

# Advanced Clean Cars II Proposed Rule

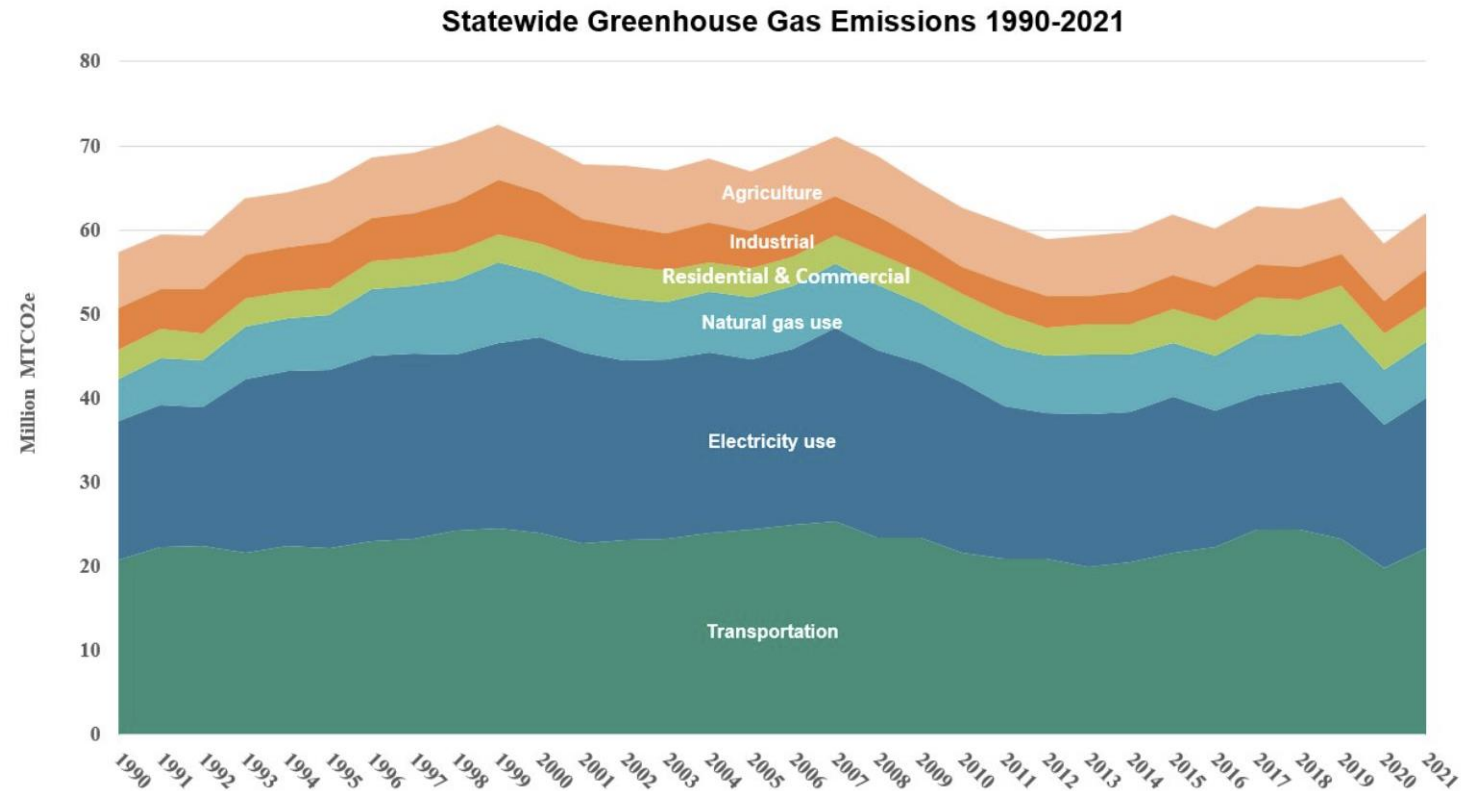
Action Item

Dec. 19, 2022

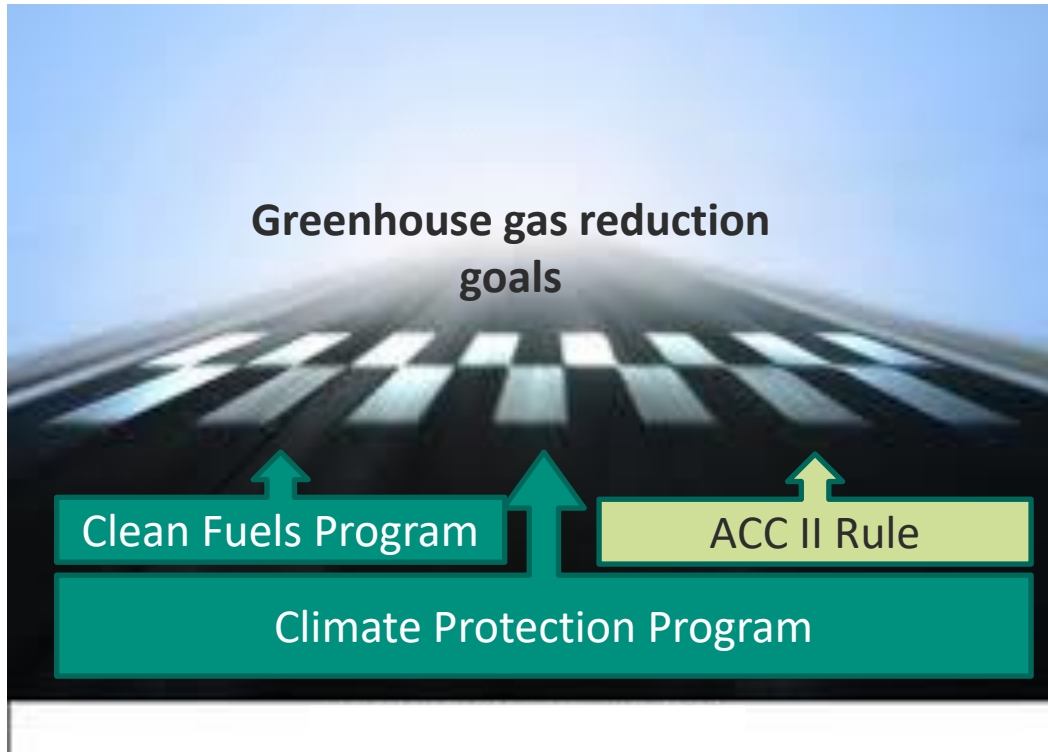
EQC Special Meeting

# Background

- Vehicles contribute air quality pollutant emissions: Particulate matter, CO, NO<sub>x</sub>, and greenhouse gases



# Greenhouse Gas (GHG) reductions



- These rules are a critical component to achieving state's GHG reduction goals
- Closely linked to other DEQ programs:
  - Climate Protection Program
  - Clean Fuels Program
  - Advanced Clean Trucks

# Background

- Clean Air Act allows California to set separate motor vehicle emission standards
- If states opt-in to California standards, must adopt them identically
- EQC adopted California's low emission vehicle rules in 2005 and has made subsequent updates since then, including the zero emission vehicle requirements



# Low Emission and Zero Emission Vehicle Program

- Low Emission Vehicle (LEV) Program - Reduce emissions of ozone-forming compounds, and air toxics by setting tailpipe emission standards on gasoline and diesel vehicles
- Zero Emission Vehicle (ZEV) Program – Requires zero emission vehicles, reducing greenhouse gas emissions
  - Includes battery electric vehicle (BEV) and plug-in hybrid electric vehicles (PHEV)
- Vehicle model years 2009-2015 and 2016 - 2025



