

Joint Legislative Committee on Climate Change Policies: Informational Hearing

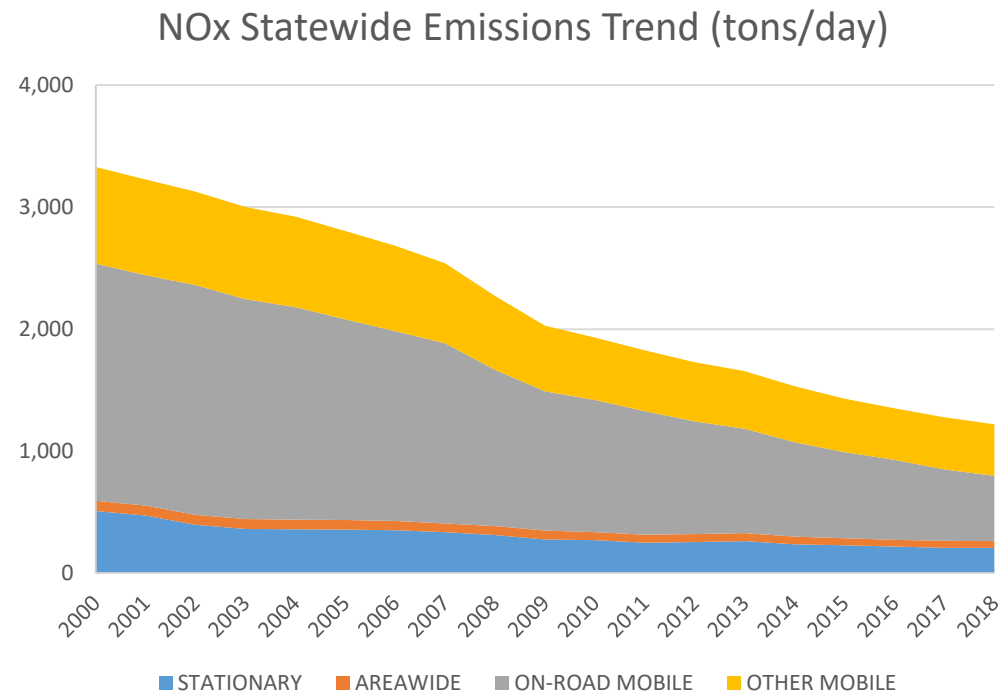
CHAIR RANDOLPH

AUGUST 17, 2021



Air Quality Successes – Criteria Pollutants

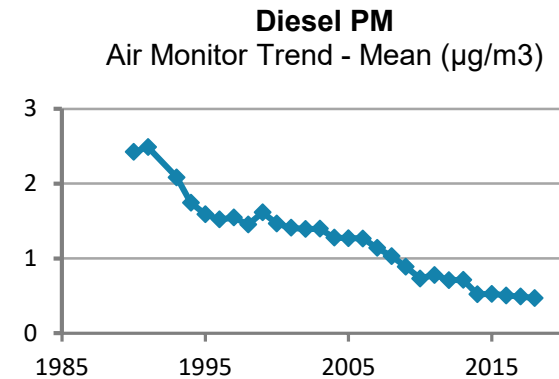
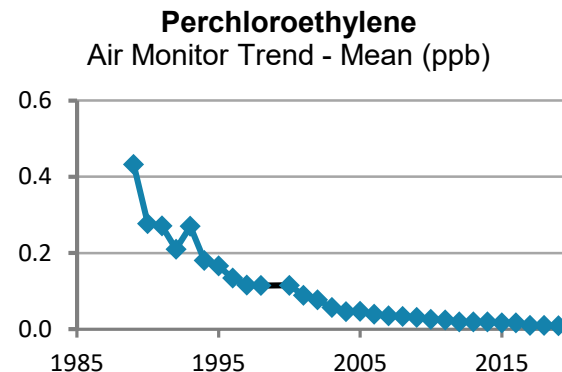
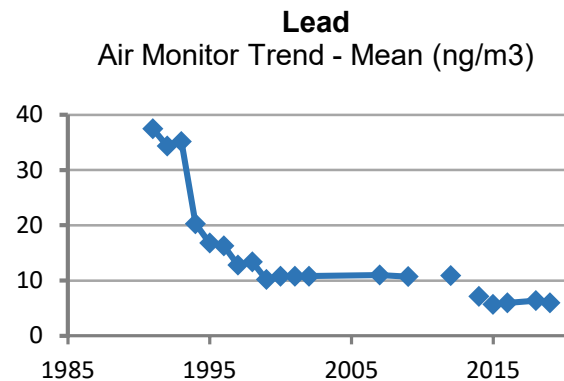
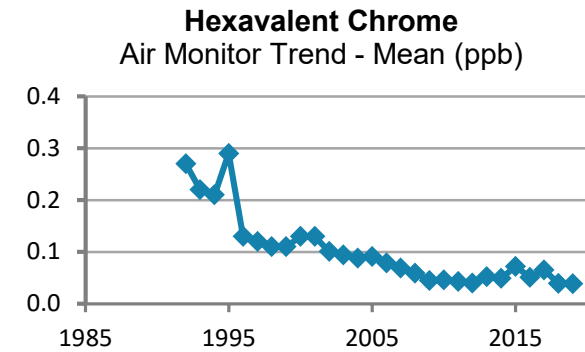
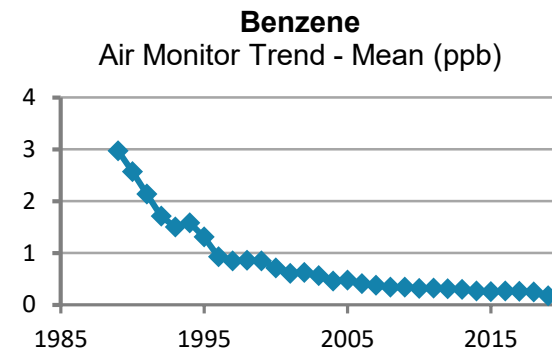
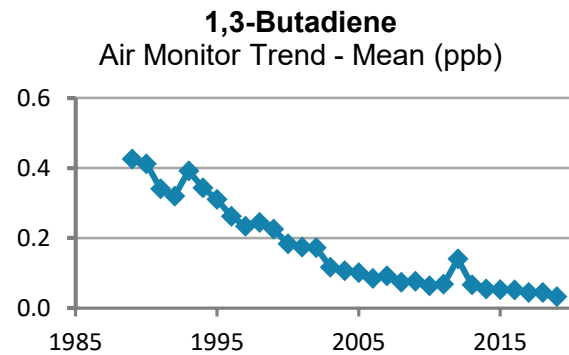
- **NOx emissions reduced nearly 70% since the 1970s**
- **Reductions are due to improvements in vehicle efficiency and advancements in stationary source engine and stack emission control technologies**



