

2022 Scoping Plan Electricity Sector

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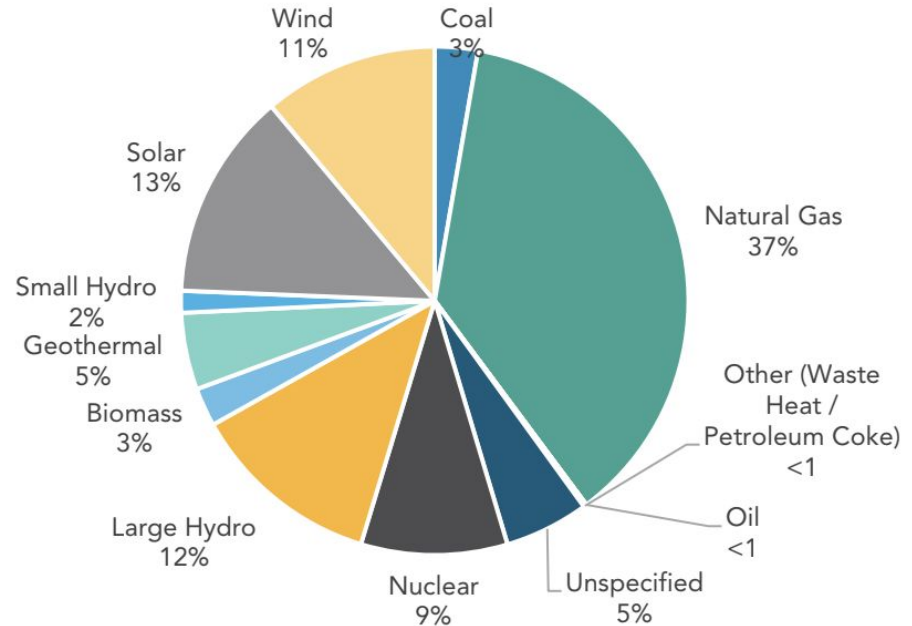


**REGENERATE
CALIFORNIA**

POWER UP CLEAN ENERGY | POWER DOWN DIRTY GAS

Electricity Grid 101

Figure 4-3: 2020 total system electric generation (based on GWh)²⁷⁷



Note: Imports contributing to total system generation are comprised of 62% zero-carbon energy and 38% non-renewable and unspecified energy. Percentages do not add to exactly 100 due to rounding.

Why Does the Scoping Plan Electricity Scenario Matter?

1. Sets sector-wide greenhouse gas emissions limits:

provider, which inform the California Public Utilities Commission (CPUC) and publicly owned utilities' integrated resource planning (IRP). A GHG planning target range of 30 to 53 MMTCO₂e—informed by the 2017 Scoping Plan—was originally developed and adopted by CARB in 2018. In its 2021 IRP planning cycle, the CPUC adopted a 38 MMT GHG target for the electricity sector in 2030.²⁹⁴

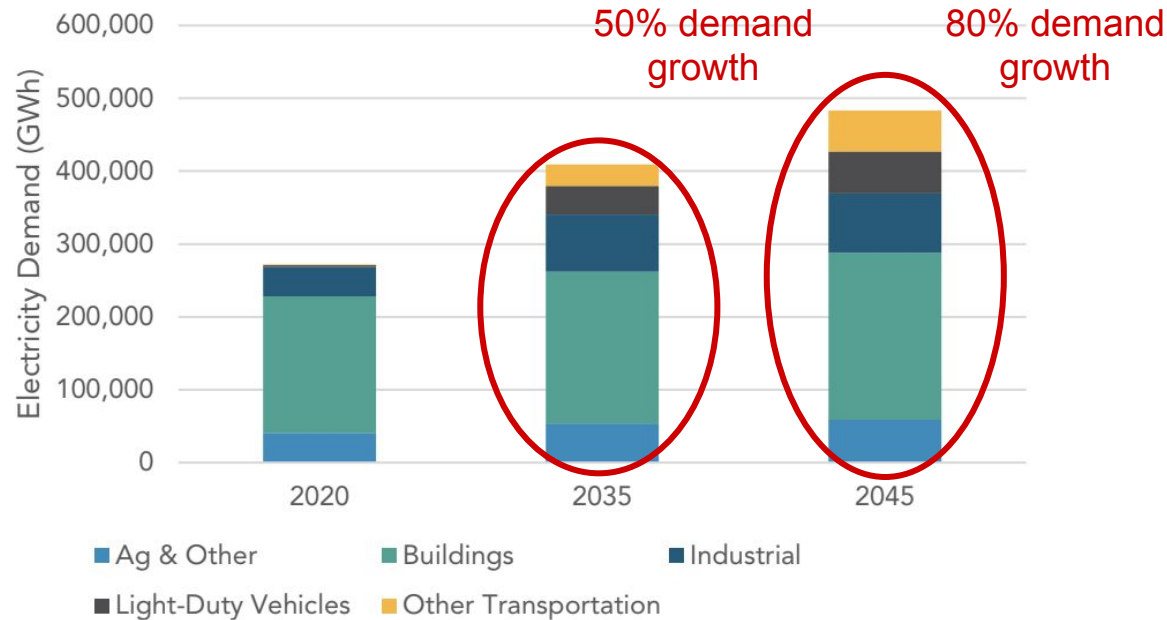
–2022 Draft Scoping Plan, Page 160

In the IRP, the greenhouse gas emissions limit set by the Scoping Plan determines the emissions limit that the CPUC sets. The IRP is when procurement decisions are made, i.e. when the CPUC can make utilities buy more clean energy instead of gas.

