

**DOCKETED**

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# Overview of Draft 2022 Scoping Plan Update



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IEPR COMMISSIONER WORKSHOP ON ROLE OF HYDROGEN IN CALIFORNIA'S  
CLEAN ENERGY FUTURE

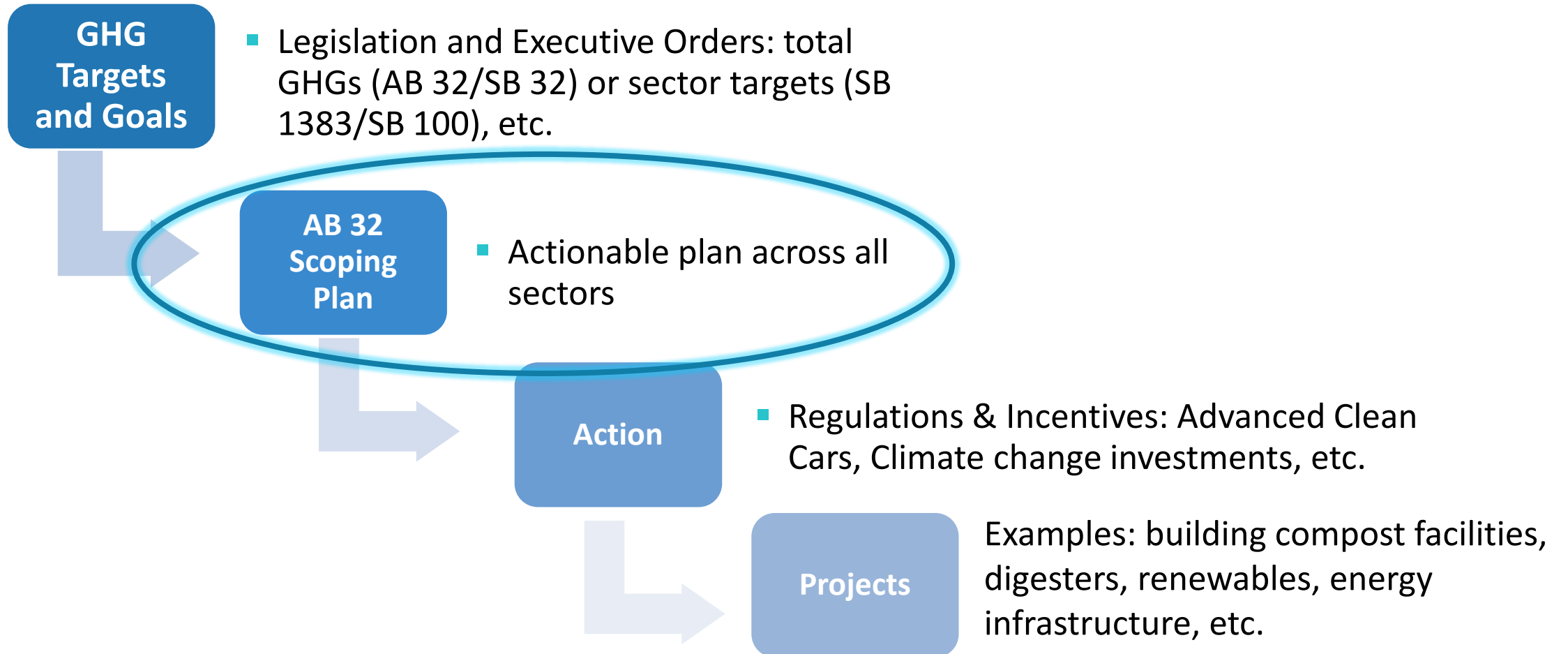
JUNE 21, 2022

# AB 32 Climate Change Scoping Plan Statutory Requirements

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- Scoping Plan(s) are action plans for CA to meet statewide GHG reduction targets
  - Scoping Plan(s) outline 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
  - Develop exportable programs for partners to adopt
- Support cost-effective and flexible compliance

# California's Climate Policy Framework



# What Carbon Neutrality Means

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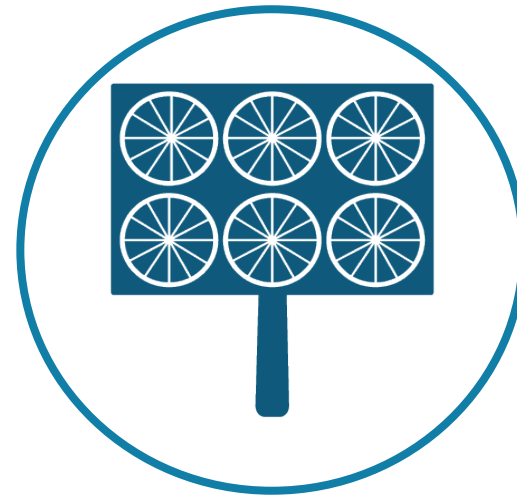
**Continue to reduce  
emissions from  
sources in the AB 32  
GHG Inventory**