****Total NOx combines NO₂, NO, and additional species (so NOx is higher than NO₂ alone)***

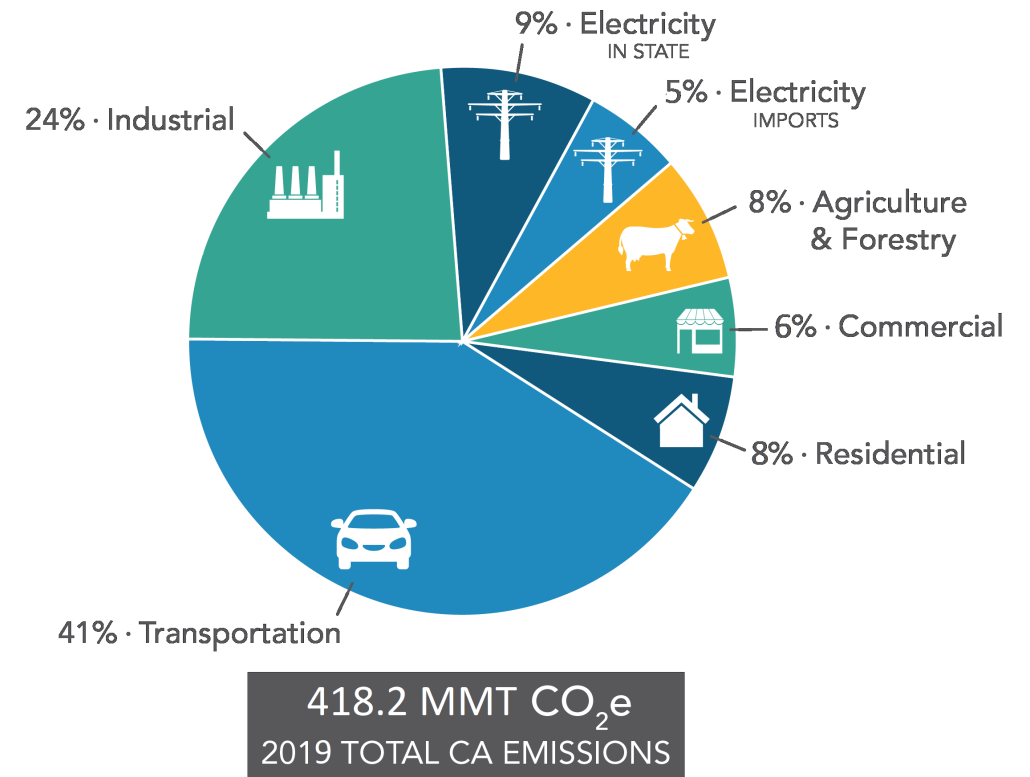
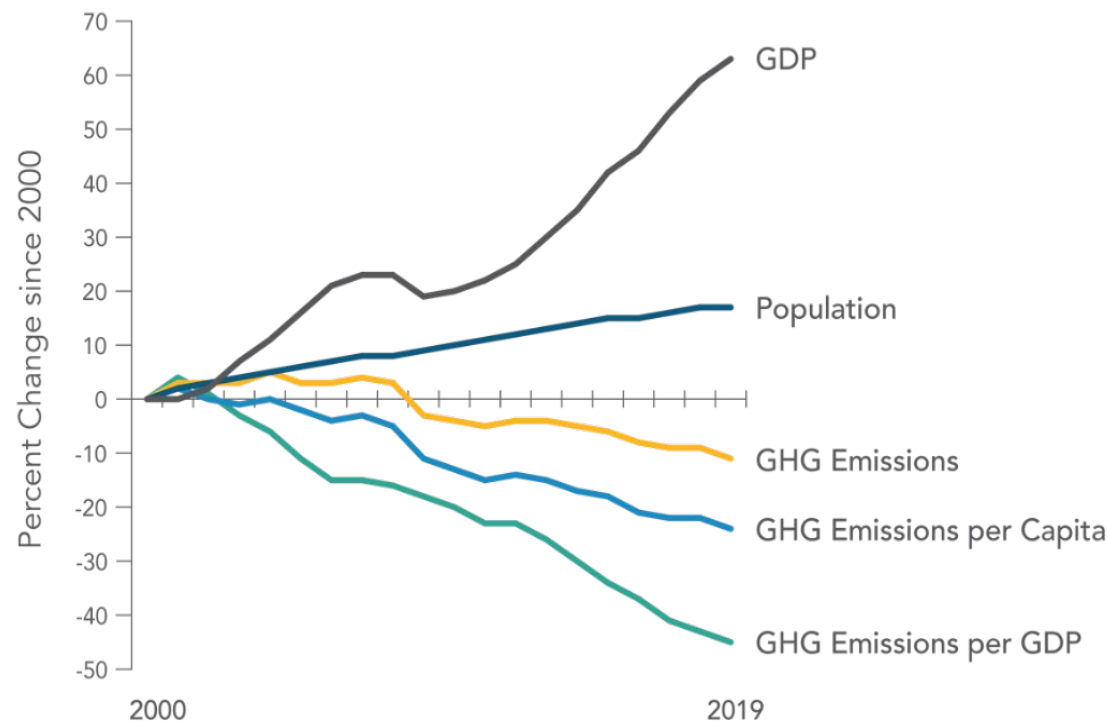
Air Quality Successes – Toxic Air Contaminants

