Advanced Clean Cars II Proposed Rule
Advisory Committee Meeting

Aug. 30, 2022
Agenda

• Welcome and Introductions
• Advisory Committee ground rules
• Background and overview of Advanced Clean Cars II rules
• Draft rule review and discussion
• Environmental justice values – implementation
• Public comment period
• Next steps
Ground rules

• Prepares for and sets aside time for the meetings;
• Provides DEQ staff with copies of relevant research and documentation cited during the meeting;
• Comments constructively and in good faith;
• Consults regularly with constituencies to inform them on the process and gather their input;
• Treats everyone and his or her opinions with respect;
• Allows one person to speak at a time;
• Is courteous by not engaging in sidebar discussions; and
• Avoids representing to the public or media the views of any other committee member or the committee as a whole.
• Raises hand when wishing to speak
Vehicles contribute air quality pollutant emissions – particulate matter, CO, NOx, and greenhouse gases.
Background - Legal authority to adopt vehicle emission standards

- Section 177 of the Clean Air Act allows California to adopt their own motor vehicle emission standards
- States can adopt California emission standards, but must do so identically
- Provide two years’ advance notice before the start of the model year
- Oregon has adopted California’s emission vehicle rules since 2005
  - Emission standards in place through the 2025 model year
Proposed Advanced Clean Cars (ACC) II Rule

• California’s ACC II Rule
  – Continuation of LEV/ZEV rules for 2026-2035 model year
  – 100% new vehicles (MY 2035) must be ZEV
  – Compliance achieved through sales of battery electric and plug in hybrid electric vehicles

<table>
<thead>
<tr>
<th>Model Year</th>
<th>ZEV Percentage Requirement</th>
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<tbody>
<tr>
<td>2026</td>
<td>35%</td>
</tr>
<tr>
<td>2027</td>
<td>43%</td>
</tr>
<tr>
<td>2028</td>
<td>51%</td>
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<tr>
<td>2029</td>
<td>59%</td>
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<td>2030</td>
<td>68%</td>
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<td>2031</td>
<td>76%</td>
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<td>2032</td>
<td>82%</td>
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<tr>
<td>2033</td>
<td>88%</td>
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<tr>
<td>2034</td>
<td>94%</td>
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<tr>
<td>2035</td>
<td>100%</td>
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EV Market Availability

Volvo plans to go fully electric by 2030 and only sell cars online

Stellantis Goes From Zero to Many BEVs With Ambitious Electrification Plans

Nissan targets 40% of U.S. sales to be electric by 2030

Honda Targets 100% EV Sales in North America by 2040, Makes New Commitments to Advances in Environmental and Safety Technology

VW expects EVs to represent half of its vehicle sales by 2030

GM can ‘absolutely’ catch Tesla in EV sales by 2025, says CEO Mary Barra

Ford ups EV investments, targets 40% electric car sales by 2030 under latest turnaround plan

Hyundai raises global EV sales target to 1.7mn in 2026, says CEO
EV Sales in Oregon

- Actual ZEV Sales
- Projected ZEV Sales
- Current ZEV Sales Requirement
- ACC II minimum ZEV sales requirement

<table>
<thead>
<tr>
<th>Year</th>
<th>Actual Sales</th>
<th>Projected Sales</th>
<th>ZEV Sales Requirement</th>
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<tbody>
<tr>
<td>2018</td>
<td>3.4</td>
<td>2.5</td>
<td>35</td>
</tr>
<tr>
<td>2019</td>
<td>3.9</td>
<td>2.5</td>
<td>35</td>
</tr>
<tr>
<td>2020</td>
<td>6.5</td>
<td>3.5</td>
<td>20</td>
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<tr>
<td>2021</td>
<td>7.8</td>
<td>4.5</td>
<td>20</td>
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<tr>
<td>2022</td>
<td>9.9</td>
<td>5.3</td>
<td>20</td>
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<tr>
<td>2023</td>
<td>12.6</td>
<td>6.7</td>
<td>16.1</td>
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<tr>
<td>2024</td>
<td>16.1</td>
<td>7.3</td>
<td>12.6</td>
</tr>
<tr>
<td>2025</td>
<td>20.7</td>
<td>7.8</td>
<td>7.3</td>
</tr>
<tr>
<td>2026</td>
<td>25.8</td>
<td>35</td>
<td>7.3</td>
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Achieving the standard - compliance flexibilities

