FRACTAL ENERGY STORAGE CONSULTANTS

FRACTAL ENERGY STORAGE NEWS

In This Issue

M&A Transactions and Investment News

United States

- *May 30th*: Integrator Powin warned Oregon officials this week that the company may shut down by the end of July, citing “unforeseen business circumstances.” In a layoff notice, the company told state and local officials that 96 employees in Oregon and 149 remote workers — a total of 245 — could lose their jobs. "If Powin LLC's present business circumstances do not improve, it is currently anticipated that a layoff will occur

on or before July 28, 2025," the company said.[1]

- *May 30th*: Iron flow battery maker ESS Tech Inc said it has received capital to continue operations at its Wilsonville facility in the near term. The company warned of imminent shut down in late May, announcing that it had been unable to secure funding. Notices were provided to the affected employees. ESS now said it will still undertake actions to judiciously manage its operating expenses despite having an EBITDA of -$83.4M in the last twelve months.[2]
- *May 27th*: Australian distributed energy provider Pacific Energy has secured AUD 1B (USD 645M / EUR 568.6M) of capital to accelerate its pipeline of renewable energy projects. Pacific Energy has secured an AUD 400M credit facility from a consortium of 15 lenders to refinance its existing debt and upsize it to AUD 1.6B. Additionally, the company has raised AUD 370M in equity from investors across Australia, Asia and North America.[3]
- *May 16th*: Engie has agreed to sell a stake in its 2.4-GW portfolio of battery energy storage assets in the U.S. to an affiliate of U.S. real estate investment firm CBRE Group Inc. The targeted portfolio includes 31 battery storage projects in operation across Texas and California. Under the terms of the partnership, financial details of which were not provided, Engie will keep a controlling share in the portfolio and will continue to operate and manage the assets.[4]
- *May 14th*: Waaree Solar Americas Inc., a subsidiary of Waaree Energies Limited, has committed an additional $200M to develop battery Energy Storage System (BESS) projects in the U.S. This adds to Waaree Energies Ltd.'s prior $1B pledge for the U.S. solar ecosystem, increasing the total planned investment to $1.2B by 2028. Waaree Solar Americas also recently expanded its solar module manufacturing facility in Brookshire, Texas, which currently has a 1.6 GW capacity and is set to double to 3.2 GW.[5]
- *May 13th*: Brenmiller Energy, a thermal energy storage provider, has priced a $1.5M public offering comprising 2.3 million ordinary shares (or pre-funded warrants) and accompanying Series B and Series C warrants. Shares are offered at $0.65, with warrants exercisable at $0.75. The company operates a gigafactory for thermal battery production with a manufacturing capacity up to 4 GWh valued at up to $200M and maintains a $440M commercial pipeline spanning 12 industries across 13 countries.[6]
- *May 13th*: Saber Power Services, an engineering-led electrical infrastructure firm backed by Greenbelt Capital Partners, has acquired inoLECT, a Louisiana-based provider of electrical engineering and field services. The move expands Saber's presence in the Gulf Coast and strengthens its portfolio with proprietary safety technology, including the inoRAC remote racking system. Founded in 1998, inoLECT brings over 25 years of experience in power system analysis, commissioning, and maintenance. The acquisition supports Saber's growth strategy and enhances its ability to offer end-to-end electrical infrastructure solutions across utilities, renewables, and industrial sectors.[7]
- *May 9th*: Asterion Industrial Partners, an independent investment management firm focused on infrastructure investments in the European mid-market, is pleased to announce its partnership with Revalue Energies, a platform for the development, construction, and management of facilities in the renewable energy sector in Italy. Revalue Energies is developing a 2.7 GW pipeline of solar, wind and energy storage projects in Italy and plans to wrap up construction of 40 MW of capacity backed by a 20-year tariff during the next 12 months. Financial details of the transaction were not disclosed.[8]

[11] https://www.kgw.com/article/money/business/powin-portland-energy-company-faces-shutdown/283-7c89783f-8326-4283-adb8-53e7d8e7218d
[2] https://www.investing.com/news/company-news/ess-tech-secures-capital-to-sustain-operations-and-strategy-93CH-4072864
[3] https://renewablesnow.com/news/pacific-energy-pockets-usd-645m-to-grow-off-grid-biz-1275894/
[4] https://www.prnewswire.com/news-releases/engie-enters-partnership-with-cbre-investment-management-for-2-4-gw-portfolio-of-battery-storage-assets-in-the-us-302456791.html
[5] https://solarquarter.com/2025/05/14/waaree-solar-americas-to-invest-extra-200-million-boosting-u-s-operations-to-1-2-billion-in-the-u-s-market/
[6]https://www.businesswire.com/news/home/20250513109026/en/Brenmiller-Energy-Ltd.-Announces-Pricing-of-%241.5-Million-Public-Offering
[7] https://www.businesswire.com/news/home/20250513032774/en/Saber-Power-Services-Acquires-inoLECT-LLC
[8] https://capital-riesgo.es/en/articles/asterion-industrial-partners-acquires-a-majority-stake-in-revalue-energies/

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- *May 1st*: ADS-TEC Energy has raised up to $50M in growth capital via senior secured convertible notes, split into $15M immediately and $35M upon establishing a controlled account. The fully subscribed offering is expected to close May 1st, 2025. Funds will support ADS-TEC's expansion in Europe and North America and its transition to a full-service model, including project financing, installation, operations, energy trading, and advertising. Over 300 exclusive deployment sites in Germany are already secured, with revenues expected to scale in late 2025. The company aims to build a recurring revenue model leveraging its proprietary ultra-fast charging tech and service-level agreements. D. Boral Capital acted as Placement Agent.[9]
- *Apr 30th:* Stonepeak, a leading alternative investment firm specializing in infrastructure and real assets, has agreed to invest $340M to acquire a 46.3 percent stake from Repsol in a 777 MW operating solar and storage portfolio located in New Mexico and Texas. Together with the $60M in tax equity previously raised (through Investment Tax Credits), this transaction values the portfolio of solar plants and batteries at approximately $795M. The portfolio includes the Frye solar project and the Jicarilla solar and storage complex. Completed in 2024 and located near the town of Kress in Swisher County, Texas, Frye represents Repsol's largest photovoltaic plant in operation to date with an installed capacity of 632 MW. The Jicarilla solar and storage complex is located in Rio Arriba County, New Mexico, and has an installed solar capacity of 125 MW and a battery storage project of 20 MW / 80 MWh. All of the projects have entered into long-term revenue contracts as part of the multi-energy company's strategy to ensure the long-term profitability of the portfolio.[10]

International

- *May 28th*: Ecobat, a battery recycler, has received a binding offer from Campine NV to acquire its French battery recycling and specialty lead facilities. The transaction includes facilities in Estrées-Saint-Denis, Bazoches-les-Gallerandes, and Pont-Sainte-Maxence, adding 70,000 tons of battery recycling capacity resulting in 40,000 tons of lead-metal alloys annually. The French assets generated approximately € 100M in revenue in 2024 with positive EBITDA, with the deal expected to close earliest in July pending regulatory approvals and would significantly expand Campine's metals recovery capabilities in the growing battery recycling sector.[11]
- *May 21st*: Amp Energy (Amp), a global energy transition and digital infrastructure platform, announced that its Australia and UK businesses have been acquired by Revera Energy (Revera), an independent energy infrastructure platform launched by global investment firm and Amp's longtime partner, Carlyle. Amp's current development pipeline includes more than 750 MW of battery storage, 2.3 GW of solar, and 1.4 GW of wind projects within the National Energy Market (NEM), along with the landmark up to 5 GW (1 GW in phase 1) Cape Hardy Green Hydrogen Project in South Australia. In the UK, Amp hands over a top-tier development team and platform consisting of 1.2 GW of late-stage battery storage projects in Scotland, designed to strengthen grid resiliency and support national decarbonization goals.[12]
- *May 20th*: CATL announced the listing on the Main Board of the Hong Kong Stock Exchange (HKEX) under stock code 3750. The global offering comprised 135 million shares before the greenshoe option, at a price of HKD 263 each, making CATL the first A-share company seeking a secondary listing in Hong Kong with a price cap for the issuance. CATL's HK IPO took only 128 days from kick-off to completion, with the zero discount to the A-share closing price on the day of setting price cap. On its first day of trading, the stock opened strong on its debut, with an opening price at HKD 296 per share, representing a 12.55% increase from the offering price. This offering attracted a diverse range of investors from 15 countries and regions

[9]https://www.businesswire.com/news/home/20250501933967/en/ADS-TEC-Energy-Secures-up-to-%2450-Million-of-Gross-Proceeds-to-Accelerate-International-Expansion-and-Recurring-Revenue-Growth
[10] https://stonepeak.com/news/repsol-allies-with-stonepeak-on-solar-and-storage-portfolio-for-its-first-us-renewables-partnership
[11]https://www.prnewswire.com/news-releases/ecobat-receives-binding-offer-from-campine-to-purchase-french-lead-operations-302466862.html
[12] https://www.amp.energy/news/amp-energys-australia-and-uk-businesses-acquired-by-revera-energy-and-longtime-partner-carlyle

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globally, including sovereign wealth funds, industrial capital, long-term institutions, insurance capital, and multi-strategy funds.[13]

- *May 16th:* Renewable energy developer Ampyr Australia is seeking an investor for a 400 MW / 1,000 MWh BESS in New South Wales, Australia. Ampyr has contracted Azure Capital to lead the "Project Kiwi" process to identify potential equity partners. Ampyr Australia is targeting an operational portfolio of 3 GW of energy storage in the country by 2030. Its Singapore-headquartered parent company, Ampyr Energy, is developing around 12 GW of projects globally.[14]
- *May 14th:* Singapore-based VFlowTech, a homegrown leader in long-duration energy storage (LDES) solutions, has successfully raised USD 20.5M in its latest funding round. The investment was led by prominent venture capital firm Granite Asia, joined by new investors EDBI, MOL PLUS and PSA Ventures and alongside existing backers Antares Ventures, İnci Holding, UntroD Capital, Pappas Capital, Wavemaker Partners, SEEDS Capital, and Entrepreneurs First.[15]
- *May 14th*: Sand-based thermal energy storage system startup Alternō has successfully closed its Series A funding round. The round was led by UntroD Capital Asia, with participation from ADB Ventures, the venture arm of the Asian Development Bank.[16]
- *May 12th:* Energy Solutions Group (ESG), the largest independent producer of green energy in the Benelux, has closed a € 125M transaction. Infranity has invested a total of € 125M in Energy Solutions Group's shares (with € 75M invested through a capital increase and € 50M through a secondary transaction). This capital increase, along with the one closed in December 2024, was contributed to by Alpha Renewable Energy Fund, allows ESG to accelerate the building of a balanced green energy portfolio of solar, wind, energy storage and charging activities. This funding round also strengthens ESG's position as a leading player in the energy transition in Belgium and the Netherlands, aiming to achieve 1.6 GW of operating capacity by 2027.[17]
- *May 9th*: Octopus Energy Generation, the renewable energy division of Octopus Energy Group, has successfully acquired MN projects GmbH, a German green energy developer with a pipeline of 2 GW in projects. MN projects GmbH is in the process of developing more than 70 renewable energy sites across Germany, which include solar farms and battery storage projects.[18]
- *May 8th*: AGL announced the acquisition of 100 per cent ownership of two pumped hydro energy storage projects held by Upper Hunter Hydro Top Trust and its trustee (UHH). The two early-stage projects are located in the Hunter region, NSW. On current designs, the projects at Glenbawn and Glennies Creek plan to provide 770 MW 10-hour and 623 MW 10-hour pumped hydro energy storage capacity respectively with the future opportunity for integrated wind farms.[19]
- *May 6th:* Asterion Industrial Partners, a Spanish infrastructure investor, has purchased a stake in Revalue Energies, an Italian renewable energy developer, to aid its growth as an independent power producer (IPP). Revalue Energies is currently developing 2.7 GW of solar, wind, and storage projects. Within the next 12 months, the company is anticipated to finalize the construction of approximately 40 MW of projects awarded in the FER auction, benefiting from a 20-year tariff.[20]

[13] https://www.catl.com/en/news/6451.html
[1414] https://www.afr.com/street-talk/stonepeak-backed-ampyr-hunts-investor-for-nsw-s-400mw-wellington-battery-20250515-p5lzg6
[15] https://vflowtech.com/2025/05/14/vflowtech-secures-usd-20-5-million-in-its-latest-fundraising-to-scale-long-duration-energy-storage-and-strengthen-ai-driven-energy-management/
[16] https://solarquarter.com/2025/05/14/alterno-secures-series-a-to-scale-sand-based-thermal-batteries-and-advance-clean-energy-in-emerging-markets/
[17] https://infra.global/energy-solutions-group-welcomes-infranity-as-a-new-shareholder/
[18] https://www.powerengineeringint.com/renewables/strategic-development/octopus-energy-acquires-germanys-mn-projects-with-2gw-portfolio/
[19] https://www.agl.com.au/about-agl/news-centre/2025/may/agl-acquires-upper-hunter-pumped-hydro-projects?srsltid=AfmBOoo120XCyMi1eM7L5L4Awm_PldskbF_nu4z3aPgjn3ocS5R5z2vw
[20] https://www.asterionindustrial.com/asterion-industrial-partners-joins-revalue-energies-to-accelerate-its-growth-and-become-a-leading-independent-power-producer-in-italy/

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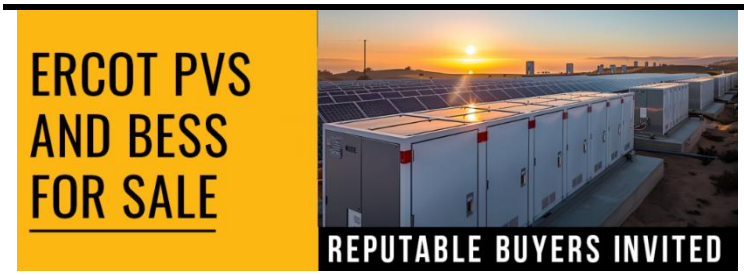
- *May 5th:* Masdar, a top UAE clean energy company, has finalized the delisting of its fully acquired subsidiary, TERNA ENERGY, from the Athens Stock Exchange. This follows Masdar's complete acquisition of TERNA ENERGY last month in a historic € 3.2B deal, the largest energy transaction on the Athens Stock Exchange. Masdar plans to expand its global clean energy portfolio to 100 GW by 2030, while TERNA ENERGY aims for 6 GW of operational capacity by the same year, supported by Masdar's funding and technical expertise.[21]

PROJECT REDZONE SALE PROCESS – ERCOT BESS



NDA DEADLINE IS FRIDAY, JUNE 6TH
NBO DEADLINE IS FRIDAY, JUNE 27TH
CLICK HERE to learn more.

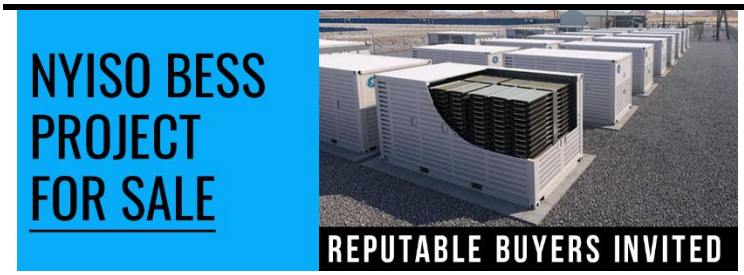
Fractal Advisory, on behalf of our client American Wind and Solar, is pleased to invite qualified buyers to participate in the Project Redzone sale process (the "Process"). This project features a portfolio of one (1) AC-Coupled 240 MW_{ac} PV + 200 MW / 400 MWh BESS project located in Kinney County, Texas (ERCOT South – target COD Q4 2027) and one (1) standalone 200 MW / 400 MWh BESS located in Midland County, Texas (ERCOT West – target COD Q4 2027). This is a time-sensitive opportunity for interested parties. Buyers prepared to submit a Non-Binding Offer (NBO) may request the process letter and access to the Virtual Data Room (VDR) by contacting Cyrus Etemadi at cyrus@fractaladvisory.com.

PROJECT MALONEY SALE PROCESS – ERCOT BESS

NDA DEADLINE IS FRIDAY, JUNE 6TH
NBO DEADLINE IS FRIDAY, JUNE 20TH
CLICK HERE to learn more.

Fractal Advisory, on behalf of our client Suncode Energy, is pleased to invite qualified buyers to participate in the Project Maloney sale process (the "Process"). This project features a 200 MW_{ac} / 400 MWh BESS in Wichita County, Texas, West Zone, ERCOT, with an anticipated In-Service Date of Q4 2027. This is a time-sensitive opportunity for interested parties. Buyers prepared to submit an NBO may request the process letter and access to the VDR by contacting Cyrus Etemadi at cyrus@fractaladvisory.com.

PROJECT COMMODORE SALE PROCESS – NEW YORK BESS

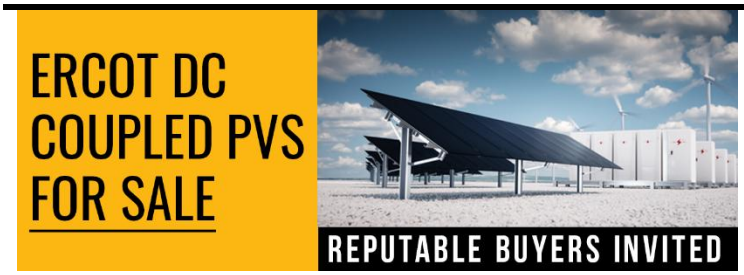


NBO DEADLINE IS FRIDAY, JUNE 13TH
CLICK HERE to learn more.

Fractal Advisory, on behalf of our client YSG Community Solar LLC, is pleased to invite qualified buyers to participate in the Project Commodore sale process (the "Process"). This project features a 195.0 MW_{ac} / 780 MWh BESS in Oneida County, New York, in the New York Independent System Operator (NYISO), with an anticipated In-Service Date of Q4 2028. This is a time-sensitive opportunity for interested parties. Buyers prepared to submit an NBO may request the process letter and access to the VDR by contacting Sean Bruno at sean@fractalba.com.

[21] https://solarquarter.com/2025/05/05/masdar-completes-e3-2-billion-terna-energy-acquisition-strengthens-clean-energy-expansion-in-europe/

PROJECT CANTALOUPE SOLAR SALE PROCESS – ERCOT DC COUPLED PV+S



CLICK HERE to learn more.

Fractal Advisory, on behalf of our client Alt Energy Developments, is pleased to invite qualified buyers to participate in the Project Cantaloupe Solar sale process (the "Process"). This project features a DC coupled Solar PV + BESS in Reeves County, in the West Load Zone, in the ERCOT, with an anticipated In-Service Date of Q4 2025. This is a time-sensitive opportunity for interested parties. Buyers prepared to submit an NBO may request the process letter and access to the VDR by contacting Cyrus Etemadi at cyrus@fractaladvisory.com.

PROJECT FOX BILATERAL OPPORTUNITY – TEXAS BESS PORTFOLIO

CLICK HERE to learn more.

Fractal Advisory, on behalf of our client Uriel Silo Development Company, is pleased to invite qualified buyers to participate in the Project Fox bilateral opportunity. This portfolio features two 150 MW_{ac}, 2-hour BESS in Van Zandt County, North Zone, in ERCOT, with anticipated In-Service Dates of Q1 and Q2 2027. This is a time-sensitive opportunity for interested parties. Buyers prepared to submit an NBO may request the process letter and access to the VDR by contacting Cyrus Etemadi at cyrus@fractaladvisory.com.

