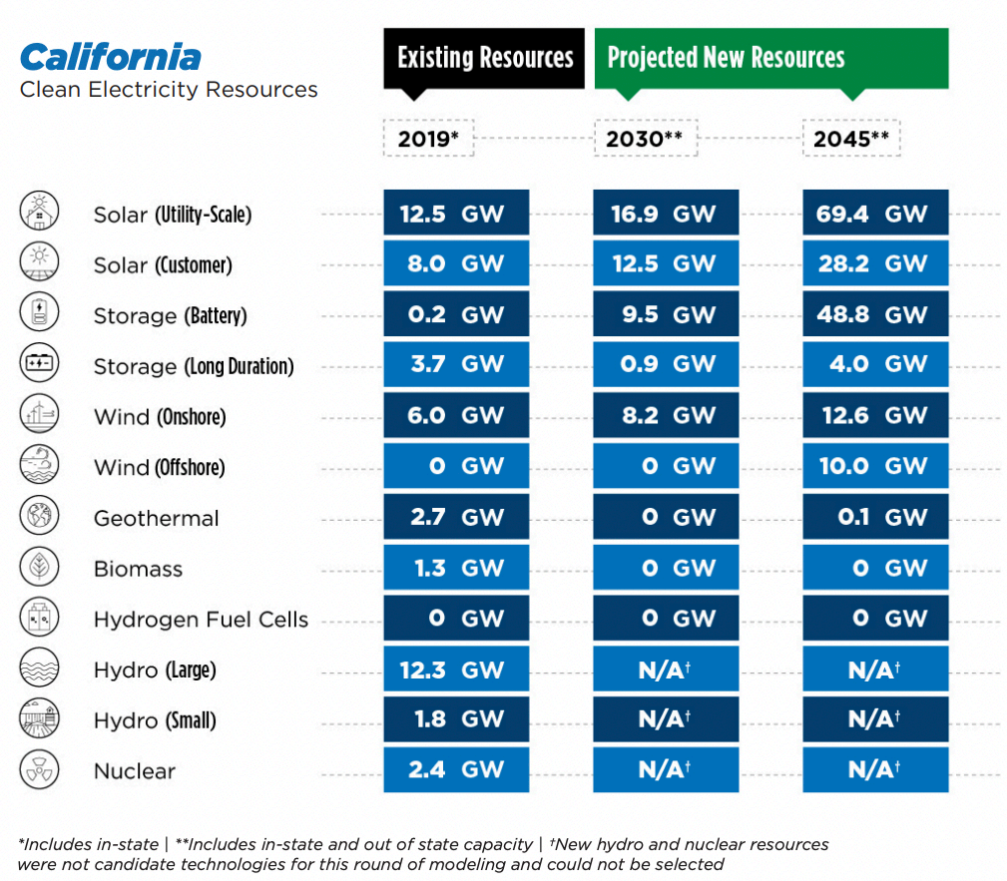
Customer Solar is a Key Part of Path to 100% Clean Electricity

CEC modeling assumes 39GW of customer-side solar in all SB100 pathways



California needs sustained growth in rooftop solar to reach clean electricity goals