Why Does the Scoping Plan Electricity Scenario Matter?

2. Electrification of other sectors means increased electricity demand

Figure 4-6: Electric loads in 2020, 2035 and 2045 for the Proposed Scenario²⁹⁷



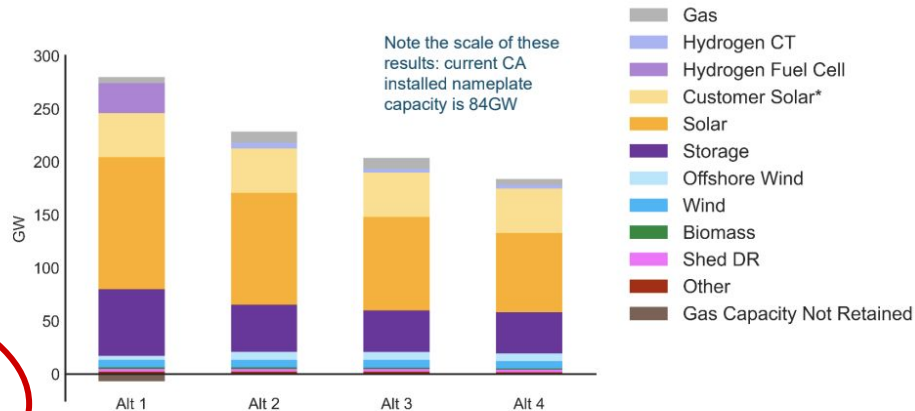
Electrification in other sectors must be matched by decarbonization & non-combustion resources in the electricity sector

March 15th, 2022, CARB/E3 Initial Modeling Results



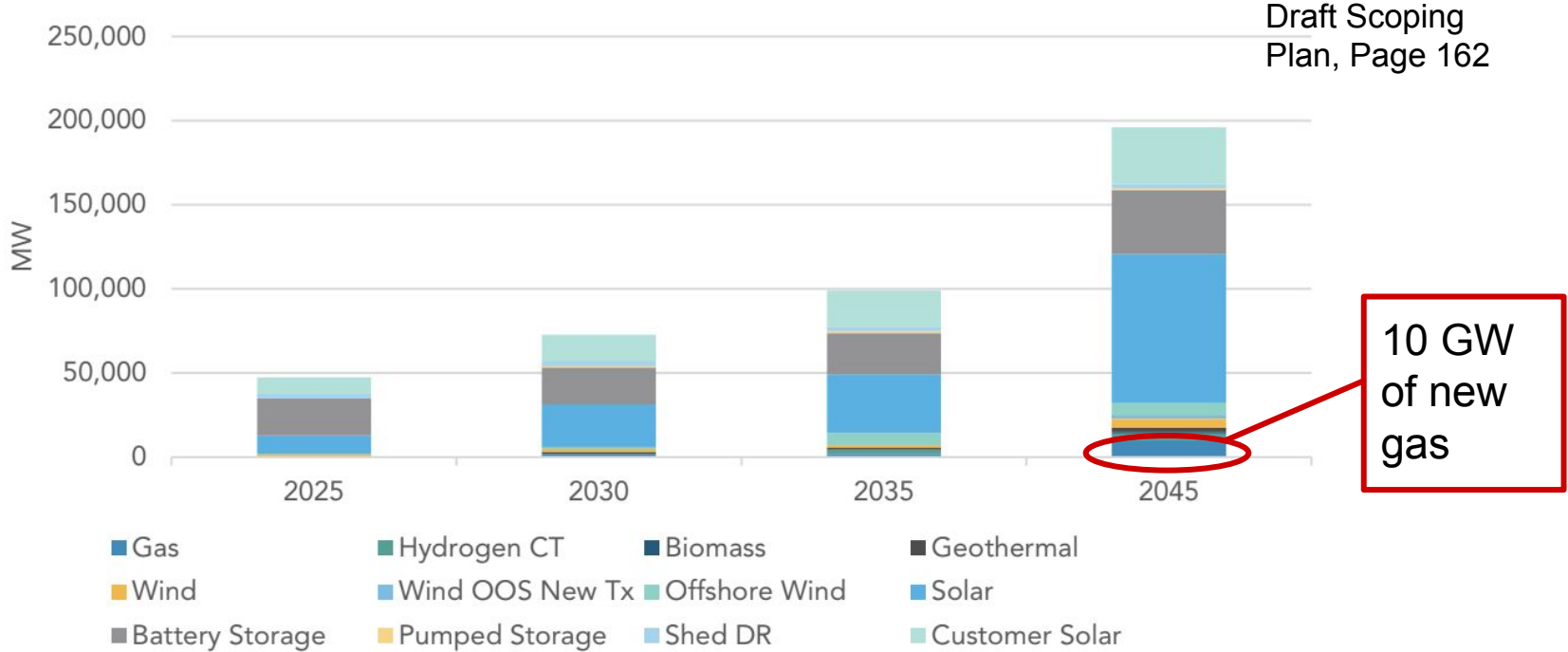
Cumulative New Resource Capacity Build in 2045