Substantial statewide toxic air contaminant reductions have occurred since the early 1990s due to Federal (Clean Air Act), State (Air Toxics Control Measures) and local air district regulations (stationary source reductions).



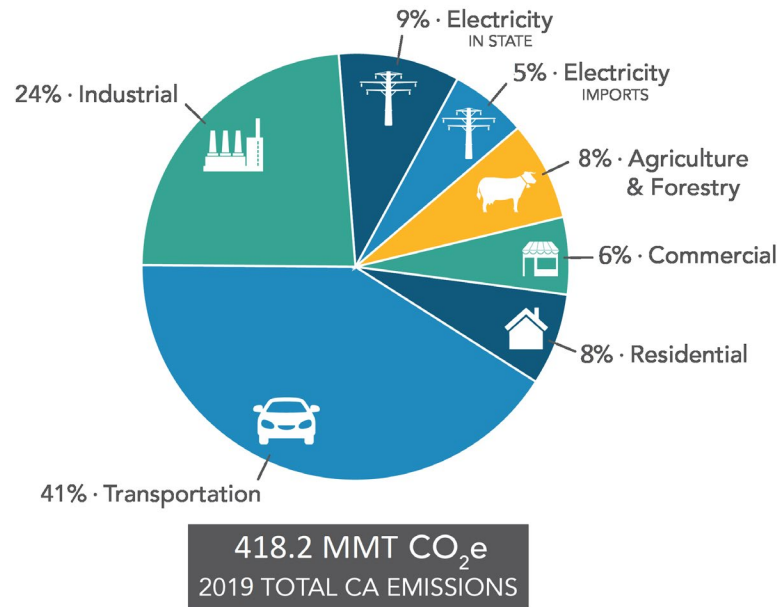
California's Trends

Achieved AB 32 Target in 2016

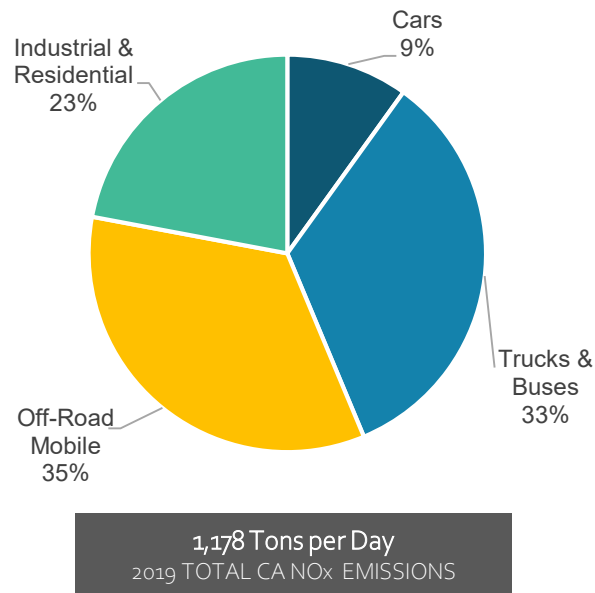


Source: 2020 Edition, California Greenhouse Gas Emission Inventory: 2000-2018

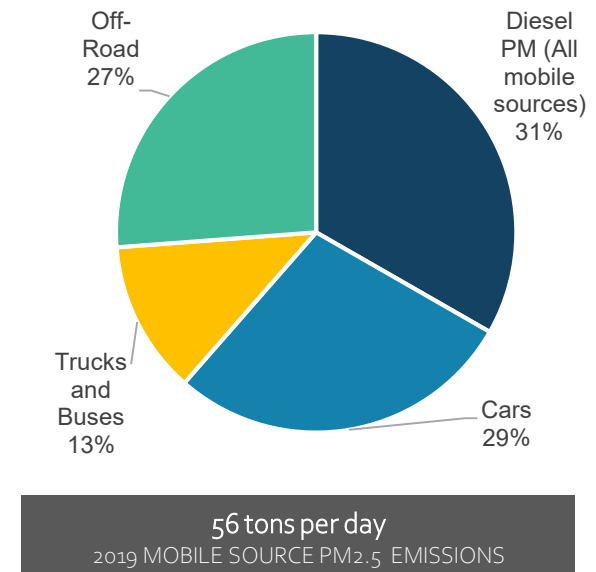
Transportation Sector: Largest source of GHG and NOx Emissions