**±**



**Emissions and  
sequestration  
from natural and  
working lands**

**-**



**Technological  
Carbon Dioxide  
Removal**

**=**

**Carbon  
Neutral**

# The Proposed Scenario

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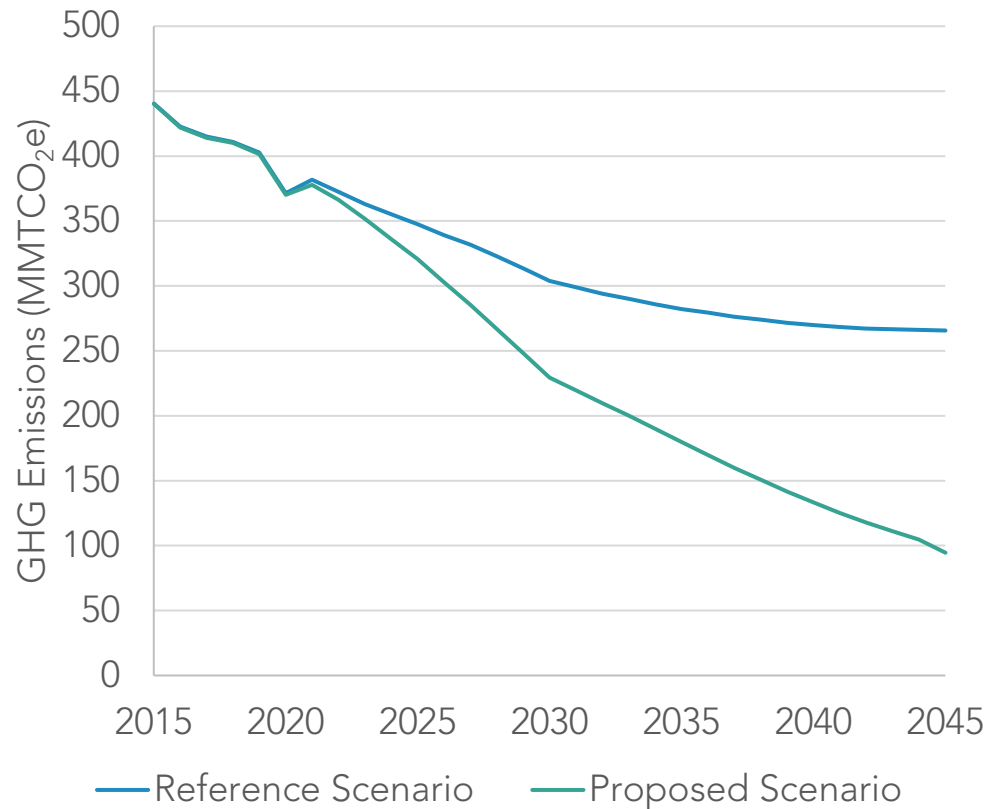


Carbon neutrality by 2045, deploy a broad portfolio of existing and emerging fossil fuel alternatives and clean technologies, and align with statutes and Executive Orders



