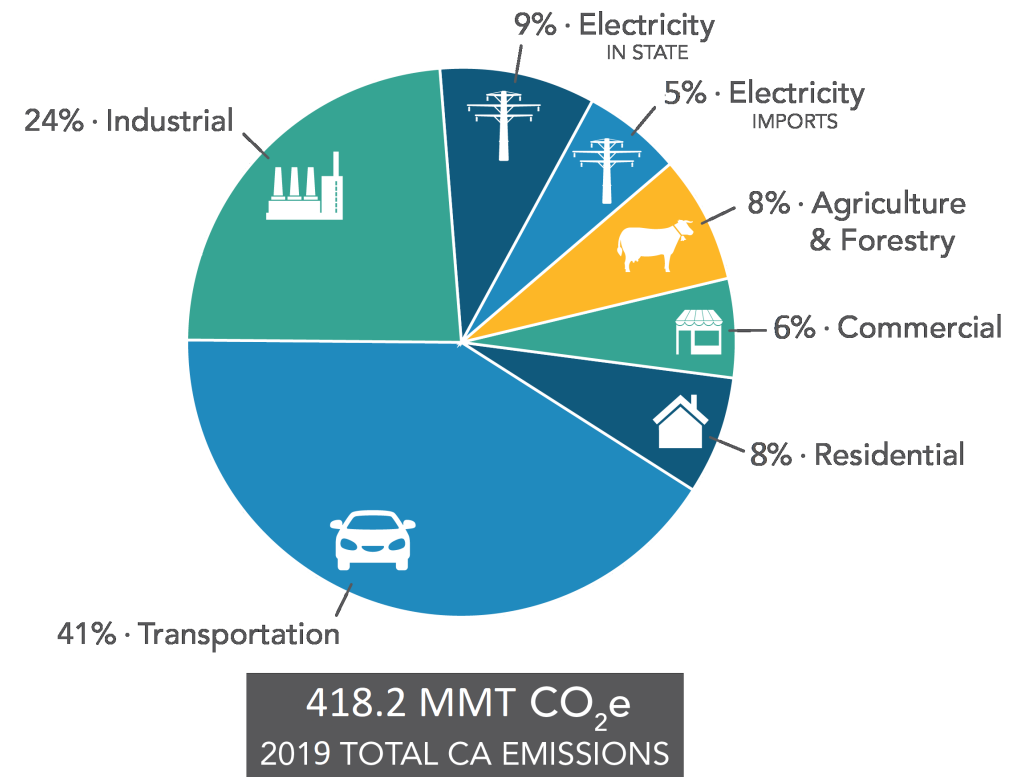


2017 Scoping Plan Progress Update



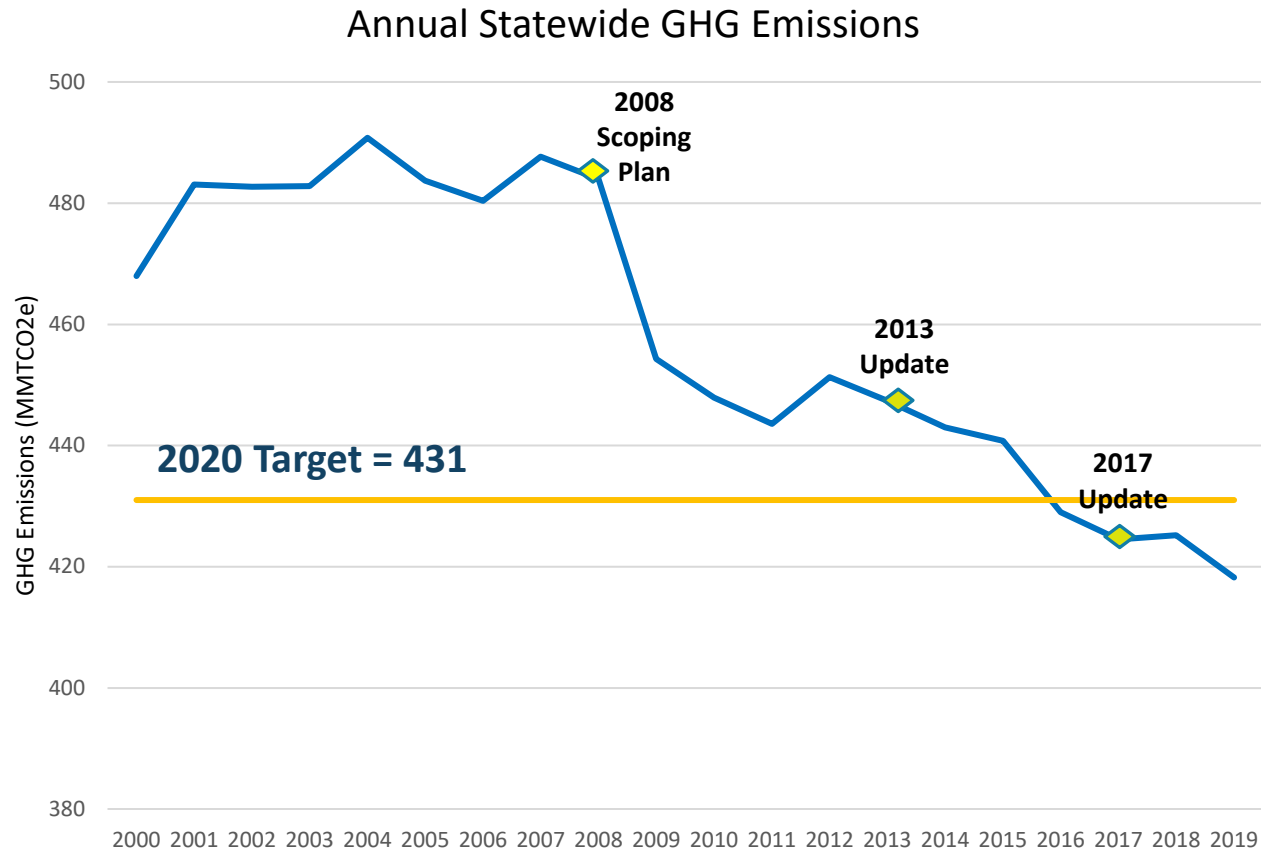
AB 32 & Scoping Plan Greenhouse Gases

- Greenhouse Gases included in statute: Carbon dioxide (CO₂), Methane (CH₄), Nitrous oxide (N₂O), Hydrofluorocarbons (HFCs), Perfluorocarbons (PFCs), Sulfur hexafluoride (SF₆), Nitrogen trifluoride* (NF₃)
- Focus on sources or categories of sources that contribute the most to statewide emissions
- AB 32 GHG Inventory includes all direct sources of emissions in the State and emissions associated with electricity consumed in-state