• Recognizing some manufacturers may need additional time to meet the proposed requirements and some states may not have the robust market development, the rule includes compliance flexibilities
  – Historical Credits
    • Allow auto manufacturers to use banked credits already earned
  – 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

• Provide compliance values to manufacturers who help increase affordable access to ZEV vehicles for priority communities
  – Discounted EVs in community-based clean mobility programs
  – Ensuring Used EVs available to participating dealerships
  – Lower priced EVs
Additional rule 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
Cost parity for electric vehicles

Slide: CARB
Supporting the transition to EVs – Incentives

Oregon Clean Vehicle Rebate Program
• Rebate program to encourage Oregon residents to purchase or lease electric vehicles
  ▪ Up to $2,500 for purchase or lease of new EV
  ▪ $5,000 for low and moderate income households for used EV
  ▪ Up to $7,500 for low- and moderate-income households for new EV
Supporting the transition to EVs - Charging infrastructure

• ODOT funding
  – $100 million to support public charging along alternative fuel corridors (ODOT)
    • NEVI, Level 2 Community EV Charging Rebates
• ODOT’s Transportation Electrification Infrastructure Needs Assessment (TEINA)
• Utility rebates to support home and workplace charging installations
• Building code requirements for new buildings to have EV charging capability
ACC II - Low Emission Vehicle 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
Anticipated benefits of the rule

- Estimated emissions benefits

<table>
<thead>
<tr>
<th></th>
<th>NO$_x$</th>
<th>PM$_{2.5}$</th>
<th>WTW CO$_{2e}$</th>
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<tbody>
<tr>
<td>By 2030</td>
<td>922 US tons</td>
<td>30 US tons</td>
<td>3.6 million metric tons</td>
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<tr>
<td>By 2035</td>
<td>3,693 US tons</td>
<td>149 US tons</td>
<td>19.9 million metric tons</td>
</tr>
<tr>
<td>By 2040</td>
<td>7,695 US tons</td>
<td>372 US tons</td>
<td>54.1 million metric tons</td>
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- Estimated health benefits would result in $8.7 million in savings

Benefits calculations conducted by Sonoma Technology Inc (STI), with technical input on data and methods from the International Council on Clean Transportation (ICCT) and NESCAUM
Oregon’s Draft Advanced Clean Cars Rule Language
Community based clean mobility program:

(a) Provides access to clean mobility solutions other than vehicle ownership including ZEV car sharing, ride-sharing, vanpools, ride-hailing, or on-demand first-mile/last-mile services;
(b) Serves a community in which at least 75 percent of the census tracts in the project area (where community residents live and services operate) are either:
   (A) Areas disproportionately affected by environmental pollution and other hazards that can lead to negative public health effects, exposure, or environmental degradation;
   (B) Areas with concentrations of people that are of low income, high unemployment, low levels of homeownership, high rent burden, sensitive populations, or low levels of educational attainment;
   (C) In a census tract with median household incomes at or below 80 percent of the statewide median income; or
   (D) A tribal community; and
(c) Is implemented by a community-based organization, Native American Tribal government, or a public agency or nonprofit organization that has received a letter of support from a project-related community-based organization or local community group that represents community members that will be impacted by the project or has a service background related to the type of project.
Draft rule review

• OAR 340-257-0050 – Incorporation by Reference
  – Incorporated California’s rules by reference
    • Section 1961.4: Exhaust emission standards for 2026 MY and subsequent passenger vehicles and trucks
    • Section 1962.2: ZEV standards for 2018-2025 MY passenger cars and trucks
    • Section 1962.3: EV charging requirements
    • Section 1962.4: ZEV standards for 2026 MY and subsequent passenger cars and trucks
    • Section 1962.5, 1962.6, 1962.7, 1962.8: Data standardization, battery labeling, recall protocols, warranty requirements
Draft rule review