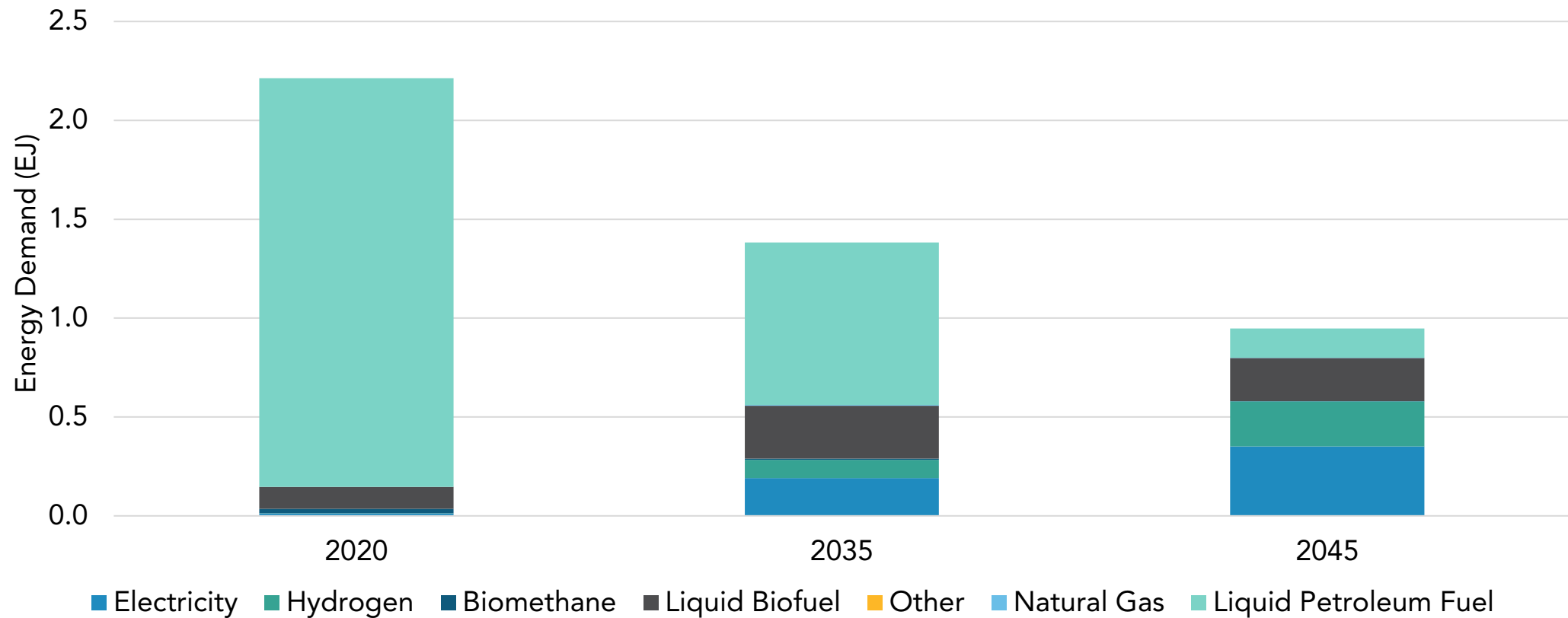
Land management activities that prioritize restoration and enhancement of ecosystem functions to improve resilience to climate change impacts, including more stable carbon stocks

# Reference and Proposed Scenario



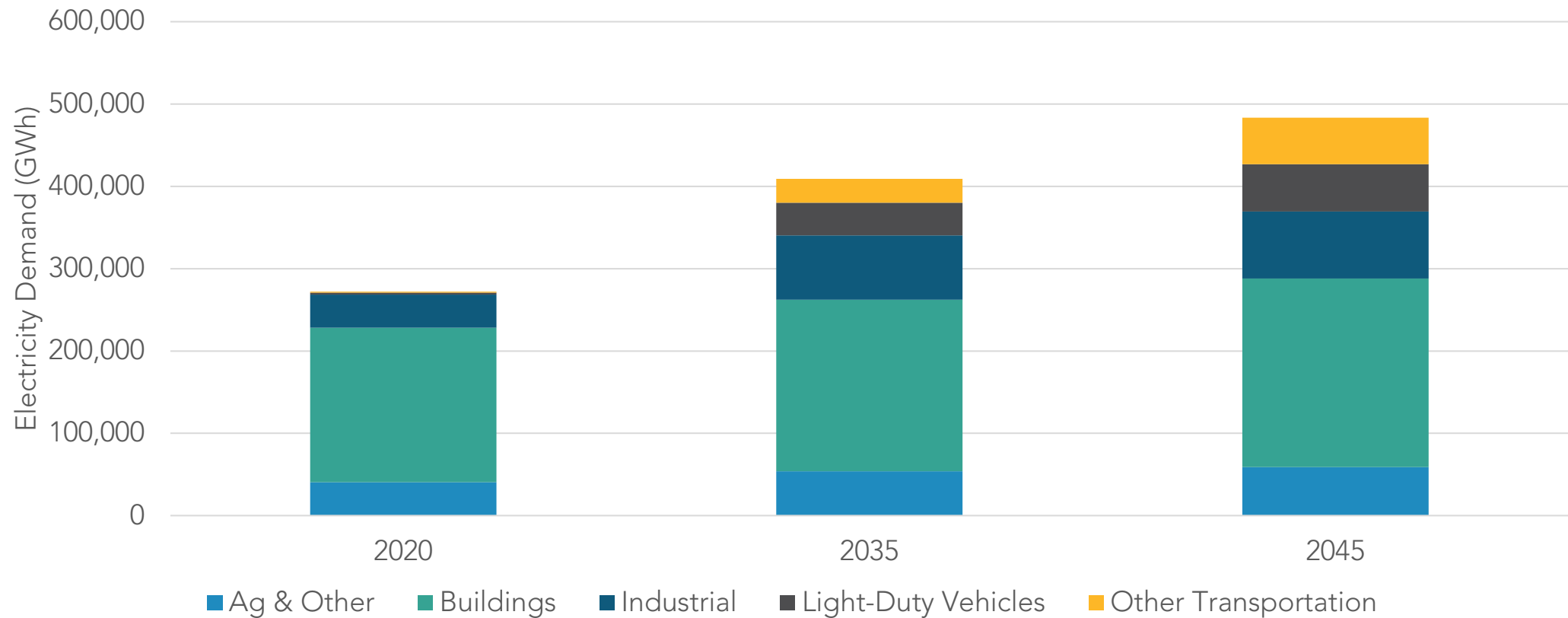
- Deploy zero-emission vehicles and reduce driving demand
- Coordinate supply of liquid fossil fuels with declining petroleum demand
- Decarbonize buildings
- Decarbonize industrial energy supply
- Generate clean electricity
- Reduce non-combustion emissions

