Expanding the Clean Fuels Program – Meeting #1

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10/29/20
Agenda

- Purpose and Methodology of Illustrative Compliance Scenarios
- Regulations and Rulemakings
- Timeline and Next Steps
Purpose of Illustrative Compliance Scenarios
Clean Fuels Program

- Current Regulation includes a 10% carbon intensity reduction in transportation fuels from 2015 by 2025 and continuing at 10% thereafter.
- Executive Order 20-04 directed DEQ to examine ways to potentially expand the CFP to achieve a 20% carbon intensity reduction by 2030 and 25% by 2035.
Illustrative Compliance Scenarios

- These scenarios present potential pathways for compliance
- They inform DEQ feasibility, compliance fuel requirements, and alternative technology penetration necessary to comply with program
The Process of Developing Illustrative Compliance Scenarios

- What are the possible liquid fuels that can be blended for compliance?
- What are the potential volumes?
- What are the possible alternative technologies?
- In each scenario, what variables (alternative fuel volumes, alternative vehicle penetration) are kept constant and which are adjusted
- Balancing deficits and credits over the full compliance period
Regulations and Rulemakings and Expansions
Electric Vehicles

- **Light-duty**
  - Current ZEV - 2025
  - Senate Bill 1044 – 50% EV fleet and 90% EV sales in 2035

- **Heavy-duty**
  - Multi-State Medium- and Heavy-Duty Zero Emission Vehicle - Memorandum of Understanding
  - California Advanced Clean Trucks – Preferred Sectors for Electrification

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<th>Class 4-8</th>
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Electric Rulemaking

- Carbon intensity of electricity
- Incremental Credits
- New type of electric vehicles and technologies
- Advancing credit generation to increase implementation and expedite payback
Additional Forms of Credit Generation

- **Similar programs to California LCFS**
  - Refinery Provisions (investments, crude innovative methods, renewable H2)
  - Carbon Capture and Sequestration

- **New fuels, technologies and feedstocks**
  - Additional RNG or liquid fuel feedstocks (poultry manure, wood waste)
  - Gasification
  - Hydrogen – cars, trucks, forklifts, etc.
Next Steps and Timeline
Next Steps and Timeline

- **Identify the variables and fuels for the compliance scenarios**
  - Gasoline substitutes – electricity, high ethanol blends, hydrogen
  - Diesel substitutes – biodiesel and renewable diesel, electricity, hydrogen, NG/RNG
  - For example: High Electrification; High Biofuels

- **Timeline**
  - Draft Assumptions Report – December 15, 2020
  - Final Report – March 31, 2021