

# 2022 Scoping Plan

*California's Proposed Strategy for Achieving  
Carbon Neutrality*

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# Recent Climate Legislation

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## AB 1279

- 2045 carbon neutrality target , anthropogenic emissions to be reduced by 85% by 2045 relative to 1990 levels

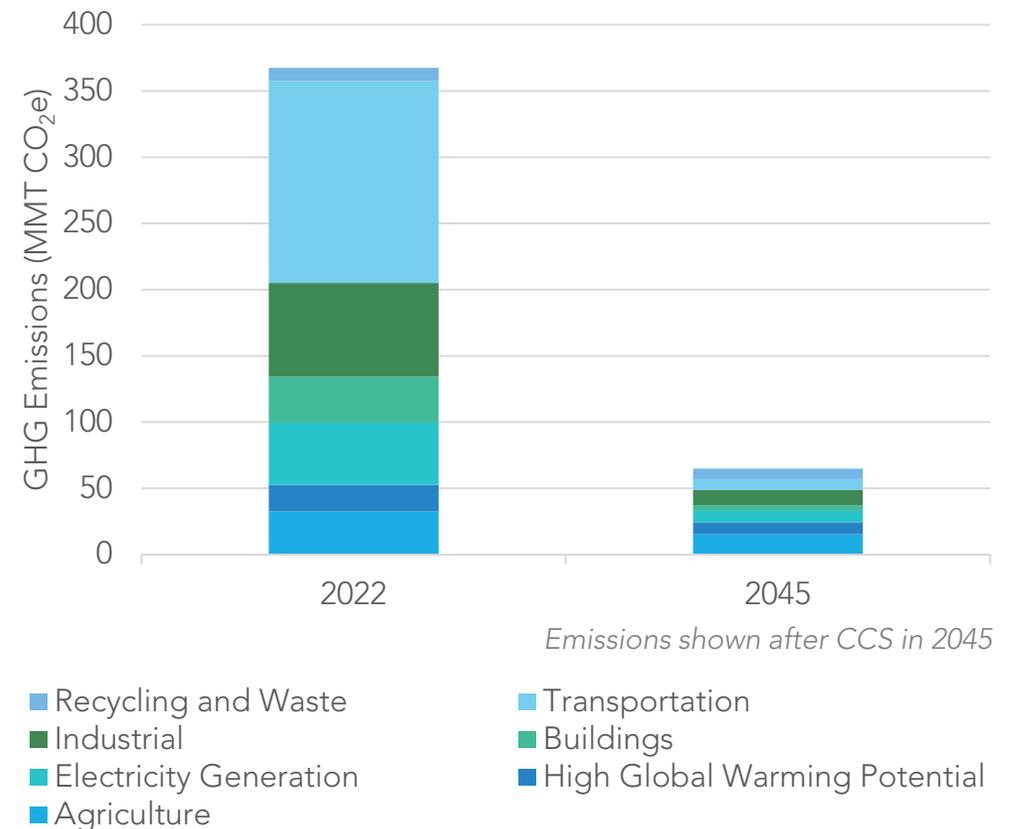
## SB 905

- Establishes a Carbon Capture, Removal, Utilization and Storage Program

# Anthropogenic GHGs

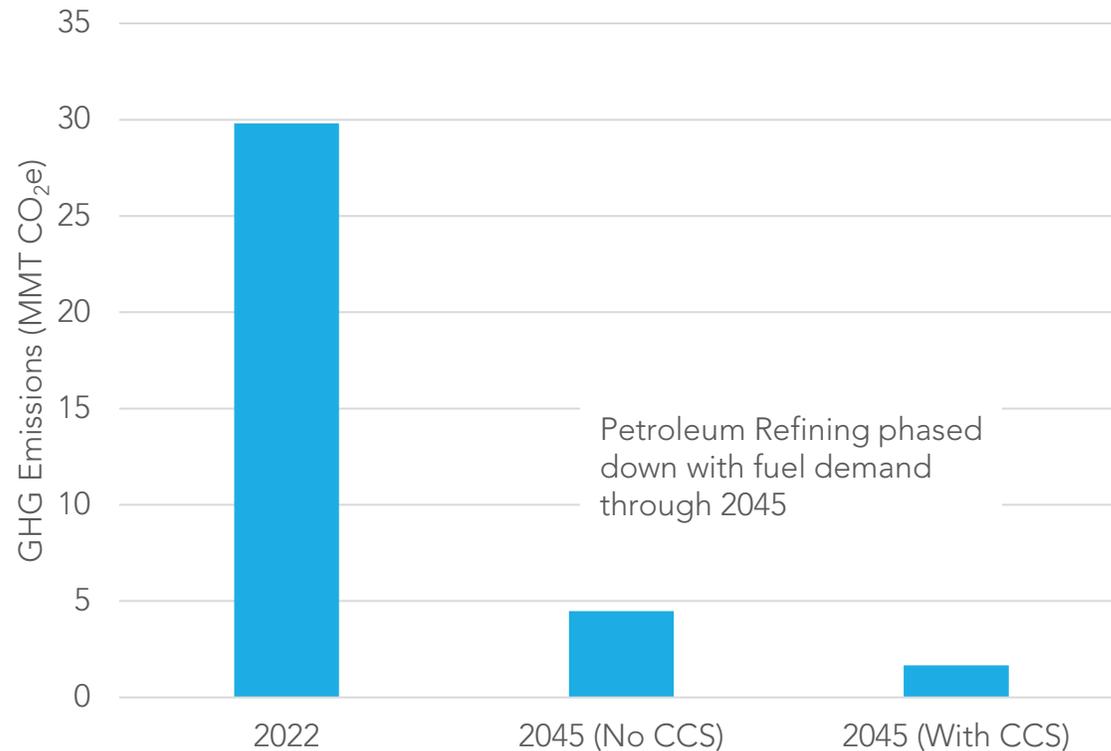
## Target 2045: 85% Reduction below 1990

- Some emissions remain in the AB 32 Sectors even after application of CCS
- Need carbon dioxide removal to compensate for residual emissions to achieve carbon neutrality



# Significant GHG Emissions Reductions in Petroleum Refining Sector

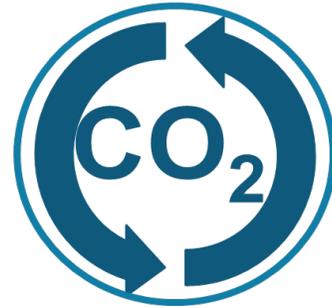
**85% reduction in Petroleum Refining GHGs without CCS and 94% with CCS**



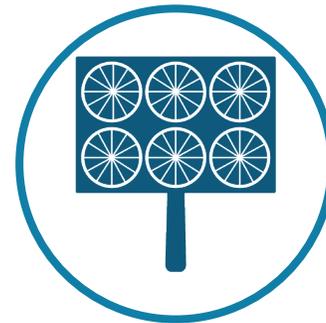
# Role and Scaling of Carbon Dioxide Removal (CDR)



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Carbon Neutral

**AB 32 GHG Inventory Sectors: Significantly reduced, but some emissions remain even with CCS**

**NWL a modest source**

**Need carbon dioxide removal to compensate for AB 32 GHG Inventory and NWL sectors**

- **Role of CDR is reduced if:**

- We reduce the emissions from the AB 32 GHG Inventory Sectors faster
- NWL are able to become a sink

