Draft 2022 Scoping Plan

SEPTEMBER 1, 2022
June 2022 Board Hearing

- Directed staff to include the following:
  - Increase VMT to align with alternative 1
  - Household economic impacts by income level, race if possible
  - Community Vulnerability Metric
  - Text for safety considerations for pipelines, injections sites, and capture of carbon dioxide
July 22nd 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 gas plants
  - 3 million climate-ready and climate-friendly homes by 2030/ 7M by 2035
  - 6 million heat pumps statewide by 2030
  - A 20% clean fuels target for aviation
  - Carbon dioxide removal and capture target of 20 MMT in 2030/ 100 MMT in 2045
  - Increase LCFS stringency, accelerate refinery transitions to clean fuels
Scoping Plan Modifications - VMT

- More ambitious targets for Vehicle Miles Traveled (VMT) reductions

From
VMT reduced 12% by 2030
VMT reduced 22% by 2045
Aligned with Alternative 3

To
VMT reduced 25% by 2030
VMT reduced 30% by 2045
Aligned with Alternative 1
Scoping Plan Modifications - Electricity

- Electricity sector changes

**From**

- ~10 GW new gas capacity
- No explicit offshore wind target
- Proposed scenario = 7.3GW offshore wind capacity by 2045

**To**

- No new gas capacity
- Offshore wind target of 20 GW by 2045
Scoping Plan Modifications - Communities

- Quantifying the climate change impact on front line communities
  
  **Currently used**
  General Social Cost of Carbon per Ton

  **In addition**
  Community Vulnerability Metric – identify additional climate burden in frontline communities
Scoping Plan Modifications - Households

- Quantifying household impacts
  
  **Currently done**
  Total statewide household impacts

  **In addition**
  Table of household impacts by income level and race
Scoping Plan Modifications - Buildings

- “Climate ready” buildings means electric-ready

**In proposed scenario**
80% of appliance sales are electric by 2030
100% of appliance sales are electric by 2035
Appliances are replaced at end of life

**In addition**
3 million electric ready homes by 2030
7 million electric ready homes by 2035
6 million heat pumps deployed by 2030
Scoping Plan Modifications - Fuels

- Aviation fuels and LCFS

**From**
10% non-combustion aviation in 2045

**To**
20% non-combustion aviation in 2045
Increase stringency for the low carbon fuel standard (LCFS)
Scoping Plan Modifications - CCS

- Carbon Capture and Storage (CCS)

**From**
Modeling of CCS begins in 2021
CCS not applied to enhanced oil recovery

**To**
Modeling of CCS begins in 2028
CCS still not applied to enhanced oil recovery
Add text about need for safety around pipelines, injection sites, and ccs technology
Scoping Plan Modifications - Removals

- Carbon Dioxide Removal, Sequestration, and Capture

**From**
No 2030 target included in modelling

**To**
20 MMT CO2e/year carbon removal by 2030
100 MMT CO2e/year carbon removal by 2045
Focus on natural and working lands 1st