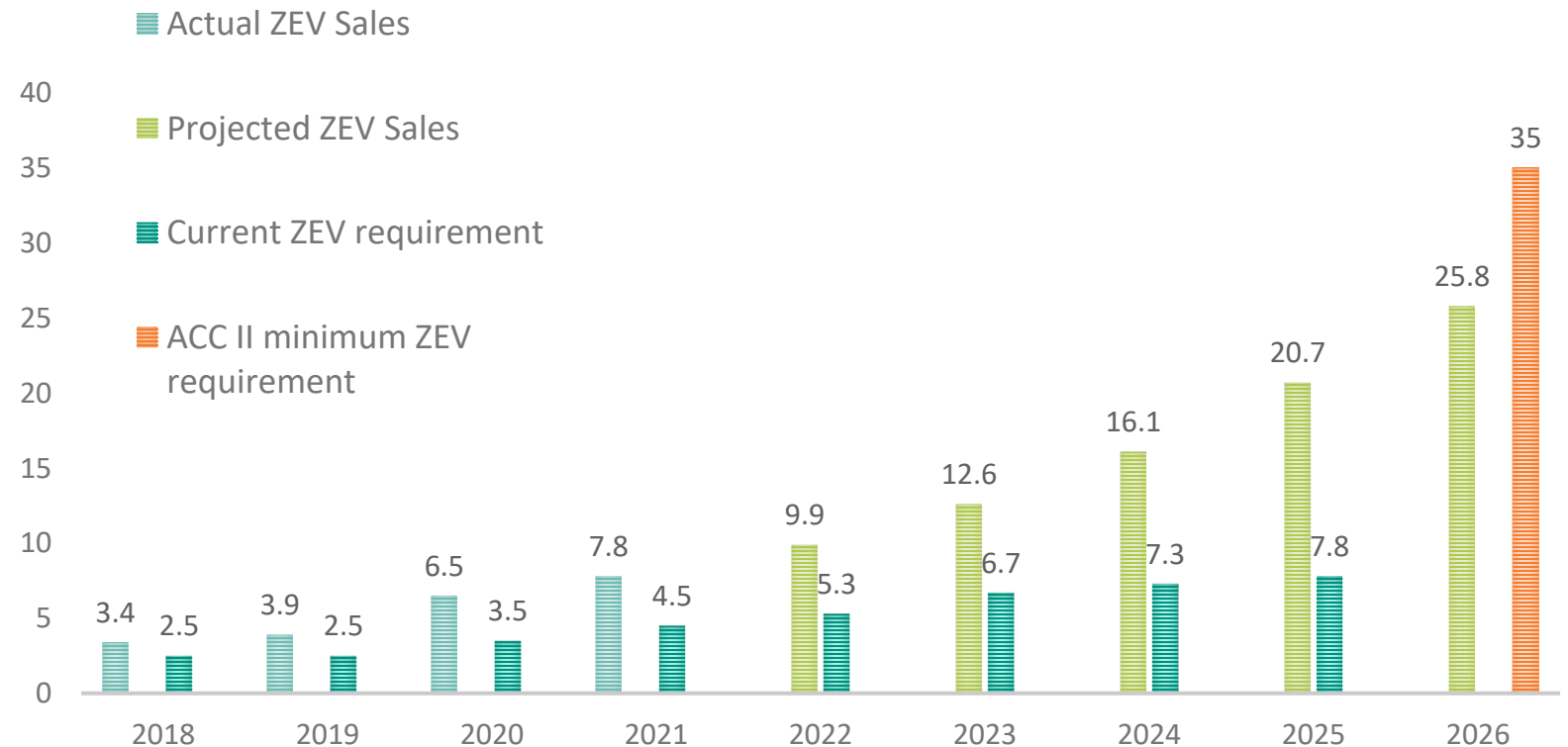
# Advanced Clean Cars (ACC) II Rule

## Proposed ACC II ZEV requirements

## Existing ZEV requirements (2018-2025 model year)