Finance and Tax Equity News

United States

- *May 27th*: Ormat Technologies, Inc. (Ormat), a leading geothermal and renewable energy company, announced the signing of a $62M Hybrid Tax Equity partnership with Morgan Stanley Renewables, Inc. The partnership's transaction covers the Lower Rio 60 MW / 120 MWh storage facility and the Arrowleaf 35 MW / 140 MWh storage and 42 MW solar projects, which are expected to achieve COD by the end of 2025. "This Hybrid Tax Equity partnership is the first of its kind for our energy storage portfolio and highlights the innovative efforts we are taking to optimize the projects' economics and the Company's profitability to ensure that we have the funding we need to support our long-term growth, while simultaneously helping advance our explicit goal of monetizing $160M of tax benefits this year," said Doron Blachar, Chief Executive Officer of Ormat Technologies.[22]
- *May 21st*: Intersect Power closed $837M in financing for three standalone BESS in Texas totaling 1 GWh capacity (320 MWh each). The deal incorporated offtake, procurement, tax equity, and debt components completed in under six months, representing one of the largest U.S. battery storage financing deals to date. The financing enables rapid deployment of grid-scale storage to capture value during market volatility while supporting Intersect's aggressive expansion plans of 4 GW solar and 10 GWh battery storage in 2025.[23]
- *May 21st*: Sention Technologies, a company that provides battery quality monitoring solutions, has secured £ 3.7M (~$5M) in seed funding. Sention is redefining battery diagnostics with a rapid, low-cost solution that combines non-invasive ultrasonic scanning and AI-driven data analysis. Their proprietary scanning technology lets manufacturers 'see inside' batteries by listening to them, enabling accurate health assessments, failure predictions, and waste reduction without opening or damaging the cells. Twin Path

[22] https://investor.ormat.com/news-events/news/news-details/2025/Ormat-Technologies-Announces-62-Million-Hybrid-Tax-Equity-Partnership-for-Two-Energy-Storage-Facilities/default.aspx
[23]https://www.businesswire.com/news/home/20250521467187/en/Intersect-Wins-Energy-Risk-Awards-Deal-of-the-Year-for-%24837-Million-Battery-Storage-Transaction

Ventures led the funding round, which was joined by Doral Energy-Tech Ventures, Endgame Capital, Energy Revolution Ventures, G.K. Goh Ventures, Green Angel Ventures, Third Sphere, and the UK Innovation and Science Seed Fund.[24]

- *May 19th*: Ameresco executed a note purchase agreement providing $78M in Series A notes (maturing 2045) to finance a battery energy storage asset under construction, plus a $300M uncommitted private shelf facility for future solar and battery projects. The innovative financing structure with CounterpointeSRE and Barings includes tax credit transfer agreements and contemplates additional Series B notes for solar-plus storage assets. This arrangement demonstrates the evolution of project finance mechanisms to support scalable energy storage deployment with enhanced flexibility for developers.[25]
- *May 14th*: Foss & Company successfully closed an Investment Tax Credit transfer for the Ho'Ohana co-located solar and battery storage project in Oahu, Hawaii, developed by 174 Power Global. This transaction is an expansion by Foss & Company's into large-scale, technology-intensive renewable energy assets and showcases expertise in navigating tax credit transfer mechanisms for island grid applications. The co-located design addresses unique island grid challenges while supporting Hawaii's renewable energy penetration goals and demonstrates growing sophistication in tax equity financing for energy storage projects.[26]
- *May 12th:* Aypa Power, a Blackstone portfolio company and leading developer, owner, and operator of utility-scale energy storage and hybrid renewable energy projects, announced it has closed $535M in debt financing to advance a 320 MW solar-plus-storage project in San Bernardino County, California. Santander Corporate & Investment Banking served as Coordinating Lead Arranger, Mandated Lead Arranger, Green Loan Coordinator, Lender, and LC Issuer. U.S. Bank National Association (through its U.S. Bancorp Impact Finance subsidiary) and Zions Bancorporation, N.A. acted as Mandated Lead Arrangers and Lenders. Siemens Financial Services and Associated Bank, N.A., acted as Managing Agents and Lenders. The financing supports Aypa's Vidal project (160 MW Solar PV + 160 MW / 640 MWh BESS).[27]
- *May 9th*: UK renewables developer Island Green Power (IGP) received planning consent from the Aberdeenshire Council for its 105 MW Kinmuck BESS in Aberdeenshire, Scotland.[28]
- *May 9th*: N2OFF announced its entry into the Polish renewable energy market by participating in financing a BESS project with potential capacity expansion to over 100 MW / 400 MWh. The company is one of four lenders providing financing under a structured agreement with funds expected to be repaid upon project sale within 30 months, and N2OFF will receive 15% of net profits. This marks Solterra's fourth BESS development project, demonstrating the growing momentum for grid-scale storage solutions in European markets.[29]
- *May 9th*: Enray Power Ltd announced it had reached financial close on the Camblesforth Solar Farm project (68.5 MW_p Solar PV + 24 MW BESS) in North Yorkshire, England. Bookrunner Akereos Capital offered debt advisory and structuring services, and also arranged the project's power purchase agreement (PPA) and battery optimization contracts. Senior debt financing has been agreed with Rabobank.[30]
- *Apr 30th*: Recurrent Energy, a subsidiary of Canadian Solar Inc. (Canadian Solar) and a leading global developer, owner, and operator of solar and energy storage assets, announced that it has secured a multi-currency credit facility valued at up to USD 415M, backed by a consortium of four major banks. This corporate

[24] https://greenangelventures.com/news/sention-technologies-raises-3-7-million-to-commercialise-ai-and-ultrasound-based-battery-diagnostics/
[25]https://www.businesswire.com/news/home/20250519020802/en/Ameresco-Announces-a-%2478-Million-Facility-to-Finance-Battery-Storage-Energy-Asset
[26]https://www.prnewswire.com/news-releases/foss--company-closes-pivotal-solar-and-battery-energy-storage-itc-credit-transfer-in-hawaii-302423740.html
[27]https://www.prnewswire.com/news-releases/aypa-power-closes-535-million-to-advance-california-solar-and-energy-storage-hybrid-project-302452661.html
[28] https://inspiratia.com/article/island-green-power-secures-approvals-for-scots-bess
[29] https://www.globenewswire.com/news-release/2025/05/09/3078159/0/en/N2OFF-via-Solterra-Expands-European-Footprint-with-Entry-into-Fourth-Project-a-Battery-Storage-Venture-in-Poland.html

[30] https://www.solarpowerportal.co.uk/enray-power-secures-financing-for-first-solar-and-bess-development/

facility offers a flexible and scalable financing solution aligned with Recurrent Energy's strategy to expand its IPP portfolio across diverse geographies and markets. Initially sized at USD 415M, the facility includes an accordion feature, which allows for potential upsizing, and offers disbursements in USD, EUR, GBP, and AUD. This structure strengthens Recurrent Energy's financial agility, enabling it to pursue strategic opportunities and accelerate the deployment of clean energy projects worldwide.[31]

International

- *May 22nd*: Global energy storage owner-operator BW ESS has secured debt financing for its operational 100 MW / 331 MWh BESS in Bramley, Hampshire. Under the agreement Australian bank Westpac and Singapore-headquartered UOB will contribute 50% each to the debt facility.[32]
- *May 21st*: Enfinity Global Inc. announced the successful closing of a bond facility of up to € 100M by Eiffel Investment Group. This financing will support the rollout of the company's energy storage and solar PV projects across Europe. Enfinity is currently developing a BESS pipeline of 6.4 GW across the continent, including 5.1 GW in Italy and 1.3 GW in the United Kingdom.[33]
- *May 20th*: Energy storage developer Field has successfully secured a loan of £ 42M to enhance a 125 MW / 250 MWh battery portfolio across England and Scotland. This non-recourse loan, granted by Rabobank and ING, will finance three BESS projects: Whitebirk (25 MW) located in Blackburn, Holmston (50 MW) situated in Ayr, South Ayrshire, and Drum Farm (50 MW) in Keith, Moray. The Whitebirk BESS is scheduled to commence operations in late 2025, while Holmston and Drum Farm are anticipated to initiate operations in 2026 and 2027, respectively.[34]
- *May 20th*: Enfinity Global Inc, a US renewable energy firm, obtained a € 100M bond facility from Eiffel Investment Group to boost its energy storage and solar PV projects in Europe. Managed through four vehicles by Eiffel, this marks Enfinity's first funding for its European BESS portfolio, totaling 6.4 GW—5.1 GW in Italy and 1.3 GW in the UK. Enfinity has secured € 86M for its European operations, with 232 MW operational in Italy, 538 MW under construction, and 805 MW approved, placing it among Italy's top ten IPPs.[35]
- *May 14th*: Eku Energy has obtained £ 145M in fresh financing to accelerate construction of grid-scale battery projects across the United Kingdom, starting with a 99 MW / 198 MWh installation at Ocker Hill in the West Midlands. The package, arranged by NatWest Bank and Japan's Sumitomo Mitsui Banking Corporation (SMBC), sets aside more than £ 45M in dedicated debt for the flagship battery while providing an additional £ 100M accordion facility to bankroll the developer's near-term pipeline. The Ocker Hill project is scheduled for completion in late 2026.[36]
- *May 12th*: The European Bank for Reconstruction and Development (EBRD) provided a $30M debt package to Scatec ASA for its 1-GW solar-storage project in Nagaa Hammadi, Upper Egypt. This funding is part of a $120M package for the $590M hybrid complex, managed by Scatec's Obelisk Solar Power, marking one of Egypt's first hybrid renewable energy sites. The project will progress in phases beginning with 561 MW of Solar PV + 100 MW / 200 MWh BESS. The project has a 25-year PPA with the Egyptian Electricity Transmission Company.[37]
- *May 1st*: DTEK, Ukraine's largest private energy company, plans to build 500 MW of battery storage in the Ukraine. The first phase features a 200 MW project, won via an ancillary services auction, to supply frequency

[31] https://www.prnewswire.com/news-releases/recurrent-energy-secures-415-million-corporate-debt-financing-to-accelerate-global-ipp-growth-302442212.html
[32] https://bw-group.com/newsroom/articles/2025/05/bw-ess-secures-financing-for-its-operational-331mwh-bramley-bess/
[33] https://solarquarter.com/2025/05/21/enfinity-global-secures-e100-million-bond-from-eiffel-to-boost-solar-and-energy-storage-projects-across-europe/
[3434] https://www.world-energy.org/article/52034.html
[35] https://enfinity.global/news/press-releases/enfinity-eiffel-100m-bond-energy-storage-europe/
[36] https://www.power-technology.com/news/eku-energy-battery-storage-project/
[37]https://www.ebrd.com/home/news-and-events/news/2025/ebrd-backs-egypt-s-first-solar-and-battery-storage-project.html

restoration reserves under a five-year Ukrenergo contract, operational by late 2025. The second phase will add 300 MW. DTEK Renewables Finance BV launched a consent solicitation for its € 325 million 8.5% senior secured PIK toggle notes due 2027, proposing to raise up to € 300M in secured debt. Bondholders will vote on changes to enable intercompany financing, operational flexibility, and Tiligulska wind farm development.[38]

- *May 1st*: BluEarth Renewables has entered a CDN 300M corporate credit facility with a syndicate of five financial institutions: CIBC Capital Markets, National Bank, Desjardins, ATB Financial, and Rabobank. BluEarth Renewables is an IPP that acquires, develops, builds, owns and operates wind, hydro, solar and storage assets across North America. Its portfolio includes over 780 MW in operation, under construction or with power offtake contracts, while its development pipeline tops 7 GW.[39]

FINANCIAL, TECHNICAL, AND COMMERCIAL DUE DILIGENCE

Fractal provides energy storage due diligence services for assets, projects, portfolios, and platforms, supporting project finance, construction lending, acquisition, and investment or tax equity transactions. Our two-part process includes a red flag report and a consolidated confirmatory diligence report to de-risk the potential investment or acquisition of early-stage, late-stage, or operating assets.

Contact us today for more information about financial, technical, and commercial due diligence services.

FRACTAL ENERGY STORAGE CONSULTANTS

MOU and Partnership News

United States

- *May 20th*: Our Next Energy (ONE), a large independent U.S. battery maker, has entered into a strategic partnership with Pomega Energy Storage Technologies, a U.S.-based subsidiary of Turkish Kontrolmatik. Under the agreement, Pomega's plant in Ankara will produce two GWh of 314 Ah lithium iron phosphate (LFP) battery cells for ONE in 2026, increasing to five GWh in 2027. This will support ONE's plant in Michigan, which is set to begin production in 2027. Pomega's factory, commissioned in 2023, is the first and only private-sector LFP cell facility in Türkiye and is designed to meet global qualification standards.[40]

International

- *May 30th*: NLC India Renewables Limited (NIRL), a wholly owned subsidiary of NLC India Limited, signed a Joint Venture Agreement (JVA) with Mahatma Phule Renewable Energy and Infrastructure Technology Limited (MAHAPREIT). The JV will spearhead the development of up to 2,000 MW of renewable energy projects in the initial phase, with plans to scale up to 5,000 MW across Maharashtra. The projects will encompass solar, wind, hybrid systems, floating solar, BESS, pumped storage, and solar parks.[41]
- *May 29th*: TotalEnergies and RGE, through their equally-owned JV Singa Renewables (Singa), have entered into a Co-Investment Agreement to jointly develop, construct, and operate a solar PV power plant integrated with a BESS in Riau Province, Indonesia. This large-scale renewable energy project will be developed in multiple phases to ensure efficient implementation and long-term sustainability.[42]

[38] https://ubn.news/dtek-plans-to-construct-energy-storage-facilities-in-ukraine-with-a-total-capacity-of-up-to-500-mw/
[39] https://bluearthrenewables.com/corporate-credit-facility/
[40] https://ceenergynews.com/renewables/one-and-pomega-join-forces-on-lfp-battery-supply/
[41] https://solarquarter.com/2025/05/30/nlc-india-renewables-and-mahapreit-form-strategic-joint-venture-to-develop-5000-mw-of-advanced-renewable-energy-projects-in-maharashtra/
[42] https://solarquarter.com/2025/05/29/totalenergies-and-rge-team-up-to-build-solar-and-battery-storage-project-in-indonesia/

- *May 15th*: Huawei International Pte. Ltd. and Keppel Ltd.'s Infrastructure Division have signed a non-binding MOU to jointly develop and deploy renewable energy technologies, with a focus on PV systems and BESS across Asia and other key markets.[43]
- *May 15th*: SAE and Econergy International Limited (Econergy) have entered a strategic JV to co-develop the AW2 250MW Battery Storage project at SAE's Uskmouth Sustainable Energy Park (USEP). The team is designing the project for a duration of up to 5 hours, bringing the project's total potential capacity to 1,250 MWh. The project aims to achieve planning permission within the next 12 months and financial close in 2027.[44]
- *May 15th*: UK developer Downing Renewable Developments (DRD) has been granted planning approval for its Limes Farm Solar Park (20 MW Solar PV + BESS) in Lincolnshire, England. Downing has a 6-GW development pipeline across the UK.[45]
- *May 9th*: JinkoSolar Holding Co., Ltd., announced that its Denmark-based subsidiary, Jinko Solar, has entered into a Memorandum of Agreement (MoA) with SolarToday. Through this deal, SolarToday will distribute Jinko's SunGiga All-in-One energy storage solutions in multiple European nations, including the Benelux region, Romania, Greece, Germany, and Turkey.[46]
- *May 6th*: Connected Energy and Forsee Power have extended their 2021 partnership to develop modular, scalable energy storage solutions using second-life batteries from electric buses. The collaboration combines Connected Energy's proven second-life technology with Forsee Power's ZEN 35 and ZEN 42 battery packs currently deployed in approximately 1,500 electric buses across Europe. The partnership aims to create additional environmental and commercial benefits by repurposing retired EV batteries for grid-scale applications including renewable energy support and behind-the-meter storage. The first 2.5 MWh system will be operational in the UK by Q4 2025, with larger projects exceeding 25 MWh planned for the UK and France, positioning both companies to meet growing global energy storage demand.[47]
- *Apr 30th*: Spanish AI-optimized solar energy storage provider Turbo Energy S.A. has partnered with Saesa, one of Chile's largest electric utilities, to expand smart battery storage systems across Chile and Latin America. Their first joint project successfully installed a 200 Kw / 880 kWh lithium BESS at Bayas del Sur, a leading berry producer in southern Chile, complementing existing photovoltaic installations to optimize energy consumption and reduce fuel dependence. This partnership follows Turbo Energy's March 2025 launch of Latin America's first fully integrated solar energy storage system and marks the debut of their new business unit, Turbo Energy Solutions, which focuses on commercial and industrial photovoltaic generation, storage, and smart energy management across Latin America.[48]

[43] https://solarquarter.com/2025/05/15/huawei-and-keppel-sign-mou-to-advance-renewable-energy-solutions-across-asia-and-beyond/
[44] https://saerenewables.com/sae-and-econergy-enter-into-a-jv-to-drive-forward-the-afon-wysg-2-aw2-battery-storage-project-at-the-uk-leading-usep/
[45] https://www.downing-renewables.co.uk/news/downing-renewable-developments-achieves-planning-consent-for-20mw-solar-farm
[46] https://solarquarter.com/2025/05/08/jinko-ess-and-solartoday-sign-memorandum-of-agreement-for-sungiga-all-in-one-ess-distribution-deal/
[47]https://www.businesswire.com/news/home/20250505427358/en/Connected-Energy-and-Forsee-Power-to-Develop-Grid-Scale-Energy-Storage-Using-Second-Life-Batteries-From-Electric-Buses
[48]https://www.globenewswire.com/news-release/2025/04/30/3071341/0/en/Turbo-Energy-Partners-with-Chilean-Utility-Saesa-to-Expand-Smart-Battery-Storage-Systems-in-Latin-America.html

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Project and Development Announcements

United States

- *May 28th*: Leeward Renewable Energy successfully brought its 126 MW /504 MWh Antelope Valley BESS into commercial operation in Kern County, California, marking the company's first stand-alone battery project and seventh clean energy facility in the state. This four-hour duration LFP battery system enhances California's grid reliability by storing energy during low demand periods and discharging during peak times, while creating significant economic benefits including 90 construction jobs and an estimated $30M in property taxes over the project's lifetime. The facility represents a key milestone in LRE's energy storage strategy and contributes to California's growing portfolio of dispatchable clean energy resources essential for renewable integration.[49]
- *May 27th*: Vistra requested two-year extensions for interconnection deadlines from federal regulators for solar and battery storage projects in Illinois totaling 833 MW. The IPP cited multi-year wait times for acquiring essential equipment as the reason for the extension. The proposed projects include 440 MW of solar power and 106 MW of battery storage at the retired coal-fired Edwards power plant in Bartonsville, as well as 287 MW of storage at the retired coal-fired Joppa power plant in Joppa. Vistra has been developing these projects since at least 2022, as indicated in their filings with the Federal Energy Regulatory Commission.[50]
- *May 26th*: OCI Energy, CPS Energy, and LG Energy Solution Vertech signed a strategic Memorandum of Understanding (MOU) to develop the 120 MW/480 MWh Alamo City BESS in Bexar County, Texas. This international collaboration, formalized in Seoul, South Korea, saw LG providing advanced lithium-ion batteries and energy management technology while OCI Energy handles development and CPS Energy serves as off-taker. The four-hour duration system, expected to achieve commercial operation by 2027, will enhance grid stability during peak demand periods while supporting San Antonio's energy sustainability goals and representing a meaningful addition to Texas' rapidly expanding battery storage capacity.[51]
- *May 26th*: The US Bureau of Land Management (BLM) has initiated a 30-day public comment period for NextEra Energy Resources' proposed 200 MW Copper Rays Solar project in Nevada, which includes battery storage. The project, located near Pahrump in Nye County, spans 1,600 acres, with 635 acres on BLM-administered land. This initiative aligns with the Biden administration's push for clean-energy projects on public lands, emphasizing community involvement in decision-making.
- *May 23rd*: Slovenské elektrárne, the largest electricity producer in Slovakia, plans to connect the country's largest pumped storage power plant, Čierny Váh, with a modern battery storage system. As part of the SE Integrator project, two turbines will be reconstructed, and the hydropower plant will be linked to an 80 MW / 160 MWh BESS. A consultation meeting was held on May 15th.[52]
- *May 22nd*: Lightshift Energy announced construction of Vermont's largest battery energy storage project, a 16 MW / 52 MWh system at GlobalFoundries' semiconductor manufacturing facility in Essex Junction. The behind-the-meter (BTM) system will primarily serve peak shaving functions, storing electricity during low regional demand and discharging during peak periods to reduce manufacturing costs and grid stress, with commercial operation expected in early 2026. This project represents a relatively new application for energy storage within the semiconductor industry, showcasing how large industrial users can manage peak demand to improve operational efficiency and reduce costs while supporting regional grid reliability.[53]

[49]https://www.businesswire.com/news/home/20250528468976/en/LRE-Brings-First-Stand-Alone-Antelope-Valley-BESS-Battery-Storage-Facility-Online-Furthering-Efforts-to-Strengthen-Grid-Reliability-in-California
[50] https://www.yahoo.com/news/vistra-solar-battery-projects-miso-083408712.html
[51]https://www.prnewswire.com/news-releases/oci-energy-cps-energy-and-lg-energy-solution-vertech-partner-to-develop-major-ercot-battery-storage-project-302465882.html
[52] https://ceenergynews.com/renewables/slovakias-largest-pumped-storage-plant-to-be-upgraded-with-battery-system/
[53]https://www.businesswire.com/news/home/20250522231233/en/Lightshift-Energy-to-Build-Vermonts-Largest-Energy-Storage-Project-to-Power-Semiconductor-Manufacturing-for-GlobalFoundries

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- *May 16th*: Developer CVE North America (CVE) has begun construction of its first solar and BESS project "Riverhead" in New York State. The project is located on a capped landfill in Riverhead and includes a 7 MW Solar PV plant and 13.6 MWh BESS.[54]
- *May 14th*: Enexus is an integrated EPC (Engineering, Procurement, and Construction) company that specializes in mid- to large-scale solar and storage projects. The company has secured contracts for over 250 MW in Romania and aims to surpass 600 MW of installed renewable capacity by 2025, further expanding its EPC presence in the Black Sea region. Currently, Enexus has a development pipeline of 350 MW and is increasing its operations to meet the growing demand in the market.[55]
- *May 14th*: Storage developer Alcemi received planning permission for their 300 MW Kintore BESS in Aberdeenshire, Scotland. The Kintore BESS will continue to progress in collaboration with Copenhagen Infrastructure Partners (CIP), through their Flagship Funds, as part of the ongoing partnership that will see 4 GW of energy storage deployed across the UK at key locations.[56]
- *May 13th*: The Iroquois County Board approved updated ordinances regulating commercial wind and solar projects and passed a new ordinance governing BESS. The changes come amid a surge in renewable energy proposals, with 14 projects currently under review, including a solar-plus-storage facility near Buckley Del Rey and a proposed Scout Clean Energy project near Gilman. The BESS ordinance applies only to standalone storage facilities, while integrated storage will follow wind/solar rules for fire safety. Scout Clean Energy's representatives and Ranger Power submitted feedback on the amendments, with Scout claiming its Gilman project could generate nearly $200M in new tax revenue. The ordinances were recommended by the zoning board of appeals following a May 5th hearing. The board voted 15-0 in favor, with one member absent.[57]
- *May 13th*: Irby Construction, SMT Energy, and CenterPoint Energy broke ground on a 160 MW / 320 MWh BESS in ERCOT's Houston market zone. The project is a large investment in supporting Texas grid reliability and renewable energy integration, with construction beginning immediately and completion expected by early July 2025. This strategic collaboration enhances grid stability by providing fast-response power during peak demand periods while supporting CenterPoint Energy's broader grid resiliency improvements, with SMT Energy serving as developer and Irby Construction as EPC contractor.[58]
- *May 7th*: EDP Renewables North America LLC (EDPR NA) has officially inaugurated its Scarlet II Solar Energy Park (200 MW Solar PV + 150 MW / 600 MWh BESS) in Fresno County, California. This project marks the second phase of the broader Scarlet Solar Energy Park initiative, following the successful launch of Scarlet I (200 MW Solar PV + 40 MW / 160 MWh BESS) in 2024. The entire solar output from Scarlet II is secured under a 15-year virtual PPA, while the capacity associated with the battery storage system is contracted through long-term Resource Adequacy (RA) agreements with Ava Community Energy and San José Clean Energy.[59]
- *May 6th*: Madison Gas and Electric received regulatory approval to build the Sunnyside Solar Energy Center, featuring 20 MW of solar generation paired with 40 MW of four-hour battery storage in Fitchburg, Wisconsin. This $35.8M project, developed by EDF Renewables, will provide locally generated renewable energy to