# Transition Away from Petroleum Fuels - Transportation

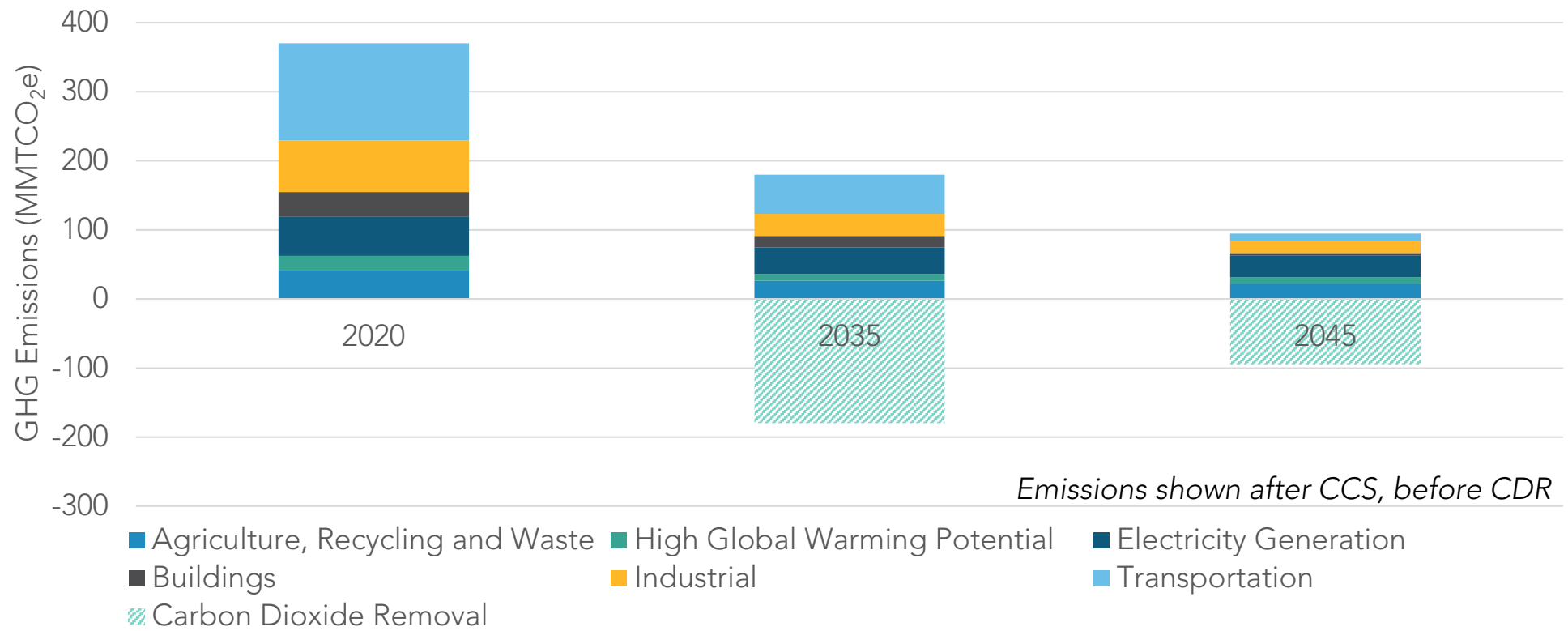




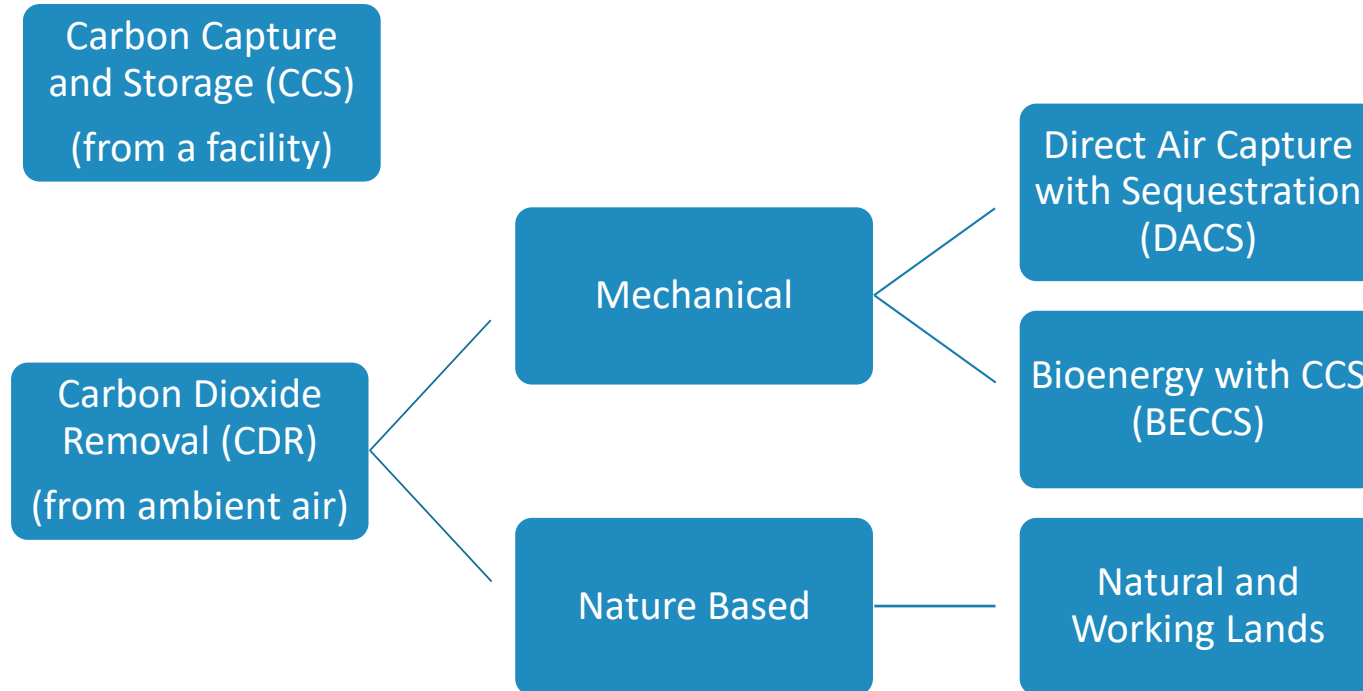
