

# Expanding the Clean Fuels Program – Meeting #1

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# Agenda

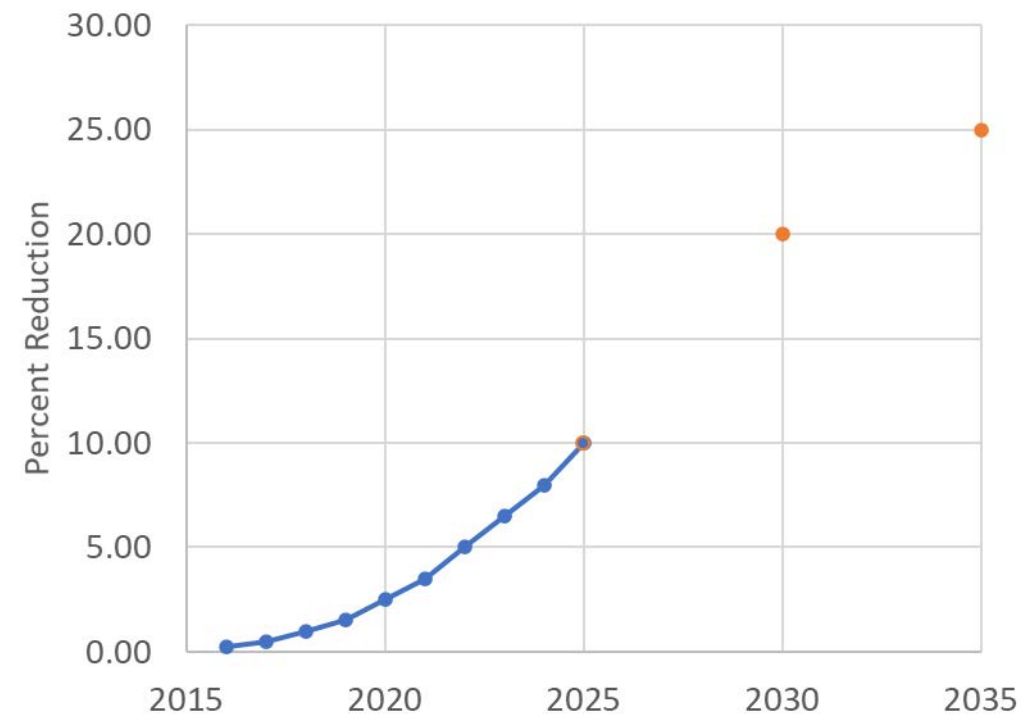
- **Purpose and Methodology of Illustrative Compliance Scenarios**
- **Regulations and Rulemakings**
- **Timeline and Next Steps**