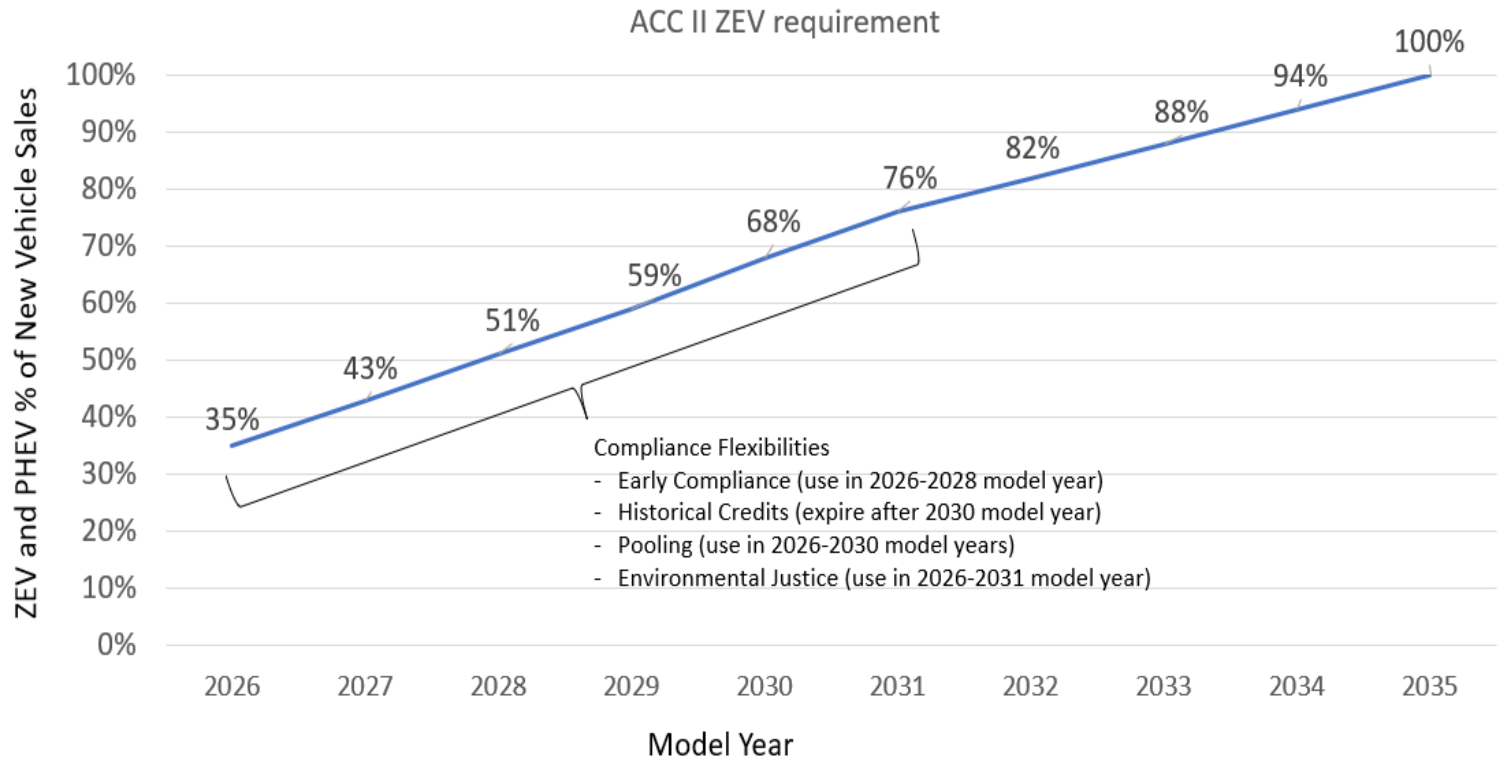
Model Year	ZEV* Percentage Requirement
2026	35%
2027	43%
2028	51%
2029	59%
2030	68%
2031	76%
2032	82%
2033	88%
2034	94%
2035	100%