# Electric Loads Increase



# Residual Emissions

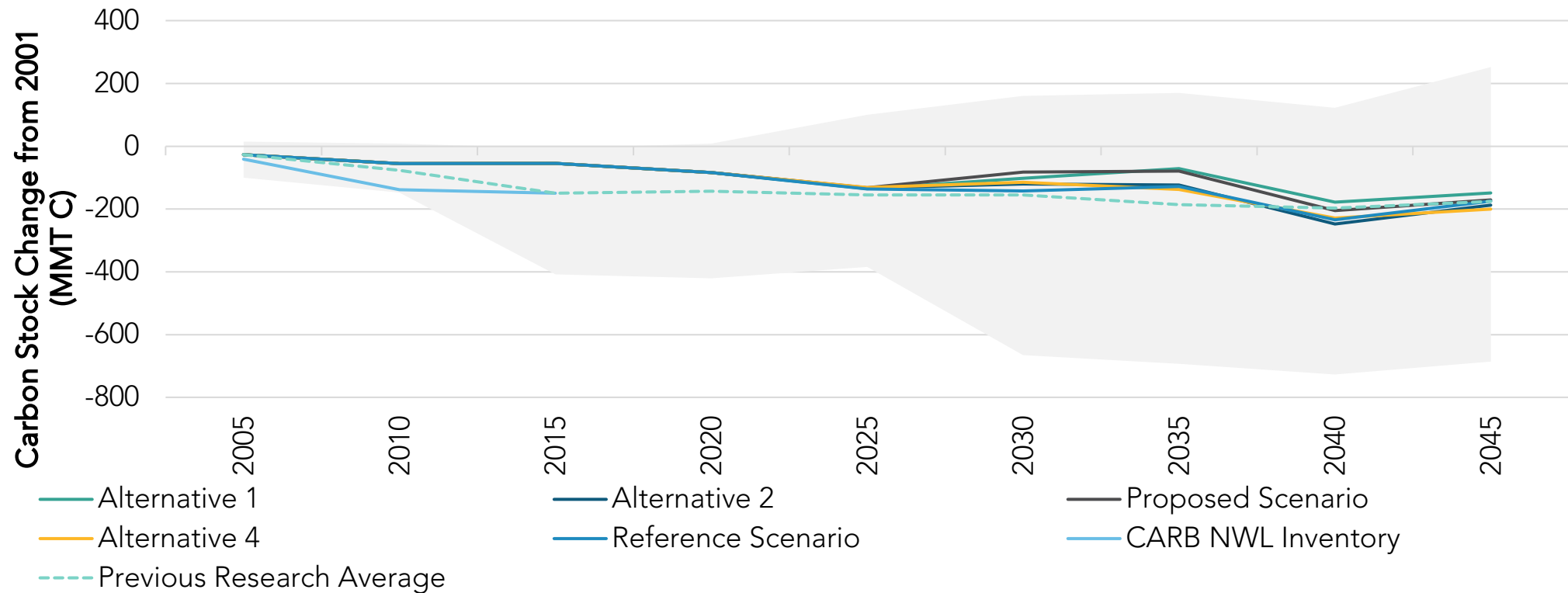


# Carbon Removal and Sequestration

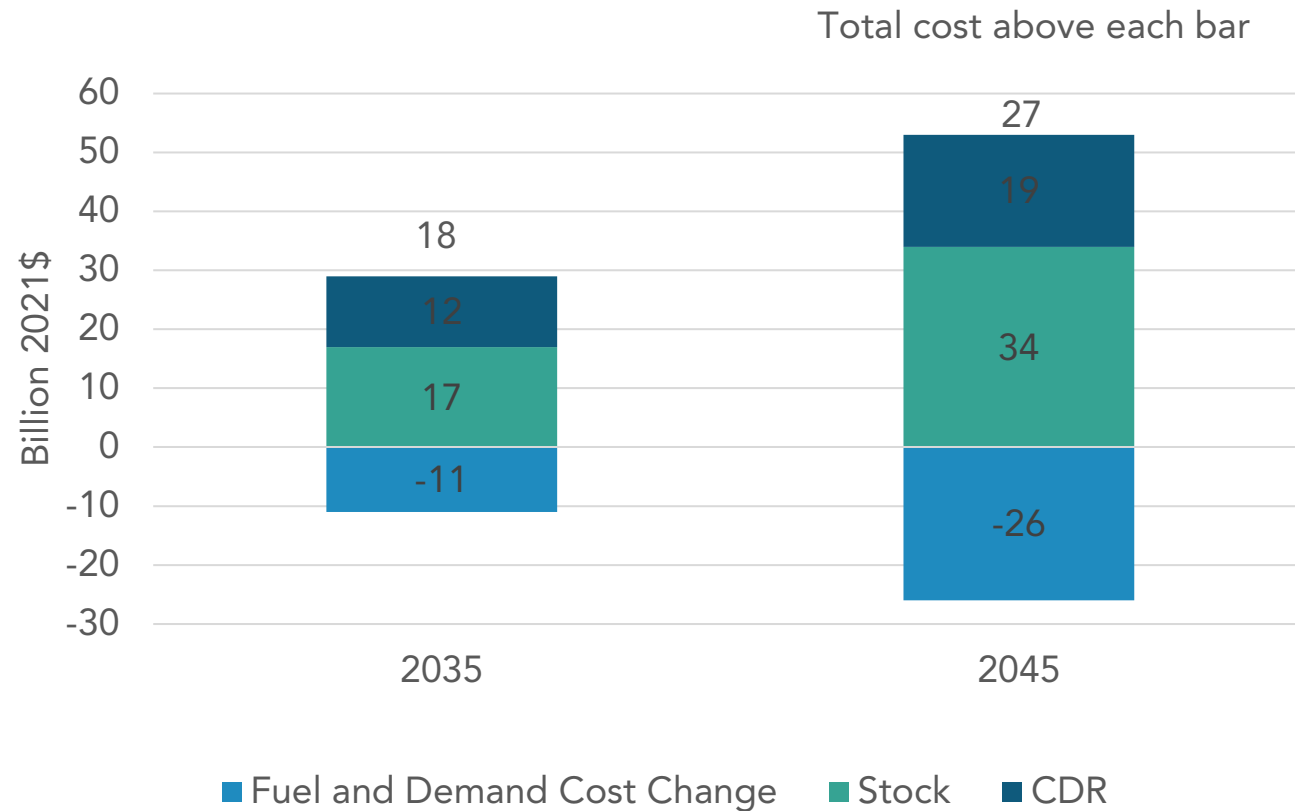


- Proposed Scenario GHG Emissions in 2045 (MMTCO<sub>2</sub>e):
  - Gross fuel combustion and non-energy emissions: 97.9
  - Captured by CCS: 3.4
  - CDR: 94.5