- 340-257-0070 – Fleet average non-methane organic gas (NMOG) exhaust emission requirements, reporting, and compliance
  - Update the rules to reflect new model year vehicle requirements
- OAR 340-257-0080 – ZEV sales requirement
  - Update rules to incorporate 2026-2035 ZEV sales requirement
- OAR 340-257-0090 – ZEV credit bank and reporting
  - Update rules to incorporate updated ZEV standards
• OAR 340-257-0095 – ZEV allowances for environmental justice values - Community based clean mobility program

• Community-Based Clean Mobility Programs
(a) DEQ must determine that a program qualifies as a community-based clean mobility program under this rule before a manufacturer may earn vehicle values under CCR, Title 13, section 1962.4(e)(2)(A)1.
(b) A manufacturer may request DEQ to make a determination that a program qualifies as a community-based clean mobility program. When making this request, the manufacturer shall provide:
   (A) Attestation that the program meets each element of the definition of community-based clean mobility program;
   (B) Contact information for the program, including program name, program implementer name (if different), mailing address including a street address, city, state, and zip code, federal tax identification number (if any), contact person name, contact person phone number, and contact person email address;
   (C) A description of the program, including program objectives, total number of vehicles, and the program service location or area;
   (D) A written communication from a responsible official (e.g., executive, principal officer) of the entity that administers the program, which shall include the following:
      (i) Certification that the vehicles will be put into service exclusively for the purposes of operating a community-based clean mobility program with a minimum of four years of service operation;
      (ii) Certification that vehicle titles or lease agreements will be held by an organizational entity, not by individual drivers; and
      (iii) Certification that the program meets the definition of community-based clean mobility program.
Draft rule review

• OAR 340-257-0095 – ZEV allowances for environmental justice values - Community based clean mobility program (continued)

(A) DEQ may determine that a program qualifies as a community-based clean mobility program if the manufacturer has demonstrated that the program meets the requirements described in section (2) and is a community-based clean mobility program; and

(B) DEQ will notify the manufacturer of the determination in writing within 60 days. If the program is determined to qualify as a community-based clean mobility program, DEQ will issue an order designating the community-based clean mobility program.

(d) Renewal. A DEQ order issued under section (3) approving a community-based clean mobility program shall remain valid for four years. A manufacturer may request a renewal of a determination of a community-based clean mobility program by providing the information and materials specified under section (2). DEQ will review and approve or deny a renewal request by the process specified in section (3).

(e) Revocation. DEQ may revoke an order issued under this section (3) if DEQ determines that:

(A) The community-based clean mobility program no longer satisfies the definition of a community-based clean mobility program or the requirements in section (2); or

(B) The community-based clean mobility program has resold or returned, prior to four years of service, one or more vehicles that a manufacturer provided for use of the program for which the manufacturer has earned Environmental Justice Vehicle Values pursuant to CCR, Title 13, subsection 1962.4(e)(2)(A)1, except for resale to another qualifying community-based clean mobility program.
Draft rule review

- OAR 340-257-0095 – ZEV allowances for environmental justice values
  - Vehicles Sold at the End of Lease to Participating Dealerships

(a) DEQ must determine that an Oregon dealership participates in a financial assistance program before a manufacturer may earn vehicle values
Implementation – EJ values

- Community-based clean mobility programs
  - Submitted materials from the manufacturer requesting a program qualify
  - Ways to ensure we get these programs up and running quickly
Next Steps

• Advisory committee meetings – Sept. 20, 2022
  – Discussion of:
    • Fiscal and Economic Impact Statement
    • Racial Equity Impact Statement

• Public comment - September 2022 – October 2022

• Environmental Quality Commission Action – December 2022

Website: https://www.oregon.gov/deq/rulemaking/Pages/CleanCarsII.aspx