A large, stylized sunburst graphic in a lighter shade of blue, positioned on the left side of the slide. It consists of numerous radiating lines of varying lengths, creating a fan-like or sunburst effect.

Impact of NEM-3 on California's Renewable Energy Progress and Solar Jobs

November 2023

State regulators are getting in the way of California's solar potential

Utilities hate competition from rooftop solar, and the CPUC seems intent on doing their dirty work:

- Earlier this year the CPUC implemented an overnight 70-80% cut in the value of rooftop solar produced by single family homes.
- Just last month, the CPUC went further by making solar even more unaffordable for multimeter properties like schools, farms, apartments and small businesses.

We predicted the impacts of the NEM-3 decision, which the CPUC ignored

“The CPUC’s final proposal is a loser for California on many levels. For the solar industry, it will result in business closures and the loss of green jobs. For middle class and working-class neighborhoods where solar is growing fastest, it puts clean energy further out of reach. For our grid reliability needs, it fails to promise robust growth in battery storage. And for California’s race to clean energy, it puts us behind our goals and out of step with the national pro-solar agenda. The proposal is a step backwards when we really need to be moving forward with solar and battery storage. It is a dark day in California when the utility regulators try to block out the sun.”

- CALSSA Statement, December 14, 2022

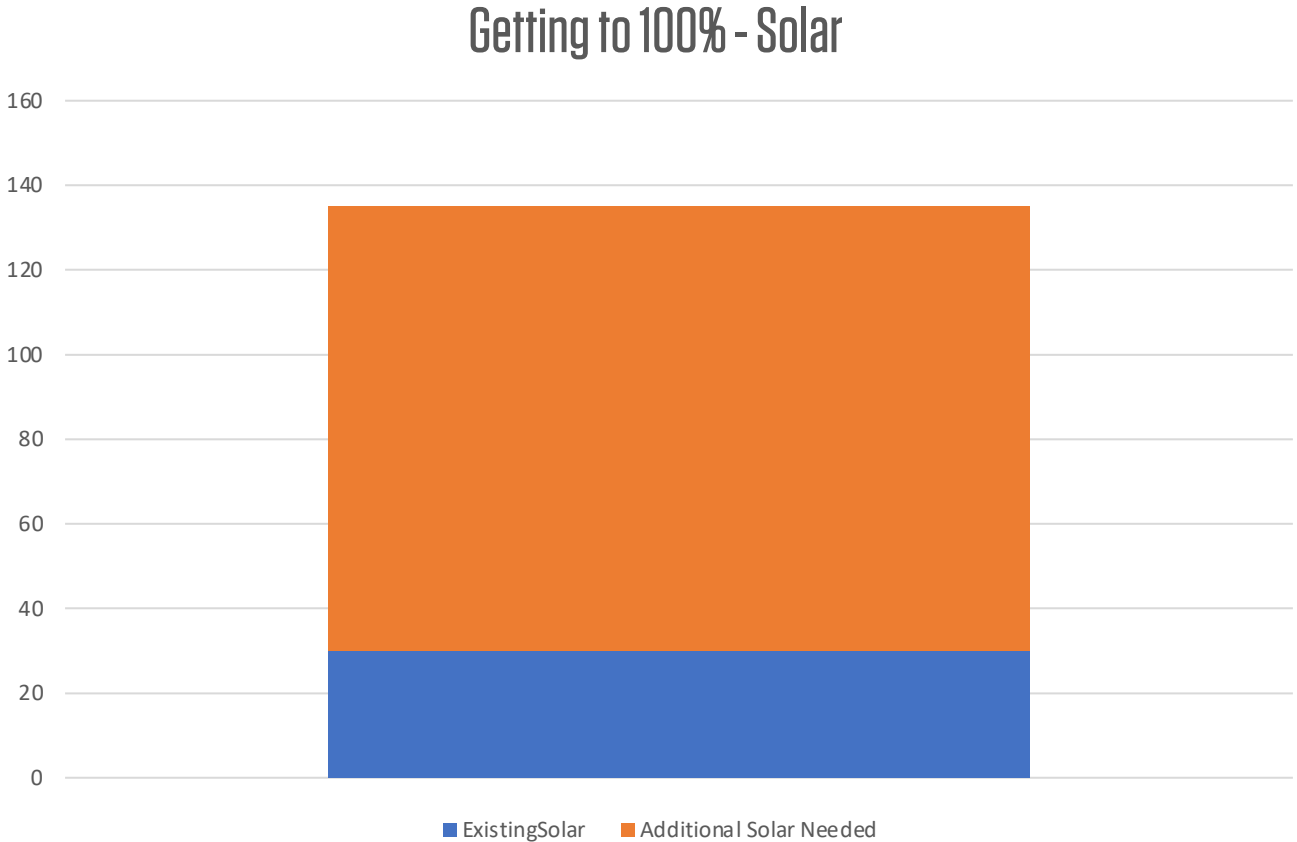
We are launching the solar and storage industry into the future so that it can support the modern grid. The new tariff promotes solar systems and battery storage with a focus on equity and advances the new clean energy technologies we need to meet our climate goals and help ensure grid reliability.”