[54] https://solarquarter.com/2025/05/16/cve-north-america-begins-construction-on-its-first-combined-solar-and-battery-storage-project-in-new-york/
[55] https://www.green-forum.eu/energy/20250514/enexus-targets-600-mw-in-2025-1866
[56] https://alcemi.com/news/alcemi-secures-planning-permission-for-300-mw-bess-project
[57]https://world.einnews.com/article/816794893?lcf=LoQIc8FHDqp-vDIGMnaUQBTLh1TqL4Ri4sdUVjKKdUU%3D&search%5B%5D=news&search%5B%5D=press&order=relevance&age_h=2160&headlines_only=mostly&search_market=yes
[58]https://www.globenewswire.com/news-release/2025/05/13/3080431/0/en/Irby-Construction-SMT-Energy-and-CenterPoint-Energy-Break-Ground-on-160-MW-320-MWh-Battery-Storage-Project-in-Houston.html
[59] https://solarquarter.com/2025/05/07/edp-renewables-north-america-adds-200-mw-solar-and-150-mw-storage-to-its-1-1-gw-california-portfolio/

MGE's distribution system while supporting the utility's ambitious carbon reduction goals of 80% emissions reduction by 2030 and net-zero by 2050. [60]

- *May 6th*: PJM selected Constellation Energy's Crane Clean Energy Center for expedited grid connection under its Reliability Resource Initiative. The project includes over 1,150 MW of clean energy, with battery storage as a component, to bolster grid reliability amid tightening reserves.
- *May 6th*: Leeward Renewable Energy announced the full operational status of its 88 MW / 352 MWh Chaparral Springs BESS in Kern County, California, as part of a broader multi-phase initiative including a 174 MW solar facility. This four-hour duration system enhances grid stability by storing solar energy during low-demand periods and dispatching power during peak demand or when solar is unavailable, serving Peninsula Clean Energy and Valley Clean Energy under 15-year PPAs. The project represents a significant milestone in Leeward Renewable Energy's expanding California portfolio, bringing the company's total operational capacity in the state to 470 MW across six facilities. [61]
- *May 5th*: Renewable Properties broke ground on three California solar projects totaling 17 MW of solar generation and 16 MWh of energy storage, funded through $35.8M in construction loans from Optus Bank, Pathward, and BridgePeak Energy Capital. The portfolio includes the 5.56 MW Redemeyer Road project with 4 MW / 16 MWh storage serving Sonoma Clean Power's EverGreen program, and two phases of the Althea Avenue project in Fresno County contributing to PG&E's disadvantaged communities programs. These community solar projects demonstrate the growing importance of distributed energy resources in expanding renewable energy access regardless of income or rooftop suitability, while the integrated storage component enables optimal utilization of solar generation by shifting energy from midday production to evening peak demand periods.[62]
- *Apr 30th*: Convergent Energy and Power initiated construction on a 3 MW / 9 MWh utility-scale BESS for West Boylston Municipal Light Plant (WBMLP), representing a strategic investment in municipal grid resilience and cost management. The system, which Convergent will finance, own, and operate using its proprietary PEAK IQ platform, is designed to stabilize electricity costs for customers and provide protection against rising energy expenses, with commercial operation expected in Q3 2025. This project exemplifies the growing trend of municipal utilities leveraging energy storage to reduce transmission and capacity costs while supporting Massachusetts' greenhouse gas emission reduction goals, as WBMLP already sources 56% of its energy from clean and renewable resources.[63]

International

- *May 30th*: Monsson, a renewable energy solutions provider, has acquired complete ownership of the Eskilstuna BESS project, which has a capacity of 60 MWh, from Neoen. Construction is set to begin in June 2025. Monsson aims to enhance its presence in Sweden, with plans to target over 200 MWh of storage capacity in the future to facilitate additional investments and partnerships in the region.[64]
- *May 30th*: Balance Power has been awarded planning approval for its 30 MW Rochdale BESS in Northwest England's Greater Manchester County, UK. The company received approval on a 29.9 MW BESS project in Scotland earlier in the month and has ~2 GW of projects in its development pipeline.[65]

[60]https://www.businesswire.com/news/home/20250506277109/en/MGE-to-Add-More-Local-Solar-and-Battery-Storage-with-Sunnyside-Solar-Energy-Center
[61]https://www.businesswire.com/news/home/20250528468976/en/LRE-Brings-First-Stand-Alone-Antelope-Valley-BESS-Battery-Storage-Facility-Online-Furthering-Efforts-to-Strengthen-Grid-Reliability-in-California
[62]https://www.businesswire.com/news/home/20250505405531/en/Renewable-Properties-Commences-Construction-on-Three-California-Projects-Totaling-17-MW-of-Solar-and-16-MWh-of-Storage
[63]https://www.businesswire.com/news/home/20250430140259/en/Convergent-Energy-and-Power-Breaks-Ground-on-Battery-Storage-System-in-Massachusetts-for-West-Boylston-Municipal-Light-Plant
[64] https://www.power-technology.com/news/monsson-60mwh-bess-sweden/
[65] https://www.energyglobal.com/energy-storage/30052025/balance-power-secures-planning-approval-for-30-mw-rochdale-bess/

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- *May 30th*: UK renewables developer Enviromena received approval from the Hartlepool Borough Council's planning committee for its Barns Solar Farm project (49.9 MW Solar PV + 25 MW BESS) near Hartlepool in England.[66]
- *May 29th*: UK renewable energy developer Queequeg Renewables has obtained planning consent for its 100 MW Hazel Grove BESS in Cheshire County, northwest England.[67]
- *May 28th*: Grenergy unveiled its 2025–2027 strategic plan, investing € 3.5B to lead in energy storage. The plan focuses on three goals: expanding hybrid solar-and-storage projects, launching Greenbox, a standalone battery platform in Europe, and ensuring 24/7 solar energy supply through its Chilean retailer, GR Power. By 2027, Grenergy targets 4.4 GW of solar capacity and 18.8 GWh of battery storage. To fund this, the company will use its asset rotation strategy, expecting € 800M in revenue, with half already being secured. Grenergy's strong project financing, including nearly $1B for the Oasis de Atacama project last year, supports these ambitions. The Oasis de Atacama project in Chile will reach 2 GW solar and 11 GWh storage by 2027 with a € 2B investment. In 2025, Grenergy will finalize contracts and financing for phases 5 and 6 and start battery operations for phases 2 and 3. The Central Oasis project, also in Chile, targets 1.1 GW solar and 3.8 GWh storage with a € 900M-investment, with all phases operational by 2027 and secured PPAs. In Spain, the Escuderos project will combine 200 MW solar and 704 MWh storage, starting construction in late 2025 and aiming for full operation by 2027. Greenbox, with a 35 GWh pipeline, will target Poland, Romania, Germany, Italy, Spain, and the UK, aiming for 3 GWh in operation or construction by 2027 to boost grid stability and renewable integration.[68]
- *May 28th*: Aramco has launched a megawatt-scale Iron-Vanadium (Fe/V) flow battery, the first globally to serve as a solar backup for gas well operations, is a 1 MWh system situated in Wa'ad Al-Shamal, western Saudi Arabia. It was developed in collaboration with Rongke Power, a top global flow battery technology provider.[69]
- *May 27th*: Iberdrola Australia has begun construction at its Broadsound Solar Farm in Clarke Creek, Queensland. The project features a 388 MW_p Solar PV plant and 180 MW BESS.[70]
- *May 27th*: Ingrid Capacity, in collaboration with SEB Nordic Energy's portfolio company Locus Energy, has officially broken ground on one of Finland's largest BESS. Located in Nivala, the 70 MW / 140 MWh project marks Ingrid Capacity's first facility in Finland and a strategic milestone in its European expansion. Scheduled to go online in 2026, the system will support grid stability, enhance energy security, and accelerate Finland's green energy transition.[71]
- *May 27th*: SolarBank Corporation announced development of the 6.9 MW Brooklyn solar project in Nova Scotia under Canada's first Community Solar Program, owned by AI Renewable Fund with a total project cost of $13.9M. The project, developed in partnership with local firm Trimac Engineering, supports Nova Scotia's ambitious renewable energy targets of 80% renewable energy by 2030 and net-zero by 2035, while enabling community members to access renewable energy benefits without installing panels on their properties. With construction expected to begin in Spring 2026 and completion by Summer 2026, this community solar initiative will power approximately 900 homes while allowing subscribers to save approximately $0.02 per kWh, demonstrating the growing importance of community solar programs in expanding renewable energy access and supporting provincial clean energy transitions.[72]

[66] https://www.bbc.com/news/articles/cwy3pyw3j1go
[67] https://renews.biz/100903/100mw-uk-battery-project-given-nod/
[68] https://taiyangnews.info/business/grenergy-2025-2027-strategic-solar-storage-plan
[69] https://solarquarter.com/2025/05/26/aramco-launches-worlds-first-iron-vanadium-flow-battery-for-solar-powered-gas-production-boosting-renewable-energy-storage/
[70] https://solarquarter.com/2025/05/27/iberdrola-australia-sets-benchmark-with-golden-row-at-377-mw-broadsound-solar-farm/
[71] https://newsroom.notified.com/news/359285/ingrid-capacity-in-collaboration-with-seb-nor
[72] https://www.prnewswire.com/news-releases/6-9-mw-brooklyn-project-in-development-by-solarbank-in-nova-scotia-canada-302465401.html

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- *May 27th*: Swedish renewables developer OX2 AB secured an environmental permit to build a 110 MW Solar PV + BESS in southwestern Sweden, with construction starting in early 2026 and operations beginning in 2027. This project aligns with OX2's 25-GW pipeline of wind, solar, and storage assets across Europe and Australia, supported by Sweden's 2040 fossil-free electricity goal and strong corporate demand for stable, low-carbon power.[73]
- *May 27th*: Real estate developer Azrieli Group acquired a 50% stake in the Ramat Beka solar-plus-storage project from Shikun & Binui Energy in Israel's Negev Desert. The project (126 MW Solar PV + 350 MWh BESS) will start operations between 2028 and 2029. Azrieli will fund half the development costs and receive all electricity output for 20 years. [74]
- *May 26th*: WALDEVAR Energy and Prime Batteries announced the development of the Da Vinci New Project (23 MW_p Solar PV + 5 MW / 10 MWh BESS) located in Nanov, Teleorman County, Romania.[75]
- *May 26th*: The Bulgarian Ministry of Energy has inaugurated the largest operational battery storage facility in the European Union, located in the north-central city of Lovech. This facility has a capacity of 124 MW and can store up to 496.2 MWh of energy. It was developed by Advance Green Energy AD, a Sofia-based company founded in 2024 by brothers Kiril and Georgi Domuschiev. The BESS represents a significant private investment of лв 147M, which is approximately $8M or € 75.2M.[76]
- *May 26th*: China has launched its first large-scale lithium-sodium hybrid energy storage station, the 400 MWh Baochi Energy Storage Station, located in Yunnan Province. This facility combines lithium and sodium-ion battery technologies to improve energy storage efficiency and facilitate the integration of renewable energy sources into the power grid. The hybrid system boasts a longer cycle life and operates effectively in temperatures ranging from -20°C to 45°C, making it a robust solution for large-scale energy storage.[77]
- *May 26th*: Meridian Energy Ltd has successfully launched its Ruakākā BESS (100 MW / 200 MWh) making it New Zealand's first large-scale grid battery, near Whangārei. The project supports Meridian's "Net Zero 2050" plan, targeting 1 GWh of storage and 900 MW of new wind capacity. Meridian is now seeking consent for a larger South Island BESS.[78]
- *May 25th*: ILI Group, based in Hamilton, Scotland, has received planning permission for its 100 MW Learielaw BESS project, which is located near Broxburn in West Lothian. The project is anticipated to connect to the grid in 2028. ILI Group's development pipeline totals 4.7 GW and includes 2.5 GW of pumped storage hydro and 2.2 GW of utility-scale battery storage, all aimed at supporting Scotland's sustainable energy goals.[79]
- *May 23rd*: AXIAN, a Pan-African group, began constructing its NEA Kolda plant in southern Senegal (60 MW Solar PV + 72 MWh BESS). Located in Tankanto Escale, Kolda region, the project is built by a Voltalia and Entech consortium, supporting Senegal's 40% renewable energy target by 2030. The € 105M project secured € 84M in financing in October 2024 from the Emerging Africa & Asia Infrastructure Fund, FMO, and DEG. AXIAN Energy, operating in nine African countries, holds 183 MW of capacity and aims for 1 GW by 2030.[80]
- *May 23rd*: BayWa r.e., though its subsidiary GroenLeven, has closed the sale of a shovel-ready 300 MW BESS to Vopak. The deal marks Baywa's largest transaction to date. The project is the Netherlands' largest planned BESS to date. [81]
- *May 23rd*: Danish renewables developer Copenhagen Energy announced that it has successfully developer

[73] https://list.solar/news/ox2-secures-green/
[74] https://list.solar/news/azrieli-invests/
[75] https://www.green-forum.eu/business/20250526/waldevar-and-prime-batteries-support-romanias-energy-system-1889
[76] https://www.green-forum.eu/energy/20250526/bulgaria-launches-eus-largest-battery-storage-system-1890
[77] https://www.world-energy.org/article/52221.html
[78]https://www.rnz.co.nz/news/national/561979/giant-battery-first-stage-of-ruakaka-energy-park-switched-on#:~:text=Peter%20de%20Graaf%2C&text=New%20Zealand's%20first%20super%2Dsized,power%20outages%2C%20Meridian%20Energy%20says.
[79] https://www.world-energy.org/article/52092.html
[80] https://energycapitalpower.com/senegal-begins-construction-of-60-mw-solar-plant/
[81] https://renews.biz/100787/baywa-re-sells-300mw-dutch-bess-to-vopak/

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a shovel-ready portfolio of 156 MWh of BESS is Denmark. The projects will be installed in Denmark's DK2 electricity zone. Construction is expected to begin late this year, with commissioning in the first half of 2026.[82]

- *May 22nd*: Apatura received planning permission from Scotland's Energy Consents Unit and North Ayrshire Council for its 100 MW BESS on the outskirts of Kilwinning. The approval marks the tenth successful BESS application in only 17 months, raising the company's development portfolio to 1.6 GW. [83]
- *May 20th*: Norwegian IPP Statkraft AS received environmental approval for its Talayuela II BESS project (23.87 MW / 47.74 MWh) in Spain. The BESS will be co-located with the 44.5 MW Talayuela II solar farm. The project was selected to receive € 2.5M in funding under Spain's Recovery Plan, supported by the EU's Next Generation funds.[84]
- *May 21st*: UK energy storage developer Root Power was awarded planning consent for a 99 MW / 198 MWh BESS project in North Yorkshire, England. The developer now has over 250 MW of storage projects consented across the region.[85]
- *May 21st*: French energy company Engie broke ground on its Libélula project (151 MW_p Solar PV + 199 MW BESS) in Chile's Santiago Metropolitan Region. The project is scheduled to come only in Q3 2026. Engie Chile plans to reach 3.5 GW of installed capacity by 2027, of which more than 60% will come from renewables and battery storage.[86]
- *May 19th*: UK-based Elements Green has secured grid connection approval for its Eurimbula Hybrid Facility (696 MW_p Solar PV + 666 MW / 1,332 MWh BESS) in Australia. The project is located in the Central Queensland Renewable Energy Zone. Elements Green said it has now received the 5.3.4A Letter from the Australian Energy Market Operator (AEMO) and Queensland transmission network operator Powerlink, providing technical clearance to connect the hybrid project to the national grid.[87]
- *May 19th*: German storage developer Green Flexibility and renewable energy company Enertrag have partnered to develop a 60 MW / 130 MWh BESS in Brandenburg, Germany. The project, valued at approximately € 45M (USD 50.3M), is currently in the final planning phase. The commissioning of the system is expected to take place in the first quarter of 2026.[88]
- *May 19th*: PPC Group has announced two BESS projects in Western Macedonia, northern Greece. The Melitis 1 project will have a capacity of 48 MW and provide 96 MWh of storage; it will be located near future solar PV parks developed by the company. Meanwhile, the Ptolemaida 4 project will feature 50 MW of capacity and 100 MWh of storage, and it will be built on the site of former lignite mines in Ptolemaida. As part of its investment plan for 2025–2027, PPC aims to commission 600 MW of energy storage capacity across Greece and Southeast Europe, with several projects already in progress.[89]
- *May 19th*: Energy Optimization Solutions (EOS) received approval for a 100 MW BESS in Teesside, north-east England. EOS is also developing other projects in the UK, including a 230 MW facility in Newport, South Wales.[90]
- *May 18th*: ACEnergy's Little River BESS, with a capacity of 770 MWh, is in Little River, Victoria, Australia. This project is currently being fast-tracked through the Allan Labor Government's Development Facilitation Program. This initiative, which was expanded last year to include renewable energy projects, aims to accelerate the development of critical infrastructure projects in Victoria. Previously, these projects had to go through the Victorian Civil and Administrative Tribunal, resulting in about 20% of them being delayed by an

[82] https://renewablesnow.com/news/copenhagen-energy-ready-to-install-156-mwh-danish-bess-portfolio-1275761/
[83]https://apatura.energy/news-insights/apatura-secures-planning-permission-for-new-100mw-battery-energy-storage-system-in-kilwinning-north-ayrshire/
[84] https://solarstoragextra.com/statkraft-secures-approval-for-new-battery-storage-scheme-in-spain/
[85] https://www.linkedin.com/posts/root-power_batterystorage-energytransition-netzero-activity-7330600733991444480-UuWE
[86]https://solarbytes.info/business-bytes/engie-chile-nextracker-dragonfly-350-mw-pv-bess-project-metropolitan-chile-9114822
[87]https://www.pv-magazine-australia.com/2025/05/19/aemo-gives-connection-approval-for-grid-forming-solar-and-storage-project/
[88] https://enertrag.com/news-and-press/press-releases/2025/may/green-flexibility-and-enertrag-implement-battery-storage-in-tantow
[89] https://www.green-forum.eu/energy/20250519/ppc-develops-battery-storage-projects-in-greece-1877
[90] https://www.world-energy.org/article/51980.html

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average of two years.[91]

- *May 16th*: India-based ReNew is set to initiate a ₹ 22,000 renewable energy project in Anantapur, a major step in India's clean energy progress, recognized as the nation's largest single-site renewable energy facility. The multi-phase project will have a 2.5 GW generation capacity and a 1 GWh advanced BESS. The first phase, with a ₹ 14,000 investment, will feature 500 MW each of solar and wind power, backed by a 1 GWh BESS. The second phase, with an additional ₹ 8,000, will add another 500 MW each of solar and wind capacity.[92]
- *May 14th*: ENGIE and NHOA Energy officially commenced construction on a 400 MWh BESS in Kallo, Belgium, marking a significant milestone in European grid modernization and renewable energy integration. The project, selected through Belgium's 4th Capacity Remuneration Mechanism auction, addresses anticipated power capacity shortages following the planned partial phase-out of Belgian nuclear plants in 2025. Located at the former Kallo power plant site, this four-hour duration system will support optimal utilization of wind and solar energy, demonstrating the critical role of large-scale storage in enabling Europe's transition to a more sustainable and resilient energy system.[93]
- *May 16th*: Cero Generation, part of Macquarie's Green Investment Group, received approval from the Ministry of Environment's General Directorate of Environmental Policy to install a 72 MW / 164 MWh BESS at a 100 MW Solar PV site in Western Macedonia, Greece. [94]
- *May 14th*: EDF Renewables UK has opened a community consultation through the Swansea Council for its proposed 250 MW Swansea North BESS project. Environmental surveys, traffic studies and noise assessments are already reportedly under way.[95]
- *May 13th*: Genex Power has renamed and reconfigured its 258 MW Kidston Wind Project, reducing the size of the wind farm component to 120 MW and adding a 150 MW / 600 MWh BESS. Now called the Kidston Hybrid Project (K3-Hybrid), the project will connect to the new 275 kV transmission line being delivered by Powerlink Queensland to Genex's flagship project—the 250 MW Kidston Pumped Storage Hydro Project (K2-Hydro).[96]
- *May 9th*: ACEN Corporation, through its wholly owned subsidiary ACEN Australia, received grid access rights for three major renewable energy projects in New South Wales through a competitive process administered by ACE-REZ on behalf of the New South Wales Government. The projects include the 920 MW Valley of the Winds Wind Project, 780 MW_{dc} Birriwa Solar Project, and 600 MW / 2-hour Birriwa BESS.[97]
- *May 8th*: Niam Infrastructure, a Nordic real assets investor, announces the launch of the second phase of its renewable energy platform in Latvia, developed in partnership with Baltic clean energy developer Evecon. The platform was initiated in June 2024 through a JV between Niam and Evecon, targeting up to 110 MW of installed capacity in solar PV and battery energy storage. The construction of the first six projects, totaling 39.4 MW, is nearing completion and expected to begin delivering clean electricity to the grid during May 2025. The second phase, now starting construction, includes an additional four projects with a combined capacity of 36.3 MW. With this milestone, the platform's total installed capacity reaches 75.7 MW. Completion of the second phase is targeted by the end of Q1 2026.[98]
- *May 7th*: The 250 MW / 1,000 MWh Oneida Energy Storage Project officially entered commercial operations, becoming Canada's largest battery energy storage facility and one of the largest globally. Located in

[91] https://www.power-technology.com/news/victoria-expedites-acenergys-battery/
[92] https://solarquarter.com/2025/05/15/renew-unveils-%e2%82%b922000-cr-2-5-gw-green-energy-complex-in-anantapur/
[93]https://www.businesswire.com/news/home/20250514650303/en/ENGIE-and-NHOA-Energy-Break-Ground-on-400-MWh-Battery-Project-in-Belgium
[94] https://www.pv-tech.org/cero-generation-100mw-solar-pv-plant-in-greece-reaches-commercial-operation/
[95]https://www.edf-re.uk/media-centre/views-sought-from-local-community-on-edf-renewables-uks-proposed-swansea-north-battery-storage-facility/
[96] https://genexpower.com.au/renew-economy-genex-turns-kidston-wind-project-into-hybrid-with-new-bess/
[97] https://solarquarter.com/2025/05/09/acen-secures-grid-access-for-2-gw-renewable-projects-in-new-south-wales/
[98] https://www.niam.se/en/who-we-are/news/niam-infrastructure-and-evecon-launches-second-phase-of-renewable-energy-platform-in-latvia/

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Haldimand County, Ontario, this landmark project was delivered ahead of schedule and under budget at approximately $700M, through a collaborative partnership between Northland Power, Six Nations of the Grand River Development Corporation, and other partners. The facility doubles Ontario's energy storage capacity from 225 MW to 475 MW, supports grid reliability for Canada's 90% clean electricity system, and is expected to reduce emissions by 1.2-4.1 million tons over its lifetime while serving as a model for Indigenous partnership in clean energy development. [99][100]