# Cap-and-Trade Program & CCUS

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- California Cap-and-Trade Program does not currently recognize reductions achieved through CCUS
- Once a SB 905 program is established, the Cap-and-Trade Regulation would need to be amended to count CCUS
- Longstanding policy stance: count CCUS towards reducing compliance obligations under the Program
  - Candidates for CCUS will be largest emitters that are covered by the Program

# Ambitious Action Delivers Huge Benefits

## *Unprecedented Deployment of Clean Technology and Nature-Based Climate Solutions*



37x total on-road ZEVs



6x electric appliances in residences



1700x hydrogen supply



4x installed wind/solar generation capacity



> 2.5 Million acres of NWL climate action per year

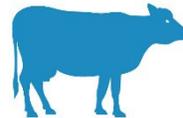
## *Significant GHG Reductions*



94% decrease in liquid petroleum fuel demand



91% decrease in fossil gas used in buildings



66% decrease in methane emissions from agriculture



10% reduction in wildfire emissions

In 2045 relative to 2022

# CALIFORNIA'S CLIMATE PLAN LAYS THE ROADMAP TO 2045



CUT AIR POLLUTION **71%**



SLASH GREENHOUSE GAS  
EMISSIONS **85%**



DROP GAS CONSUMPTION **94%**



CREATE **4 MILLION** NEW JOBS



SAVE CALIFORNIANS **\$200 BILLION**  
IN HEALTH COSTS DUE TO  
POLLUTION



Rajinder Sahota  
Deputy Executive Officer  
California Air Resources Board