- + In Alt 1, builds ~62 GW of battery storage and ~30 GW of hydrogen fuel cells as clean firm capacity
- + Alt 1 builds ~124 GW of solar, compared to ~26 GW in the BAU
- + Alts 2 through 4 are similar in 2045 due to SB100 goal, while in Alt 1 the model builds significantly more clean energy resources to meet the 0 MMT, no combustion target
- + In Alt 3 scenario, model builds ~90 GW of solar and ~40 GW of batteries to meet SB100 retail sales target. All gas remains online and ~10 GW of new gas is built



Draft Scoping Plan for the Electricity Sector

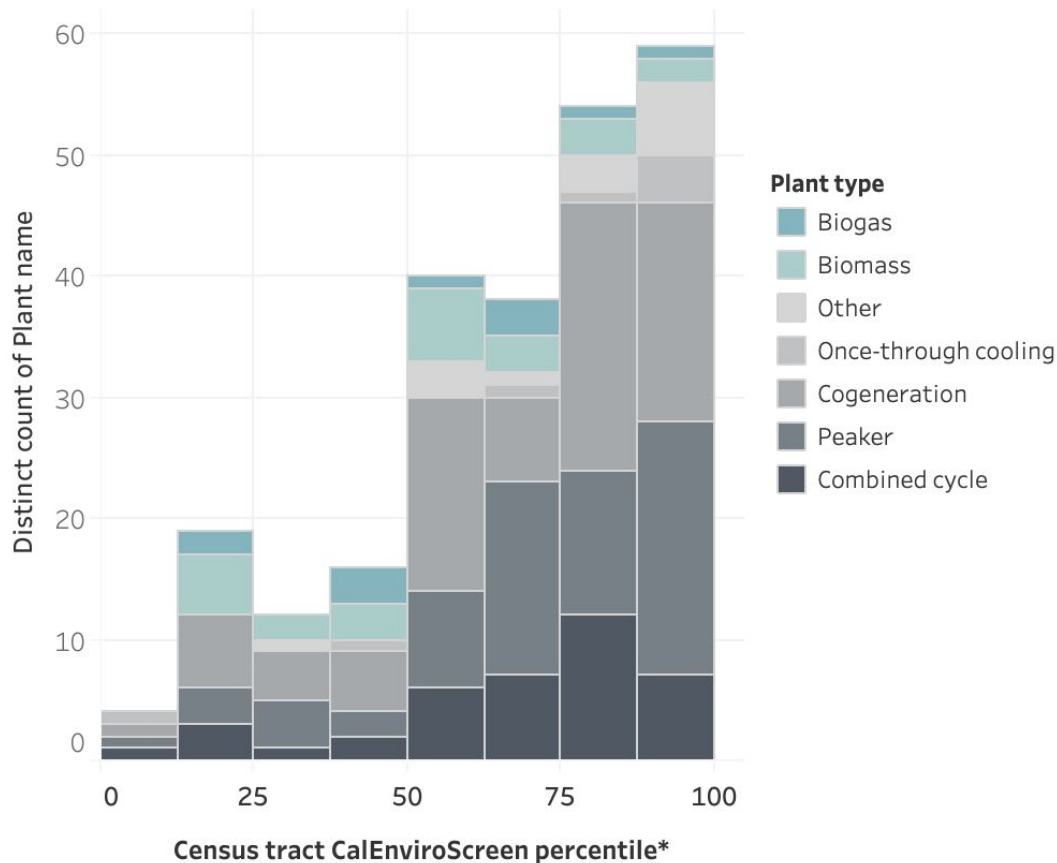
Figure 4-5: Projected electricity resources needed by 2045 in the Proposed Scenario



Distribution of plants by CalEnviroScreen percentile

What Does this Mean for EJ Communities?

- 10 GW of new gas capacity, regardless of how often they run, means more pollution in EJ communities
- Equivalent to around 33-38 new mid-sized power plants



Our Asks

1. There must not be any new gas-fired electricity generation in the 2022 Scoping Plan
2. The Scoping Plan must reach 0 greenhouse gas emissions from the electric sector by 2035

Reliability

Feasibility

Affordability

Legality