- *May 7th*: UK renewables company Ethical Power Group received planning permission for three solar farms (Burcot, Langer, and Kirkgate) with a combined capacity of 63.4 MW and a battery energy storage project in England. The projects were developed by Hive Ethical Project Developments, a JV between Ethical Power and British renewables developer Hive Energy.[101]
- *May 6th*: British utility SSE plc received planning permission from the Mayo County Council for its Mullafarry project (80 MW / 160 MWh BESS) in Ireland's County Mayo. The project is expected to be operational in 2028.[102]
- *May 5th*: Norwegian renewable energy developer Scatec commenced construction on its 1.1 GW Obelisk solar project combined with 100 MW / 200 MWh battery storage in Egypt, representing the country's first hybrid solar-battery facility. The $590M project will be built in two phases, with the first phase (561 MW solar + 100 MW / 200 MWh storage) targeting commercial operation in H1 2026, supported by a USD-denominated 25-year PPA with Egyptian Electricity Transmission Company. [103]
- *May 5th*: UK renewables developer Ridge Clean Energy received planning consent from the Scottish government's Energy Consents Unit for its Ladyfield Renewable Energy Park (58.5 MW Wind + 41.4 MW BESS) in Scotland.[104]
- *May 2nd*: SSE Renewables launched a public consultation for its Tinnycross BESS (former Thornberry) – a 120 MW / 240 MWh project in County Offaly, Ireland. Located just northeast of Tullamore, Tinnycross was acquired from Low Carbon in November 2024. SSE will submit an updated planning application to Offaly County Council later this year. [105]
- *May 2nd*: Low Carbon's proposed Beacon Fen Energy Park (400 MW Solar PV + 600 MW BESS) in Lincolnshire has entered the pre-examination phase after UK Planning Inspectorate approval. Located northeast of Sleaford, the project may begin construction in 2027 if approved. Low Carbon previously secured a permit for the 500-MW Gate Burton Energy Park in Lincolnshire and is planning a similar project in Kent. [106]
- *May 1st*: UK renewables developer Apatura received planning approval for a 50 MW / 100 MWh BESS near East Kilbride, South Lanarkshire. This follows approval for a 40 MW / 80 MWh BESS in Eaglesham, reinforcing Apatura's commitment to providing clean, reliable energy in the UK. [107]

[99] https://www.globenewswire.com/news-release/2025/05/07/3075978/0/en/250-MW-1-000-MWh-Oneida-Energy-Storage-Project-Commences-Commercial-Operations.html
[100] https://www.globenewswire.com/news-release/2025/05/07/3075957/0/en/Northland-Power-Announces-Commercial-Operations-at-Oneida-Energy-Storage-Project-Canada-s-Largest-Battery-Storage-Facility-Delivered-Ahead-of-Schedule-and-Below-Budget.html
[101] https://ethical-power.com/news-insights/ethical-power-advances-development-portfolio-with-three-new-solar-farms-receiving-planning-permission/
[102] https://www.sserenewables.com/news-and-views/2025/04/sse-receives-planning-approval-for-mullafarry-battery-project-in-north-mayo/
[103] https://www.globenewswire.com/news-release/2025/05/05/3074478/0/en/Scatec-starts-construction-of-large-scale-solar-and-battery-storage-project-in-Egypt.html
[104] https://www.ridgecleanenergy.com/project/ladyfield-renewable-energy-park/
[105] https://www.sserenewables.com/solar-and-battery/battery-storage/tinnycross/
[106] https://www.hvac-now.co.uk/article/280647/low-carbon-enters-review-phase-for-400mw-solarstorage-project
[107] https://list.solar/news/apaturas-new/

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Vendor / OEM News

- *May 29th*: Meikesheng Energy and Jinko Energy Storage signed a strategic cooperation agreement for a 100 MWh project. The two parties will deepen their collaboration in the industrial and commercial energy storage sector. Currently, Meikesheng Energy's signed industrial and commercial energy storage projects have surpassed 1.5 GWh, with projects deployed in multiple provinces including Jiangsu, Zhejiang, Guangdong, and Anhui, covering high-energy consumption industries such as steel, textiles, and new materials, and accumulating rich practical project experience.[108]
- *May 27th*: ADS-TEC Energy established ads-tec Energy Austria GmbH in Kötschach-Mauthen as part of its international growth strategy, immediately securing a framework agreement for three 5 MWh battery storage systems plus a fast-charging EV system from an Austrian utility company. The strategic expansion into the DACH region (Germany, Austria, Switzerland) provides localized customer support and positions the company for Central and Eastern European market growth. Delivery of the first storage system is scheduled for late 2025/early 2026, with the Austrian presence enabling faster response times and competitive maintenance packages for the growing demand for high-performance storage and charging solutions. [109]
- *May 27th*: Sungrow successfully deployed a 30 MW / 60 MWh battery storage project in Simo, Finland, located less than 100km south of the Arctic Circle, making it one of the world's northernmost battery power plants. The installation consists of 26 PowerTitan 1.0 liquid-cooled LFP battery containers designed to operate reliably in extreme weather conditions, supporting Finland's renewable energy grid stabilization as part of the FRV AmpTank JV. The project demonstrates advanced battery technology's capability to function in harsh climates while providing critical grid services including frequency regulation and renewable energy integration, showcasing the global applicability of energy storage solutions. [110]
- *May 26th*: Sungrow and Globeleq signed a BESS supply and 15-year service term sheet for the 153 MW / 612 MWh Red Sands project in South Africa's Northern Cape, which will become the largest standalone BESS in Africa. The project, part of South Africa's inaugural Battery Energy Storage Independent Power Producer Procurement Program (BESIPPPP), will use PowerTitan 2.0 liquid-cooled technology and connect via Eskom's Garona substation to provide load shifting and grid stabilization services. Expected to reach financial close in 2025 and begin operations in 2027, the project addresses South Africa's energy supply challenges and supports renewable energy integration while requiring approximately $300M investment over 24 months construction. [111]
- *May 22nd:* Grenergy has signed a supply agreement with BYD Energy Storage for the delivery of 3,500 MWh of energy storage systems for the sixth phase of the Oasis de Atacama (Elena) project in northern Chile. This agreement represents the largest collaboration between the two companies and reinforces their strategic partnership, marking the largest battery supply project in Latin America and the second largest globally.[112]
- *May 22nd*: ZincFive established a certified warehouse and service depot in Europe through collaboration with Akkuteam Energietechnik GmbH to support fast delivery of nickel-zinc batteries and spare parts across EMEA region. The facility touts seamless customs transit through Europe and streamlined exports to non-EU countries, reducing shipping emissions while helping meet accelerating international demand for safer, more sustainable alternatives to legacy lead-acid systems. [113]

[108] https://www.energytrend.com/news/20250529-49688.html
[109]https://www.businesswire.com/news/home/20250527407472/en/ADS-TEC-Energy-Expands-Into-Austria---First-Major-Orders-Already-Secured
[110]https://www.prnewswire.com/news-releases/reliability-in-extreme-latitude-sungrow-deploys-60mwh-battery-storage-project-close-to-the-arctic-circle-302465728.html
[111]https://www.prnewswire.com/news-releases/sungrow-and-globeleq-sign-term-sheet-for-the-red-sands-bess---africas-largest-standalone-battery-energy-storage-system-302465149.html
[112] https://www.world-energy.org/article/52141.html
[113]https://www.businesswire.com/news/home/20250522279972/en/ZincFive-Expands-Global-Reach-with-Strategic-EMEA-Warehouse-and-Service-Hub

- *May 21st*: ABB has unveiled its new BESS-as-a-Service, offering a zero-CapEx, turnkey solution to help businesses deploy energy storage without upfront investment. Customers pay a quarterly fee covering hardware, software, maintenance, and energy market participation, with performance guarantees included. The offering supports a shift from CapEx to OpEx. ABB is currently conducting feasibility studies across sectors like EV charging, logistics, and commercial buildings, with early projects showing large financial lifetime benefits and up to 80% energy cost reductions. [114]
- *May 20th*: Zelestra contracted Sungrow to supply approximately 1 GWh of PowerTitan 2.0 liquid-cooled battery storage systems and MV power conversion units for the Aurora hybrid project in Tarapacá, Chile, one of Latin America's largest battery storage projects. The BESS complements a 220 MW_{dc} solar plant, creating a customized multi-technology solution providing guaranteed solar energy supply during nighttime hours to Chilean energy company Abastible through a long-term PPA. Construction is underway with the facility expected to generate 600 GWh annually, with BESS delivery beginning Q4 2025, demonstrating the growing trend toward large-scale hybrid renewable projects in Latin America.[115]
- *May 19th*: SMA America announced that it will begin domestic integration of its Medium Voltage Power Station (MVPS) solutions in the U.S. The MVPS is a fully integrated, turnkey solution that combines SMA central inverters, medium-voltage transformers, and switchgear in a 20-foot skidded container. Product integrated in the United States is expected to be available to customers beginning in the first quarter of 2026.[116]
- *May 19th*: SOLV Energy has secured agreements with multiple leading developers to construct more than 6 GW of utility-scale solar and energy storage projects across the United States. These initiatives span several states, including Arizona, Mississippi, Nevada, Oregon, Texas, and California. The projects involve partnerships with long-term clients such as Arevon, Clēnera, and Sol Systems, alongside new collaborators like NewSun Energy, Enfinity Global, and Panamint Capital. Construction is slated to begin in 2025 and will continue in the following years.[117]
- *May 16th:* At The smarter E Europe, Hithium showcased its comprehensive energy storage product portfolio and launched the ∞Power 6.25 MWh 2h / 4h BESS EU Version, tailored for the European market. Hithium also signed a MOU with GCRPV, a Spanish venture capital management firm, to foster end-to-end collaboration in the energy storage sector, advancing its strategy for localized manufacturing in Europe. Additionally, Hithium introduced its versatile, all-scenario product lineup, featuring high-capacity Cell 587 Ah and Cell 1175 Ah battery cells, the Pack+ high-capacity energy storage platform, the Cell N162Ah sodium-ion battery, and the Block 261 kWh C&I integrated storage cabinet, demonstrating its commitment to innovative, market-specific solutions.[118]
- *May 13th*: UL Solutions opened its Europe Advanced Battery Testing Laboratory in Aachen, Germany, expanding the company's battery technology testing capabilities and European footprint for EV and large-scale energy storage systems. The purpose-built facility evaluates batteries during R&D phases and offers comprehensive finished product evaluations, specializing in lifespan estimation and safety testing including thermal runaway assessment. The laboratory replaces a smaller facility acquired through UL Solutions' 2024 purchase of BatterieIngenieure.[119]
- *May 13th:* Anza, a leading energy storage and solar development and supply chain platform, announced the

[114]https://www.prnewswire.com/news-releases/foss--company-closes-pivotal-solar-and-battery-energy-storage-itc-credit-transfer-in-hawaii-302423740.html
[115]https://www.prnewswire.com/news-releases/zelestra-signs-major-bess-agreement-with-sungrow-for-1-gwh-of-energy-storage-at-the-aurora-hybrid-project-in-chile-302460257.html
[116] https://www.sma-america.com/newsroom/news-details/sma-america-launch-domestic-integration-mvps-solutions#:~:text=Product%20integrated%20in%20the%20United,the%20utility%2Dscale%20solar%20market.
[117] https://solarquarter.com/2025/05/19/solv-energy-secures-over-6-gigawatts-of-new-project-awards-across-the-united-states/
[118]https://www.prnewswire.com/news-releases/hithium-launches-power-6-25mwh-2h4h-bess-eu-version-and-accelerating-manufacturing-in-europe-through-partnership-with-gcrpv-302457453.html
[119]https://www.businesswire.com/news/home/20250513936962/en/UL-Solutions-Launches-Advanced-Battery-Testing-Center-in-Europe

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launch of Energy Storage Pro, a first-of-its-kind data and analytics subscription platform. It revolutionizes storage development processes by shaving off significant process time and helps improve project profitability and risk position. No other platform gives users access to accurate, on-demand direct-from-supplier pricing, product and supplier data, lifecycle cost, capacity maintenance, and comparison tools across more than 20 battery suppliers, including fully domestic and non-Chinese options. Energy Storage Pro gives developers, EPCs, IPPs, and utilities the insights they need to make faster and smarter development decisions.[120]

- *May 12th:* Envision Energy, a global leader in green technology, introduces its next-generation EN 5 Pro 5 MWh all-in-one String PCS Energy Storage System at Smarter E Europe 2025. The EN 5 Pro delivers 2.5 MW / 5 MWh per container, enabled by pre-lithiated cell technology that ensures zero degradation for the first three years. The system achieves over 99% efficiency and boots round-trip efficiency (RTE) by approximately 1% through advanced SiC technology. Its string PCS architecture enables cluster-level control and eliminates bottlenecks to support superior energy dispatch and system optimization. The all-in-one DC+AC architecture significantly reduces Levelized Cost of Energy (LCOE) through dual liquid-cooling and intelligent temperature control, and convenient O&M with a pre-assembled, rapidly deployable system.[121]
- *May 11th:* Hoymiles, a global provider of smart solar and storage solutions, made a striking appearance at Intersolar Europe 2025 with its comprehensive energy storage portfolio, covering DIY micro storage, residential, commercial & industrial (C&I), and utility-scale applications. Under the theme "Storage Beyond Limit. Micro to Mega, All in Smart", Hoymiles highlights its latest C&I storage innovations including Power Conversion Systems and Containerized BESS, marking a major milestone in its strategic transformation towards energy storage.[122]
- *May 10th:* StarCharge, a global leader in EV charging infrastructure, energy, and digital solutions, has unveiled its latest BESS solution at Intersolar 2025. The 5MWh Container Energy Storage System is optimized for utility-scale application, ensuring peak shaving and enhancing grid stability. It features high-performance 314Ah LFP battery cells, BMS, Aerosol Fire Suppression System (FSS) and Environmental Control System, all housed within a 20 feet standardized container. The container is highly corrosion-resistant and complies with global environmental standards, ensuring its resilience in a variety of operating conditions.[123]
- *May 9th:* At EES Europe 2025, Sunwoda Energy unveiled its NoahX 3.0 6.528MWh Liquid Cooling BESS, equipped with high-performance 625 Ah LFP battery cells that deliver over 15,000 cycles and a 25-year service life. The system integrates AI-enabled active balancing to optimize charge/discharge consistency and overall efficiency. With multi-layer fire protection, high energy density (430+Wh/L), and the ability to operate in extreme environments from -30°C to 55°C, the NoahX 3.0 is designed to meet the needs of next-generation utility-scale energy storage. Additionally, Sunwoda Energy presented its OASIS A180 179kWh C&I ESS, which offers a compact design, flexible deployment, and smart energy management capabilities for C&I applications in Europe. The company also showcased a comprehensive range of integrated energy storage solutions, including battery cells (280Ah, 314Ah, 625Ah), utility-scale ESS (5MWh), C&I ESS (215 kWh), and residential ESS (5-120 kWh), underscoring its full end-to-end production capabilities.[124]
- *May 8th:* REPT BATTERO releases its latest energy storage batteries and energy storage systems during Intersolar Europe 2025 Munich. It is the third time that REPT BATTERO has joined the Intersolar series

[120]https://www.prnewswire.com/news-releases/anza-launches-energy-storage-pro-a-first-of-its-kind-subscription-data--analytics-platform-to-accelerate-energy-storage-development-and-project-timelines-302452574.html
[121]https://www.prnewswire.com/news-releases/envision-energy-showcases-en-5-pro-5-mwh-all-in-one-storage-system-at-smarter-e-europe-2025-302452282.html
[122]https://www.prnewswire.com/news-releases/storage-beyond-limit-hoymiles-drives-the-future-of-energy-storage-at-intersolar-europe-2025-302451864.html
[123]https://www.prnewswire.com/news-releases/starcharge-unveils-cutting-edge-bess-solution-at-intersolar-2025-302451578.html
[124]https://www.prnewswire.com/news-releases/ees-europe-2025-sunwoda-energy-unveils-innovative-energy-storage-solutions-for-a-sustainable-future-302451147.html

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panel. At this exhibition, REPT BATTERO brought 392Ah new generation high-capacity energy storage battery, which expected to be put into production shortly as well as the new Powtrix™ 6.26 MWh energy storage system which is built on the new 392Ah battery.[125]

- *May 7th:* Envision Energy, a global leader in green technology, announced the launch of its next-generation EN 8 Pro 8 MWh DC Liquid-Cooled Energy Storage System at Smarter E Europe 2025. The system features include a 26 % smaller footprint (4-hour system) and 12 % lower auxiliary power drive down LCOE, a quick-connect interface allows pack replacement in under one hour minimizing downtime, 700 Ah-plus cells, and precision SoC algorithms and millisecond-level data acquisition optimize energy management in real time.[126]
- *May 5th*: Flux Power received a patent for its AI-based Intelligent Battery Cycle Life Maximization Algorithm that uses machine learning to monitor and adjust battery behavior in real-time, dynamically optimizing maximum charge values based on field usage patterns. This proprietary technology signals Flux Power's strategic evolution from battery manufacturer to technology-driven energy solutions provider, creating self-optimizing battery networks that extend cycle life and improve operational efficiency. Flux Power claims that this patent reinforces their intellectual property portfolio and positions them to deliver software-driven solutions that provide additional customer value beyond traditional energy storage hardware.[127]
- *May 5th*: iAccess Energy and Ampt announced a DC-coupled PV-plus-storage project in Germany featuring 7 MW_p ground-mounted solar paired with 4 MW / 8 MWh battery storage using Ampt String Optimizers technology. The battery-centric architecture enables multiple revenue streams including peak-shifting, grid services, and energy trading while reducing costs through fewer inverters and transformers, with higher DC-to-AC ratios allowing simultaneous battery charging and grid export. iAccess Energy is developing over 40 projects using this DC-coupled solution, making it available to landowners, renewable investors, and asset owners, demonstrating the growing trend toward integrated solar-storage systems optimized for grid services and energy trading.[128]
- *May 1st*: Sunrun's CalReady virtual power plant expanded dramatically to include over 56,000 customers with approximately 75,000 batteries, making it the nation's largest virtual power plant. The distributed energy resource can deliver up to 375 MW of backup power during peak demand from 4-9 PM, May through October, helping California's grid stability during heat waves and emergencies. Customers earn up to $150 per battery annually, with total customer compensation expected to reach nearly $10M in 2025, demonstrating the economic viability of residential energy storage aggregation.[129]
- *May 1st*: Panasonic Corporation of North America has decided to step away from its solar and battery storage operations by the end of this year, opting instead to concentrate on businesses it believes will drive stronger long-term growth. Panasonic wrote on its website that it would discontinue its solar and battery storage line, which includes its popular EverVolt solar panels and batteries. Despite the closure, the company emphasized its plans to honor all warranties and continue providing customer service and support.[130]
- *Apr 30th*: NTR signed contracts for its 55 MW / 110 MWh Uusnivala BESS project in Nivala, Northern Ostrobothnia, Finland, with Fluence providing GridStack Pro 5000 technology and Nispera asset performance management platform. The 2-hour duration system will deliver frequency regulation, grid balancing, grid-forming capabilities, and energy shifting services to support Finland's renewable energy

[125]https://www.prnewswire.com/news-releases/rept-battero-releases-new-392ah-battery-and-powtrix-6-26mwh-energy-storage-system-302450055.htmlen
[126]https://www.prnewswire.com/news-releases/redefining-utility-scale-storage-envision-unveils-en-8-pro-at-smarter-e-europe-2025-302449303.html
[127]https://www.businesswire.com/news/home/20250505851499/en/Flux-Power-Awarded-Patent-for-an-Intelligent-Battery-Cycle-Life-Maximization-Algorithm-Pioneering-the-Future-of-AI-Driven-Energy-Optimization
[128]https://www.businesswire.com/news/home/20250505651801/en/iAccess-Energy-Announces-PVstorage-Project-Using-Ampt-Technology-to-Deliver-Best-in-Class-Solution-for-Asset-Owners
[129]https://www.globenewswire.com/news-release/2025/05/01/3072295/0/en/Sunrun-s-Distributed-Power-Plant-Quadruples-in-Size-to-75-000-Solar-Powered-Batteries-to-Support-California-s-Grid.html
[130] https://solar.na.panasonic.com/

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integration and net zero goals. Construction begins in spring 2025 with completion by mid-2026, marking the first battery project for the € 600M L&G NTR Clean Power (Europe) Fund and demonstrating growing Nordic market demand for grid stabilization services.[131]

Grants and Funding News

United States

- *May 23rd*: New York is allocating over $5M (approximately € 4.4M) to support the development of advanced energy storage technologies that enhance grid integration of existing energy resources. The funding will be managed by the New York State Energy Research and Development Authority (NYSERDA) through its Power Generation and Storage Innovation Program. NYSERDA announced a competitive solicitation on Thursday, with proposals due by July 24th. Eligible applicants can submit projects for electric, chemical, mechanical, or thermal-electric long-duration or advanced battery storage solutions, including devices, software, controls, and power electronics. Proposals for complementary technologies that reduce hardware and installation costs, improve battery performance, or demonstrate grid integration will also be considered. All proposed solutions must be ready for manufacturing.[132]

International

- *May 26th:* Polish DSO Enea has obtained over PLN 9B ($2.4B) from Bank Gospodarstwa Krajowego to develop a modern distribution network with smart grid technology. The loan agreement is being financed from the National Resilience and Recovery Plan (KPO) to develop the Group's modern power infrastructure, including the construction and modernization of distribution networks, and an 8 MW / 8 MWh BESS "Debrzno-Wieś ESS" project.[133]