ZEV = BEV and PHEV



# Achieving the standard - compliance flexibilities

- Historical Credits
  - Allow auto manufacturers to use banked credits already earned under the existing LEV/ZEV rules
- Pooled Credits
  - Auto manufacturers can “pool” across states
- Early Action Credits
  - Earn values for placing EVs in states prior to the 2026 requirements



# Compliance flexibilities - Environmental Justice values



Photo: The Greenlining Institute

- Provide compliance values to manufacturers who help increase affordable access to ZEV vehicles for priority communities
  - Discounted ZEVs in community-based clean mobility programs
  - Ensuring used ZEVs available to participating dealerships
  - Lower priced ZEVs



# Additional ZEV requirements



EVs must have a minimum electric range

- BEVs – 150 miles
- PHEVs – 50 miles

Durability – 80% of certified range value for 10 yr/150,000 mi

Warranties – for parts and battery state of health (maintain 70-80% of battery range for life of vehicle)

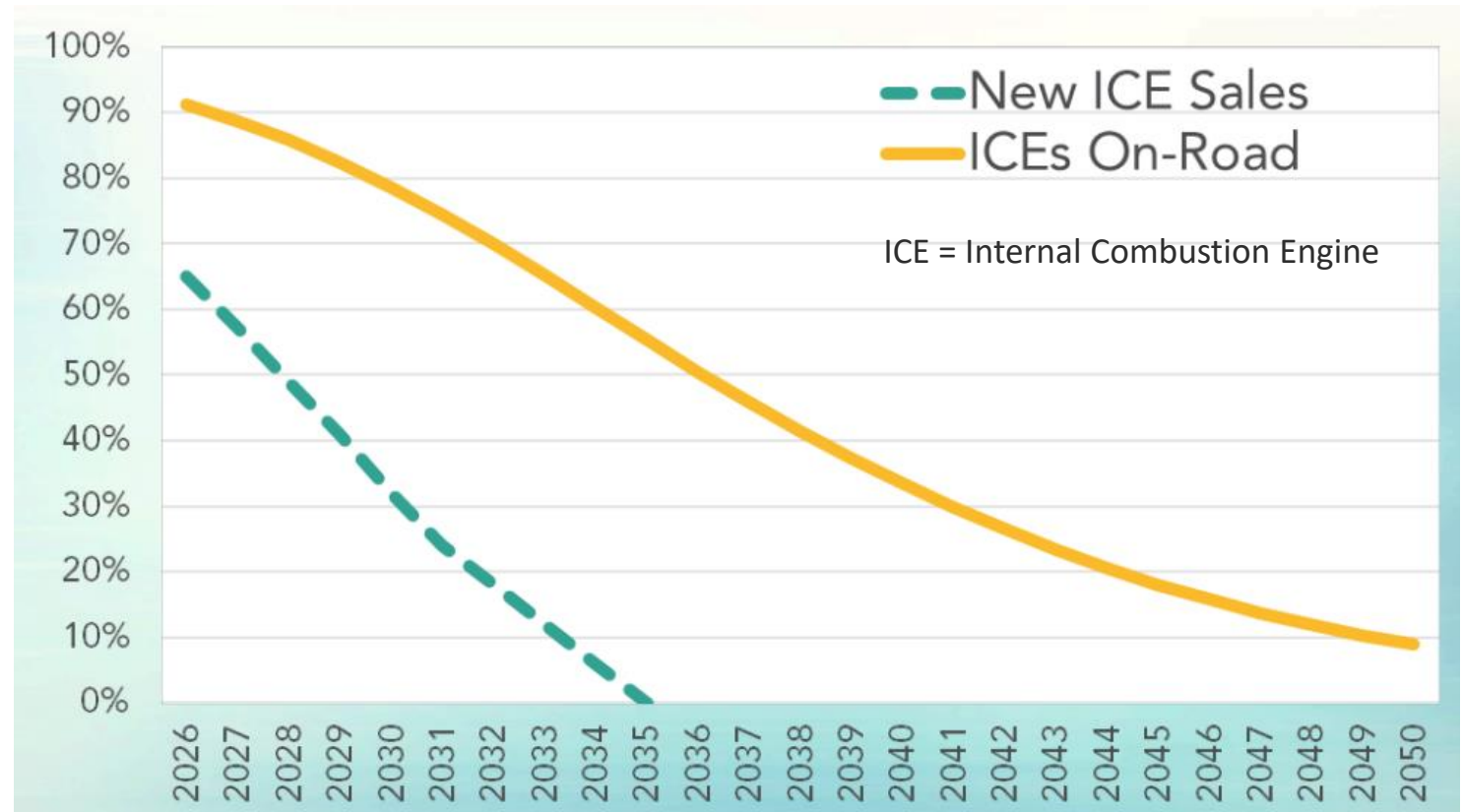
Charging cord capability (Level 1 and 2 capable)