# NWL Carbon Stock Decreasing

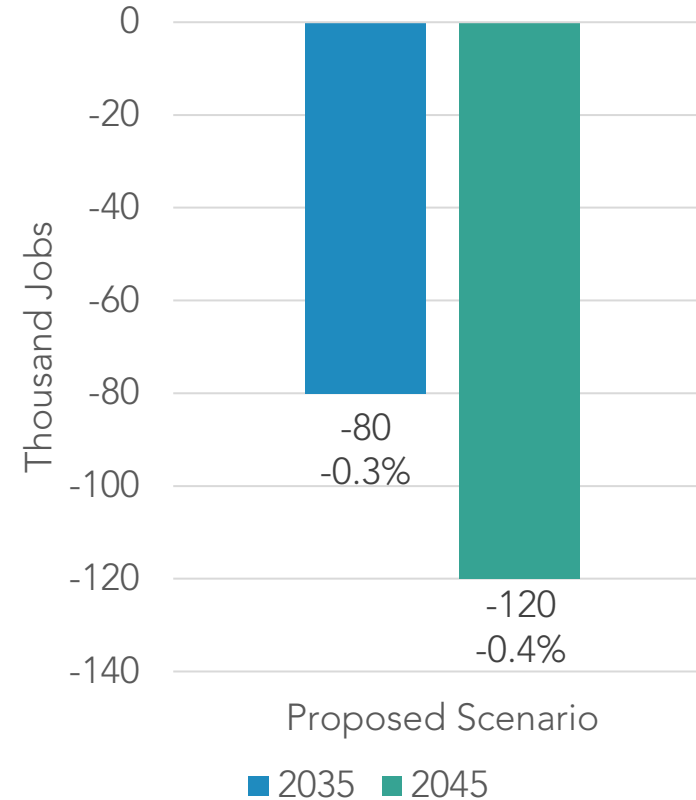
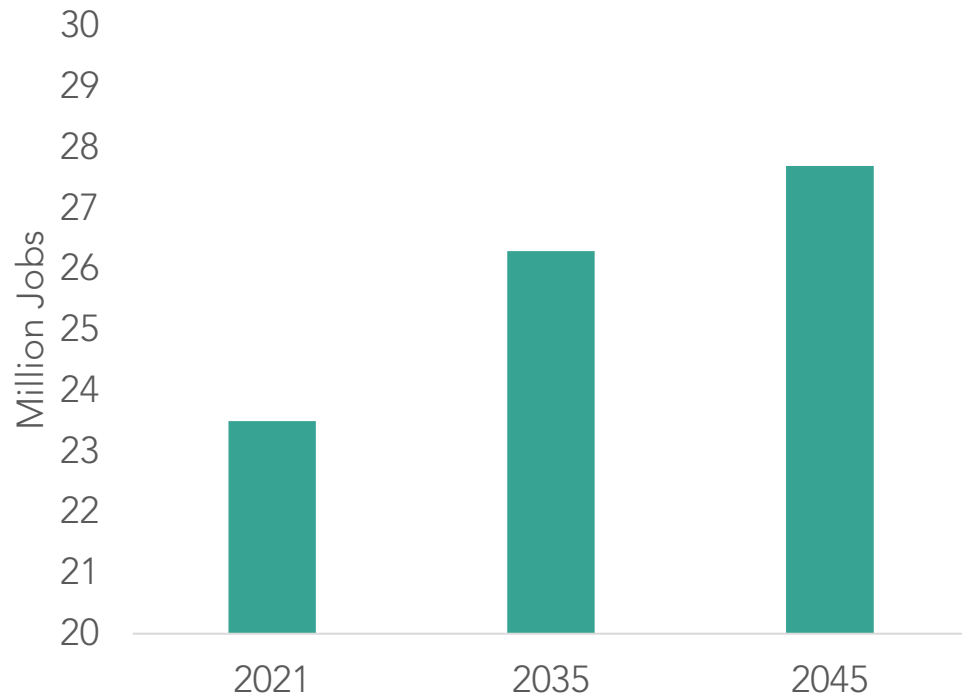


# Proposed Scenario Direct Cost



Cost and savings relative to the Reference Scenario for the AB 32 GHG Inventory sectors

# Proposed Scenario Employment Impact



Employment relative to a growing California workforce for AB 32 GHG Inventory Sectors