Off-Take / PPA / Awards News

International

- *May 30th*: Mulilo, a South African renewable energy company, has secured preferred bidder status for four BESS projects, totaling 493 MW / 1,972 MWh, under South Africa's BESIPPPP Round 3. The projects include three 123 MW / 492 MWh facilities - Erfdeel, Retreat, and Vanilla BESS - and one 124 MW / 496 MWh project, Bloemhoek. Each will operate under 15-year PPAs with Eskom, the state utility. Meanwhile, Scatec, of Norway, which has a large South African presence, prevailed with its 123 MW Haru BESS project at the Leander substation, with a R2 037.10/MWh evaluation price.[134]
- *May 30th*: Sembcorp's subsidiary, Sembcorp Green Infra, was awarded a 150 MW Solar PV project with a 300 MWh BESS from SJVN Limited through their recent 1.2 GW Inter State Transmission System (ISTS)-connected solar tender, which includes a total of 600 MW / 2.4 GWh of BESS capacity. Sembcorp has a pending 25-year PPA and plans to reach COD within 24 months.[135]
- *May 28th*: BC Jindal Group has been granted a 150 MW Round-the-Clock (RTC) renewable energy project through a competitive bidding process organized by the Solar Energy Corporation of India (SECI). This project forms a part of SECI's broader 1200 MW RTC renewable energy program, with the tender issued in November last year. BC Jindal Group secured 150 MW at a rate of Rs. 5.07 per kilowatt-hour, and the

[131] https://www.globenewswire.com/news-release/2025/04/30/3071084/0/en/NTR-a-leading-renewable-energy-specialist-selects-Fluence-for-Flagship-Finnish-Battery-Energy-Storage-System.html
[132] https://www.nyserda.ny.gov/About/Funding/Clean-Energy-Fund
[133] https://www.smart-energy.com/finance-investment/polands-enea-secures-2-4-billion-for-distribution-network-modernisation/
[134] https://www.engineeringnews.co.za/article/mulilo-and-scatec-emerge-as-preferred-bidders-for-r95bn-battery-storage-projects-2025-05-30
[135] https://solarquarter.com/2025/05/30/sembcorp-wins-150mw-solar-project-with-300mwh-bess-in-india/

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electricity generated will be provided to various DISCOMs under a PPA managed by SECI.[136]

- *May 28th*: RWE and Terralayr, have entered into a five-year tolling agreement for a 50 MW / 100 MWh of storage capacity in Germany. The projects are aggregated into a virtual battery via Terralayr's flexibility platform, which offers storage capacity virtually rather than tied to a specific single project. RWE will pay Terralayr a fixed annual fee for the capacity in return for taking control of the BESS capacity's activity in the energy market.[137]
- *May 2nd*: Reliance Power announced that its subsidiary, Reliance NU Suntech Pvt Ltd, has signed a 25-year long-term PPA with SECI. As per the agreement, Reliance NU Suntech will supply 930 MW of solar power integrated with 465 MW / 1,860 MWh BESS, at a competitive fixed tariff of Rs 3.53 per kWh. Reliance Power subsidiary, Reliance NU Suntech, is set to develop and commission Asia's largest single-location integrated solar and BESS project within the next 24 months.[138]

Open Energy Storage RFPs/RFQs/RFIs

Off-Taker	Description
Argentina Ministry of Economy	The Argentine government announced a national and international private tender for 500 MW of BESS to address critical zones in the AMBA region, aiming to prevent power outages. Bids must be accompanied by a bank guarantee of $10,000/ MW.[139]
Avista	Avista will release an All-Source Request for Proposals (RFP) on May 30, 2025, to source between 75 and 375 MW of winter capacity by 2029, 50 to 350 MW of summer capacity by 2029, and up to 200 MW of renewable / non-emitting and demand response by 2026.[140]
Colorado Springs Utilities	Colorado Springs Utilities intends to release an RFP to secure 1,250 MW of new renewable energy and storage capacity by 2030. The utility is seeking approximately 525 MW of solar, 100 MW of energy storage, and 625 MW of wind capacity, in addition to 350 MW of natural gas. The target date for integrating these new resources is May 2028.[141]
DTE	DTE Energy announced the company is issuing an RFP for new standalone energy storage projects totaling approximately 450 MW. These projects will support DTE Electric's CleanVision Integrated Resource Plan and Michigan's goal of achieving 60% renewable energy by 2030. Bids are due by June 27, 2025.[142]
Evergy	Evergy, Inc. and its operating utility subsidiaries are issuing an RFP to solicit offers from interested parties with the intent of securing Proposals for generation and storage projects with a minimum size of 50 MW and a Commercial Operation Date on or before December 31, 2032. Technology types that will be evaluated in this RFP include, but are not limited to Wind, Solar PV, Stand-Alone Energy Storage Systems, Energy Storage Systems partnered with any Generation Asset, Conventional gas fired generation resources, and Other Technologies. Bids are due by July 1, 2025.[143]
Guatemala	Guatemala has launched a competitive solicitation process to secure the supply of up to 1.4 GW of new energy capacity as it unveiled bidding terms for the Open Tender Electricity Generation Expansion Plan. The country's power distributor, Empresa Electrica de Guatemala (EEGSA), said this 1.4 GW tender will open the way to new investments in renewable energies and clean technologies. The agency will accept technical bids till October 31, 2025.[144]

[136] https://solarquarter.com/2025/05/28/bc-jindal-group-wins-150-mw-round-the-clock-power-tender-from-solar-energy-corporation-of-india-seci/
[137] https://www.rwe.com/en/press/rwe-supply-and-trading/2025-05-28-rwe-to-market-a-virtual-50mw-battery-from-terralayr-for-5-years/
[138] https://www.reliancepower.co.in/documents/2181716/2365208/Media_Release_PPA_02052025.pdf
[139] https://www.mercomindia.com/argentina-launches-500-mw-battery-energy-storage-tender
[140] https://www.myavista.com/about-us/integrated-resource-planning/2025-all-source-rfp
[141] https://www.bidnetdirect.com/colorado/colorado-springs-utilities
[142] https://skrift.meltwater.io/site/5e12ac481b7bea03e16a9079/article/67d2f37203228600138c8c5b
[143] https://evergy2025rfp.rfpmanager.biz/
[144] https://taiyangnews.info/tenders/guatemala-14-gw-energy-tender

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Off-Taker	Description
IESO	The Independent System Operator for Ontario (IESO) launched an RFP on February 27, 2025. The request is for 14 TWh of energy and 1,600 MW of storage. Proposals are due between July and September 2025.[145]
IPC	The Idaho Power Company (IPC) is preparing to issue an RFP for energy and capacity products. IPC identified a need for 138 MW of incremental peak capacity and 555 MW of supply-side resource additions. Asset purchases, PPAs, and battery storage agreements are eligible types of bids.[146]
Kenya	The Kenya Electricity Generating Company has issued a tender for the design and building of seven solar projects. The projects will total 42.5 MW, and each must have a BESS system as well. Proposals are due July 29, 2025.[147]
KREDL	Karnataka Renewable Energy Development Ltd (KREDL) has released a tender for the development of a 250 MW solar PV power project along with a 250 MW / 1,100 MWh BESS at Ryapte in Karnataka. The aim of the system is to supply peak power and optimize grid utilization at the Pavagada Solar Park. [148]
Lincoln Electric System	Lincoln Electric System (LES) is soliciting discussions with entities interested in providing LES with firm or deliverable capacity within the Southwest Power Pool to meet LES's own load and reserve requirements for the 2026-2030 period. All offers, capacity amounts, term lengths, and types of participation will be considered. Interested parties can contact the Manager of Energy & Environmental Operations, Dennis Florom at dflorom@les.com. [149]
LPEA	La Plata Electric Association (LPEA) has opened an RFP to add up to 150 MW of power starting in 2028. Issued in partnership with TEA Solutions, the RFP invites energy providers to submit proposals for projects set to come online between 2028 and 2031. LPEA is seeking proposals for a diverse range of energy projects, including solar, hydro, natural gas, wind, battery storage, geothermal, and other innovative technologies. The RFP is open until June 2, 2025.[150]
Milltown	The Borough of Milltown, NJ, is seeking an 8 MW lithium-ion BESS for its municipal utility property. Bidders will be responsible for financing, designing, building, operating, maintaining, and removing the BESS. Bids are due June 2, 2025.[151]
MOTIE	The Ministry of Trade, Industry and Energy (MOTIE) of South Korea will release a competitive solicitation for battery storage capacity. The capacity will be split between 500 MW of large-scale BESS on the Korean mainland and a 40 MW BESS on Jeju Island. [152]
New South Wales	New South Wales has released a tender for 1 GW of capacity of long-duration (at least 8 hours) energy storage. The tender will close in mid-July 2025.[153]
PacifiCorp	According to the utility company's integrated resource plan, filed with state regulators, PacifiCorp expects to procure about 2,400 MW of solar, 2,270 MW of wind, 1,680 MW of four-hour storage, and 510 MW of 100-hour iron air battery storage through requests for proposals by the end of 2030.[154]
Philippines Department of Energy	The Philippines Department of Energy has initiated a tender to integrate over 9.4 GW of new renewable energy capacity to enhance the country's clean energy infrastructure. This initiative involves the development of renewable power sources, including solar and wind, with some projects incorporating BESS to ensure reliability and efficiency. The supply contracts for winning projects will have a 20-year duration starting from the commercial operation date. Technical requirements mandate a minimum

[145] file:///C:/Users/sfb38/Downloads/lt2rfp-20241212-engagement-presentation.pdf
[146] https://docs.idahopower.com/pdfs/AboutUs/businessToBusiness/2028_IPC_AllSource_RFP.pdf
[147] https://www.mercomindia.com/kenya-tenders-42-5-mw-solar-projects-with-bess
[148] https://www.pv-magazine-india.com/2025/05/28/karnataka-launches-tender-for-250-mw-solar-project-with-250-mw-1100-mwh-battery-energy-storage-system/
[149] https://naema.com/lincoln-electric-system-spp-capacity-solicitation/
[150] https://lpea.coop/power-supply/lpea-open-power-generation-rfp
[151] https://www.milltownnj.org/DocumentCenter/View/7133/25-01-Electric-Battery-Storage
[152] https://www.energy-storage.news/south-korea-government-tenders-central-contracts-for-540mw-3240mwh-bess/
[153] https://list.solar/news/new-south-wales-12/
[154] https://www.pacificorp.com/content/dam/pcorp/documents/en/pacificorp/energy/integrated-resource-plan/2025-irp/2025_IRP_Vol_1.pdf

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Off-Taker	Description
	storage duration of four hours, an ESS inverter ratio of at least 0.2, and a round-trip efficiency of 85% or higher.[155]
PGE	Portland Gas and Electric (PGE) will be issuing an RFP for both capacity and energy resources totaling a new 251 MW of new renewable generation every year through 2030 (roughly 1,000 MW by 2029), and 300 to 500 MW capacity. The RFP will be issued on July 24, 2025, and it will close August 28, 2025.[156]
Power Grid	The Power Grid Corporation of India has released a tender to commission a 2.1 MW BTM solar project and 300 kW / 1,200 kWh BESS. Bids must be submitted by June 27, 2025.[157]
San Diego Community Power	San Diego Community Power is authorized to procure 20.16 MW for its DAC-GT program. The offer must include a new solar photovoltaic, Renewable Portfolio Standard-eligible, FTM generating facility. Optional configurations that include paired battery energy storage resources will also be considered. Hybrid configurations (single CAISO meter systems) are preferred for this solicitation. The response deadline for this solicitation is September 8, 2025.[158]
Saudi Arabia	Saudi Arabia has announced the launch of a tender for developing BESS. These projects, totaling 2,000 MW of capacity, will provide up to 8,000 MWh of stored energy, promoting better management of renewable energy sources, including solar and wind, within the national grid. The deadline for bid submissions is June 2, 2025. [159]
SCPPA	The Southern California Public Power Authority (SCPPA) has issued two RFPs: • The SCPPA, on behalf of its member utilities, is soliciting competitive proposals from qualified respondents (Respondents) for renewable energy projects or products consistent with the California Renewable Energy Resources Program and the California Renewables Portfolio Standard Program. RFP responses may propose (i) project ownership by SCPPA, (ii) a PPA with an ownership option, or (iii) a PPA without an ownership option. An energy storage component may be included with a proposed renewable energy project. Responses to this RFP can be received and reviewed at any time before the proposal deadline and are due on or before June 30, 2025. [160] • SCPPA, on behalf of its Member Agencies, is soliciting competitive proposals from qualified respondents (Respondents) for standalone energy storage. All types of energy storage technologies are open for consideration to be added to the resource portfolios of SCPPA's Member Agencies if such technologies and projects are determined to be cost-effective. Responses to this RFP can be received and reviewed at any time before the proposal deadline and are due on or before June 30, 2025.[161]
Spanish Ministry	The Spanish Ministry for Ecological Transition launched a tender to award up to 1,259 MW of synchronous power-generating modules and synchronous storage capacity. Applications will be chosen on a first-come, first-served basis.[162]
SVCE	Silicon Valley Clean Energy Authority (SVCEA) is soliciting a Request for Offers (RFO) for Carbon Free Energy and Storage Project to make progress towards meeting its goals related to RPS, greenhouse gas emission reductions and reliability requirements by contracting with Carbon Free Energy projects, including California Energy Commission (CEC), eligible RPS resources, hydroelectricity, nuclear and paired and standalone storage. The deadline for bid submissions is June 20, 2025. [163]

[155] https://www.pv-tech.org/philippines-opens-tender-9-4gw-renewable-energy-storage/
[156] https://portlandgeneral.com/about/who-we-are/resource-planning/procuring-clean-energy
[157] https://www.mercomindia.com/powergrid-tenders-2-1-mw-solar-project-with-300-kw-1200-kwh-bess-in-ladakh
[158] https://sdcommunitypower.org/wp-content/uploads/2025/04/SDCP-DAC-GT-2nd-RFO-Protocol_FINAL.pdf
[159] https://energynews.pro/en/saudi-arabia-8-gwh-battery-storage-tender-launched/
[160] https://scppa.org/wp-content/uploads/2025/02/2025-Q1_Q2-Renewables-RFP.pdf
[161] https://scppa.org/wp-content/uploads/2025/03/SCPPA-2025-Q1_Q2-SCPPA-Standalone-Energy-Storage-RFP.pdf
[162] https://weadapt.org/organisation/miteco/?tab=about
[163] https://svcleanenergy.org/solicitations/

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Data Center / Energy Storage News

United States

- *May 22nd*: xAI has installed 168 Tesla Megapack battery energy storage units at its Colossus supercomputer in Memphis, Tennessee. The company has integrated the Megapacks to manage outages and demand surges, which xAI claims will bolster the reliability of the data center. The data center, which supports the training and operation of the company's AI chatbot, Grok, is situated in an industrial area on Paul Lowry Road in southwest Memphis.[164]
- *May 14th*: Prometheus Hyperscale and XL Batteries have announced a multi-year agreement to deploy LDES systems at U.S. data centers using XL's non-lithium Organic Flow Battery technology. The deployment will occur in phases: a 333-kW demonstration system at Prometheus' Wyoming facility in 2027, followed by two 12.5 MW / 125 MWh commercial-scale systems in 2028 and 2029. XL's organic flow battery technology touts scalable, non-toxic, non-flammable energy storage that can smooth compute load swings and provide backup power. [165]
- *Apr 25th*: Belltown Power Texas, a US renewable energy developer, has unveiled plans for six new data centers in North Texas, marking its entry into the U.S. market. These projects will collectively offer 1.435 GW of capacity. Strategically positioned near major transmission hubs and the Dallas–Fort Worth metroplex, the sites are designed for quick interconnection and scalability to support hyperscale and AI-driven operations. One 15MW facility has secured committed capacity, while the other five are progressing through the study phase with local utilities. Specific construction timelines and individual facility capacities were not disclosed. Belltown plans to integrate these data centers with utility-scale solar and battery storage projects. The company has a strong presence in the Dallas-Fort Worth region, with 50 projects either operational or in development, boasting a 4.6 GW development pipeline and over 3 GW of capacity in operation or under construction.[166]

International

- *May 15th*: Huawei and Keppel have signed a MoU to develop solar and BESS projects for the data center and other high-energy-consuming sectors, initially focusing on the Association of Southeast Asian Nations (ASEAN) region. The MoU will see the companies explore the design and development of ‘innovative’ solar and BESS technologies deployed across various sectors, including data centers and transmission grids. The company has a robust data center portfolio across the ASEAN region, including around 200 MW of capacity in Singapore, 350 MW across the rest of APAC (Australia, Japan, China, and Malaysia), in addition to a further 100 MW of capacity in Europe.[167]
- *Apr 24th*: Frontier Power, a UK power generation company, has entered into a Joint Development Agreement with Ethos Green Energy to potentially develop 5 GW of data center capacity integrated with solar power and LDES across the UK. The agreement grants Frontier exclusive access to various connection points and land options to advance its project pipeline. Ethos reports having over 10 GW of connection offers, which could support up to 20 GWh of LDES projects. The partnership also targets the development of 5 GW of solar energy projects.[168]

[164] https://www.datacenterdynamics.com/en/news/xai-deploys-168-tesla-megapacks-to-power-its-colossus-supercomputer-in-memphis/
[165]https://www.businesswire.com/news/home/20250514931152/en/Prometheus-Hyperscale-and-XL-Batteries-Partner-to-Deploy-Long-Duration-Energy-Storage-Systems-at-U.S.-Data-Centers
[166] https://www.prnewswire.com/news-releases/belltown-power-announces-development-of-six-data-center-sites-in-north-texas-302437612.html
[167] https://www.datacenterdynamics.com/en/news/huawei-keppel-sign-mou-on-solar-and-battery-storage-for-data-centers-across-asean/
[168] https://www.datacenterdynamics.com/en/news/frontier-power-ethos-green-energy-to-develop-up-to-5gw-of-colocated-data-center-capacity/

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General Energy Storage News

United States

Manhattan Court Blocks Trump Liberation Tariffs

May 29th: The U.S. Court of International Trade in Manhattan ruled that President Trump exceeded his authority by using the International Emergency Economic Powers Act (IEEPA) to impose widespread tariffs on multiple countries. The court permanently blocked most of Trump's tariffs and prohibited future changes to them. A three-judge panel ordered the White House to formally end the tariffs within 10 days. The Trump administration quickly appealed the decision. Typically, Congress must approve tariffs, but Trump sidestepped this by declaring trade deficits a national emergency. The court ruled that Trump's tariff orders "exceed the president's authority to regulate imports through tariffs" under the IEEPA, a law designed for "unusual and extraordinary" threats during national emergencies. The ruling nullifies all tariff orders issued via the IEEPA, and Trump must issue new orders complying with the injunction within 10 days. The administration's appeal will move to the U.S. Court of Appeals for the Federal Circuit in Washington, D.C., and potentially the U.S. Supreme Court. Without IEEPA, the administration must rely on slower trade investigations and comply with other trade laws to justify tariffs. The court did not address industry-specific tariffs on automobiles, steel, and aluminum, which Trump imposed under a different statute. These tariffs remain in effect for now.[169]

HiTHIUM Celebrates New Milestone in U.S. Manufacturing with Texas Factory Grand Opening

May 29th: HiTHIUM, a global leader in integrated energy storage solutions, celebrated the grand opening of its state-of-the-art manufacturing facility in Mesquite, Texas. The event gathered over 200 industry leaders, local government officials, and community partners to witness the unveiling of a facility that combines cutting-edge technology with local economic empowerment. The 484,441-square-foot facility represents a nearly $200M investment and is poised to begin mass production in late 2025, with an annual capacity of 10 GWh for battery modules and systems. The operation will create nearly 200 high-quality jobs and serve as a cornerstone of domestic energy storage production.[170]

Anti-Renewable Bills Die in Texas Congress

May 29th: The Texas Senate passed three bills - S.B. 819, S.B. 388, and S.B. 715 - last month, but House leadership blocked their advancement by omitting them from a key calendar before the legislative session ended.[171]

- Senate Bill 819 looked to impose stringent permitting requirements, fees, setbacks, and regulations on utility-scale solar and wind projects (10 MW or greater) connecting to the ERCOT grid after September 1, 2025. These included environmental impact reviews, public notices, and setback distances (e.g., wind turbines at twice their height from property lines, solar equipment 100 feet from property lines and 200 feet from habitable structures unless waived). These rules did not apply to fossil fuel projects, raising concerns about discriminatory barriers. SB 819 passed the Texas Senate on April 16, 2025, with a vote of 22-9. Moved to the Texas House but failed to advance past the House Calendars Committee, missing the May 24, 2025, deadline for a committee vote and the May 27, 2025, deadline for second and third readings in the House. No further action was taken, effectively killing the bill for the session.
- Senate Bill 388 would have mandated that at least 50% of new electricity generation in the ERCOT region after January 1, 2026, come from "dispatchable" sources (e.g., natural gas, coal, nuclear) excluding battery storage. Renewable energy developers would need to purchase "dispatchable generation credits" to comply, potentially increasing costs. The bill aimed to prioritize fossil fuel generation, with critics

[169] https://www.theguardian.com/us-news/2025/may/28/us-court-blocks-trump-tariffs
[170] https://en.hithium.com/newsroom/latest/details/68.html
[171] https://capitol.texas.gov/billlookup/billnumber.aspx

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arguing it would hinder renewable growth and raise energy bills. SB 388 passed the Texas Senate on March 19, 2025. It was referred to the House State Affairs Committee but did not clear the May 24, 2025, committee vote deadline or the May 27, 2025, deadline for House floor readings. The House took no further action, and the bill stalled and died.

- Senate Bill 714 would require existing wind and solar facilities to "firm" their power by adding backup dispatchable generation (e.g., gas) or paying fees, effectively imposing a retroactive mandate. This could force the retirement of 15% of Texas's wind energy fleet and discourage new renewable projects, increasing consumer costs. A House companion bill, HB 3356, was also introduced. It passed the Texas Senate, though specific vote counts are unavailable. It was referred to the House State Affairs Committee. HB 3356, its House counterpart, passed the committee 8-7 on April 29, 2025, but stalled in the House Calendars Committee, missing the May 24, 2025, committee deadline and the May 27, 2025, floor vote deadline. No further action occurred in the House, halting both bills.