Source: 2021 Edition, California Greenhouse
Gas Emission Inventory: 2000-2019



Source: CARB Emission Inventory

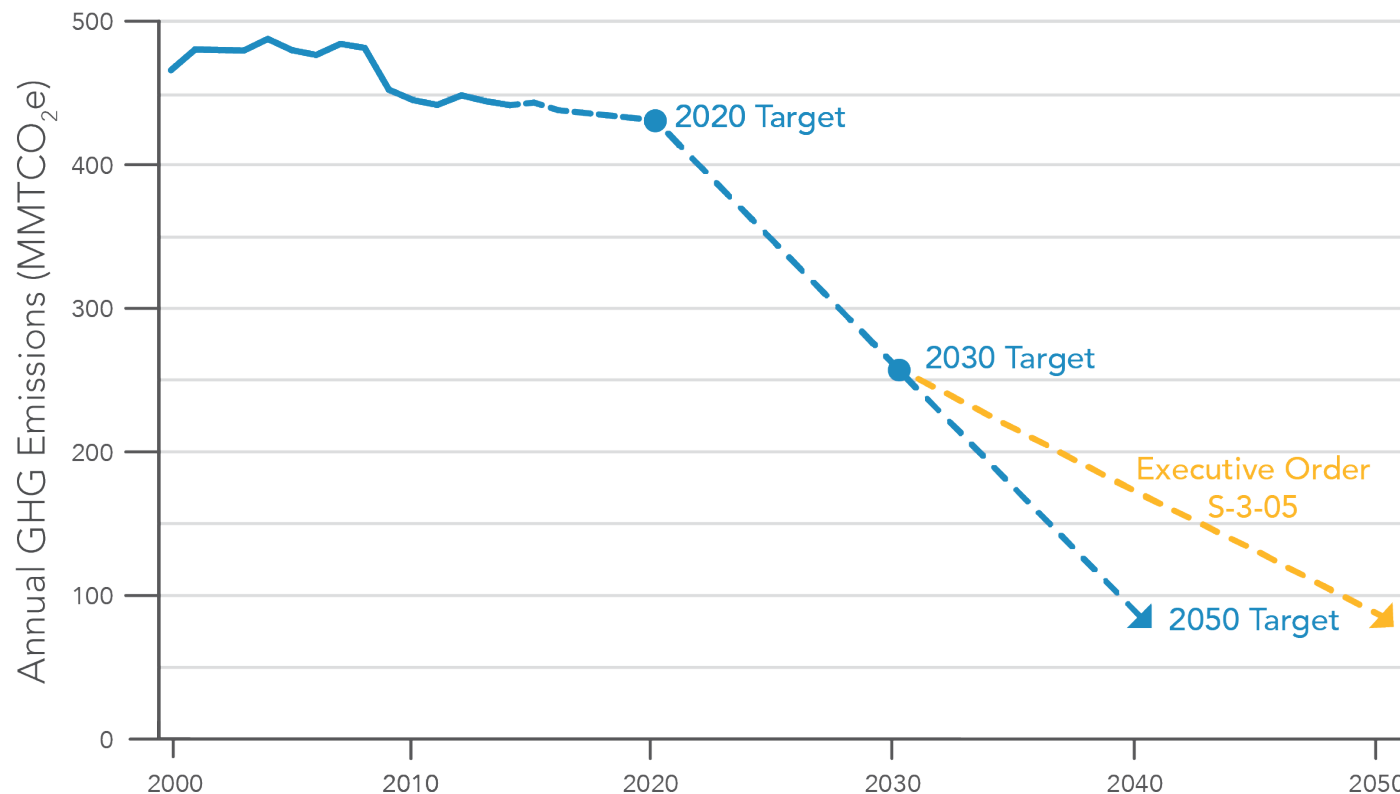


Source: CARB Emission Inventory

AB 32 Climate Change Scoping Plan

- Scoping Plan(s) are action plans to ensure CA meets statewide GHG reduction targets (mandated in AB 32)
 - Scoping Plan(s) rely on a suite of climate policies to address emissions across all sectors
 - Required to be updated at least every 5 years
 - 2017 SP (most recent) – cost-effective and technologically feasible path to achieve the 2030 target
- Provide direct GHG emissions reductions and air quality benefits
- Minimize emissions “leakage” – increase to non-CA GHG emissions
 - Ensure high-road jobs remain
- Facilitate sub-national and national collaboration
- Support cost-effective and flexible compliance

