

Energy Perspectives

MONTHLY MARKET UPDATE December 2023



December 2023 Review

Notable Mergers & Acquisitions and Asset Transactions

MERGERS & ACQUISITIONS

- Spanish infrastructure builder Elecnor SA entered into an agreement to divest its renewables unit, Enerfin, to Norwegian state-owned power company Statkraft AS for an enterprise value of \$2 billion. With this deal, Statkraft now adds 1.5GW of operational wind power, wind and solar capacity currently under construction plus a sizeable pipeline of projects in development to its portfolio
- Enel Américas and Enel Perú S.A.C jointly signed an agreement with Niagara Energy S.A.C for the sale of all the equity stakes held by them in power generation companies Enel Generación Perú S.A.A and Compañía Energética Veracruz S.A.C. Specifically, the agreement establishes that Niagara Energy will acquire the stakes held by Enel Perú and Enel Américas in Enel Generación Perú's share capital (equal to approximately 66.50% and 20.46%, respectively) as well as those held by Enel Perú in Compañía Energética Veracruz's share capital (equal to 100%) for a total consideration value of about \$1.4 billion
- British oil and gas giant BP Plc agreed to acquire the remaining 50.03% stake in solar developer and operator Lightsource BP. The former will now have full ownership of the latter at an equity value of \$322 million. According to the agreement, the full acquisition of Lightsource BP will enable BP to take advantage of BP's financial and trading capabilities to further grow its business and create more value. The deal is expected to close in the middle of 2024

ASSET TRANSACTIONS

- Zara agreed to acquire a 49% stake in a 618MW portfolio which includes 12 wind farms and 2 solar PV plants from Repsol SA for an amount of \$427 million in Spain
- US-based insurance company Global Atlantic Financial Group divested its 33% stake in the 2.2GW solar and energy storage operating portfolio to Dutch pension provider APG for an undisclosed sum in the US. The portfolio comprised 26 solar farms and 2 energy storage facilities located across 6 states. The majority shareholder of the portfolio Southern Power will continue as the general partner alongside APG

Notable Fund Raisings & Project Finance Transactions

FUND RAISINGS

- Spanish renewables investor Qualitas Energy announced the final close of its latest flagship renewables fund, Qualitas Energy Fund V, amassing nearly €2.4 billion for investments in renewable energy and infrastructure. The oversubscribed Energy Fund had an initial target size of €1.6 billion and eventually exceeded its hard cap of €2.3 billion. The new fund targets investments in renewable energy assets both in operation and under development as well as assets with repowering potential and other infrastructure projects enabling the energy transition, mainly located in Europe
- US investment giant BlackRock's Evergreen Infrastructure fund, focused on investments in energy transition and energy security in Europe and North America, raised nearly USD1 billion at its first close. Evergreen Infrastructure has attracted commitments from various European founding partners, including Italian lender Intesa Sanpaolo SpA and pension fund Inarcassa. About 50% to 60% of its total capital is expected to be invested in Western Europe, including Italy. The fund has already started building its portfolio of investments and has agreed to acquire Lighthouse, which boasts an operating portfolio across six US states
- French independent renewable power producer Technique Solaire raised \$214 million in a funding round among its founders and existing shareholders Credit Agricole Group and Bpifrance. The fresh capital is aimed at supporting the company's efforts to expand both on the domestic market and abroad. Technique Solaire currently has more than 450MWp of solar assets, including ground-mounted, rooftop and carport installations, and a 2GWp pipeline

PROJECT FINANCE TRANSACTIONS

Portuguese renewable energy developer Hyperion Renewables received \$153 million in financing from French sustainable investment manager Mirova, an affiliate of Natixis Investment Managers, to support its transition from a developer to an IPP. In particular, the funding will advance the initial deployment of Hyperion's current 3.4GW pipeline, which comprises solar, wind, storage and green hydrogen projects in Portugal

FINANCIAL ADVISORY GROUP

CleanBridge's Investment Banking Group works with leading multinational corporations, developers, and financial institutions on structuring and capital raising for long term, commercially sustainable investments. We develop innovative investment approaches, designed to achieve attractive levels of investment return through investment in infrastructure, and operational businesses positioned to benefit from long term trends in resource efficiency.

As an organization, CleanBridge holds a privileged position within environmental capital markets that includes a combination of governments, financial institutions, multinational corporations, multilateral development banks, NGOs, and leading institutional investors who are each active within the environmental and social markets. CleanBridge's Investment Banking Group provides creative solutions across complex and critical mandates. The hallmarks of our practice are an independent, conflict-free structure, a team that is one of the most highly experienced and expert in our selected industries, supplemented by our global relationships and reach.