Texas Passes Bill to Expedite Solar and Storage Permitting

May 28th: Texas legislators passed SB 1202, which aims to streamline the process for installing home backup power systems, such as solar panels, battery storage, and generators. The bill allows qualified third-party reviewers to assess property development documents and conduct inspections without requiring submission to municipal authorities. This change reduces bureaucratic delays and costs for homeowners. After passing in both the Senate and the House, the bill was sent to Governor Abbott on May 28th. Since it was submitted with fewer than 10 days remaining in the legislative session, the governor has 20 days after the session adjourns on June 2nd to act. If he does not veto the legislation, it will automatically become law and take effect on September 1, 2025.[172]

Massachusetts Plans to Procure 5 GW of Energy Storage by 2030

May 28th: Massachusetts has plans underway to procure 5,000 MW of energy storage by 2030. The state's Department of Energy Resources (DOER) has partnered with the state's electric distribution companies (EDCs) to file a draft RFP to the MA Department of Public Utilities (DPU) for procuring 1,500 MW of mid-duration BESS. Specifically, the EDCs are seeking to procure the Environmental Attributes, produced by Mid-duration Energy Storage Systems up to a maximum power capacity of approximately 1,500 MW. This solicitation allows bidders to offer proposals of systems connected 69 kV and above and sized from 40 MW up to 1,000 MW. Of the total 5,000 MW, the act designates 3,500 MW for mid-duration storage (more than 4 hours and up to 10 hours), 750 MW for long-duration storage (more than 10 hours and up to 24 hours), and, if commercially feasible at a reasonable cost, 750 MW for multi-day storage (more than 24 hours). Existing storage systems can take part in the procurement. The RFP may be issued at the end of July, but that date will depend on the DPU issuing an order.[173]

Illinois Looks to Pass New Pro Solar and Storage Bill

May 27th: The Clean and Reliable Grid Affordability Act (CRGA Act, SB 2473/HB 3779, also known as SB 40 in later updates) was under consideration by the Illinois General Assembly as the legislative session draws to an end. The act addresses the increasing energy demands, particularly from data centers, and aims to modernize the grid to facilitate Illinois' transition to 100% clean energy by 2050. The bill sets a substantial target of 3 GW of energy storage by 2030. Another proposed bill aims for an even higher goal of 15 GW by 2035. It introduces the Illinois Storage for All program, which allocates up to 25% of the funds from the Illinois Solar for All program to support battery storage paired with solar energy, focusing particularly on low-income communities. The CRGA

[172] https://legiscan.com/TX/bill/SB1202/2025
[173] https://macleanenergy.com/wp-content/uploads/2025/05/attachment-a-section-83e-draft-request-for-proposals-may-5-2025.pdf

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Act includes a Solar Bill of Rights designed to protect consumers who install rooftop solar panels by lowering barriers such as high insurance requirements and ensuring fair compensation for the solar energy they contribute to the grid. At least 25% of the incentives from the Illinois Solar for All Program will be set aside for community solar projects in environmental justice communities, promoting equitable access to solar benefits. Additionally, the act reserves funds for projects that bolster "energy sovereignty" for low-income households and community-based organizations. The bill also supports the state's Renewable Portfolio Standard (RPS), which aims to increase the share of renewable energy (including solar) to 40% by 2030, building upon the current requirement of 25% by 2025. Furthermore, it addresses interconnection delays that hinder solar project deployment and promotes Virtual Power Plant programs.[174]

Big Beautiful Bill Doesn't Seem So Beautiful for the IRA

May 22nd: The U.S. House of Representatives narrowly passed the "One, Big, Beautiful Bill" (215 "yes" to 214 "no" votes) a $3.8T budget reconciliation package that significantly cuts clean energy tax credits previously created under the Inflation Reduction Act (IRA). Among its most significant changes are steep cuts to investment tax credits (ITCs) for BESS and other renewable technologies. Under current law, BESS projects—whether stand-alone or paired with renewables—can claim a 30% ITC if they meet certain criteria. However, the new bill tightens the rules sharply: to qualify, projects must begin construction within **60 days** of the bill becoming law and be placed in service by **December 31, 2028**. Projects that miss either deadline would receive **no credit at all**. This effectively limits the benefit to projects that are "shovel-ready" by **mid-2025**.

Projects that already began construction before the end of 2024 would remain eligible under previous tax rules, but the bill removes any possibility for future extensions or a gradual credit phase-down. Instead of a gradual phaseout of ITCs, the credits will be abruptly **cut off after 2028**. In addition, domestic manufacturing tax credits for clean energy components would also phase out, ending by 2031 (and as early as 2027 for wind equipment).

Other changes add more complications:

- New **"foreign entity of concern" (FEOC)** rules would disqualify projects using Chinese-linked battery materials or equipment after 2025.
- The IRA's **credit transferability provision**—which lets developers sell credits for financing—is slated for early elimination, removing a key funding tool for many projects.
- The bill's production tax credit (PTC) for clean electricity is also affected by the same deadlines, meaning solar+storage projects will likely lose access to either form of tax relief unless they move quickly.

Now that the bill has passed the House, attention shifts to the Senate. The package also includes a debt ceiling increase, putting pressure on lawmakers to act before the US Treasury's estimated default date in August. With only a narrow Republican majority (53–47), every GOP senator has leverage and several have already expressed concerns about the bill's aggressive energy cuts and signaled that they will seek changes. Should the Senate make any changes, the bill would require another vote in the House.

FERC Approves PJM's Fast-Track Process for Power Projects

May 21st: The Federal Energy Regulatory Commission (FERC) approved PJM Interconnection's plan to expedite 51 new power projects, including battery storage, to meet surging data center demand in Northern Virginia. The process will review 55 GW of legacy projects, including renewables and storage, starting in the spring of 2026, to prevent capacity shortages by 2026/27. The projects selected have a combined capacity of 11.8 GW. Of that,

[174] https://www.citizensutilityboard.org/blog/2025/05/30/for-lower-utility-bills-support-the-clean-reliable-grid-affordability-act-sb-40/#:~:text=The%20Citizens%20Utility%20Board%20(CUB,while%20managing%20unprecedented%20energy%20demand.

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gas-fired generation makes up 69 percent, followed by BESS at 19 percent, nuclear at 12 percent, and coal at 0.1 percent. The 12 new projects are expected to add 7.253 GW of UCAP. Half of the 12 are natural gas projects, five are BESS projects, and one is nuclear. PJM says that it expects 90 percent of these new projects to be operational by 2030.[175]

FERC Rejects MISO's ERAS Proposal

May 16th: FER) rejected MISO's Expedited Resource Addition Study (ERAS) proposal, which aimed to fast-track new generation interconnections, including energy storage. FERC cited the lack of limits on project numbers as a reason for rejection. Critics, including Commissioner Chang, expressed concern that approving ERAS might favor natural gas over storage and renewables, potentially discouraging energy storage development due to queue uncertainties and curtailment risks.[176]

Reuters Reports on Rogue Devices Found in Batteries and Power Electronics

May 14th: Reuters reported that rogue communication devices not disclosed in product documents have been discovered in some Chinese solar power inverters in the U.S. The devices were found by "U.S. experts" who dismantle grid-connected equipment to check for security issues. Over the past nine months, undocumented devices such as cellular radios, have also been detected in some batteries from multiple Chinese suppliers, according to one of the sources. The findings or claims were not acknowledged by government officials.[177]

International

AEMO to Streamline NEM Interconnection Standards for BESS and Generation in Australia

May 22nd: The Australian Energy Market Commission (AEMC) has updated rules to streamline connections to the national electricity grid, aiming to speed up Australia's shift to renewable energy and address rising energy demands from AI-driven data centers and hydrogen electrolyzers.

- Package 1: The AEMC finalized "Package 1" reforms to make grid connections faster and cheaper for renewable energy sources like solar, wind, and batteries. These changes, effective August 21, 2025, clarify technical requirements, reduce negotiation costs, and support technologies like synchronous condensers and high-voltage direct current links for grid stability. The reforms aim to triple renewable energy and increase battery storage fivefold by 2030, easing connection bottlenecks while ensuring system security.
- Package 2: Meanwhile, the AEMC is seeking feedback on "Package 2" by June 19, 2025, to set standards for large energy users, such as data centers, to prevent grid disruptions during system events. This follows a U.S. incident where data centers consuming 1,500 MW disconnected simultaneously, worsening grid stability.

These updates, the most significant since 2018, balance renewable energy growth with grid reliability amid rising AI-driven energy demands. For more information about Package 1 on Improving the NEM access standards, visit its project page. For more about Package 2, or to provide feedback, visit its project page.[178]

[175] https://www.datacenterdynamics.com/en/news/pjm-selects-51-projects-for-fast-track-interconnection-to-meet-increased-demand-from-data-center-sector/
[176] https://elibrary.ferc.gov/eLibrary/docinfo?accession_number=20250516-3075
[177] https://www.reuters.com/sustainability/climate-energy/ghost-machine-rogue-communication-devices-found-chinese-inverters-2025-05-14/
[178] http://aemc.gov.au/news-centre/media-releases/aemc-modernises-grid-connection-rules-accelerate-energy-transition-manage-ai-boom

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Hydrogen News

United States

U.S. House Votes to Kill 45V Green Hydrogen Tax Credit

May 22nd: The US House narrowly passed the "One Big Beautiful Bill," which would terminate the 45V clean hydrogen tax credit for projects starting after Dec 31, 2025. Passed by a 215–214 vote, the bill now heads to the Senate, where it is expected to face stronger opposition. The 45V credit, worth up to $3/kg, was a key driver of U.S. green hydrogen investment under the IRA. Analysts warn its removal could derail most planned U.S. projects, as only a few, like Plug Power and Infinium, have started construction early enough to qualify.[179]

Infinium Breaks Ground on World's Largest Green Hydrogen-Based E-Fuels Plant in Texas

May 20th: Infinium has officially begun construction on Project Roadrunner in Pecos, Texas, which will become the world's largest green hydrogen-based aviation fuel facility upon its 2027 completion. The project includes a 100 MW electrolyzer system from Electric Hydrogen and a 150 MW wind PPA from NextEra. Backed by $1.1B from Brookfield, including $200M for this project, and supported by Breakthrough Energy, Infinium will produce 23,000 tons of e-fuel annually. Offtake agreements are secured with American Airlines and IAG. The project also benefits from favorable timing under the U.S. 45V hydrogen tax credit and may qualify for future 45Z clean fuels subsidies. [180] Some output will be exported to the UK to help meet its SAF mandate.[181]

International

Longi Founder Li Zhenguo Steps Down as CEO

May 28th: Li Zhenguo, billionaire founder of Chinese hydrogen electrolyzer and solar giant Longi Green Energy, has stepped down as CEO after 25 years. No official reason was given for the resignation, which was disclosed in a filing to the Shanghai Stock Exchange. Li will remain the controlling shareholder and continue to lead Longi's Central Research Institute and Technology Management Center as president and CTO, focusing on advanced photovoltaic technology. As of October, Li was estimated to be China's 179th richest individual, with a net worth of $3.7B.[182]

Global Electrolyser Deliveries Hit Record 3.2GW in 2024, Led by China

May 28th: Worldwide hydrogen electrolyser deliveries doubled to 3.2 GW in 2024, pushing total installed capacity past 6 GW, according to VNZ Insights. China led with 1.44 GW delivered, followed by the Middle East & Africa (1.04 GW), mainly for Saudi Arabia's Neom project. Thyssenkrupp Nucera topped global suppliers with 1.04 GW shipped. Pressurised alkaline technology dominated 2024 deliveries (1.5 GW) and orders (2.5 GW), while atmospheric alkaline fell out of favor for new orders. A further 3.3 GW of firm orders were placed, with China, Europe, and India leading. Large projects are becoming standard. 42% of 2024 deliveries and 70% of the orderbook were for projects >200 MW. Despite strong numbers, only 43% of delivered electrolysers are operational, and the top five countries hold 75% of all global orders.[183]

Thyssenkrupp Nucera Launches Pilot Solid-Oxide Electrolyzer Plant in Germany

May 27th: Thyssenkrupp Nucera has begun pilot production of solid oxide electrolyzers (SOE) at a new facility in

[179]https://www.hydrogeninsight.com/policy/us-house-of-representatives-passes-bill-that-scraps-45v-clean-hydrogen-production-tax-credit/2-1-1823663
[180]https://www.hydrogeninsight.com/production/a-real-step-forward-infinium-officially-begins-construction-on-worlds-largest-green-hydrogen-based-fuels-plant/2-1-1821886
[181]https://www.hydrogeninsight.com/electrolysers/worlds-largest-e-fuels-plant-selects-us-made-electric-hydrogen-electrolysers-for-green-h-production/2-1-1820953
[182]https://www.bloomberg.com/news/articles/2025-05-27/china-s-longi-shuffles-leadership-as-solar-losses-deepen?embedded-checkout=true
[183]https://www.hydrogeninsight.com/electrolysers/exclusive-a-record-3-2gw-of-hydrogen-electrolysers-were-delivered-worldwide-in-2024-led-by-china-vnz-insights/2-1-1825288

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Arnstadt, Germany. Developed with Fraunhofer IKTS, the high-temperature SOE technology uses 20–30% less electricity than conventional electrolyzers when paired with external waste heat. The pilot line has an annual capacity of 8 MW and is designed for future automated scale-up. The SOE stacks can also produce syngas directly from water and CO_2 for e-fuel applications. This marks Nucera's expansion beyond alkaline electrolyzers, which it supplies to major projects like Neom (2.2 GW) and Stegra (740 MW).[184]

Construction Begins on World's Largest Ammonia-to-Hydrogen Cracker Pilot in Germany

May 27th: Uniper and Thyssenkrupp Uhde have begun building the world's largest known ammonia-to-hydrogen pilot cracker at Uniper's Gelsenkirchen-Scholven site in Germany. Set to start operations in 2026, the unit will process 28 tons of ammonia per day, producing around 5 tons of hydrogen daily, representing over 10 times more than the UK's current largest operational cracker. The project will serve as a model for Uniper's planned Wilhelmshaven terminal, which is expected to handle 2.6 million tons of ammonia annually from 2030. Despite concerns over the energy intensity of cracking, the project supports Germany's strategy to import and distribute hydrogen via its national pipeline network.[185]

Australia to Launch Second A$2B Hydrogen Headstart Subsidy Round in Late 2025

May 27th: The Australian government will launch a second AUS $2B (USD 1.3B) round of its Hydrogen Headstart subsidy program later this year, according to ARENA. The scheme offers ten-year production credits per kg of green hydrogen, with consultation on Round 2 expected in early H2 2025. While the structure will resemble Round 1, final design depends on consultation feedback. Round 1 awarded up to AUS 814M to Copenhagen Infrastructure Partners' 1.5 GW Murchison project at an estimated AUS 0.25/kg subsidy. ARENA will again weigh deliverability, project design, offtake certainty, and developer credibility rather than choosing the lowest-cost bids alone.[186]

India and Germany to Co-Develop $1.3B Green Hydrogen and Ammonia Export Hub

May 26th: Indian firm Juno Joule Green Energy and German trader SET Select Energy will co-develop a $1.3B green hydrogen and ammonia facility at the under-construction Mulapeta Port in Andhra Pradesh. Designed to produce 1 million tons of green ammonia annually, the project will target exports to Europe and Asia. It will use seawater desalination and be powered entirely by renewable energy, including solar, wind, and hydropower, to meet EU RFNBO standards. A dedicated pipeline will link the plant to port infrastructure. This is Juno Joule's first known project, while Select will handle logistics and international trade via its subsidiary, Select New Energies.[187]

UK and Germany Plan Offshore Hydrogen Pipeline to Link Markets

May 26th: National Gas (UK) and Gascade (Germany) have signed an MoU to study a North Sea hydrogen pipeline linking the UK to Gascade's AquaDuctus project. AquaDuctus, a German IPCEI-backed project, is designed to carry green hydrogen from the offshore SEN-1 zone (up to 1GW of wind-powered production) to mainland Germany. Two cross-border options are under review: connecting northeast England or Scotland to AquaDuctus. The proposed UK-Germany Hydrogen Corridor would enable bidirectional flow and support a cross-border hydrogen market, improving energy security and decarbonization efforts in Europe.[188]

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[184]https://www.hydrogeninsight.com/electrolysers/thyssenkrupp-nucera-opens-pilot-solid-oxide-electrolyser-production-plant-in-germany/2-1-1825005
[185]https://www.hydrogeninsight.com/production/construction-begins-on-worlds-largest-known-ammonia-to-hydrogen-pilot-cracker/2-1-1824983
[186]https://www.hydrogeninsight.com/production/australian-government-to-launch-second-a-2bn-round-of-green-hydrogen-subsidies-later-this-year/2-1-1824980
[187]https://www.hydrogeninsight.com/production/german-and-indian-firms-agree-to-co-develop-1-3bn-export-oriented-green-hydrogen-and-ammonia-project-in-india/2-1-1824630
[188]https://www.hydrogeninsight.com/innovation/offshore-hydrogen-pipeline-between-uk-and-germany-planned-by-national-gas-transmission-operators/2-1-1824535

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Land Secured for 1 GW Green Hydrogen Project in Western Australia

May 26th: Xodus and Warradarge Energy have secured 16,000 hectares in the Oakajee Strategic Industrial Area for a 1GW green hydrogen facility. The Warradarge Green Hydrogen Project will launch with 26 MW in 2028, scaling to 196 MW to serve hydrogen-powered trucks via a partnership with Fenix Resources. Later phases aim for 500 MW and then 1 GW, targeting industrial use and ammonia exports. Developers are negotiating wind power supply and stress the project's role in bridging demo-scale efforts and full-scale hydrogen production.[189]

Chile to Launch Green Hydrogen Production Subsidies Focused on Domestic Use

May 23rd: Chile will unveil green hydrogen production subsidies in the coming months, with energy minister Diego Pardow suggesting a July release. The incentives will target domestic consumption rather than exports due to WTO concerns. Chile also plans additional grants to attract electrolyzer manufacturers, following $25.6M awarded to China's Hygreen and Guofu and Spain's Joltech. Electrolyzer factory tenders will reopen pending a review. Chile's H2 pipeline has grown to $26.2B in projects, though its 2025 and 2030 green H2 targets are delayed by 2–4 years. [190]

Fortescue's Green Hydrogen CEO Steps Down Amid Market Challenges

May 23rd: Mark Hutchinson has retired as CEO of Fortescue's energy division, citing underwhelming market development and limited government support for green hydrogen. Mining CEO Dino Otrano will take over hydrogen responsibilities. Fortescue has scaled back its 15Mtpa H_2 target, and its 2 GW PEM electrolyzer plant is facing closure. Hutchinson acknowledged customers' reluctance to pay a green premium and the slow rollout of subsidies. Fortescue's broader green energy portfolio will now be led by Agustin Pichot.[191]

ISO Will Not Classify Hydrogen as a Greenhouse Gas, Says IPHE Director

May 23rd: At the World Hydrogen Summit, IPHE executive director Laurent Antoni stated that hydrogen will not be treated as a greenhouse gas in upcoming ISO standard 19870-1, which focuses on lifecycle emissions. Antoni argued that hydrogen's warming effects are due to indirect interactions with methane, not inherent properties, and that fugitive methane is already accounted for in the draft. EDF's Steven Hamburg pushed back, warning that fugitive hydrogen leaks contribute to climate change similarly to methane and should be included in emissions accounting. EDF has launched a new study on hydrogen leaks with support from Shell, TotalEnergies, Air Products, and Air Liquide.[192]

World's Largest Green Hydrogen Project Nears Completion with Offtake Secured

May 22nd: Envision Energy has signed an offtake deal with Marubeni for ammonia from its 500 MW green hydrogen and ammonia plant in Chifeng, China. The facility, already producing molecules since early 2024, will reach 300,000 tons/year output by September. Envision self-supplied its alkaline and PEM electrolyzers and plans to scale production to 1.5 million tons/year, surpassing Saudi Arabia's Neom project. The off-grid site has secured Bureau Veritas renewable ammonia certification with an exceptionally low carbon intensity of 0.003kgCO_2e/kg NH_3 and is seeking EU RFNBO recognition via ISCC Plus.[193]

[189]https://www.hydrogeninsight.com/production/land-secured-for-1gw-green-hydrogen-project-that-will-initially-supply-h2-trucks-in-western-australia/2-1-1824177
[190]https://www.hydrogeninsight.com/policy/exclusive-chile-to-unveil-green-hydrogen-production-subsidies-within-months/2-1-1824130
[191]https://www.hydrogeninsight.com/production/the-market-didn-t-turn-up-fortescues-green-hydrogen-boss-exits-the-company/2-1-1823939
[192]https://www.hydrogeninsight.com/policy/hydrogen-is-not-a-greenhouse-gas-and-will-not-be-counted-as-one-in-our-iso-international-standards-iphe/2-1-1823748
[193]https://www.hydrogeninsight.com/production/worlds-largest-green-hydrogen-project-secures-offtake-as-it-nears-completion/2-1-1823601

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EU Member States Face Scrutiny Over Lower National Green Hydrogen Targets

May 22nd: Some EU countries, including the Netherlands, Denmark, and Germany, have set national green hydrogen mandates below those in the EU's RED III directive, which requires 42% industry use and 1% in transport by 2030. Dutch and German officials at the World Hydrogen Summit argued that high H_2 costs and slow market development justify lower or delayed targets to avoid pushing industries out of Europe. EU officials warned that full legal compliance is still expected. Germany highlighted that H_2 costs now reach €8–10/kg, far above initial estimates, and could hinder investment if targets are seen as unrealistic.[194]

Johnson Matthey to Sell Blue Hydrogen Business to Honeywell for £1.8bn

May 22nd: Johnson Matthey will sell its Catalyst Technologies unit, including its blue hydrogen technology, to Honeywell for £1.8B ($2.4B), in a move seen as a response to pressure from activist investor Standard Investments. The deal excludes its green hydrogen "Hydrogen Technologies" unit, which remains cash-strapped with £5m/year in capex and a goal to break even by 2026–27. Johnson Matthey's blue H_2 tech (LCH), which claims 99% carbon capture, is earmarked for UK projects like HyNet's Stanlow and Equinor's H2H Saltend. £1.4B of proceeds will be returned to shareholders.[195]

EDF Launches Groundbreaking Study on Hydrogen Emissions with Industry Support

May 22nd: The Environmental Defense Fund (EDF) has begun an unprecedented hydrogen emissions study using high-precision instruments developed by Aerodyne. Supported by Shell, TotalEnergies, Air Products, and Air Liquide, researchers from US and Dutch institutions are gathering site-level data from various H_2 infrastructure types. The study aims to fill a data gap and inform policy and investment. Peer-reviewed publications will begin in late 2026. EDF is still seeking electrolyzer projects to include in the scope. The effort parallels EDF's previous methane emissions work and aims to understand H_2's indirect climate impacts.[196]

