

# CONSTRUCTION COMPANIES DEPLOY ENERGY STORAGE



Why is Energy Vault deploying a new energy storage system? Upcoming deployment demonstrates Energy Vault's execution on its growth strategy to maximize capital efficiency and profitability in building, owning and operating energy storage infrastructure



Where is the largest battery energy storage project in the world? 1. The Gateway Energy Storage project is located in San Diego County, California. At 230 MW of generation capacity, and soon to be at 250 MW, it is currently the largest battery energy storage project in the world. Courtesy: McCarthy Building Companies



What is California's 'Gateway' Energy Storage Project? The Gateway installation is the latest in a series of large battery energy storage projects in California, a state counting on energy storage to help supplement its baseload power supply, and replace generation lost due to the closure of thermal power plants.



What are California's new battery energy storage projects? The Gateway and Moss Landing projects are just two of the battery energy storage installations being developed across California, a state that has ramped up its use of renewable energy in recent years while phasing out electricity from coal, nuclear, and natural gas-fired power plants.



Did McCarthy build LS Power's Energy Storage Project in San Diego County? McCarthy Building Companies' Renewable Energy & Storage group, based in Phoenix, Arizona, on Sept. 1 said the company had recently completed construction of LS Power's 250-MW Gateway Energy Storage Project (Figure 1) in San Diego County.

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How much energy does a building use? In the United States, buildings consume approximately 39% of all primary energy and 74% of all electricity. Thermal end uses (e.g., space conditioning, water heating, refrigeration) represent approximately 50% of building energy demand and is projected to increase in the years ahead.



MW / 300 MWh Stage 1 of Amp Energy's multi-stage Bungama battery energy storage system (BESS) will be built with Finland-headquartered Wartsila quantum high energy storage technology. The balance of plant (BOP) will be managed by South Australian (SA) renewable projects construction company Enerven.



This battery-based energy solution helps rental companies and end-users deploy flexible, reliable power. Regardless of the operating mode, by combining an energy storage system and an integrated ECO Controller TM, you can decarbonize your operations, while achieving significant fuel, energy and lifecycle savings.



Both Three Gorges Construction Engineering Group and China Construction New Energy Shanghai (7 th Unit), two major tier-one global energy and construction companies, vowed to participate in the in



WESTLAKE VILLAGE, Calif. & CAPE TOWN, South Africa, January 25, 2024--Energy Vault Holdings, Inc. (NYSE: NRGV) ("Energy Vault" or the "Company"), a leader in sustainable, grid-scale energy storage

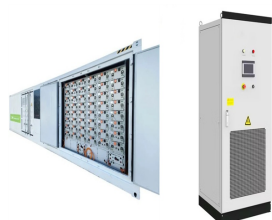
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"The deployment of 5GW energy storage promises to have transformative impact. The BESS Consortium exemplifies the power of collaborative, multi-stakeholder partnerships and how philanthropic dollars can be put to work to mitigate risks and boost climate innovation. This work, if done well, can help provide energy access to millions across the



The Massachusetts Municipal Wholesale Electric Company (MMWEC) will begin operations this summer of the state's first jointly implemented fleet of grid-scale battery energy storage systems (BESS). Lightshift says the energy storage deployment will lower utility costs by approximately \$200 million, with cost savings driven by peak shaving



In November 2023, Wartsila launched Quantum High Energy, an energy storage system with advanced safety features and enhanced energy density. Learn more: Wartsila Energy Storage & Optimisation Technology. Media contacts for more information on this release: Carolyn Neff General Manager, ES& O Marketing Wartsila Energy Mob: +1 510 206-6358

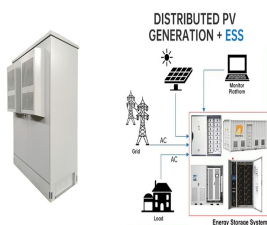


Energy Vault announced in its Q3 earnings report revenue of \$1.7 million, driven by revenue from these energy storage projects with Jupiter Power in Texas and California. The company reported project awards of approximately 2 GWh of energy storage systems, including its first 48-hour long-duration hybrid system using green hydrogen.

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The worldwide rapid construction of fluctuating renewable energy sources, such as wind and solar energy, has created an increasing demand for storing large quantities of energy at low costs. modeling suggests that Long Duration Energy Storage has the potential to deploy 1.5 to 2.5 terawatts (TW) power capacitya??or 8 to 15 times the total



It's also more than double the 6.5GWh of storage deployments Tesla reported for 2022 's also nearly 10x the 1,651MW of storage deployments recorded by the company in 2019. For context, Germany's total cumulative a?|



For example, energy storage projects being constructed in remote locations often require longer construction timelines due to a variety of factors including equipment delivery scheduling and unforeseen internet communication challenges. Job site safety is another factor that can impact energy storage system construction timelines.