Increased charger size capability (to allow for faster charging)

- Battery labeling
  - Address battery recycling

# ACC II - Low Emission Vehicle (LEV) rule changes

- Gasoline vehicles will continue to be part of the fleet beyond 2035
- Rule changes ensure 2026 – 2035 MY vehicles are as clean as possible
  - Includes more stringent emission standards for gasoline vehicles



Source: California Air Resources Board

# Fiscal and pollutant reduction benefits of the rule

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- Health benefits: \$5M - \$13M
  - 150 reduced mortality deaths
- CO<sub>2</sub> reduction of 53 MMT by 2040
- NOx reduction of 3,693 tons by 2035
- \$1.2B - \$5.2B in GHG emission reduction benefits

# Public involvement

- Early stakeholder involvement
  - One public workshop
  - Two Advisory Committee meetings
  - Stakeholder meetings
- Public comment period Sept. 28 to Oct. 21, 2022
  - Two virtual public hearings
  - Outreach via Facebook, Twitter, GovDelivery, coordinated with stakeholders to reach out to various affected communities
- Received 734 public comments



Image: Robert Churchill

# Public comment

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- Many comments in support
  - Reductions in GHG, air toxics, criteria pollutants
  - Public health benefits
  - Provides regulatory certainty for the vehicle market
  - Provides vehicle choice and ensures ZEVs will come to Oregon
  - Consumer protections, durability and warranty requirements

