CARB’s Role

• Leads California’s fight against air pollution and climate change
• Protects public health
• Promotes environmental justice, social equity and sustainable communities
• Promotes clean, energy-efficient fuels and technology
California’s Policy Drivers for Climate Protection

- **Greenhouse gas (GHG) emission reduction targets**
  - Achieve 1990 GHG levels by 2020 (AB 32)
  - 40% below 1990 levels by 2030 (E.O. B-30-15 and SB 32)
  - 80% below 1990 levels by 2050 (E.O. S-3-05)

- **Specific goals for short-lived climate pollutants reduction (SB 1383)**
  - 40% reduction in methane for 2030 from 2013
  - 40% reduction in hydrofluorocarbon gases for 2030 from 2013
  - 50% reduction in anthropogenic black carbon for 2030 from 2013

- **Cleaner electricity targets (SB 100)**
  - 60% clean and renewable by 2030
  - Zero carbon by 2045
Transition to Zero-Emission Vehicles (ZEV)

100% ZEV sales by 2035

- Full transition to ZEV short-haul/drayage trucks by 2035
- Full transition to ZEV buses & heavy-duty long-haul trucks by 2045*
- Full transition to ZE off-road equipment by 2035* (where feasible)

Executive Order N-79-20
California GHG Reduction Targets

- Achieved AB 32 target 4 years early in 2016
- 2030 target is a milestone setting trajectory to carbon neutrality
- 2022 Scoping Plan lays out path to carbon neutrality by 2045

Source: CARB, 2017
California’s Climate Policy Framework

**GHG Targets & Goals**
Legislation & Executive Orders: Total GHGs (AB 32/SB 32) or sector targets (SB 1383/SB 100), etc.

**Scoping Plan**
Actionable plan across all sectors

**2019 California GHG Emission Contributions by Scoping Plan Sector**
- Transportation: 40%
- Industrial: 21%
- Electric Power: 14%
- Commercial & Residential: 10%
- Agriculture: 8%
- Recycling & Waste: 2%
- High GWP: 5%

**Action**
Regulations & Incentives: Advanced Clean Cars, climate change investments, etc.

**Projects**
Examples: Zero-emission trucks, energy infrastructure and renewables, compost facilities, digesters, etc.
Successful implementation of the Proposed Scenario would exceed the SB 32 GHG reduction target of 40% below 1990 levels by 2030.
Successful implementation of the Proposed Scenario would meet the 1383 targets for methane reductions.
And would grow the biomethane supply potential by at least 3 (estimated by CARB).
Biomethane End-Use Options in the Draft Scoping Plan

• Transportation (conditioned to hydrogen, $H_2$)
• Pipeline injection for residential/commercial end-uses
• Pipeline injection for industrial end-uses
• Feedstock for $H_2$ production, either onsite or via pipeline injection
July 22\textsuperscript{nd} Letter from Governor Newsom

- Increase ambition and action called for in the Draft Scoping Plan

- Directed CARB to include the following:
  - 20 GW of offshore wind by 2045
  - Avoid need for new natural gas plants
  - 3 million climate-ready and climate-friendly homes by 2030 and
    7 million by 2035
  - 6 million heat pumps statewide by 2030
  - Increase LCFS stringency, accelerate refinery transitions to clean fuels
  - Increase a clean fuels target for aviation
  - Address oil and gas methane leaks near communities
  - Carbon dioxide removal and capture target of 20 MMT in 2030/100 MMT in 2045
2022 Scoping Plan Update Schedule

Next Steps:
- Meet w/ CARB Board Members, Execs in Climate Change & Mobile Divisions, & EJAC reps again
- Participate in all CARB workshops & coordinate more members to testify
- Comment letters recommending specific regulatory language