# Purpose of Illustrative Compliance Scenarios



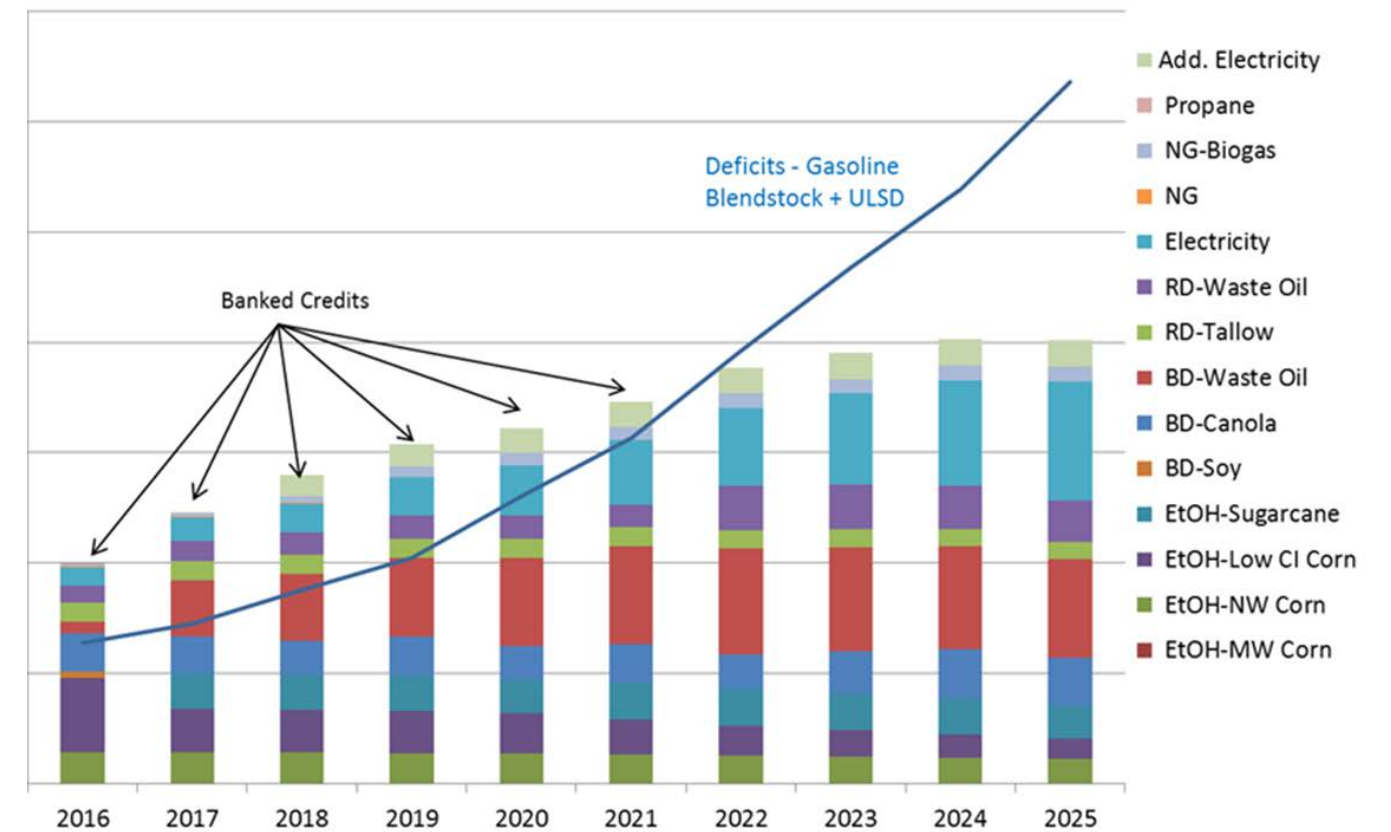
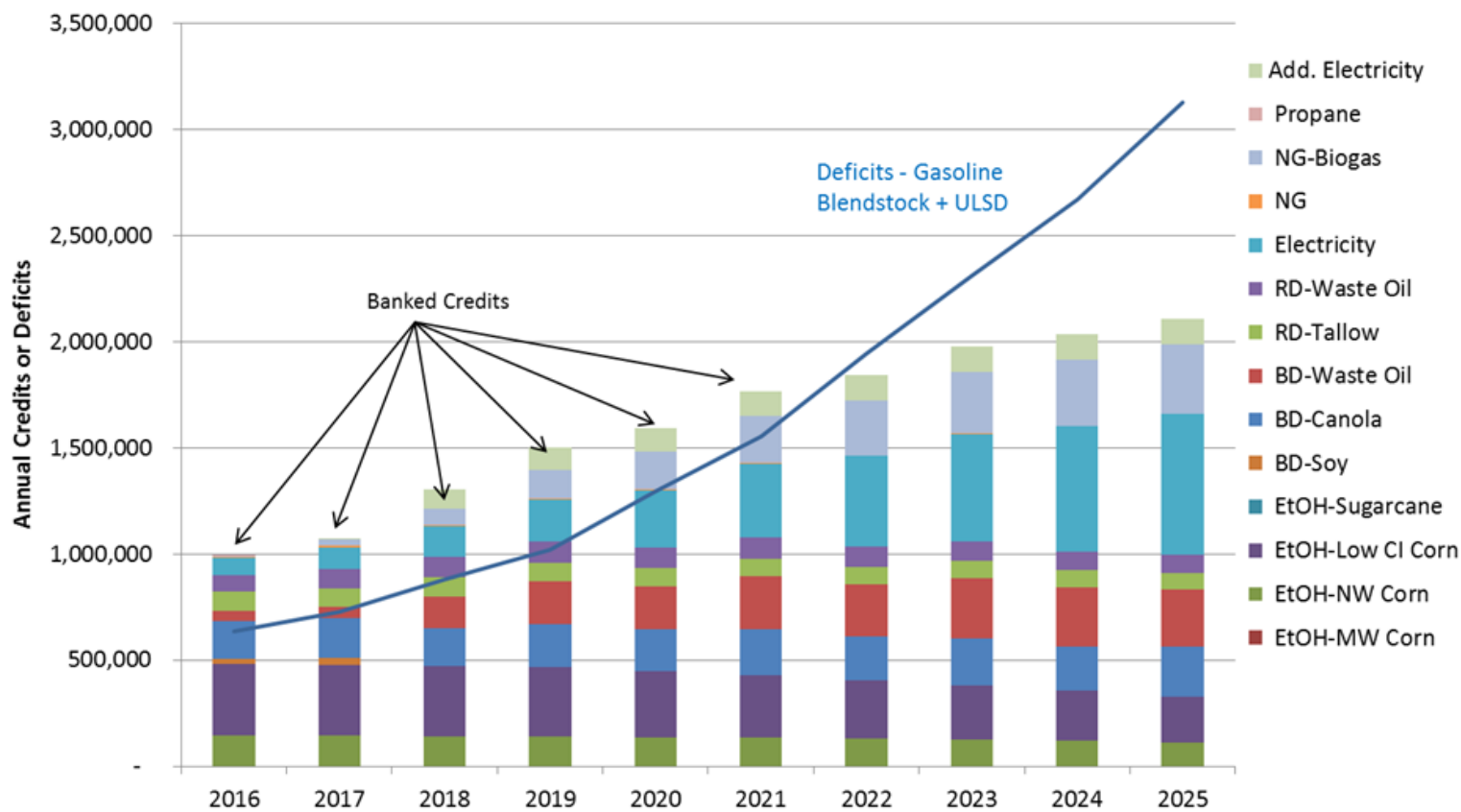
# Clean Fuels Program

- **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

	<b>Class 2b-3</b>	<b>Class 4-8</b>	<b>Class 7-8 Tractor</b>
2024	5%	9%	5%
2025	7%	11%	7%
2026	10%	13%	10%
2027	15%	20%	15%
2028	20%	30%	20%
2029	25%	40%	25%
2030	30%	50%	30%
2031 – 2035+	35 – 55%	55 – 75%	35-40%



# 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
- Draft Scenarios Report – January 31, 2021
- Final Report – March 31, 2021