CA GHG Reduction Targets



Source: CARB, 2017

- SB 32 Target -40% below 1990 levels
- 2030 milestone on way to carbon neutrality
- Identify least regret actions that achieve 2030 and support carbon neutrality
- Avoid stranded assets
- Set long term goals to attract private capital for research, development and deployment of clean technology

2017 Scoping Plan Portfolio

40% below 1990 levels by 2030



Double building efficiency



60% renewable power



More clean, renewable fuels



Slash potent "super-pollutants" from dairies, landfills and refrigerants



Cleaner zero or near-zero emission cars, trucks, and buses



Cap emissions from transportation, industry, natural gas, and electricity



Walkable/bikeable communities with transit



Invest in communities to reduce emissions

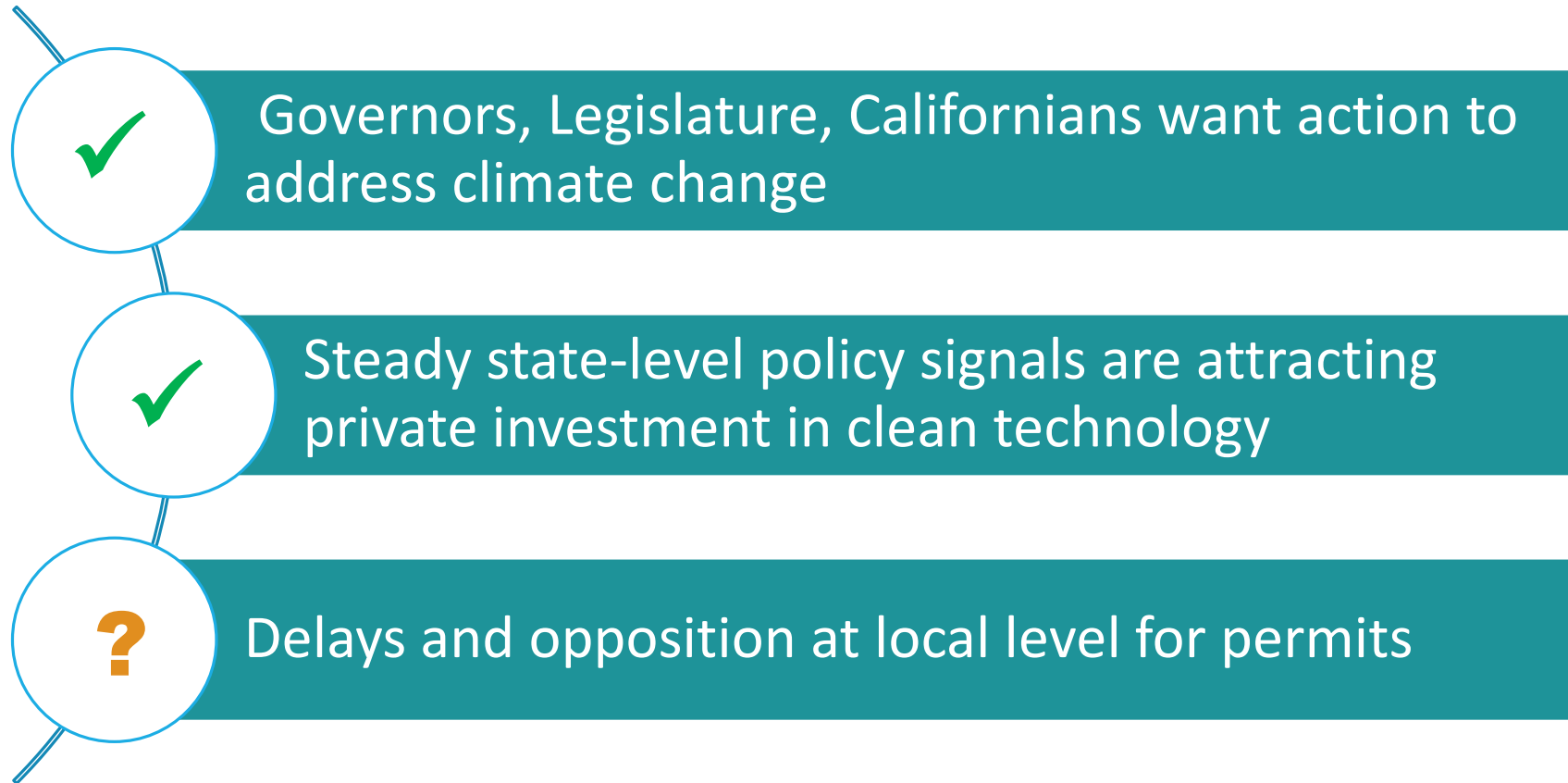


Cleaner freight and goods movement

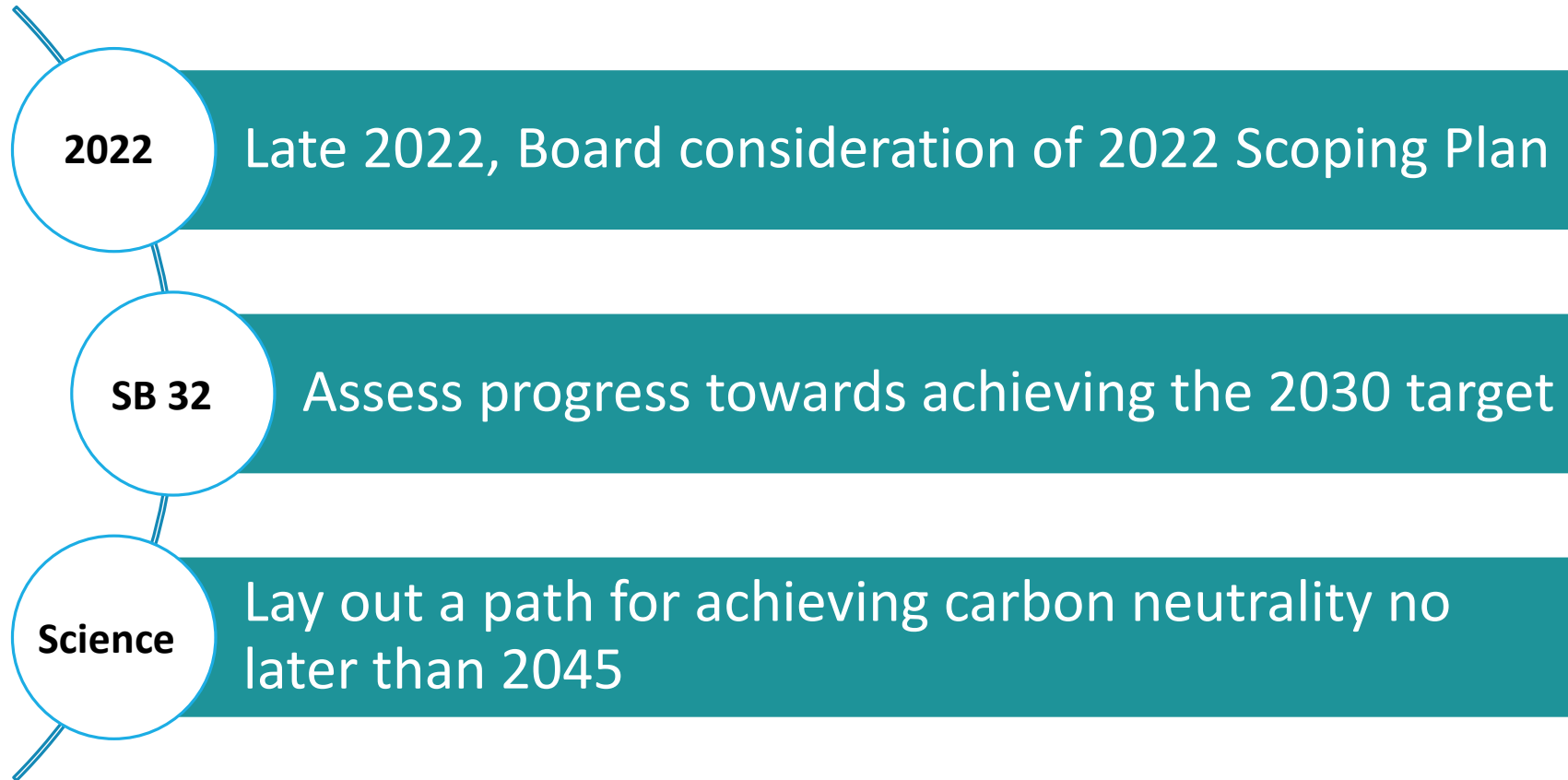


Protect and manage natural and working lands

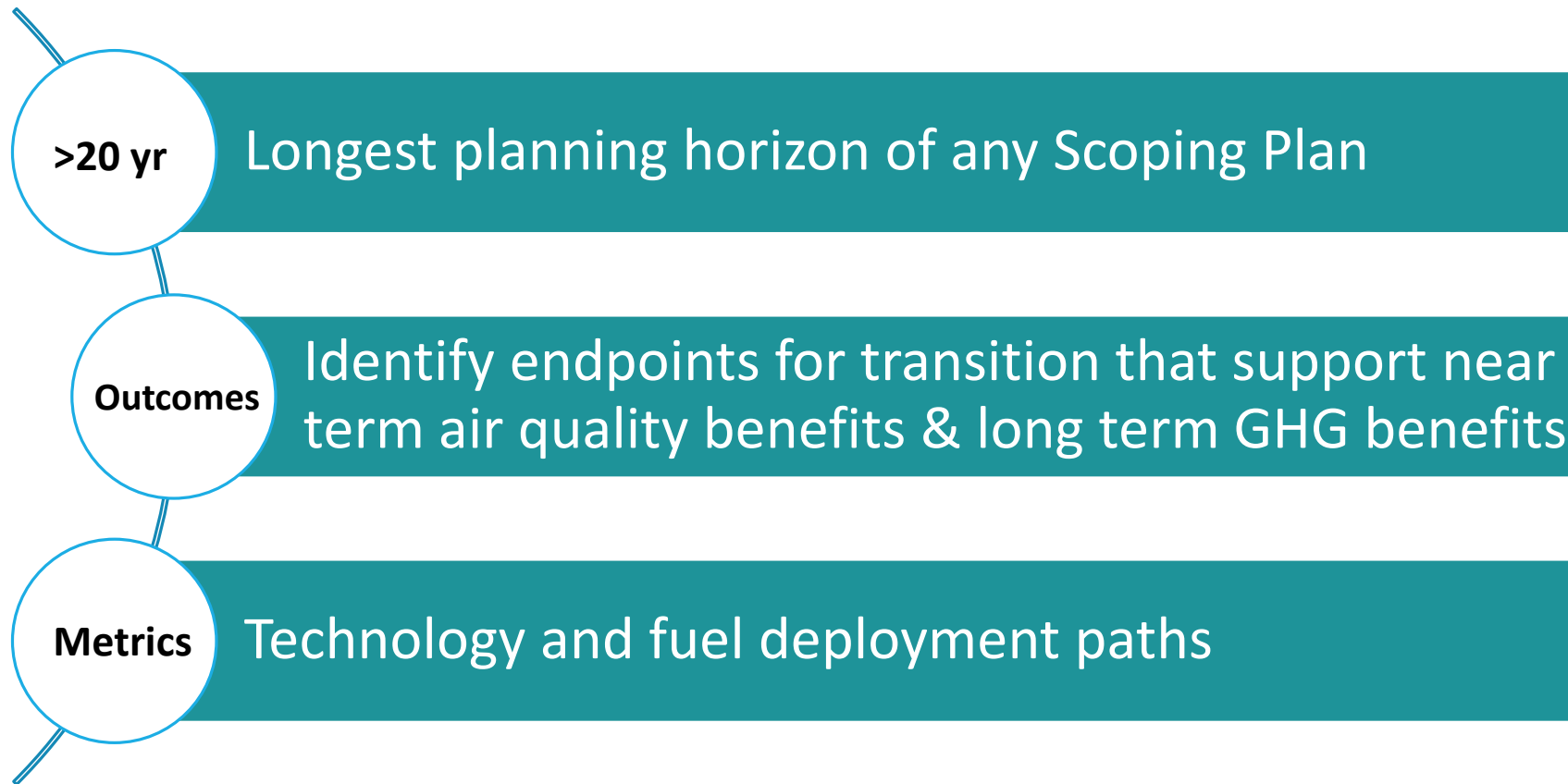
AB 32 Scoping Plan Implementation



2022 Scoping Plan Update: Key Objectives



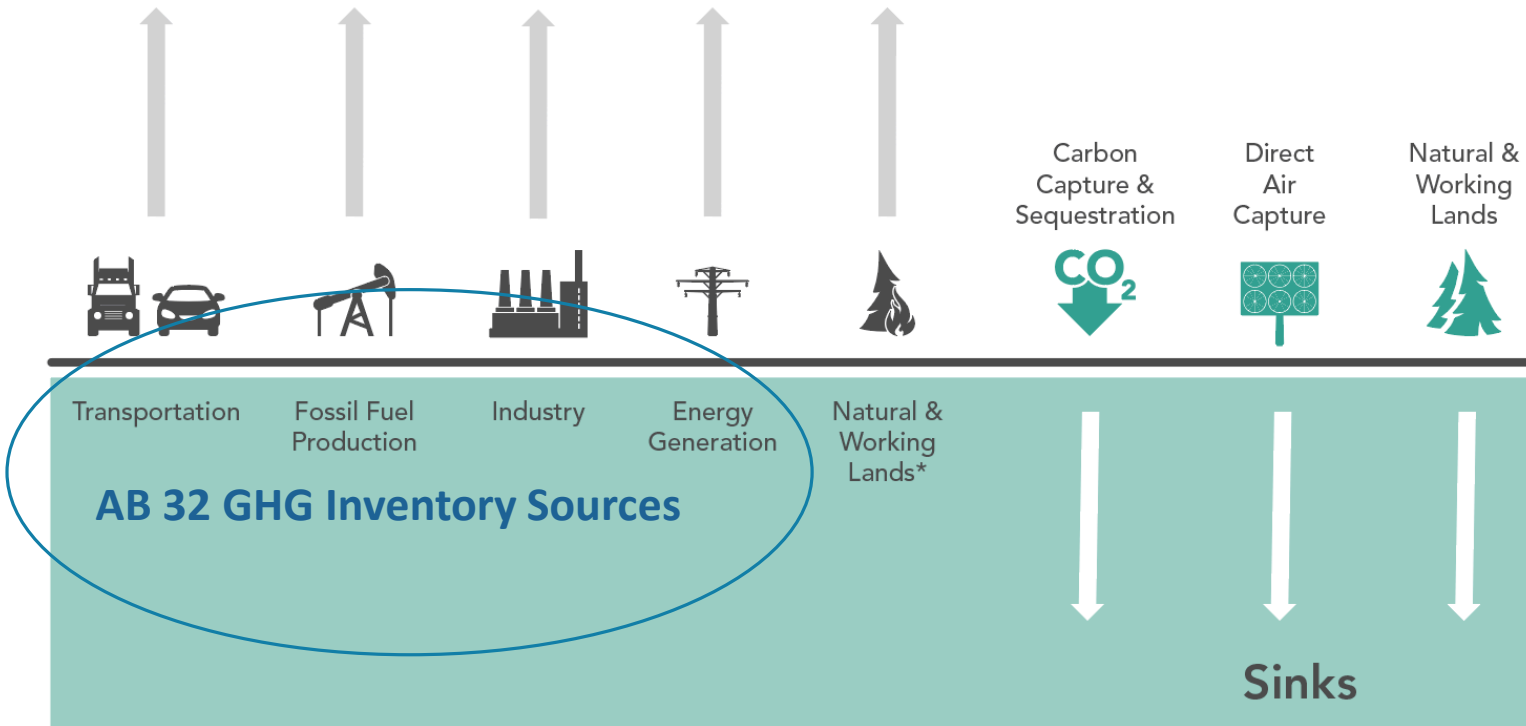
2022 Scoping Plan Update: Key Objectives, cont.