DATE	BUYER	TARGET	TRANSACTION TYPE	AMOUNT	SECTOR	DESCRIPTION
30-Nov	BP Plc	50.03% stake in Lightsource BP	Acquisition	Equity value \$322million		British oil and gas giant BP Plc agreed to acquire the remaining 50.03% stake in solar developer and operator Lightsource BP. The former will now have full ownership of the latter at an equity value of \$322 million. According to the agreement, the full acquisition of Lightsource BP will enable BP to take advantage of BP's financial and trading capabilities to further grow its business and create more value. The deal is expected to close in the middle of 2024.
30-Nov	AG Insurance	A minority stake in the Nysater wind project (Energy Infrastructure Partners AG)	Acquisition		Onshore Wind	Belgian insurer AG Insurance signed an agreement to buy a minority stake in the 475MW Nysater onshore wind farm from one of the stakeholders, Energy Infrastructure Partners AG, in Sweden. The latter will divest a minority interest out of its total share of 80%, thus keeping the percentage of the divestiture undisclosed, while Germany's RWE Renewables, a co-investor in the Nysater wind project, will continue to hold 20%. The financial terms of the acquisition also remain undisclosed
29-Nov	Summit Ridge Energy	A 100MW portfolio of community solar projects (Apex Clean Energy, ESA Solar, ForeFront Power, New Leaf Energy, RWE Clean Energy and SolAmerica Energy)	Acquisition		Solar	US-based solar company Summit Ridge Energy acquired a 100MW portfolio of community solar projects comprising 19 projects currently under construction. The portfolio was jointly held by seven firms – Apex Clean Energy, ESA Solar, ForeFront Power, New Leaf Energy, RWE Clean Energy and SolAmerica Energy. Summit Ridge Energy expects to commission the entire portfolio by the end of 2024.
23-Nov	EWZ	51% stake in Solare Nordic AB	Acquisition		Solar	Zurich-based utility EWZ is to acquire a 51% stake in Swedish developer Solare Nordic AB as part of a collaboration for the development of solar projects in Sweden. The former will partner with the latter's shareholder EnergiEngagemang Sverige AB, to develop the first set of projects expected to be operational by 2025.

DATE	BUYER	TARGET	TRANSACTION TYPE	AMOUNT	SECTOR	DESCRIPTION
22-Nov	Niagara Energy SAC	Equity stakes in Enel Generación Perú S.A.A and Compañía Energética Veracruz S.A.C (Enel Américas and Enel Perú S.A.C)	Acquisition	Consider- ation Value \$1.4 billion	Renewable Energy	Enel Américas and Enel Perú S.A.C jointly signed an agreement with Niagara Energy S.A.C for the sale of all the equity stakes held by them in power generation companies Enel Generación Perú S.A.A and Compañía Energética Veracruz S.A.C. Specifically, the agreement establishes that Niagara Energy will acquire the stakes held by Enel Perú and Enel Américas in Enel Generación Perú's share capital (equal to approximately 66.50% and 20.46%, respectively) as well as those held by Enel Perú in Compañía Energética Veracruz's share capital (equal to 100%) for a total consideration value of about \$1.4 billion.
21-Nov	DIF Capital Partners	60% stake in Novar	Acquisition		Solar	Global infrastructure investment manager DIF Capital Partners signed a deal to acquire a 60% stake in Novar, a Dutch ground-mounted solar PV firm and IPP backed by Ib Vogt. Novar specialises in utility-scale solar, rooftop solar and battery energy storage systems. With a project pipeline of over 15GW, Novar currently owns and operates 440MW of solar and storage projects. Financial details of the transaction were not disclosed.
20-Nov	Statkraft AS	Enerfin (Elecnor SA)	Divestment	Enterprise Value \$2 billion		Spanish infrastructure builder Elecnor SA entered into an agreement to divest its renewables unit, Enerfin, to Norwegian state-owned power company Statkraft AS for an enterprise value of \$2 billion. With this deal, Statkraft now adds 1.5GW of operational wind power, wind and solar capacity currently under construction plus a sizeable pipeline of projects in development to its portfolio
20-Nov	Pacific Green	5 BESS projects with a combined capacity of 500MW (Sphera Energy Srl)	·		Energy Storage	Energy storage developer Pacific Green acquired a 500MW portfolio comprising 5 BESS projects from Sphera Energy Srl for an undisclosed sum in Italy. Pacific now holds a 51% share in the projects and will acquire the remaining interests in stages as the projects hit specific development milestones.