# Proposed Scenario Emission Reductions

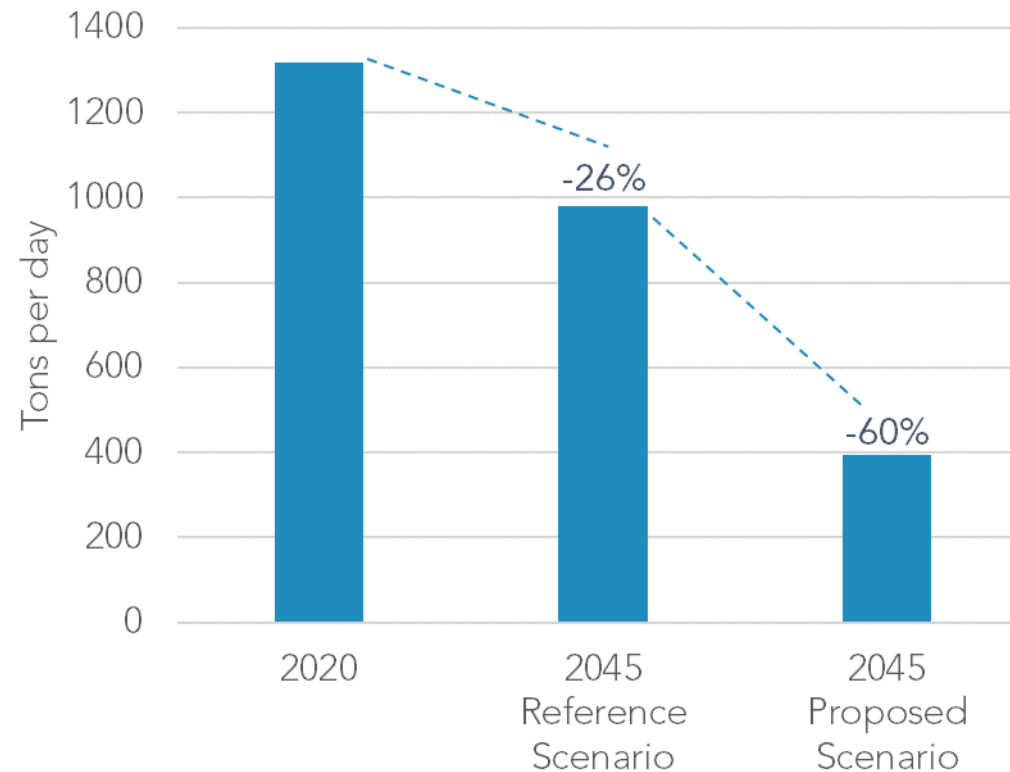
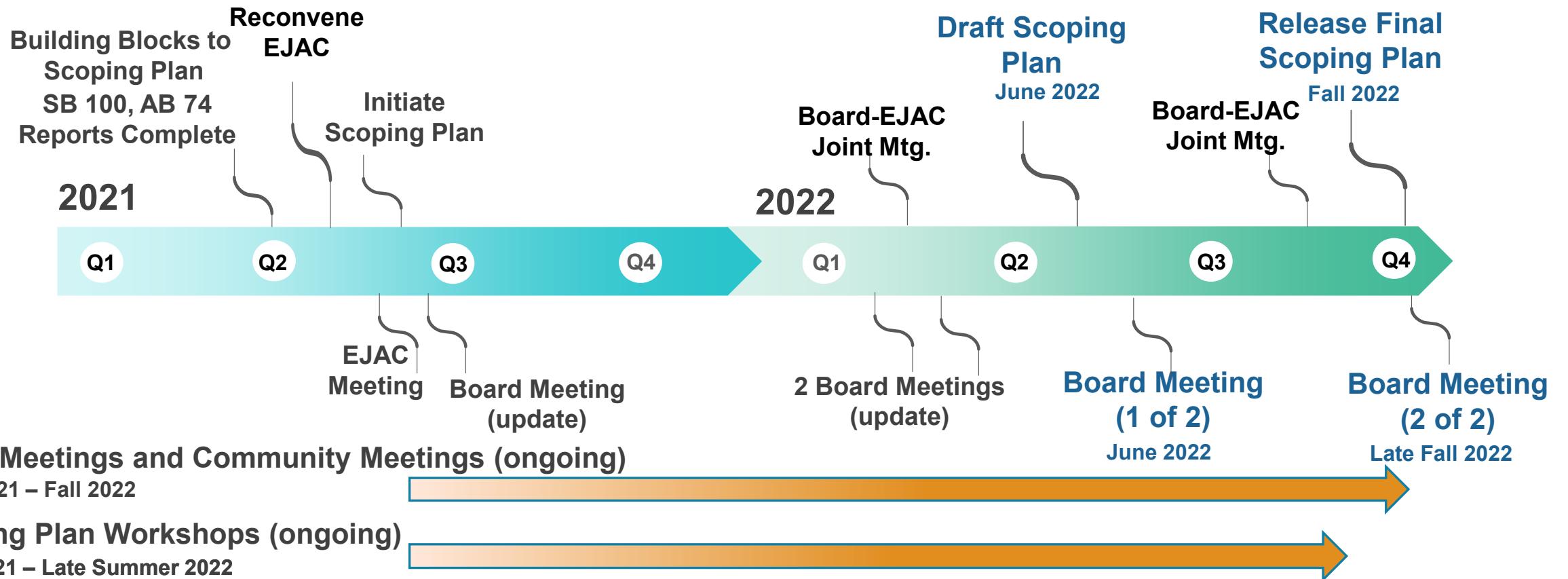


Illustration of NOx Emission Reductions from Current Levels for the Reference Scenario and Proposed Scenario in July and January 2045 for the AB 32 GHG Inventory Sectors

# 2022 Scoping Plan Update Schedule





# Thank you

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SUBMIT COMMENTS ON 2022 DRAFT SCOPING PLAN UPDATE:  
[HTTPS://WW2.ARB.CA.GOV/APPLICATIONS/PUBLIC-COMMENTS](https://ww2.arb.ca.gov/applications/public-comments)