- CPUC Press Release, December 15, 2022

Now – just a half a year after the implementation of the NEM-3 decision – we are already seeing severe impacts for California’s clean energy progress, green jobs and small businesses.

California Needs A LOT MORE Solar

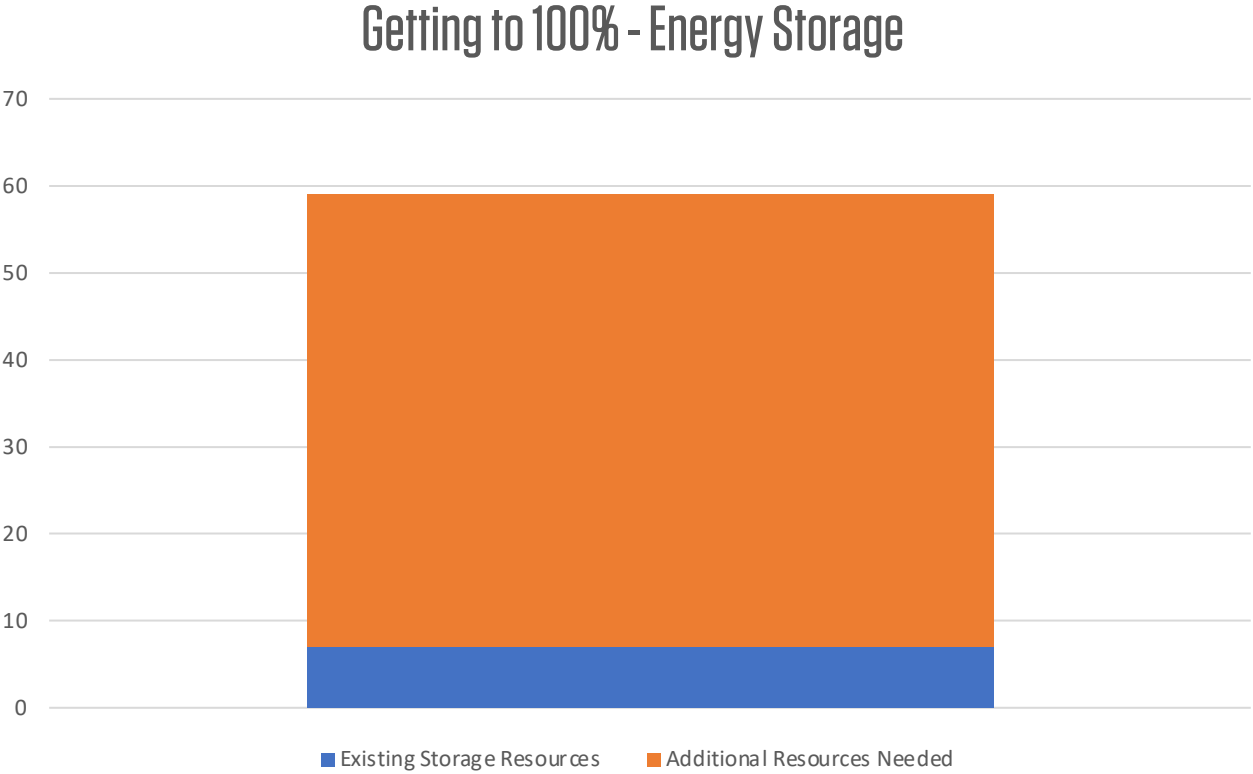
To meet our 100% clean energy goals, California needs 3.5x more solar energy than we have today.



Based on CEC's SB 100 pathway report

California Also Needs A LOT MORE Storage

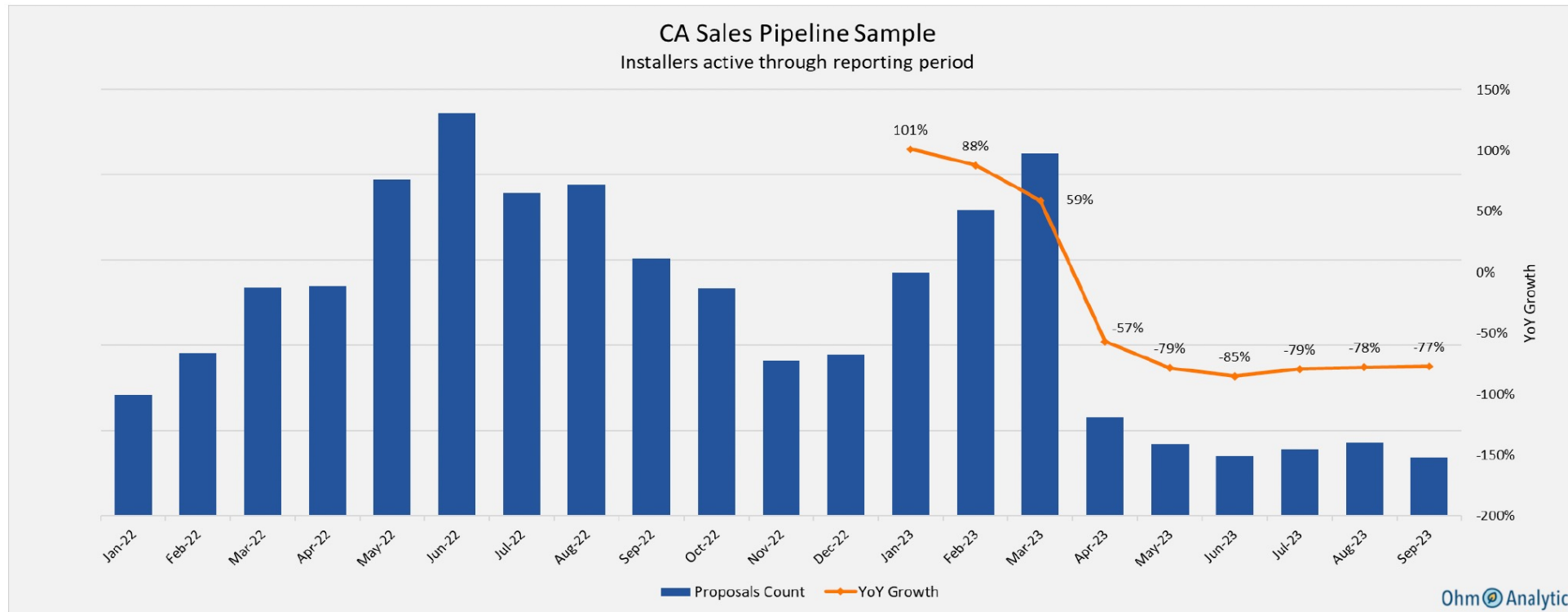
California needs 7x more energy storage to meet our needs for a resilient and reliable grid.



Based on CEC's SB 100 pathway report

NEM 3 Slammed the Brakes on Solar

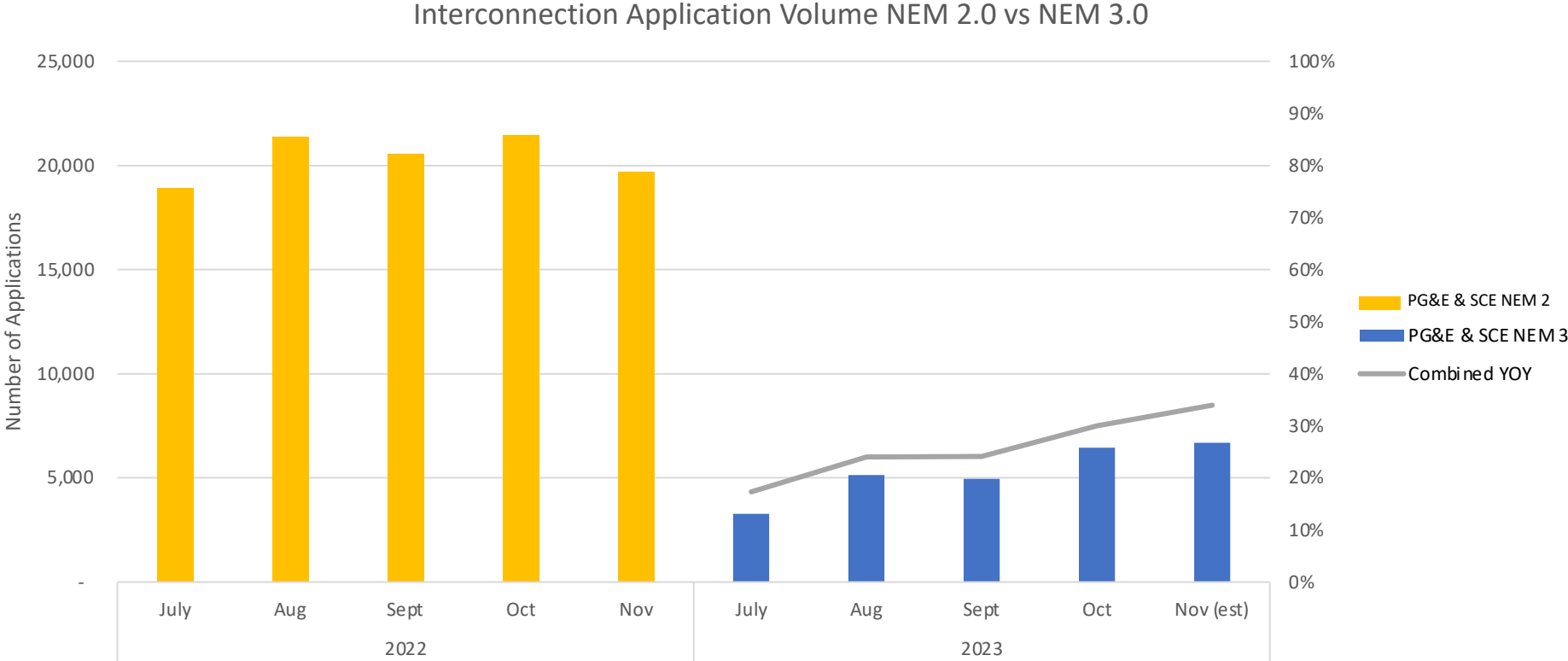
Solar sales are down between 77% and 85% since last year following the NEM-3 implementation.



*Sales pipeline data (proposal/software platforms) from a sampling of median sized private installers provides transparency into NEM 3.0 impact (stronger reported performance of the larger/public companies are not reflected in this sample)

NEM 3 Slammed the Brakes on Solar

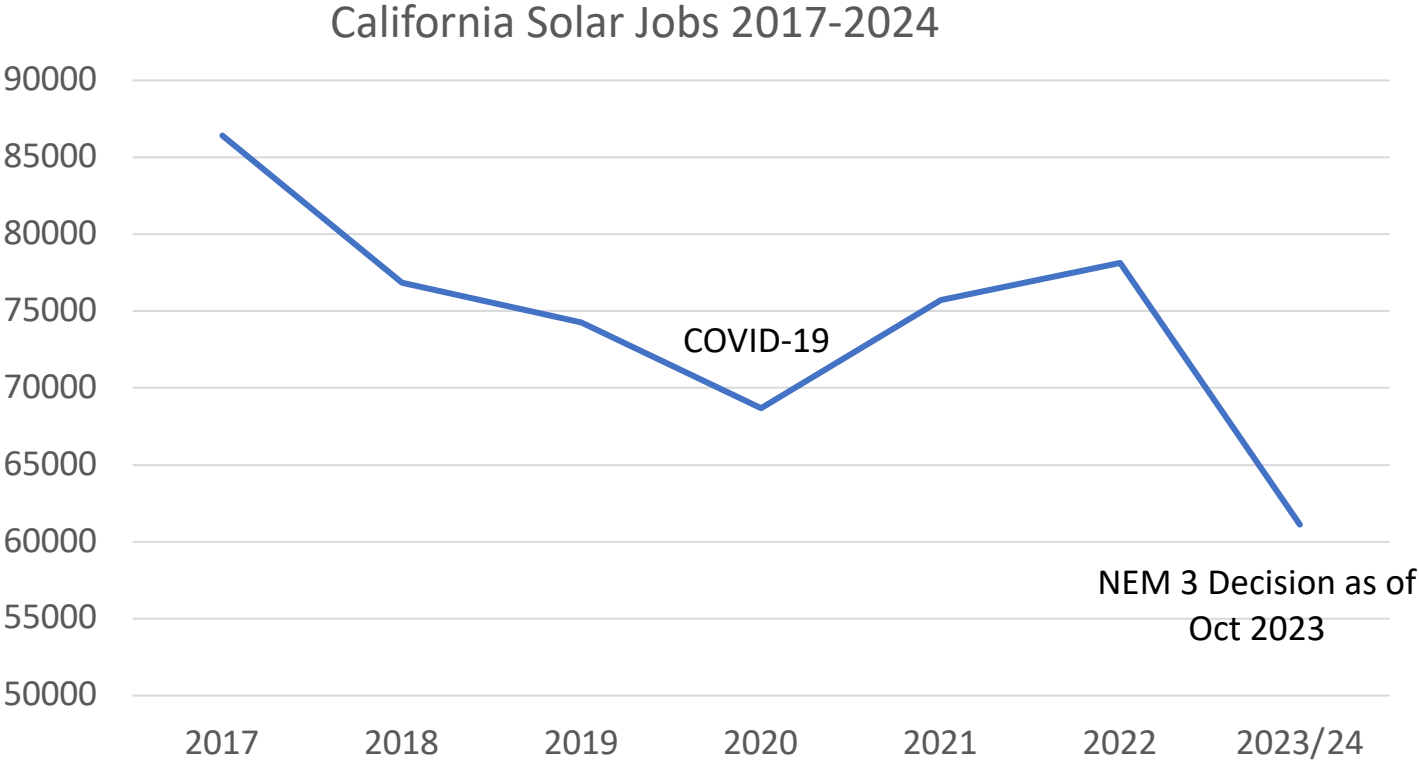
Utility interconnection data shows solar sales are down between 66% and 83% since last year due to NEM-3.



NOTE: Data comes directly from PG&E and SCE. CALSSA requested data from SDG&E, but none has been received to date.

Depression-Level Job Loss in Solar

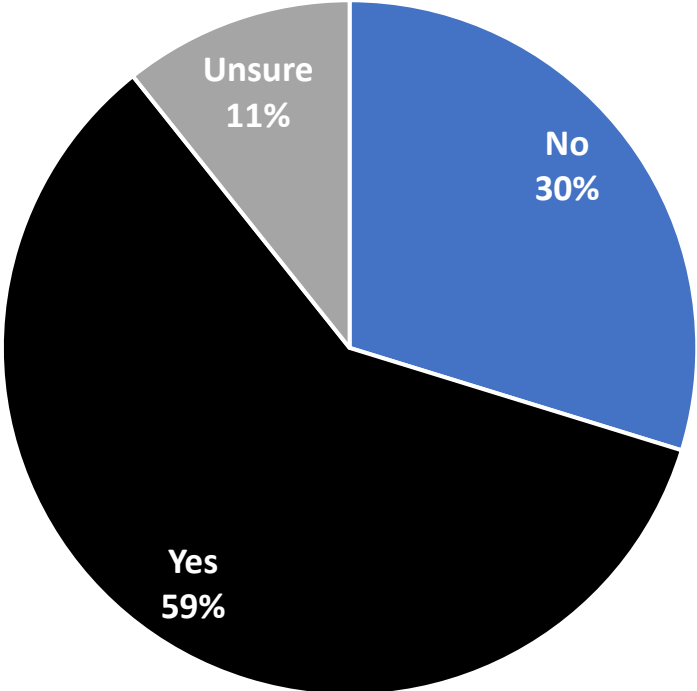
17,000 jobs have or will be lost by the end of 2023 due to NEM-3. The massive job loss represents 22% of all solar jobs in California.



More Pain for Solar Jobs Expected

59% of residential solar and storage contractors expect layoffs, with another 11% still unsure.

Residential Solar & Storage Contractor Layoffs



Companies w/Layoffs by Region	%
Los Angeles/Desert	69%
North Valley/Foothills/N. Coast	65%
San Diego Region	61%
Central Valley	61%
Central Coast	50%
Greater Bay Area	43%

Good Jobs Lost

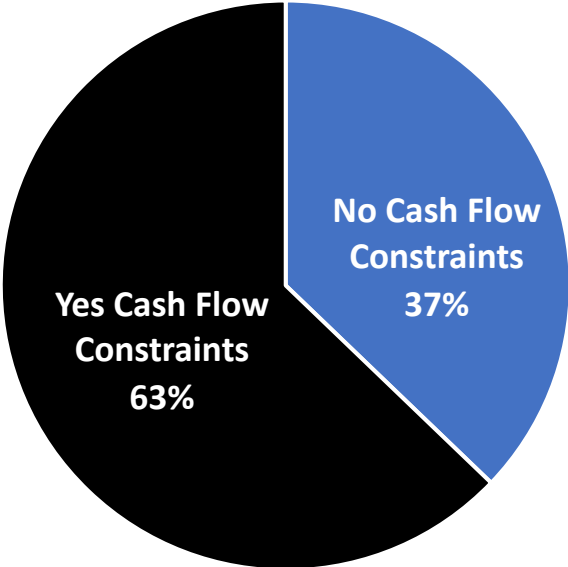
Most of the jobs lost are on the installation side of the business. These positions earn \$70,000 per year on average and come with health insurance, retirement plans, and other benefits.



Uncertain Future for Solar Businesses

Nearly two-thirds of the solar and storage residential contractors expect to experience cash flow issues in the next three quarters

Residential Solar and Storage Contractors Cash Flow Constraints

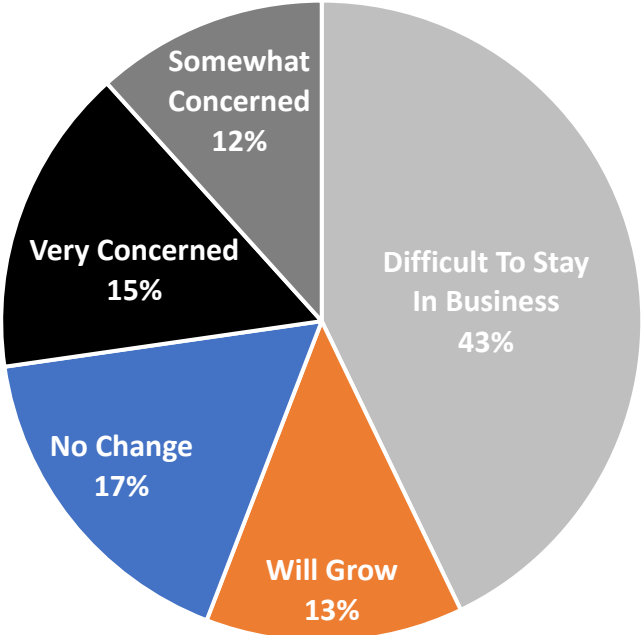


Cash Flow Constraints by Region	%
North Valley/Foothills/North Coast	76%
Los Angeles/Desert	57%
Central Coast	50%
San Diego Region	48%
Central Valley	44%
Greater Bay Area	41%

Uncertain Future for Solar Businesses

70% of residential solar and storage contractors expressed concern about their business outlook. Nearly 43% (~300 companies) believe it will be difficult to stay in business. Many have already started to shut their doors.

Residential Solar & Storage Contractors Business Outlook



Concerning Business Outlook	%
North Valley/Foothills/North Coast	29%
Central Valley	29%
Los Angeles/Desert	29%
Central Coast	20%
San Diego Region	19%
Greater Bay Area	16%

Solar business leaders see California moving in the wrong direction

Moving away from distributed solar

"We exited the residential sector 100% due to CA market conditions." – **Central Valley contractor**

"The roofing will carry us through for now. If I were solar only the outlook would be far more grim." – **So Cal contractor**

Moving away from California

"Though I would like to do more business in California, several of my biggest customers are located out of state." – **Nor Cal provider**

"We're mostly outside of California, and our business is minimal in California." – **Multi-state contractor**

The other shoe will drop

"My concern would be beyond...6-12 months+ the revenue is forecasted to fall by 60% unless our battery sales/attachment rate increases significantly." - **Contractor**

"I still have NEM 2.0 contracts in commercial that I'll be working through in Q1/Q2. But after that... I'm concerned about this space because I know how difficult/high touch batteries are..." – **So Cal contractor**

Getting solar jobs and clean energy progress back on track in California

Solar industry leaders view NEM-3 as a disastrous policy that is causing massive harm to California's flagship renewable energy market at a time when the industry should be hitting its stride in the race to 100% clean energy. Short of reversing the decision, there are other steps the state can take to stop further job loss and get the state back to growing clean energy in line with the California's climate goals.

Getting solar jobs and clean energy progress back on track in California

1. First, do no more harm
 - Reject High (\$30+/month) Fixed Charges and all Solar Taxes
 - Simplify AB 2143 (Carrillo) to protect small businesses installing solar and storage
 - Do not limit licensed solar contractors from installing solar + batteries
2. Launch [The Million Solar Batteries Initiative](#): Create new, massive investments in energy storage for all consumers (low-, working-, middle-class and non-residential consumers).
3. Cut red tape
 - Eliminate interconnection delays and establish penalties for utility non-compliance
 - Simplify permitting at city and county level by fully implementing SB 379 (Wiener)

Data Sources

- Sales data from Ohm Analytics
- Interconnection Application Data from Pacific Gas & Electric (PG&E) and Southern California Edison (SCE)
- Job loss and company financial information from CALSSA survey collected October 20th - November 3rd, 2023 – 208 respondents; 30% response rate



Thank you

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