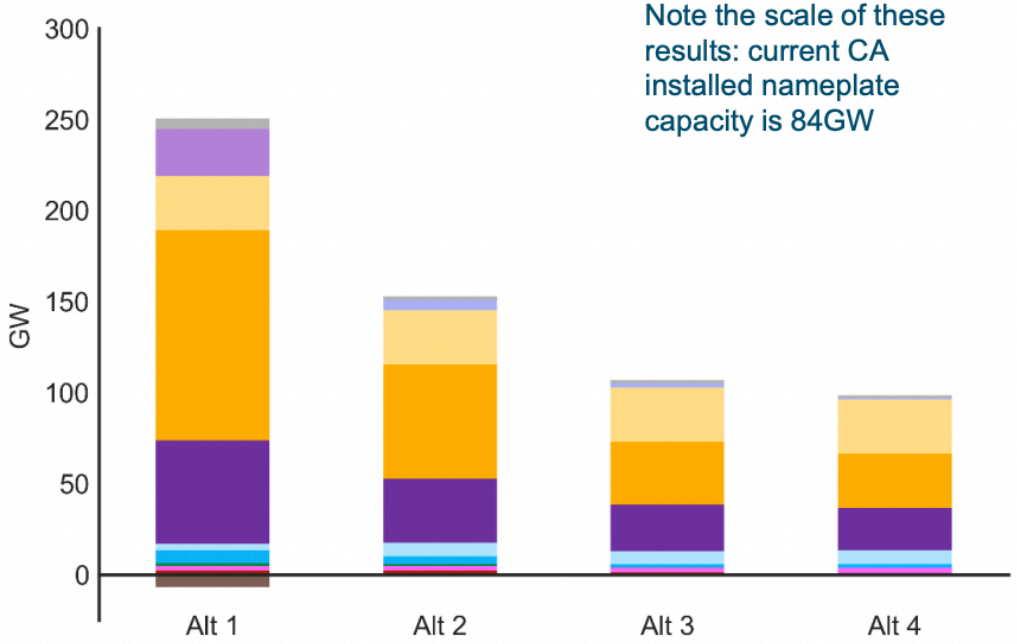
1. The state is on pace to reach 10.65 GW of rooftop solar through the end of 2022
2. The current CPUC proposed decision on a NEM successor program from the CPUC would greatly slow the growth of rooftop solar
3. Modeling from Wood Mackenzie of the CPUC proposed decision on a NEM successor program shows that California would only reach 15.9 GW of rooftop solar by 2030, compared to the 20.5 GW needed in the CEC projections
4. The decline in growth if the current proposed decision goes into effect would likely be steeper given supply chain and international trade challenges that are slowing both rooftop and utility-scale solar

Source: California Energy Commission

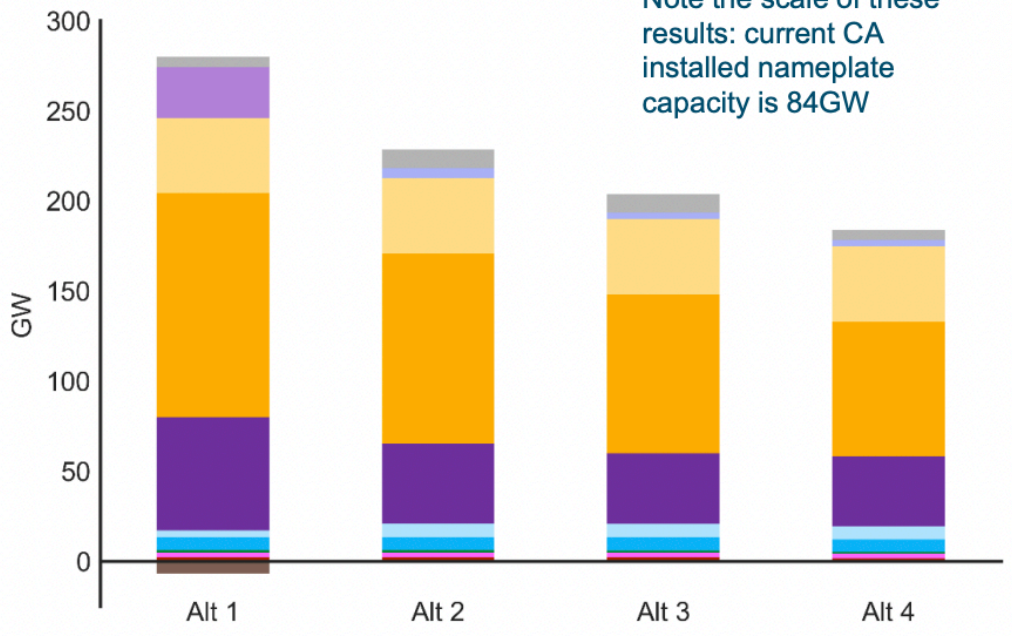
Major Growth in Customer Solar Needed to Reach Climate Goals