Science-based Target: Achieve Carbon Neutrality (CO₂e) Mid-Century

Sources equal Sinks

Sources



*Natural and working land emissions come from wildfires, disease, land and ag management practices, and others

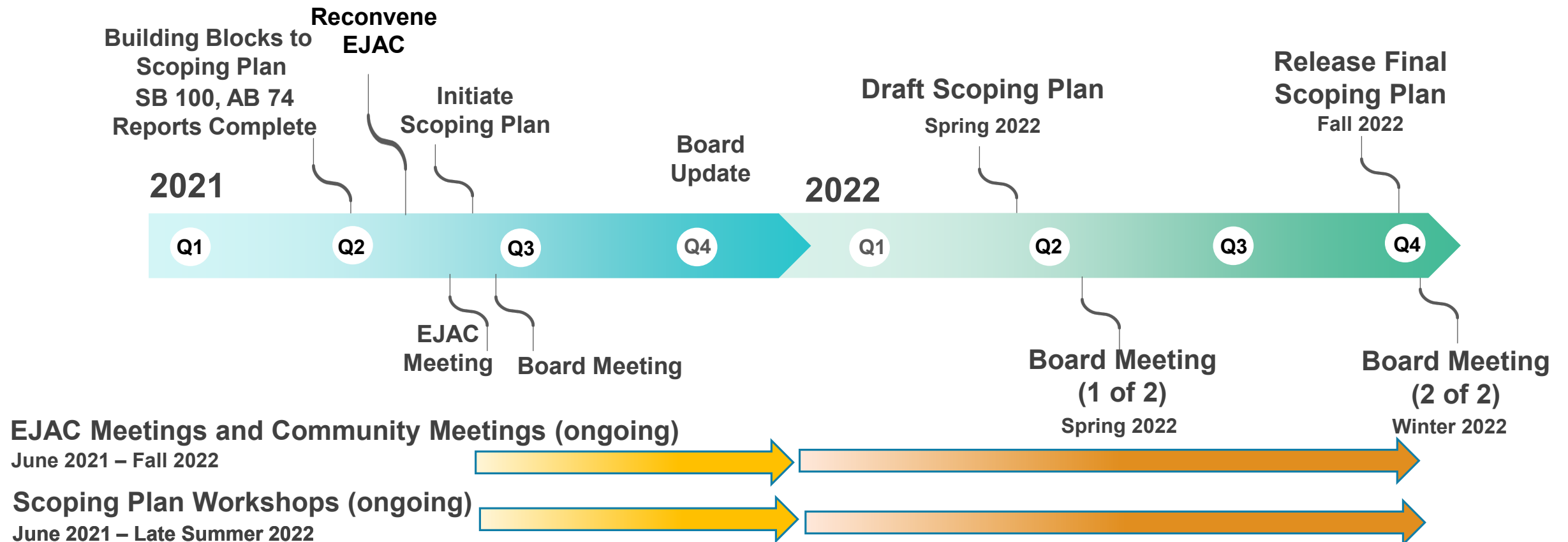
- Continue to reduce emissions from sources in AB 32 GHG Inventory
- Reduce emissions and increase sequestration in Natural and Working Lands
- Maximize all sinks with goal of achieving net negative

Analyses for 2022 Scoping Plan Update

- Cost per ton of policy (AB 197)
- Social cost of carbon (AB 197)
 - New values expected in coming months
- Estimated air quality benefits (AB 197)
- Environmental (CEQA)
- Economic (health, macro, household, jobs)



2022 Scoping Plan Update Schedule



Reporting and Oversight

Ongoing monitoring and reporting provides opportunities for public input, Board feedback and adjustments if needed

- CARB annual Greenhouse Gas Inventory (data) and annual Mandatory GHG Reporting Data
- Annual status report to the Board on Scoping Plan Implementation
- Update to the AB 32 Scoping Plan at least once every 5 years (written report)
- AB 398
 - Annual report by the Independent Emissions Market Advisory Committee on environmental and economic performance of relevant climate policies
 - Annual report by the Legislative Analyst's Office on the economic impacts and benefits of specified greenhouse gas emissions targets
- SB 1018 (written reports)
 - Semi-annual update on key climate programs
 - Semi-annual report on actions proposed by WCI, Inc.
 - Annual fiscal report on prior fiscal year
 - Annual resources report on resources by major program area
- AB 197
 - Annual informational report by CARB Chair on emissions covered by the Scoping Plan

Additional Information

Carbon Neutrality Website

<https://ww2.arb.ca.gov/our-work/programs/carbon-neutrality>

Scoping Plan Website

[AB 32 Climate Change Scoping Plan | California Air Resources Board](#)

All Workshops

[Scoping Plan Meetings & Workshops | California Air Resources Board](#)

2017 Scoping Plan

<https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan>