FACT SHEET

Batteries are Key to San Diego's Clean Energy Future

Battery energy storage systems are critical to San Diego's clean energy transition. They support an increase in renewable energy and help keep the power on.

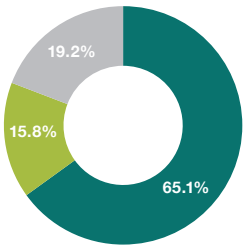
THE BIG PICTURE:

San Diegans Want Clean Energy[1]

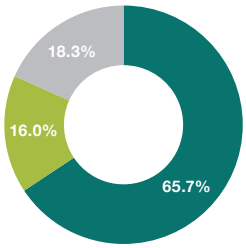
Battery storage keeps our clean energy grid working

Reliable electricity is critical for our economy. Battery storage prevents blackouts during heat waves and reduces grid stress when electricity demand peaks.[4] Simply stated, it is critical infrastructure.

Batteries help keep electricity rates stable too. They soak up low-cost[5] solar power during the day, when it's plentiful, and share it at dusk when electricity demand rises putting upward pressure on rates. This helps keep rates stable and improves the ROI on renewable energy by reducing its waste.[6]



65% of San Diegans support the transition from fossil fuel to renewable energy.



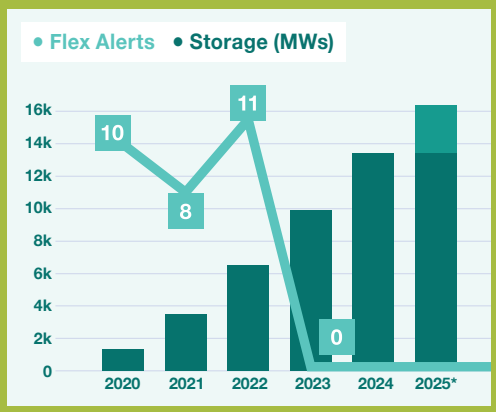
66% of San Diegans support battery storage projects in San Diego County.

Support Oppose Unsure

FLEX ALERT

Storage is a **Difference Maker**

California has had no Flex Alerts since 2022 after doubling its battery storage capacity, despite experiencing the hottest July on record in 2024.[2,3]



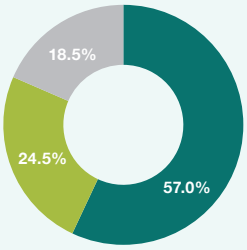
*Estimated

BRINGING IT HOME:

Battery Storage in our Neighborhoods

Homes and businesses are the source of electricity demand and locating battery storage systems near them efficiently addresses congestion and grid strain while postponing costly upgrades like new transmission lines.[7]

Battery storage systems can provide backup power in an emergency particularly when paired with a microgrid. This makes the grid more resilient and helps communities mitigate outages.[8]



57% of County Residents support battery storage projects in their neighborhood.

Protecting the public
is a shared goal

Battery technology and project designs get safer every year.[9]

Safety Standards

All battery storage projects comply with a national fire safety standard known as NFPA 855. Published in 2020 and updated every three years, it has provided a big boost to battery storage safety.

Certification & Testing

NFPA 855 also requires all battery storage systems to undergo UL 9450/UL 9450A certification and submit detailed safety documentation, plans and testing results to local authorities prior to installation.[10,11]

Batteries are safe
and fire impacts limited

- Air quality monitoring during battery storage fires has not identified any significant public health risks.[12,13,14]
- There are no reported cases of fires spreading outside of a battery storage facility.[15]

Battery storage systems that meet today's stringent safety standards and certifications are unlikely to catch fire. In the unlikely event of a fire, systems are designed to limit spread and danger. Fires gradually self-extinguish in their container which avoids the risk of explosion, contaminated runoff or reignition.[16]

BOTTOM LINE:

Batteries are Ready to Meet the Moment

Cities in the region and the County of San Diego itself are working to support the clean energy future that the majority of residents want. Some have set targets like achieving 90% clean energy by 2030 in their Climate Action Plans.[17]

Such plans and targets are intended to ensure that the pace continues.

Regional energy providers—Clean Energy Alliance, San Diego Community Power and San Diego Gas & Electric—all have renewable energy goals that rely heavily upon battery storage. These goals support reliability, affordability, local climate action plans and are required under state mandates.

Our region will need many more battery energy storage projects, of all sizes, to complete this important change. Today's battery storage systems are ready to keep power flowing to our homes and businesses even as temperatures and electricity demand rise.[17]

Battery storage also allows us to store affordable renewable energy when it's available, reducing waste and improving the return on investment in wind and solar. This is exactly the kind of transition San Diegans are calling for—a cleaner, more reliable energy future powered by renewables.

Cleantech San Diego is a member-based business association that positions the greater San Diego region as a global leader in the cleantech economy. For updates and more, sign up at: cleantechsandiego.org/newsletter.

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San Diego Battery Storage Fact Sheet
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1. Data collected in a public opinion survey of San Diego County residents conducted by Probolsky Research between Jan. 31-Feb. 13, 2025 and has a ±3.5% margin of error. 2. "Grid Emergencies History Report," California ISO. 3. "Statewide Time Series," NOAA, 07/2024. 4. "Giant Batteries Are Transforming the Way the U.S. Uses Electricity," The New York Times, 05/07/2024. 5. "Setting the Record Straight About Renewable Energy," World Resources Institute, 02/12/2020. 6. "California is Paying Other States to Take Its Solar Energy", Newsweek, 12/04/2024. 7. "Optimal allocation of battery energy storage systems for peak shaving and reliability enhancement in distribution systems," Journal of Energy Storage, Volume 95, 08/2024. 8. "Battery Energy Storage Systems (BESS) and Microgrids," SDG&E, 2023. 9. "BESS Failure Incident Database", Electric Power Research Institute (EPRI). 10. "NFPA 855: Standard for the Installation of Stationary Energy Storage Systems," NFPA, 2023. 11. "NFPA 855: Improving Energy Storage System Safety," American Clean Power, 01/2024. 12. "Air Quality Report and Water Run Off Report for the SDG&E Battery Storage Fire," City of Escondido, 09/19/2024. 13. "After Battery Fire, Evacuations, Agencies Try to Quell Online Anxiety," Voice of San Diego, 09/09/2024. 14. "Moss Landing Battery Facility Fire Update," Monterey Bay Air Resource Board, 01/22/2025. 15. Claims vs. Facts: Energy Storage Safety," American Clean Power. 16. "BESS fires – let them burn is often the answer," BEST Magazine, 05/31/2024. 17. "Climate Action Plan – Measure E-2.1," County of San Diego.