ZeroAvia to Build Hydrogen Aviation Powertrain Factory in Scotland

May 22nd: ZeroAvia will establish a fuel-cell powertrain manufacturing facility near Glasgow Airport, backed by a £9m Scottish Enterprise grant. The company claims nearly 3,000 powertrain and component orders, representing over $10B in potential revenue. Additional funding includes £ 20M from the Scottish National Investment Bank and £ 32M from the UK National Wealth Fund. ZeroAvia is targeting certification for its 600-kW fuel-cell system and recently signed an agreement to retrofit RVL Aviation's cargo planes. CEO Val Miftakhov sees Scotland as a strategic hub for the hydrogen aviation transition.[197]

BP Exits 250 MW Dutch Green Hydrogen Project

May 21st: BP has withdrawn from H2-Fifty, a planned 250 MW green hydrogen project in the Port of Rotterdam, citing a strategic refocus on prioritized hydrogen and CCS opportunities. Co-developer HyCC will now develop a new, similarly sized facility, H2Next, alone, aiming to produce 25,000 tons of hydrogen annually for industrial and mobility use within the port. A final investment decision is expected in 2028, with operations beginning in 2030. The exit follows BP's broader energy transition retrenchment, including the cancellation of 18 low-carbon projects and a cap of under $800M for hydrogen and CCS this decade.[198]

[194]https://www.hydrogeninsight.com/policy/are-european-countries-at-risk-of-legal-trouble-for-transposing-lower-green-hydrogen-mandates-than-set-out-by-the-eu-/2-1-1823502
[195]https://www.hydrogeninsight.com/industrial/johnson-matthey-to-sell-blue-hydrogen-business-to-honeywell-as-part-of-1-8bn-deal/2-1-1823272
[196]https://www.hydrogeninsight.com/policy/environmental-group-launches-unparalleled-study-into-hydrogen-emissions-with-help-from-four-major-h-producers/2-1-1823232
[197]https://www.hydrogeninsight.com/transport/hydrogen-aviation-pioneer-zeroavia-to-build-fuel-cell-powertrain-factory-in-scotland/2-1-1822938
[198]https://www.hydrogeninsight.com/production/bp-pulls-out-of-250mw-green-hydrogen-project-in-the-netherlands/2-1-1822785

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Norwegian Hydrogen Secures $25M for Rjukan Green H_2 Hub via EU and National Funding

May 21st: Norwegian Hydrogen has secured nearly $25M in funding for its Rjukan green hydrogen project through a strategic split in project phases, allowing it to sidestep EU anti-stacking subsidy rules. The first 6.25 MW phase will be backed by a $4.86M grant and loan from Innovation Norway, while the 18.75 MW second phase will receive up to € 13.2M ($14.8M) from the European Hydrogen Bank under its maritime ringfenced window. The facility, powered by hydroelectricity under a PPA with Tinn Energi, is expected to cost NKr 750M and will serve marine hydrogen users in Norwegian waters. A final investment decision was already taken earlier this year.[199]

Japan's $21B Clean Hydrogen Tender Oversubscribed, Awards to Begin Rolling Out in September

May 21st: Japan's ¥ 3T ($2B) Contracts for Difference (CfD) program for clean hydrogen has been "significantly oversubscribed" with 27 applications received. The Ministry of Economy, Trade and Industry (METI) plans to award the 15-year CfD contracts on a rolling basis starting as early as September 2025, with all awards finalized by March 31, 2026. Under the CfD model, the government will pay the difference between a fluctuating fossil fuel reference price and a guaranteed strike price for clean hydrogen, with recipients required to operate for an additional 10 years beyond the contract period. The initiative supports Japan's target of 20 million tons of hydrogen consumption by 2050 and complements parallel subsidy schemes, including a ¥ 5.7B Hydrogen Hub program and a new ¥ 700/kg refueling subsidy for hydrogen in commercial vehicles.[200]

EU Awards €992M to 15 Projects in Second European Hydrogen Bank Auction

May 20th: The European Commission has awarded € 992M ($1.1B) in subsidies to 15 green hydrogen projects under the second European Hydrogen Bank auction. Grants, based on hydrogen production over 10 years, will be finalized in agreements signed by September or October. The auction received 61 bids requesting € 4.88B in total, far exceeding the € 1B budget. While € 200M was reserved for maritime projects, only € 96.7M was awarded across three Norway-based bids. The auction also included a cap limiting Chinese electrolyzer use to 25%. Germany and the Netherlands were among key awardees, with Spain, Lithuania, and Austria contributing an additional € 836M via the "auctions-as-a-service" mechanism. A third € 1B auction is planned for later this year.[201]

Southern Germany Begins Construction of First Hydrogen Pipeline as Part of National Network

May 20th: Badenova Netze has begun building the 58km H2@Hochrhein pipeline, southern Germany's first dedicated hydrogen pipeline, linking Grenzach-Wyhlen to Waldshut-Tiengen near the Swiss border. The pipeline, expected to transport up to 600MW of green hydrogen, will supply energy-intensive industries and eventually connect to Germany's national hydrogen core network. The project will link with RWE's planned 50MW electrolyzer in Albbruck (2029) and can also receive hydrogen from Switzerland. With € 24B in national support and EU approval, Germany's broader hydrogen pipeline network aims to span 9,700km by 2032, though full completion is now delayed to 2037.[202]

Longi Ships Electrolysers for Australia's Largest Green Hydrogen Facility

May 16th: Chinese manufacturer Longi Hydrogen has delivered two 5 MW alkaline electrolyzers to Australian Gas Infrastructure Group's (AGIG) 10 MW Hydrogen Park Murray Valley in Victoria. The AUD 65.5M ($41.4M) facility—set to be the largest commissioned green hydrogen project in Australia—will initially blend up to 10%

[199]https://www.hydrogeninsight.com/production/how-norwegian-hydrogen-secured-domestic-and-eu-funding-for-a-green-h-project-despite-anti-stacking-rules/2-1-1822217
[200]https://www.hydrogeninsight.com/production/significantly-oversubscribed-21bn-japanese-clean-hydrogen-tender-will-be-awarded-on-rolling-basis-ministry/2-1-1822221
[201]https://www.hydrogeninsight.com/policy/eu-awards-nearly-1bn-to-15-projects-in-second-european-hydrogen-bank-auction/2-1-1822074
[202]https://www.hydrogeninsight.com/innovation/we-dont-wait-for-tomorrow-first-hydrogen-pipeline-in-southern-germany-now-under-construction/2-1-1821577

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renewable hydrogen into the local gas grid. This marks Longi's first order in the Australian market and second international shipment. The company customized the electrolyzers to meet Australian standards and improve efficiency and reliability. While blending hydrogen into gas grids is controversial for its limited climate benefits, the project is seen as a steppingstone toward broader hydrogen applications like refueling.[203]

Korea Southern Power to Build 135MW 100% Hydrogen Power Plant in Ulsan

May 15th: Korea Southern Power (Kospo) has committed to constructing a 135 MW clean hydrogen power plant in Ulsan's Mipo National Industrial Complex at an estimated cost of ₩ 600B ($430M). The facility will use a 100% hydrogen-fired turbine and is scheduled for construction from 2029 to 2031. It will be South Korea's largest planned hydrogen-fired power plant, surpassing the under-construction 107.9 MW fuel cell facility in Gyeongju. While Kospo has secured support from the Ulsan city government, it remains unclear whether the project will pursue national hydrogen power tender support or what its hydrogen supply source will be.[204]

Canadian Green Hydrogen Projects Look Abroad for Electrolysers Amid U.S. Uncertainty

May 15th: Canadian hydrogen developers are increasingly sourcing electrolysers from Europe and Asia due to political and trade uncertainties in the U.S., says Siemens Energy's Chris Norris. Despite proximity to major U.S. manufacturers like Plug Power and Electric Hydrogen, projects in Ontario, Quebec, and Atlantic Canada are leaning toward European suppliers like Siemens, which operates a 1 GW PEM electrolyser plant in Berlin. Limited domestic manufacturing, combined with Canada's clean tech investment incentives and export agreements like H2Global, are shaping procurement decisions. While shipping from overseas adds cost, Norris sees growing confidence in Canada's green hydrogen sector, with several large projects nearing final investment decisions.[205]

World's First Large-Scale Green Methanol Plant Inaugurated in Denmark

May 13th: European Energy and Mitsui have officially opened the Kassø e-methanol plant in Aabenraa, Denmark, the world's first large-scale green methanol facility and Europe's second-largest green hydrogen project. Powered by a 304 MW solar park and using 52.5 MW of Siemens PEM electrolyzers, the plant will produce 42,000 tons of e-methanol annually from green hydrogen and biogenic CO_2. Offtakers include Maersk, Novo Nordisk, and Lego. Maersk will use the fuel in its methanol-powered vessel *Laura Mærsk*, while Novo and Lego will displace fossil-based methanol in chemical and plastic production.[206]

BASF Produces First Certified Green H_2-Based Ammonia in Central Europe

May 12th: BASF has begun producing green ammonia at its Ludwigshafen site using certified renewable hydrogen from its 54 MW electrolyzer, the largest in Europe, capable of generating 8,000 tons of H_2 per year. While the plant already uses ~250,000 tons of fossil/by-product hydrogen annually, the green ammonia designation will be mass-balance-based, proportional to renewable input. Demand for low-carbon ammonia and chemicals with low product carbon footprints is rising. The move aligns with EU RED III targets and ETS phase-outs starting in 2026, aimed at incentivizing greener production in ammonia and fertilizer sectors. [207]

ExxonMobil to Supply 250,000 Tons of Blue Ammonia to Japan Under New Offtake Deal

May 8th: ExxonMobil has signed a definitive offtake agreement with Japan's Marubeni to ship 250,000 tons of blue hydrogen-derived ammonia annually from its Baytown project in Texas. The ammonia will be used for co-

[203]https://www.hydrogeninsight.com/electrolysers/chinas-longi-ships-electrolysers-to-what-will-soon-be-australias-largest-completed-green-hydrogen-project/2-1-1820828
[204]https://www.hydrogeninsight.com/power/korea-southern-power-agrees-to-build-135mw-clean-hydrogen-power-plant-in-ulsan/2-1-1820309
[205]https://www.hydrogeninsight.com/electrolysers/canadian-green-hydrogen-projects-are-now-looking-east-and-west-for-electrolysers-not-south/2-1-1818812
[206]https://www.hydrogeninsight.com/innovation/worlds-first-large-scale-green-methanol-plant-officially-inaugurated/2-1-1818687
[207]https://www.hydrogeninsight.com/industrial/basf-produces-first-certified-green-hydrogen-based-ammonia-in-central-europe/2-1-1818237

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firing at Kobe Steel's 1.4 GW coal power plant near Osaka by 2030. While Baytown hasn't reached final investment decision, the deal signals renewed confidence in its viability, possibly aligned with Japan's $20B hydrogen subsidy scheme. The project is expected to produce 1 million tons of low-carbon ammonia per year, with up to 98% CO_2 capture. Marubeni has also taken an equity stake, joining other strategic partners including Adnoc, JERA, and Mitsubishi.[208]

Electrolyzers En Route to Europe's Largest Green Hydrogen Plant at Stegra's Swedish Steel Mill
May 6th: Stegra (formerly H2 Green Steel) is set to receive 740 MW of Thyssenkrupp Nucera alkaline electrolyzers for its € 6.5B green hydrogen and steel project in Boden, Sweden. The 37x 20 MW modules, assembled in Spain, will power Europe's largest renewable hydrogen facility, set to begin operations in 2026. The hydrogen will feed a direct-reduced iron process for green steel production, with offtake agreements already secured with major automotive firms like Mercedes-Benz and Porsche. With € 6.3B in funding, the project may briefly hold the title of the world's largest green hydrogen facility ahead of Saudi Arabia's 2.2 GW Neom project.[209]

South Australia Shifts Hydrogen Strategy, Dissolves Office in Favor of Green Iron Focus
May 2nd: South Australia has dissolved its Office of Hydrogen Power, redirecting the AUD 593M ($381M) Hydrogen Jobs Plan budget to support an AUD 1B green iron fund as part of a broader AUD 2.4B rescue package for the Whyalla steelworks. The state now aims to convert Whyalla into a green hydrogen-based direct reduced iron (DRI) producer using electric arc furnaces. The office's responsibilities have been folded into the Department for Energy and Mining, with a new focus on industrial transformation at Whyalla. Premier Malinauskas emphasized that hydrogen remains part of the state's long-term green steel ambitions.[210]

Click Here to book a link with Fractal Energy Storge Consultants at the event.

[208]https://www.hydrogeninsight.com/production/exxonmobil-signs-offtake-agreement-to-ship-vast-amounts-of-blue-hydrogen-based-ammonia-from-us-to-japan/2-1-1816777
[209]https://www.hydrogeninsight.com/production/big-milestone-electrolysers-about-to-arrive-at-stegras-giant-740mw-green-hydrogen-plant/2-1-1815607
[210]https://www.hydrogeninsight.com/policy/south-australia-dissolves-office-of-hydrogen-power-as-policy-shifts-towards-green-iron/2-1-1814239

Energy Storage and Renewables Conference List

June 3-5, 2025	The Battery Show Europe 2025 - Messe Stuttgart, Germany
June 4-5, 2025	ACORE Finance Forum – New York, NY
June 5, 2025	RE+ Portugal - Porto, Portugal
June 9-11, 2025	Midwest Solar Expo – Chicago, IL
June 11-12, 2025	Infocast Energy Storage Finance & Investment – San Diego, CA
June 11-13, 2025	SNEC PV Power Generation and Energy Storage – Shanghai, China
June 24-26, 2025	Transmission & Interconnection Summit – Arlington, VA
June 24-25, 2025	Solar & Storage Live Dubai 2025 – Dubai
June 24-25, 2025	SEIA Finance, Tax and Buyers Seminar – New York, NY
June 25-26, 2025	Global Energy Transition 2025 – New York
June 25-26, 2025	Solar & Storage Live España 2025 – Valencia, Spain
July 1-2, 2025	Large Scale Solar Southern Europe 2025 – Athens, Greece
July 1-2, 2025	UK Solar Summit 2025 – London, UK
July 8-9, 2025	Energy Storage Summit Asia 2025 - Asia
July 9-10, 2025	Solar & Storage Live Vietnam 2025 - Ho Chi Minh City, Vietnam
July 10-11, 2025	RE+ Mid-Atlantic - Philadelphia, PA
July 21-23, 2025	Infocast PowerUp Data Centers – Dulles, VA
July 31-Aug 1, 2025	RE+ Storage – Santa Clara, CA
August 19-20, 2025	Infocast Midcontinent Clean Energy Summit – Indianapolis, IN
August 26-28, 2025	Infocast Texas Clean Energy Summit – Austin, TX
August 26-28, 2025	ees South America 2025 - São Paulo, Brazil
August 26-27, 2025	Solar & Storage Live Kenya 2025 – Nairobi, Africa
December 3-4, 2025	RE+ Midwest- Chicago, IL
October 13-14, 2025	RE+ Florida - Florida
September 2-4, 2025	ees Mexico 2025 – México City, Mexico
September 8-11, 2025	RE+ 2025 – Las Vegas, NV
September 16-17, 2025	Solar & Storage Live Zürich 2025 - Messe, Zürich
September 16-17, 2025	Solar & Storage Live Zurich 2025 – Zürich, Switzerland
September 23-24, 2025	Energy Storage Summit Central Eastern Europe 2025 – Warsaw, Poland
September 23-25, 2025	Solar & Storage Live UK 2025 – The NEC, Birmingham
September 23-25, 2025	Solar & Storage Live UK 2025 – Birmingham, UK
September 25-26, 2025	Energy Storage Canada 2025 – Canada
September 29-30, 2025	Infocast Energy Tax Equity & Credit Markets – Houston, TX
September 30, 2025	GCPA Fall Conference 2025 – Austin, TX
September 10-12, 2025	SNEC 10th (2025) International Energy Storage Technology – Shanghai, China
September 30 – Oct 1, 2025	RE+ Centroamerica – Panama City, Panama
October 8-9, 2025	Solar & Storage Live Italia 2025 – Veronafiere, Italy
October 12-14, 2025	Solar & Storage Live KSA 2025 - Riyadh Front, Saudi Arabia
October 14-15, 2025	Clean Energy Investment Summit – Houston, TX
October 15-16, 2025	Solar & Storage Live Amsterdam 2025 - Amsterdam
October 15-16, 2025	Solar & Storage Live Cape Town 2025 – Cape Town, South Africa
October 22-23, 2025	Infocast Clean Energy Investment Summit
October 27-29, 2025	ACP Recharge Energy Storage Summit 2025 – Austin, TX
October 29-31, 2025	ACP PEAK: Performance, Modeling & Assessment Conference – Austin, TX
October 6-9, 2025	The Battery Show North America – Detroit, MI
October 10-12, 2025	SNEC Energy Storage and Battery Expo – Shanghai, China
October 14-15, 2025	Energy Storage Summit Latin America 2025 - Santiago, Chile
October 19-23, 2025	CARILEC Conference and Exhibition 2025 – Dominican Republic
October 20, 2025	RE+ Alaska – Anchorage, AK
October 29-30, 2025	All Energy Australia 2025 – Melbourne, Australia
November 3-5, 2025	Southeast Renewable Energy – Charlotte, NC
November 4-5, 2025	Mountain West Renewables – Salt Lake City, UT
November 5-6, 2025	Solar & Storage Live Paris 2025 – Paris, France
November 6-7, 2025	Solar & Storage Live Indonesia 2025 - Tangerang, Jakarta, Indonesia
November 6-7, 2025	Novogradac Fall Renewable Energy Tax Credits Conference

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November 7-8, 2025	Reuters Energy Storage North America 2025 – Houston, TX
November 7-8, 2025	RE+ Midwest, 2025 - Chicago, Illinois
November 12-13, 2025	Battery Asset Management – San Diego, CA
November 13-14, 2025	Solar & Storage Live Barcelona 2025 - Barcelona, Spain
December 9-10, 2025	Reuters Energy LIVE 2025 – TBD
January 14-15, 2026	RE+ Hawai'i – Honolulu, Hawai'i
January 28–29, 2026	Solar & Storage Live Thailand 2026 – Bangkok, Thailand
January TBD, 2026	2026 COSSA Solar Power Energy Storage
January TBD, 2026	Infocast Projects & Money – New Orleans, LA
February 3-4, 2026	Solar Finance & Investment Europe 2026 – London, UK
Feb 3-8, 2026	China International Battery Fair (CIBF2025) - Shenzhen, China
February 10-12, 2026	Solar Power Africa - Cape Town, South Africa
February 18–20, 2026	Intersolar / Energy Storage North America- San Diego, CA
February TBD, 2026	RE+ Northeast - Boston, MA
February 24-25, 2026	Energy Storage Summit 2026 – London, UK
February TBD, 2026	ERCOT Summit 2026 – Austin, TX
March 4-6, 2026	Operations, Maintenance & Safety Conference Orlando, FA
March 11-12, 2026	Energy Storage Show – Birmingham, UK
March TBD, 2026	Infocast Solar Wind Finance and Investment 2026 – Phoenix, AZ
March 17-18, 2026	Energy Storage Summit Australia 2026 – Sydney, Australia
March 18-20, 2026	Solar & Storage Live Africa 2026, Johannesburg, South Africa
March 18-19, 2026	Solar & Storage Live Queensland 2026 – Brisbane, Australia
March 30–April 1, 2026	ACP Siting & Permitting Conference 2026 – Aurora, CO
April TBD, 2026	Energy Storage International Conf & Expo 2026 – Beijing, China
April 1-2, 2-26	Energy Storage International Conference and Expo (ESIE 2026) – Beijing, China
April 7-9, 2026	Middle East Energy (MEE 2026) - Dubai
April 9-10, 2026	Solar & Storage Live Malaysia 2026 - Kuala Lumpur, Malaysia
April 14-16, 2026	RE+ Mexico - Jalisco, Mexico
April TBD, 2026	Energy Storage International Conf & Expo 2026 – Beijing, China
April TBD, 2026	UK and World Energy Storage Conferences 2026 – UK
April TBD, 2026	Solar + Storage España 2026 - Valencia, Spain
April TBD, 2026	RE+ Southeast 2026 - Atlanta, GA
April 29-30, 2026	Wood Mackenzie Solar & Energy Storage Summit 2026 – Denver, CO
April TBD, 2026	Renewables Energy Revenues Summit USA 2026 – Dallas, TX
April TBD, 2026	Solar & Energy Storage Summit 2026 – Denver, CO
April TBD, 2026	ACP Clean Power on the Hill – Washington, D.C.
April TBD, 2026	NPM Development & Finance Conference 2026 – NYC
April TBD, 2026	Large Scale Solar USA 2026 – Dallas, WA
April TBD, 2026	Solar & Storage Live Egypt 2026 – New Cairo, Egypt
May TBD 2026	California Energy Transition Summit – Sacramento, CA
May TBD 2026	Electrical Energy Storage 2026 – Munich, Germany
May TBD 2026	Intersolar Europe 2026 – Munich, Germany
May TBD 2026	ees Europe 2026
May TBD 2026	RE+ Texas - Houston, TX
May TBD 2026	Novogradac 2026 Spring Renewable Energy Tax Credit Conference
May TBD 2026	Clean Power 2026 – Phoenix, AZ
May TBD 2026	Hawaii Energy Conference – Maui, Hawaii
May TBD 2026	Renewable Energy Revenues Summit 2026 – London, UK
May TBD 2026	Infocast Energy Storage Finance 2026 – San Diego, CA

Fractal Energy Storage Consultants News

Fractal is a specialized energy storage consulting and engineering firm that provides expert consulting, independent engineering, and advisory services for energy storage and hybrid projects.