# Public comment: Key concerns

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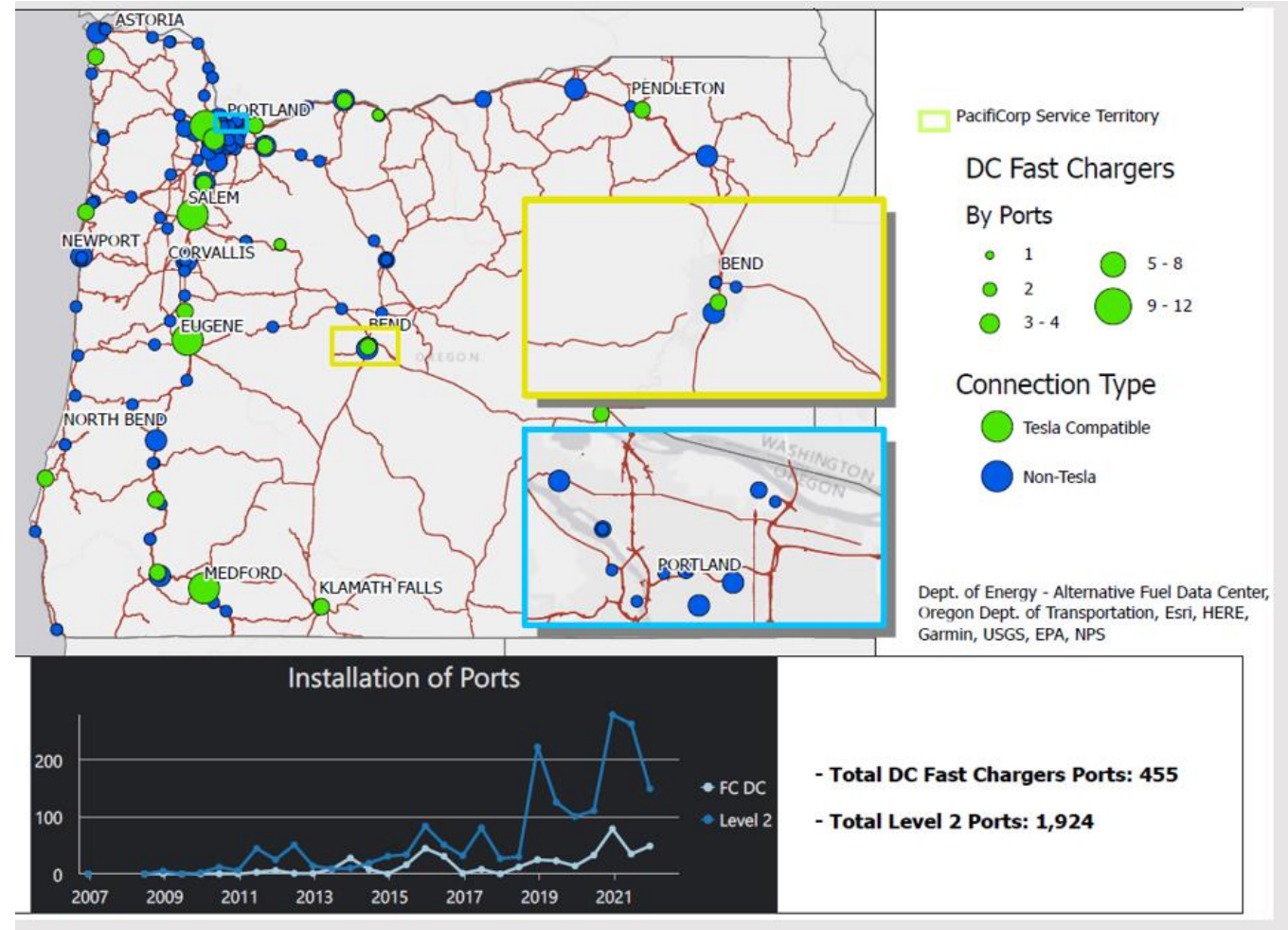
## Infrastructure

- Not ready or available to support transition
- Lack of charging network in rural areas and in multi-unit dwellings (MUD)



# Charging infrastructure to support EV adoption

- NEVI funding
  - \$100 million to support public charging along alternative fuel corridors (ODOT)
- ODOT's Transportation Electrification Infrastructure Needs Assessment (TEINA)
- Utility rebates to support home and business charging installations
- Building code requirements for new buildings to have EV charging capability



# Public comment: Key concerns



## Electric Grid Capacity and Resiliency

- Electrical grid handling greater EV charging
- Power outages and ability to charge EVs
- Cost of grid infrastructure



# Public comment: Key concerns

- Car availability / technology concerns - Charging capacity, range, durability
- Higher upfront cost to purchase or lease a ZEV
- Restriction of personal choice
- Considered a ban on gasoline vehicles



# Rule change

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## Program review

- Included rule language to conduct a program review in 2030
  - Opportunity to review program compliance through the 2029 model year
  - Assess how compliance flexibilities are utilized

# Summary

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- Foundational strategy to help Oregon achieve GHG reduction goals
- Increases vehicle choice – ensures manufacturers send new ZEVs to Oregon
- ZEVs are cheaper to own – providing savings for the consumer
- Includes environmental justice components to ensure equitable access to ZEVs

# DEQ Recommendation to EQC

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- DEQ recommends that the Environmental Quality Commission adopt the proposed rules as seen on pages 42 through 63 of the staff report for this item as part of Chapter 340 of the Oregon Administrative Rules.