New report from CARB shows California needs historic growth in rooftop solar

Cumulative new resource capacity build by 2035



Cumulative new resource capacity build by 2045



Source: California Air Resources Board

CPUC DER Action Plan 2.0

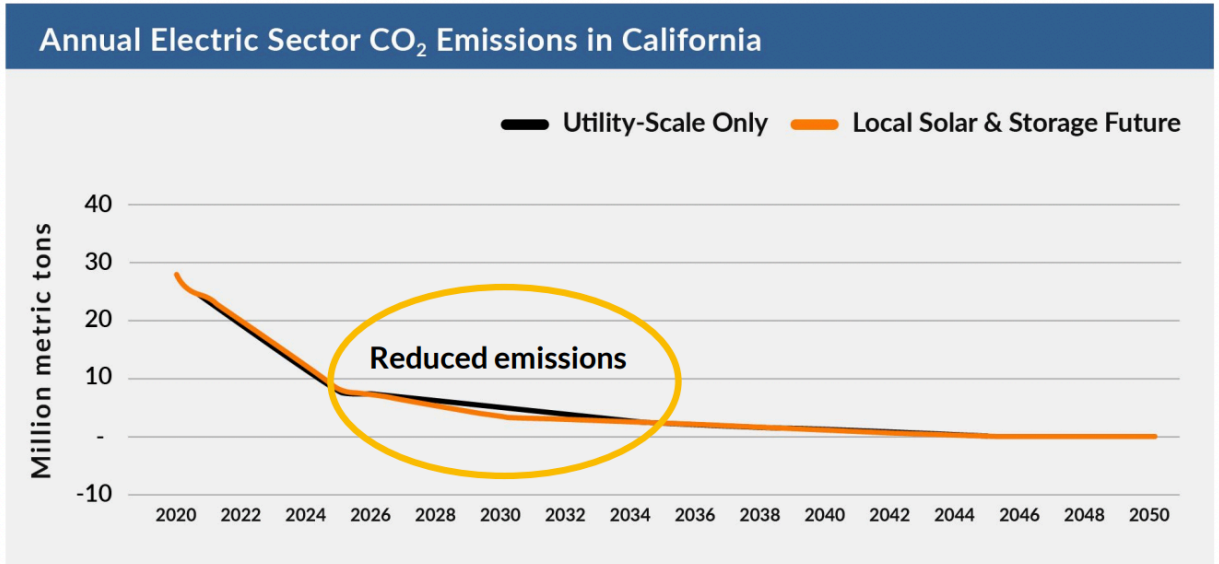
Covers 2022-2026

1. The CEC's 2020 Integrated Energy Policy Report forecasts large increases in BTM solar generation (260%), BTM energy storage capacity (770%), and electric vehicle demand (370%) from 2019 to 2030.
2. Among the factors driving DER growth include advancements in technology and cost declines.
3. DER Action Plan 2.0 seeks to maximize the ratepayer and societal value of millions of DERs on the grid, while ensuring affordable and equitable rates. Some of the aspirational vision elements of the first DER Action Plan are still relevant today, and more progress is needed in other areas. Some issues and challenges that were not prevalently featured in the first Plan include: accelerated transportation and building electrification, microgrids and resiliency, flexible loads and dynamic rates, and equity and affordability.

Local Solar Reduces Greenhouse Gas Emissions

Leads to larger emissions reductions than utility-scale solar alone

Annual Electric Section CO_2 Emissions in California



California could reduce greenhouse gas emissions by 4.1 million metric tons by prioritizing local solar and storage[1]

1. Distributed solar and storage reshapes load and reduces the amount of bulk power needed
2. Reduction in bulk power reduces the amount of fossil fuels needed to serve the distribution grid leading to greater and more immediate emissions reductions

Emissions reductions today provide greater benefit than the same reductions in the future[2]

1. California has set clean electricity goals in terms of 2030 and 2045 but the cumulative amount of carbon in the atmosphere is what matters most
2. Immediate emissions reductions reduce the risk that the climate will pass a tipping point

1. Compared to the base case of a future that relies entirely on utility-scale energy generation.
2. Environment California Research & Policy Center, The Environmental Case for Rooftop Solar, accessed 27 April 2022 at https://environmentamerica.org/sites/environment/files/reports/CA_Env_Benefits_scrn.pdf?_ga=2.267776780.305040142.1651087654-1167419607.1640036177

Source: California Local Solar Roadmap