

California Community Solar

Top line statistics:

- Using *existing infrastructure* (no grid upgrades) the net value billing tariff can conservatively deploy nearly **8 gigawatts of community solar**. With some upgrades, this number could be substantially more.
- This amount includes nearly **4 gigawatts** of ground mount community solar with over half of that capacity in disadvantaged communities and local reliability areas. This ground mount capacity can be deployed if the CPUC adopts CCSA's Net Value Billing Tariff.
- Additionally, about the same amount of capacity (~4 gigawatts) can be deployed on industrial roofs (warehouses, etc.). This capacity could be deployed if the CPUC adopts CCSA's Net Value Billing Tariff AND the Energy Commission provides reliability funding to support the additional cost of projects.

Table 1:

Technical capacity of grid and land/roof availability to support community solar.

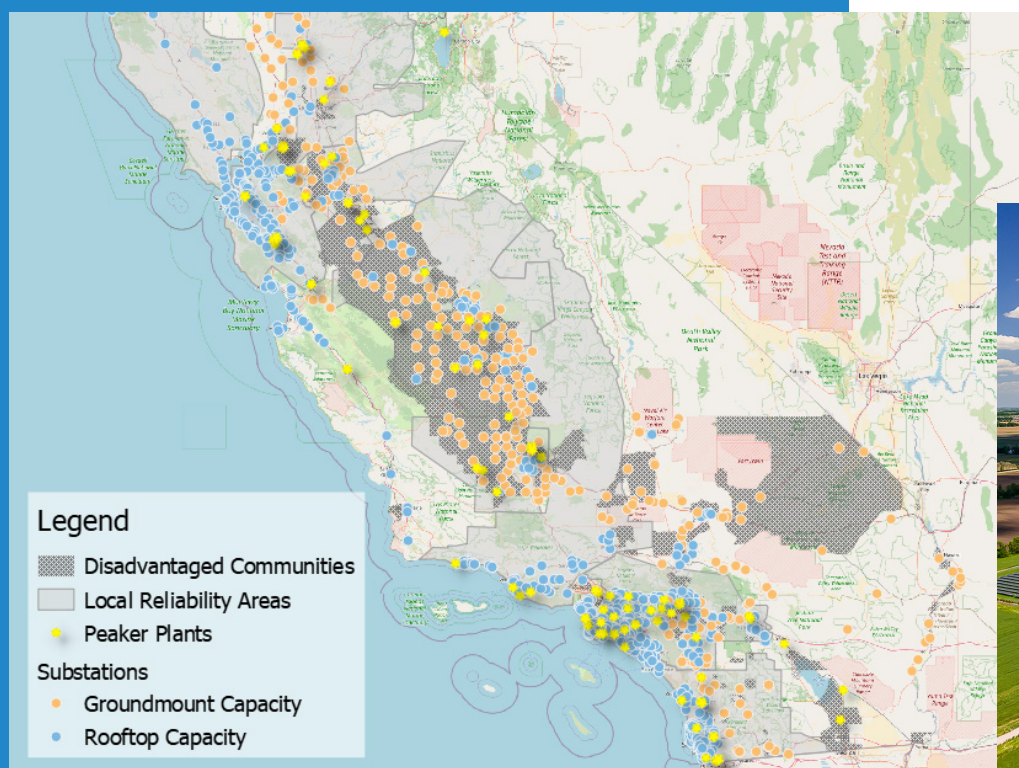
Technical Capacity Analysis (MWdc)			Groundmounts			Rooftops		
LRA	Not in DAC	In DAC	Grand Total	Not in DAC	In DAC	Grand Total		
Big Creek / Ventura	107	225	332	198	37	235		
Greater Bay	32	0	32	575	124	699		
San Diego/ IV Area	225	0	225	414	97	511		
Greater Fresno	75	579	654	37	55	92		
Humboldt	0	0	0	32	0	32		
Kern	43	354	397	23	23	46		
LA Basin	204	118	322	975	782	1,757		
North Coast/North Bay	0	0	0	115	0	115		
Sierra	182	0	182	28	9	37		
Stockton	107	129	236	18	60	78		
No LRA	986	311	1,297	248	60	308		
Grand Total	1,962	1,715	3,677	2,663	1,247	3,910		

What is the basis of these capacity numbers?