- AB 32 and SB 32 targets include all sources in the AB 32 GHG Inventory



**Original AB 32 text (2006) included the 6 "Kyoto Protocol" gases. NF₃ was added in 2009 when SB 104 amended AB 32 to include the 7th gas.*

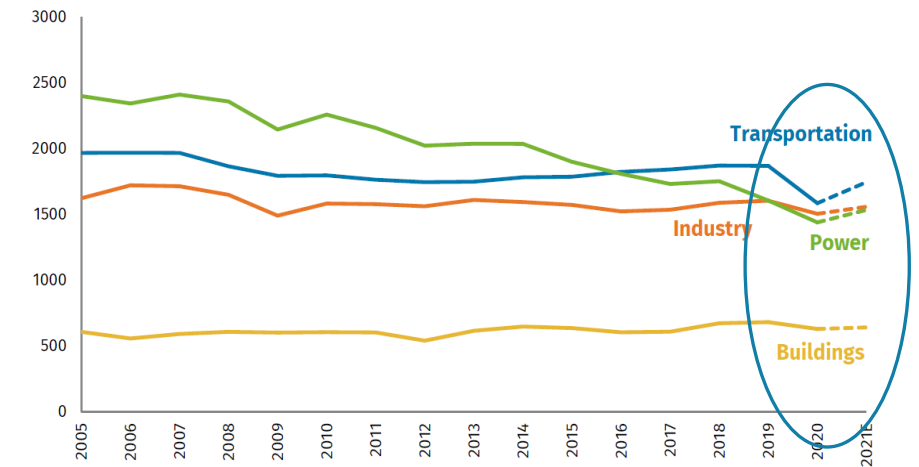
AB 32 Source GHG Emissions



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

U.S. GHG Emissions Outlook

FIGURE 1
US GHG emissions by major emitting sector
 Million metric tons CO₂e, IPCC definitions, excludes international bunkers



Source: Rhodium Group

- 2020 emissions much lower due to pandemic related impacts
- Economists predict rebound in economy and emissions starting in 2021