KEY SERVICES

Financial Analysis
- Project Lifetime Investment Analysis
- Cost Analysis and Benchmarking
- Revenue Analysis and Benchmarking
- Seller Model Preparation
- Feasibility Studies
- Bankability Analysis
- Power Market Pricing Assessment
- RFP Offer Preparation
- Long-Term Power Market Forecasts

Market Analysis
- ISO/RTO Market Analysis
- Development Roadmap / Go-to-Market
- Energy Storage Trends
- Custom Topic Whitepapers

Contract Support
- Turnkey Form of Agreement Preparation (Supply, SLA, Turnkey EPC, EPC, PPA, Full Toll, Virtual Toll, ESSA, Warranty)
- Technical Exhibit Preparation or Review (DOR, Scope, EMC/MPC/SCADA, Technical Specifications, Test Plans, Performance Guarantees)
- Negotiation Support (Licensing/Royalty Agreements, Supply, SLA, Turnkey EPC, EPC, PPA, Full Toll, Virtual Toll, ESSA, Warranty**)**

M&A Services

Due Diligence Services
- Financial, Technical, and Commercial Due Diligence Review to Support Investment, Finance, M&A, and Tax Equity Transactions

Independent Engineering Services
- Independent Engineer Review and Report
- Fatal Flaw Analysis
- Technology Assessment
- Energy Production Review
- Cost Estimation and Critical Path Schedule Development
- Commissioning Test Plan Development and Review
- Commissioning Witness/Certification
- Annual Performance Verification
- Technical Dispute Resolution
- Fire Safety Review
- SLD and Site Layout Preparation
- 3D Modeling Services
- 30%, 60%, IFP, IFC Design / Drawing Review

Manufacturing Consulting
- Manufacturing Plant (Pilot or Commercial) Regulatory and Permit Filing and Compliance Support
- Manufacturing Plant Layout Development, Construction, and Equipment Installation and Commissioning Oversight

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- Arrange and Lead Competitive Sales Processes for Assets and Equipment
- Buy-side and Sell-side Representation
  - Development and Operational Assets and Platform Advisory Services

- Contract Manufacturer Identification and Assessment for Pilot and Commercial production
- ESS Patent and IP analysis and Declaration Support

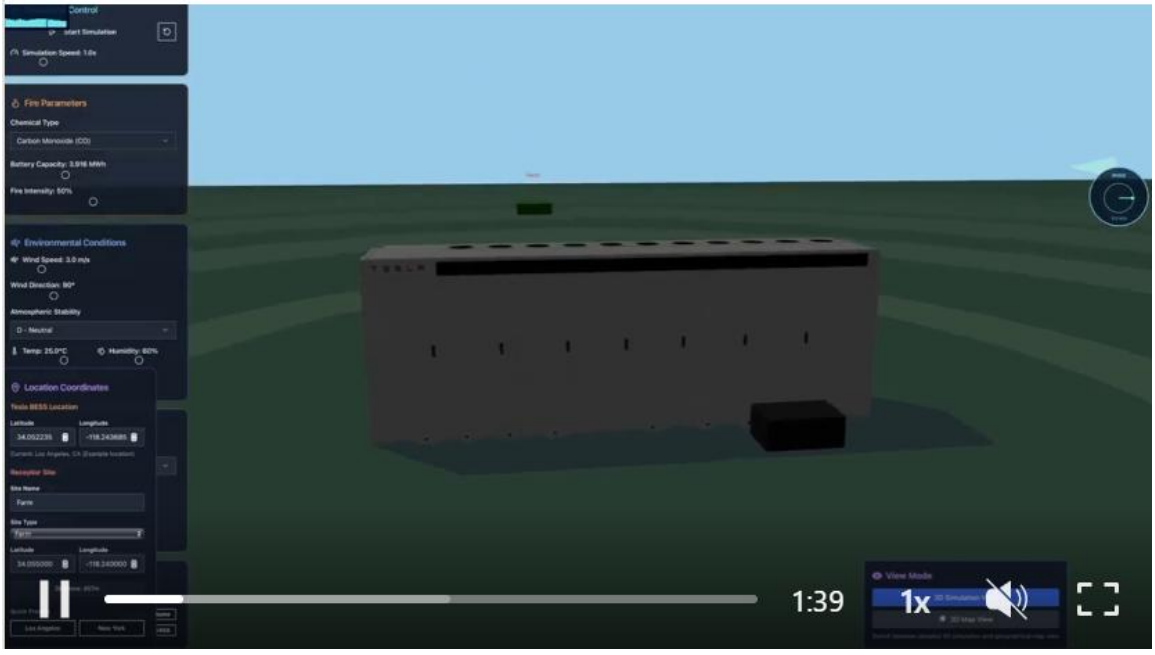
Procurement Support

- Procurement Strategy Advising
- RFP Package Drafting
- Bid Evaluation and Scoring

NEW THERMAL-RUNAWAY GAS DISPERSION MODELING AT FRACTAL

Fractal now offers gas dispersion modeling to support first safety computation and stakeholder discussions. Contact us for a demo. Key input categories for PE-Grade dispersion modeling include:

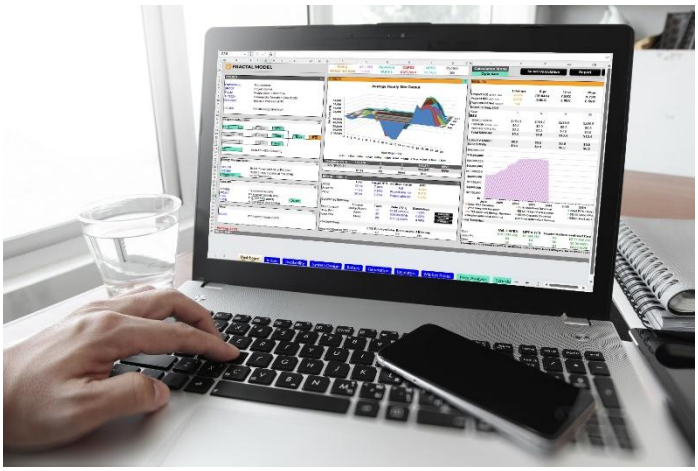
- Source (Emission) Parameters
  - Gas species (CO, H_2, HF)
  - Emission rate Q (kg/s per MWh) & release duration
  - Release height H, temperature T_s, velocity V_s, source radius r
- Meteorology
  - Wind speed & direction
  - Atmospheric stability (Pasquill-Gifford A–F)
  - Ambient temperature, pressure, humidity
  - Turbulence (for CFD models)
- Dispersion Model Specs
  - $\sigma_Y(x)$ & $\sigma z(x)$ coefficients
  - Effective plume rise ΔH & buoyancy flux $F = g \cdot V_s \cdot r^2 \cdot (T_s - T_a)/T_s$
  - Deposition/washout & chemical transformation rates
  - Ground-reflection terms (Gaussian)
- Receptor Settings
  - Coordinates (x_r, y_r, z_r) & receptor height (1.5–2 m)
  - Grid/domain extents and time resolution
- Gas Physical Properties
  - Molecular weight M, density ρ, diffusivity D
  - Specific heat & enthalpy (for thermal buoyancy)
- Terrain & Obstacles
  - DEM terrain elevation
  - Building/obstacle geometry & surface roughness
  - Land-use classification
- Health & Safety Criteria
  - AEGL, IDLH, ERPG thresholds (ppm or mg/m³)
  - Averaging times (10 min, 1 hr, etc.)
- Model Control & Outputs
  - Grid resolution, time step, simulation duration
  - Output frequency & formats (CSV, VTK, OpenVDB, etc.)



FRACTAL MODEL TECHNOECONOMIC MODELING SOFTWARE

INVESTMENT-GRADE BATTERY STORAGE AND HYBRID DESIGN AND ANALYSIS TOOL

V25.3 RELEASED – SCHEDULE A DEMO

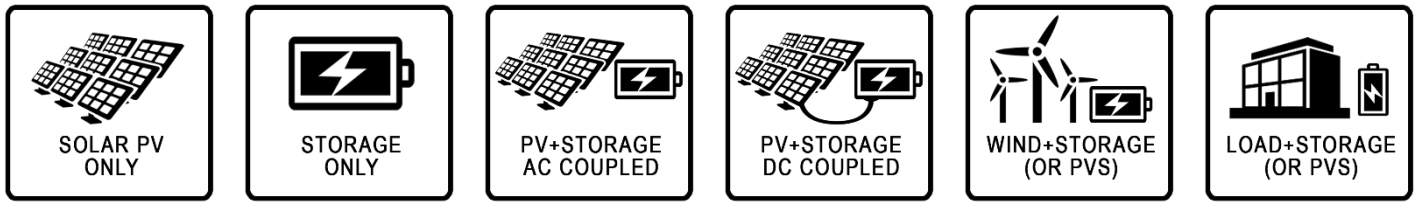


STANDALONE STORAGE OR HYBRID SYSTEM ANALYSIS

The Fractal Model is a techno-economic modeling tool used for project development, due diligence, and RFP evaluation. Used by hundreds of companies globally, the Fractal Model provides investment-grade analysis while simulating performance, degradation, warranty, costs, and revenues to optimize the economics of your energy storage and hybrid projects.

The Fractal Model platform is a cloud-based solution and is available through a license with quarterly updates. The Fractal Model is used by electric utilities and tier-1 energy companies (developers, EPCs, integrators) to perform battery storage sizing, dispatch, and financial analysis. Fractal Model strives to be the energy market's choice for transparent, real-world storage investment analysis.

Contact Rahul Verma (rahul@fractalba.com) for a demo.



Fractal Model v 25.3 Key Updates Include:

1. Fractal's long-term price forecast for ERCOT and CAISO integrated in Fractal Model Add-in
2. Model gas generator integrated with Fractal's solar, Wind, and BESS model
3. Updated BESS CAPEX and OPEX benchmarks

SUPPORTED USE CASES AND CONFIGURATIONS

STANDALONE OR HYBRID PROJECTS
- Standalone BESS
- Solar PV (AC and DC Coupled)
- Wind
- Load

REVENUE SOURCES
- ISO/RTO Market Participation
- PPAs and Tolling Contracts
- Retail Energy and Demand Charge Offsets

BESS APPLICATIONS
- Wholesale Power and Ancillary Services
- Renewable Energy Shifting
- Load Following and Peak Shaving
- Capacity Market Obligations
- Solar PV Smoothing and Firming
- Curtailment Reduction
- Solar PV Clipped Energy Recapture

WHOLESALE MARKETS
- Built-in Functionalities for all North American Markets
- Customizable for European and Asia Pacific Markets

INTERCONNECTION
- Front-of-the-meter
- Behind-the-meter

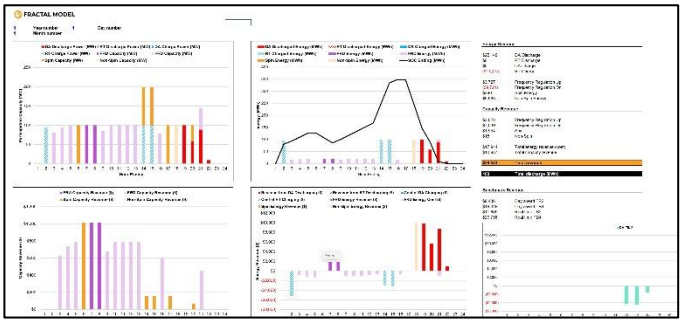
TECHNOLOGIES
- Lithium-ion (multiple LFP, NMC, LTO, etc.)
- Flow Batteries (multiple)
- Zinc Aqueous
- Sodium Sulphur Batteries

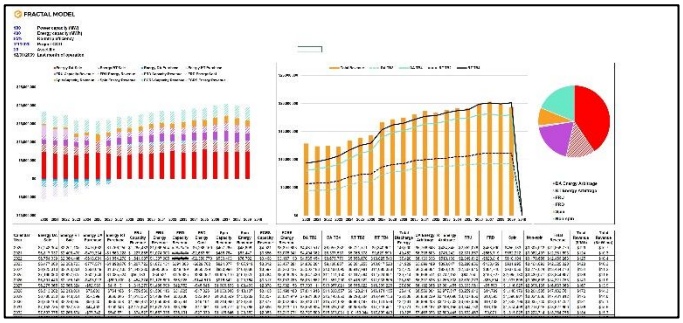
TAX INCENTIVES
- Investment Tax Credit
- Production Tax Credit
- State Incentives

STATE LEVEL PROGRAMS
- CA Self-Generation Incentive Program (SGIP)
- MA Solar Massachusetts Renewable Target (SMART)
- NY Value of Distributed Energy Resources (VDER)
- MA Clean Peak Energy Standard
- MA / RI Connected Solutions
- NY Index Storage Credits (ISC)
- Custom – Build Your Own

INVESTMENT-GRADE ANALYSIS

Fractal Model's financial model generates detailed cash flow results used for investment analysis worldwide. Fractal Model supports tax equity cash flow, back leverage, construction loans, and other advanced financial model features. Users can perform sensitivity analysis by changing annual escalators for capacity payments, arbitrage revenue, ancillary revenue, warranty costs, aux load costs, corrective maintenance, etc., to derisk project economics.





Fractal EMS News

BMS/EMS/PPC KEY FEATURES

Fractal EMS combines advanced features with competitive pricing to create the industry's best energy storage and hybrid controls value.

TECHNOLOGY AGNOSTIC
Flexible architecture that allows you to use different types of batteries and PCS.

MADE IN THE U.S.A.
Fractal EMS is U.S.-made with in-house controller and FNE assembly and in-house software development

TURNKEY CONTROLS
Full-stack controls and software for EMS/SCADA/MPC. Fractal designs, installs, and commissions the controls, networking, SCADA, historian, and HMI.

LOCAL CONTROLS
Fractal hosts the historian and HMI on-site and off-site (the equipment controls are on-site and do not need the cloud).

PV+S (SOLAR + STORAGE)
Hybrid (AC or DC coupled), solar-only, storage-only, AC and DC coupled.

DATA RETENTION
Fractal stores data for the life of the contract to support warranty claims and asset sales.

VERTICAL CONTROLS
Fractal provides a range of options including unit controller, site controller and MPC.

SCALABLE
An open, modular platform that can control multiple sites with 100+ PCS. Fractal provides a fleet-level view of your portfolio.

CYBER SECURITY
Built on ISO 27001, NERC CIP, and NIST 800-53 framework. Highly experienced in-house cyber/IT team with third-party auditing.

EXPERIENCED TEAM
Our team has over a decade of energy storage controls development, integration, commissioning, and operations.

BUILT FOR HIGH RELIABILITY
Hardened equipment backed by a high availability guarantee.

DIAGNOSTICS
Performance analytics to maximize performance and uptime.

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LATEST PROJECT AWARDS

Fractal EMS has been awarded 130 projects for 2025 and 28 projects for 2026+—thank you so much!! Our team will work hard to COD these projects on time.

29 GWh
Total Awards

12 GWh
Operating Projects

The following projects were awarded in the last few weeks:

100 MW / 400 MWh Standalone BESS	Colorado	Merchant
2 MW / 16 MWh Standalone BESS	Indiana	Ancillary Services and Grid Support
2 MW / 11 MWh Standalone BESS	Indiana	Ancillary Services and Grid Support
5 MW / 25 MWh Standalone BESS	Indiana	Ancillary Services and Grid Support
3 MW / 16 MWh Standalone BESS	Indiana	Ancillary Services and Grid Support
3 MW / 16 MWh Standalone BESS	Indiana	Ancillary Services and Grid Support
4 MW / 22 MWh Standalone BESS	Indiana	Ancillary Services and Grid Support
6 MW / 29 MWh Standalone BESS	Indiana	Ancillary Services and Grid Support
6 MW / 28 MWh Standalone BESS	Indiana	Ancillary Services and Grid Support
5 MW / 25 MWh Standalone BESS	Indiana	Ancillary Services and Grid Support
10 MW / 50 MWh Standalone BESS	Indiana	Ancillary Services and Grid Support
4 MW / 22 MWh Standalone BESS	Indiana	Ancillary Services and Grid Support
10 MW / 50 MWh Standalone BESS	Indiana	Ancillary Services and Grid Support
9.4 MW / 540 MWh Standalone BESS	California	CAISO Market Participation

UNLOCK YOUR SUPPLY CHAIN

Fractal EMS can integrate, commission, and provide best-in-class cybersecurity for the following battery systems and inverters. Contact us for more information on alternative suppliers:

- **Vertical equipment**: Tesla, Sungrow, LGES, CLOU, SYL, AESI, Powin
- **Batteries**: A123, AESI, Amperon, ATESS, ATL, BatteroTech, BYD, CALB, CATL, COSPOWERS, CRRC, Cube Energy, Dongguan, ECO Power, Eneon, Envision, E-Storage, EVE Energy, EVLO, Goldwind, Gotion, Great Power, Hithium, Hyperstong, PotisEdge, JinkoSolar, Kore Power, Narada, RelyEZ, REPT Battero, Samsung, Sinexcel, Sunwoda, SVOLT, SYL, Trina, Topband, Woolong, Zentech
- **Inverters**: PE, SMA, EPC Power, Sungrow, Sineng, Dynapower, Ingeteam, Kehua, Huawei, CRRC, Sinexcel

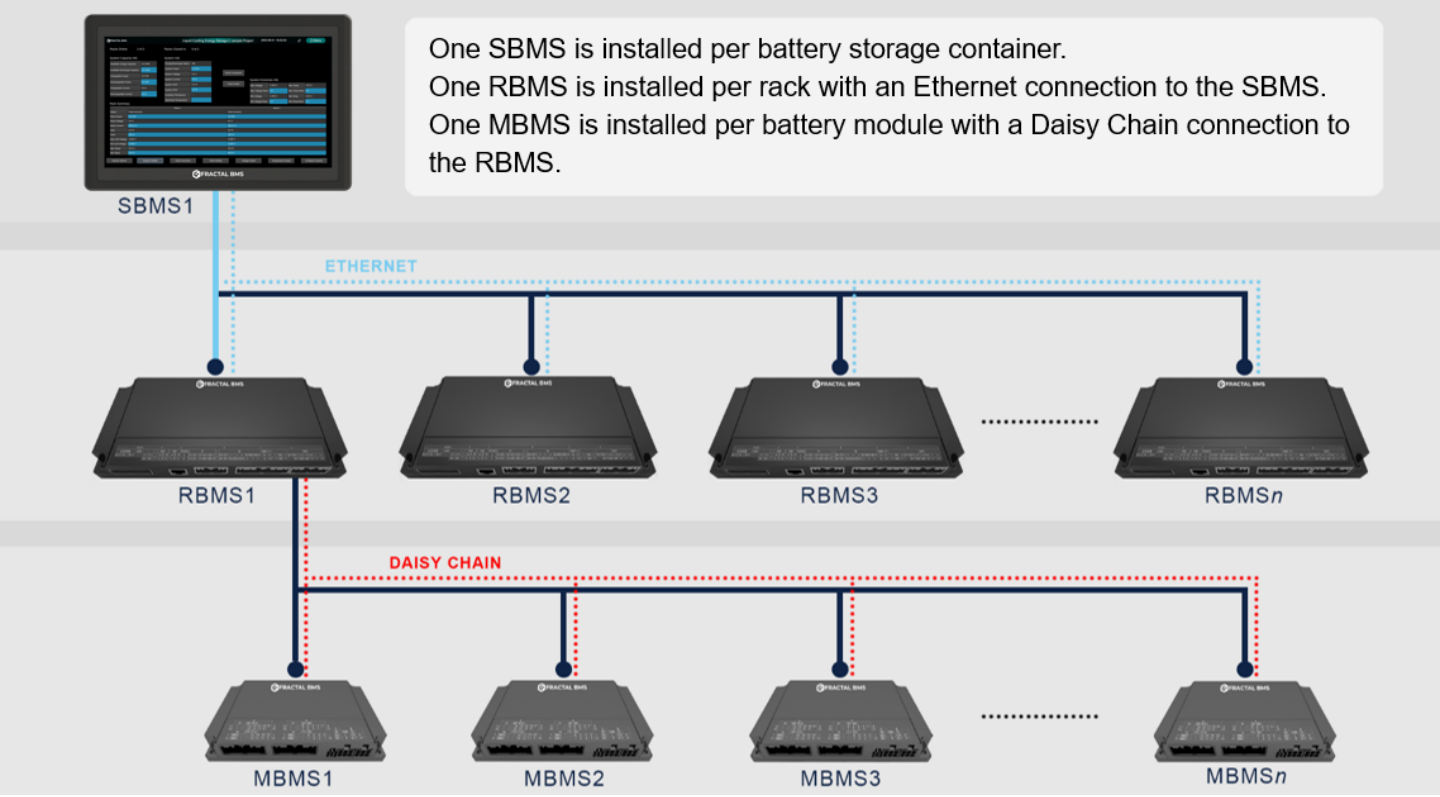
SCHEDULE A DEMO

Schedule a demo today. Feel free to reach out about bidding on your projects (Fractal partners with vendors and EPCs to provide quotes):

- Corrie@FractalEMS.com
- Alice.Lu@FractalEMS.com

AMERICAN BMS NEWS

Fractal is excited to announce that Fractal BMS has entered UL1973 testing with a Tier-1 containerized battery supplier. This marks a significant milestone towards offering a BMS with cybersecurity and domestic content. Fractal BMS is a 3-layer BMS that replaces foreign-sourced BMS with American chips, software, and cyber. Fractal BMS is compatible with most tier-1 battery containers.



NOW RETROFITTING POWIN SYSTEMS

Fractal EMS has planned Powin retrofits underway. Contact Fractal EMS if you would like to discuss retrofitting a Powin EMS and BMS. There are three main options:

1. Overlay: Fractal EMS overlays Power EMS
2. EMS Retrofit: Powin EMS is removed and retrofitted with Fractal EMS
3. BMS and EMS Retrofit: Powin BMS & EMS is removed (L2 & L3), and retrofitted with Fractal BMS and EMS

Fractal EMS has retrofitted (replaced controls) on 575 MWh of battery systems to date across number manufacturers. Retrofits have been requested for various reasons to include:

- Underperformance or System Not Working
- Cybersecurity Concerns
- Inability to Meet Market / Project Requirements
- Lack of Features
- Insolvency (Actual or Potential)

RETROFIT PROCESS – REQUEST A PROPOSAL AND SCHEDULE

1. Preliminary investigation and provide the initial project implementation plan
2. Issue detailed proposal
3. Execution of contract and project kick-off
4. Research the existing project:
    - Equipment and network topography
    - Battery system and project documentation
    - Deep dive on existing issues
    - Project scope and desired control modes
5. Provide a 60% drawing set of the new equipment and network
6. Owner review and feedback
7. Incorporate feedback into IFC engineering design package
8. Equipment procurement and shipment
9. Site mobilization
10. Removal of old EMS, BMS, and network equipment
11. Installation of new EMS, BMS, and network equipment
12. Unit-level (Battery+PCS) software integration, configuration, and deployment*
13. Site-level software integration, configuration, and deployment, SCADA and PLC updates
14. Unit and site-level commissioning
15. Site acceptance and performance testing

Schedule a retrofit discussion today:

- Nick Hughes: Nick.Hughes@FractalEMS.com
- Ian McFarland: Ian.McFarland@FractalEMS.com