These numbers are based on an analysis of the substations in the featured map, specifically:

1. Ground mount installations — these are rural substations. We assume these substations can support 10 GW worth of community solar (2 typical 5 MW rooftop solar projects) which is based on the typical equipment ratings of substations.
2. Rooftop installations — these are suburban/urban substations that are within 2 miles of industrial roof space. Here we assume 5MW per substation not because the substations couldn't support more but because there often isn't enough roof space for more close to the substation.

Figure 1:
Statewide map of possible community solar capacity



What could be achieved if the state opens community solar with adoption of the Net Value Billing Tariff and allocation of state funds to leverage federal funds:

If California acts to successfully leverage billions in federal and state funding opportunities for community solar-plus-storage in California, there are numerous benefits:

- For every \$1 invested by the Inflation Reduction Act and state electric reliability funding in the AB2316 program, the average home is estimated to save ~\$1.50 total in electric bills.
- At minimum, more than 1.1 million CA households are expected to subscribe, over half of which will be low and moderate income households. The average household is expected to receive utility bill savings of around \$200 a year from the program. Savings will be even higher for low and moderate income households — closer to \$300/year. **If the state moves swiftly this summer to stand up AB2316**, however, federal and state incentives could bolster the program and allow more than 2 million CA households to subscribe, and low and moderate income communities would save even more — close to \$500/year.
- These projects are expected to generate at least \$12 billion in investments and spur the creation of more than 25,000 jobs. If the state moves swiftly to create the program and capitalize on incentives, this could soar to an estimated \$23 billion in investments and 40,000 jobs.
- If California moves aggressively to make the most of the Federal funding opportunities, the total power produced from community solar-plus-storage projects would exceed all power currently produced by gas peaker plant generation in California.

Regional analysis:

The Los Angeles Basin (“LA”) could have over 100 community solar-plus-storage projects, or approximately 700 megawatts of new renewable energy available to support the grid and our communities. **But, if the CPUC acts quickly this summer to create the program**, there could be more than 600 new community solar-plus-storage projects in LA, totaling more than 2 GW.

- Community solar-plus-storage has the potential to reduce nearly a quarter (22 percent) of the peaker plant generation in LA that is polluting our communities. **But if the CPUC acts quickly this summer**, these projects could effectively displace more than half of all peaker generation in LA (61 percent).
- **If the CPUC acts quickly**, community solar-plus-storage would offset the emissions of 180,000 cars and help improve the air quality for the over-burdened Los Angeles area.
- Around 200,000 subscribers are eligible for the program with low and moderate income households making up 51 percent of the beneficiaries. **If the CPUC acts quickly**, the program could grow to support more than 560,000 LA-area subscribers. That means 360,000 additional LA households eligible for the program’s savings.
- These projects at baseline are estimated to bring 4,400 jobs to LA and more than \$665 million in federal investment tax credits (ITC) that help ensure a successful, expansive, equitable community solar-plus-storage program. **If the CPUC acts quickly**, the program could grow to bring nearly 12,000 jobs, and more than \$3 billion in federal incentives, to LA.

The San Joaquin Valley region could have over 100 community solar-plus-storage projects, or approximately 650 megawatts of new renewable energy available to support the grid and our communities. **But if the CPUC acts quickly this summer to create the program**, the area could benefit from approximately 150 new community solar-plus-storage projects totaling more than 720 MW.

- Community solar-plus-storage has the potential to eliminate *all* of the peaker plant generation in the San Joaquin Valley that is polluting our communities.
- **If the CPUC acts quickly**, community solar-plus-storage would offset the emissions of 60,000 cars and help improve the air quality for the over-burdened San Joaquin Valley.
- Around 180,000 subscribers in the San Joaquin Valley are eligible for the program with low and moderate income households making up 51 percent of the beneficiaries. **If the CPUC acts quickly**, the program could grow to support more than 205,000 subscribers in the area. That means 25,000 additional San Joaquin Valley households eligible for the program’s savings.
- These projects at baseline are estimated to bring 3,900 jobs and more than \$580 million in federal investment tax credits (ITC) that help ensure a successful, expansive, equitable community solar-plus-storage program. **If the CPUC acts quickly**, the program could grow to bring an estimated 4,300 jobs, and more than \$1 billion in federal incentives, to the area.