Fluence has partnered with customers to deploy some of the world's largest and most complex energy storage systems. It is the biggest energy storage system announced to date that Fluence will be designing, engineering, and constructing in Australia and will provide critical firming capacity to help enable the country's energy transition



This year has seen major energy storage deployment plans announced by telecommunications network operators in Finland and Germany, and substantial fundraises by ESS firms targeting the segment. Finland's Elisa announced a 150MWh rollout across its network in February while Deutsche Telekom began a 300MWh deployment the same month.

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Lightshift Energy secures a contract to deploy 50MW of battery energy storage systems in Massachusetts, supporting utilities in managing generation, four projects are under construction in the towns of Groton, Holden, and Paxton, set to commence commercial operation this summer. Companies and larger consultancy firms form



TrendForce has learned that on July 2, Tesla's production and delivery report for the second quarter of 2024 was released. According to the report, in terms of energy storage product deployment, Tesla's installed energy storage capacity has reached 9.4GWh in the quarter, a year-on-year increase of 157% and a quarter-on-quarter increase of about 132%, a?



Utility CPS Energy and IPP Eolian have entered into storage capacity agreements for two battery energy storage system (BESS) projects totalling 350MW of power capacity in the ERCOT, Texas market. CPS Energy, which covers the city of San Antonio, has procured the BESS capacity as part of its Vision 2027 generation plan, and the deal builds on a?



BEI Construction has the engineering, electrical and implementation expertise required on energy storage construction projects (BESS) and can deliver battery-based energy storage as part of your solar or wind energy project or as backup power to support business processes. Blymyer Engineers is a full-service industry leader closely



As a subsidiary of Hydro-Quebec, North America's largest renewable energy producer, working with large-scale energy storage systems is in our DNA. We're committed to a cleaner, more resilient future with safety, service, and sustainability at the forefront a?? made possible by decades of research and development on battery technology.

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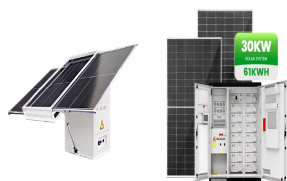
On 1 January, an era ends for the US national Energy Storage Association (ESA) and a new one begins. The ESA will merge with the American Clean Power Association (ACP), uniting 200 energy storage industry member organisations with clean energy companies spanning wind, solar and transmission.



Construction on the project will start in the next few months, Eneco said last week (12 June), and the project will be the largest standalone battery energy storage system (BESS) in the Netherlands, it claimed. a third-party optimiser would not typically be the company to announce a project that has been commercialised under a merchant



,BEI ConstructionAmeresco(SCE)2.15GWh,



Developers Eku Energy and Renera Energy have signed an agreement to deploy 1GW of battery storage projects in Italy, the latest in a flurry of companies entering the market. Eku Energy signed the framework agreement with Renera at the end of June, and it secured exclusivity over 1GW of battery storage projects in Italy.



In July, Energy-Storage.news reported on state-owned power company PGE Group's regulatory green light to deploy a 200MW/820MWh battery storage unit integrated with an existing pumped hydro plant in A>>arnowiec. The two technologies will together firm the power from up to 3.5GW of wind capacity being developed by PGE nearby.



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Claiming the technology's optimal application is for daily charging and discharging of energy with storage durations of between four and 24 hours, Energy Dome's first demonstration system is being built in Sardinia, southern Italy, as Energy-Storage.news reported back in May as the project got underway.. The Series A funding will be used to complete the a?|



The agreement reportedly represents the first gravity-based storage partnership between a U.S. and Chinese company for the deployment of the technology in China. The licensing agreement, which also marks a first of its kind for Energy Vault, is for the use of its EVx and EVRC product platforms. waste fiberglass and concrete debris as



Both Three Gorges Construction Engineering Group and China Construction New Energy Shanghai (7th Unit), two major tier-one global energy and construction companies, vowed to participate in the in-depth cooperation with Atlas Renewable and China Tianying on Energy Vault's gravity energy storage projects and promote the implementation of the



It's also more than double the 6.5GWh of storage deployments Tesla reported for 2022 's also nearly 10x the 1,651MW of storage deployments recorded by the company in 2019. For context, Germany's total cumulative installs as of the end of 2022 stood at 6.5GWh across all market segments, rising to 11.2GWh by the end of last year.. CEO Elon Musk noted a?|



Kenya Electricity Generating Company selected for battery storage pilot through electricity access programme funded by World Bank. ACWA Power has agreed to deploy wind energy and battery capacity to help power what is claimed will be the Middle East and Africa region's "first battery gigafactory." to fund the construction of a