2017 Scoping Plan Portfolio



Double building efficiency



Cleaner freight and goods movement



50% renewable power **



Slash potent “super-pollutants” from dairies, landfills and refrigerants



More clean, renewable fuels



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



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



Invest in communities to reduce emissions



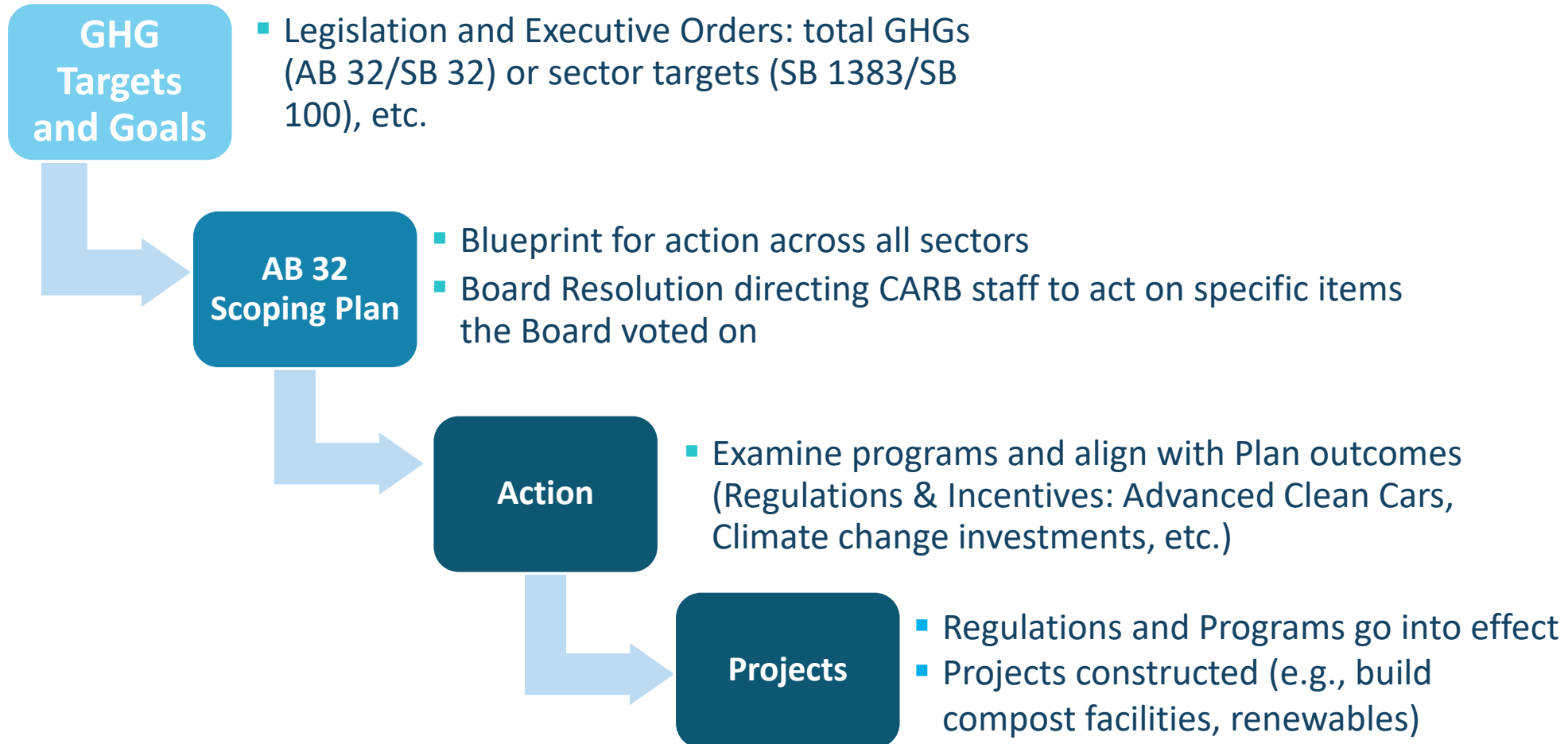
Walkable/bikeable communities with transit



Protect and manage natural and working lands

**In 2018, SB 100 increased the Renewables Portfolio Standard to 60% by 2030

What Happens After Plan Adoption



CARB Actions per 2017 Scoping Plan Update (1 of 3)

Set GHG Planning Targets	Effective Date	Statute
Electricity sector and retail electricity providers	Adopted by Board July 2018 for use in utility Integrated Resource Plans until next Scoping Plan Update	SB 350
Sustainable Communities Strategies	Updated targets approved by Board March 2018	SB 375
Strengthen/Extend Existing Regulations	Effective Date	
Mobile Sources – Phase 2 GHG emission standards for medium-duty/heavy-duty vehicles and trailers, Innovative Clean Transit, Advanced Clean Trucks, Ocean Going Vessels at Berth, Airport Shuttles	Range from April 1, 2019 to March 15, 2021	

CARB Actions per 2017 Scoping Plan Update (2 of 3)

Strengthen/Extend Existing Regulations and Programs	Effective Date	Statute
Low Carbon Fuel Standard, reflecting increased carbon intensity reduction by 2030	January 4, 2019	AB 32*
Cap-and-Trade Program for implementation beyond 2020	April 1, 2019	AB 398
Proposing to add 8 additional health endpoints to be included in CARB's quantification of health benefits of its air quality and climate actions	In progress, December 6, 2021 public workshop	

*LCFS was originally identified as one of the Discrete Early Action Measures required to be identified by AB 32

CARB Actions per 2017 Scoping Plan Update (3 of 3)

Adopt New Requirements	Effective Date	Statute
Prohibitions on HFCs in refrigeration/foam end uses	Dec. 27, 2018 (amended to impose further limits and regulate new AC equipment in 2021)	SB 1383
Reduce organic waste disposal by 50% by 2020 and 75% by 2025 (CalRecycle)	January 1, 2022	SB 1383

Additional Information

- Board materials from last update on the implementation of the 2017 Scoping Plan:
 - Presentation - <https://ww3.arb.ca.gov/board/books/2020/042320/20-4-2pres.pdf>
 - Status of Resolution 17-46 directives - <https://ww2.arb.ca.gov/ma042320>
- Board Resolution 17-46:
<https://ww3.arb.ca.gov/board/res/2017/res17-46.pdf>