-2025.
- Covers light-duty LEV, ZEV, and GHG requirements.
- 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



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



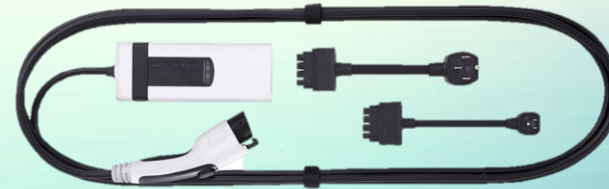
Added Durability



Warranties



Capable charging cords



Streamlined fast charging



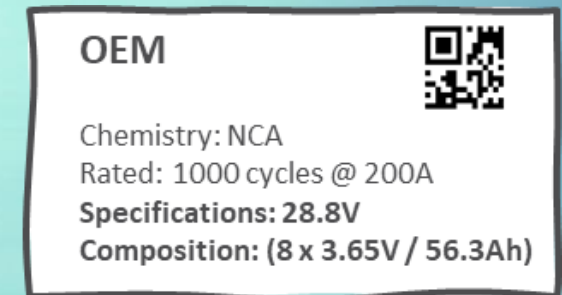
Standardized Data



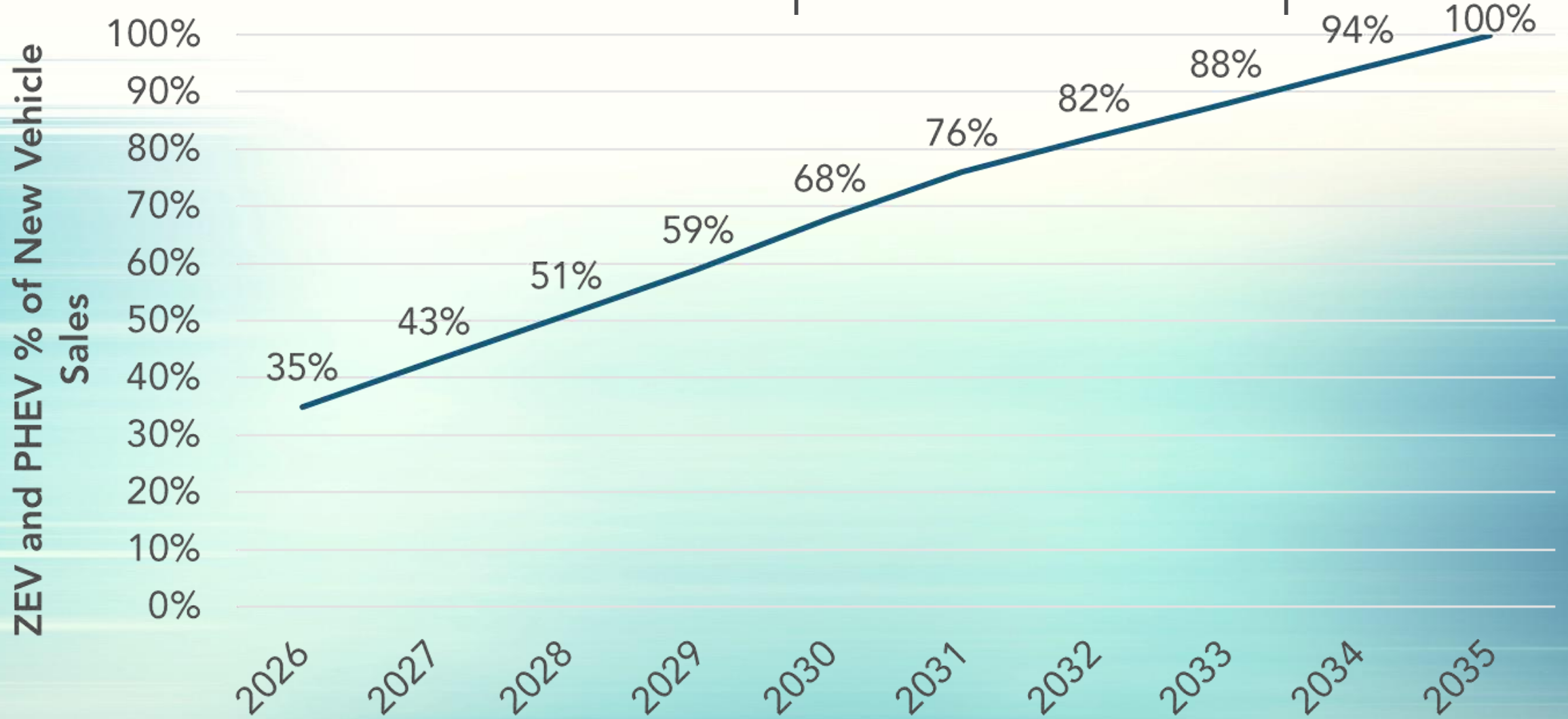
Repair Information



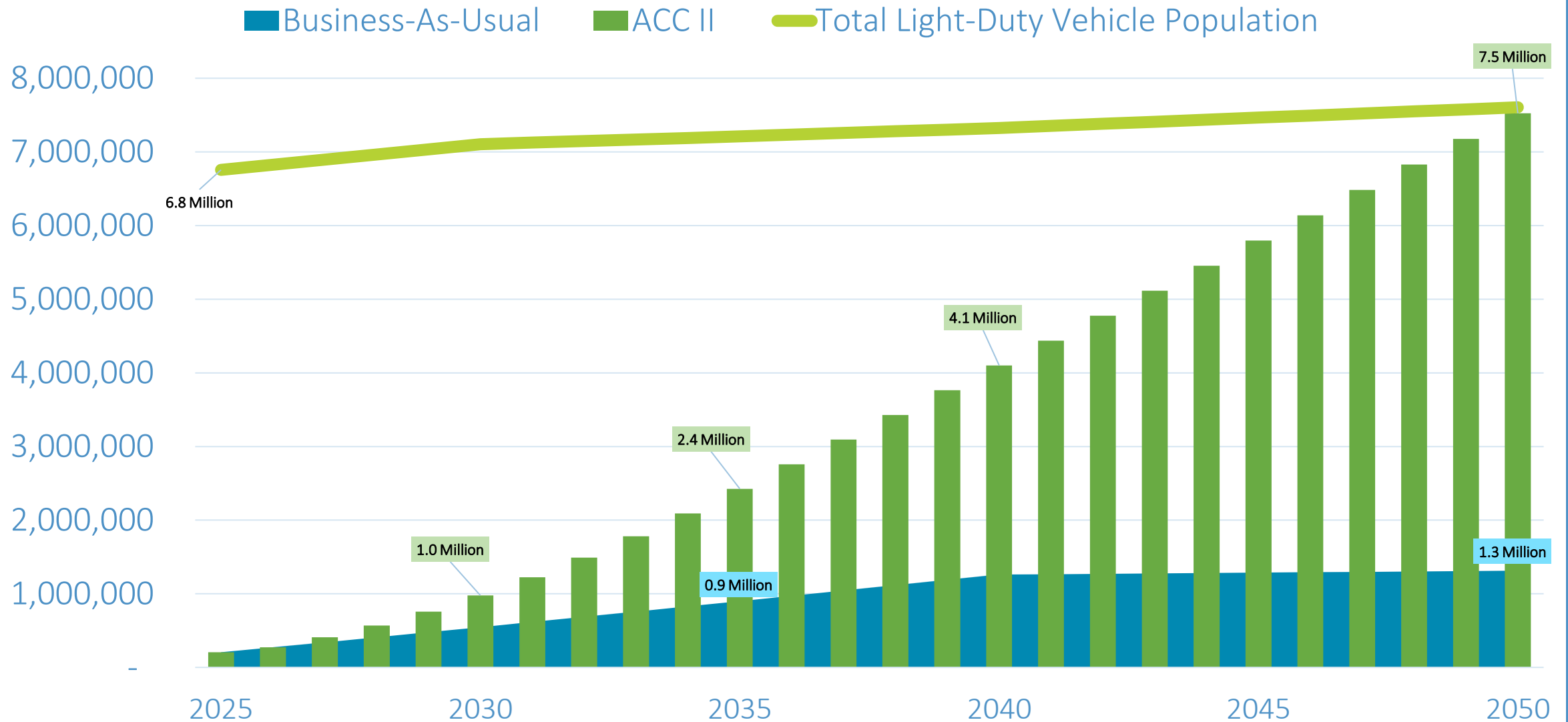
Battery Labeling



ACC II: ZEV Requirement Proposal



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



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.

Discussion Questions

- Should NJ propose to adopt the ACCII rule?
 - What are the concerns/hurdles with implementation and how can we mitigate those?

Discussion Questions

- How can the EJ flexibilities be structured/implemented to provide EJ communities with tangible benefits from transportation electrification?
- Are there any other ways, outside of the scope of this potential rulemaking, to increase availability and feasibility of EV ownership in EJ communities?

Discussion questions for Dealer focus group

EJ Flexibility 1: LMI community mobility programs

- Is this flexibility appealing to you? Elaborate on pros and cons.
- How many of your current model offerings would you discount to participate in this option?

Discussion questions for Dealer focus group

EJ Flexibility 2: Low MSRP ZEVs

- Is this flexibility appealing to you? Elaborate on pros and cons.
- How many of your current model offerings do you believe would be appropriate for this program?

Discussion questions for Dealer focus group

- *EJ Flexibility 3: Off lease ZEVS used in dealerships' financial assistance programs*
 - 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?
 - One element of this program requires that dealers be able to qualify car buyers as low income. Do you have any existing mechanism to do that and what is it based on (public assistance program eligibility, W2s, 1040s?)?

www.state.nj.us/dep/njpact

www.Drivegreen.nj.gov

**Send additional comments or questions to
njairrulesmobile@dep.nj.gov by April 15,
2023**



Thank you!

NJDEP

Air Monitoring and Mobile Sources