DATE	BUYER	TARGET	TRANSACTION TYPE	AMOUNT	SECTOR	DESCRIPTION
20-Nov	GE Vernova	50% stake in a 334MW portfolio comprising 5 wind and 3 solar power projects (Alfanar)	Acquisition		Onshore Wind and Solar	GE Vernova acquired a 50% stake in a 334MW portfolio comprising 5 wind and 3 solar power projects developed by Saudi engineering group Alfanar in Spain. The portfolio is now part of a joint venture (JV) established by Alfanar Energia Espana and the Financial Services business of GE Vernova. Henceforth, the JV will continue the development of Alfanar's projects and seek new opportunities in the onshore wind and solar PV space. Financial terms of the acquisition remain undisclosed.
17-Nov	EnfraGen LLC	A 188MW renewable portfolio comprising wind, solar and hydrpower	Acquisition		Renewable Energy	LATAM focussed renewables and grid business, EnfraGen LLC completed the acquisition of a 188MW renewables portfolio comprising one wind, two solar and three hydropower projects in Panama and Costa Rica. The transaction ended with a debt refinancing agreement. The portfolio aqcuired consists of the 119MW Dos Mares run-of-river hydro complex in Panama, the Prudencia and Divisa solar parks in Panama with a cobined capacity of 19.7MW and the 49.5MW Guanacaste wind farm in Costa Rica. Financial details and name of the seller remain undsiclosed.
17-Nov	Zara	49% stake in a 618MW portfolio comprising 12 wind farms and 2 solar PV plants (Repsol SA)	Acquisition	\$427 million	Onshore Wind and Solar	Zara agreed to acquire a 49% stake in a 618MW portfolio which includes 12 wind farms and 2 solar PV plants from Repsol SA for an amount of \$427 million in Spain.
15-Nov	APG	33% stake in a 2.2GW operating solar and storage portfolio (Global Atlantic Financial Group)	Divestment		Solar & Energy Storage	US-based insurance company Global Atlantic Financial Group divested its 33% stake in the 2.2GW solar and energy storage operating portfolio to Dutch pension provider APG for an undisclosed sum in the US. The portfolio comprised 26 solar farms and 2 energy storage facilities located across 6 states. The majority shareholder of the portfolio Southern Power will continue as the general partner alongside APG.

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10-Nov	Equinor	Rio Energy assets (Denham Capital)	Divestment		Renewable Energy	Denham Capital sold Brazilian renewable company Rio Energy to Equinor and has carved out a new 1GW renewables platform, Pontal Energy. The new spunout platform Pontal Energy includes 3 operational wind farms, comprising the 100MW Caetité asset, the 200MW Itarema scheme and the 200MW Serra da Babilônia 3 site. It also includes the 200MW Caetité Norte wind farm under construction and 300MW of wind and solar pipeline projects.
09-Nov	Matrix Renewables	A 410MW portfolio comprising 5 BESS facilities (Emeren Group Ltd)	Divestment		Energy Storage	US-based solar energy developer Emeren Group Ltd divested a 410MW BESS portfolio comprising 5 energy storage facilities to global renewables platform Matrix Renewables in Italy. The financial details of the transaction remain undisclosed.
06-Nov	EQT AB	Statera Energy Limited (InfraRed Capital Partners)	Acquisition		Renewable Energy	Swedish investment firm EQT AB reached an agreement to acquire Statera Energy Limited, a London-based developer of flexible generation, battery storage, pumped hydro and green hydrogen projects, from infrastructure investment manager InfraRed Capital Partners for an undisclosed sum.
01-Nov	Cloudberry Clean Energy ASA	The 210MW Nees Hede hybrid solar and wind project (Skovgaard Energy A/S)	Acquisition	Total Enterprise Value €8 million	Onshore Wind and Solar	Cloudberry Clean Energy ASA, through its subsidiary Odin Energy, reached an agreement to acquire the 210MW Nees Hede hybrid solar and wind project from Skovgaard Energy A/S in Denmark. The total enterprise value for the project is \in 8 million, of which Cloudberry will pay a fee of \in 1.6m to transfer the project into Odin, and the remaining enterprise value of \in 4.8 million and \in 1.6 million is payable upon a potential final investment decision (FID) and commercial operating date (COD) respectively.

DATE	BORROWER	FINANCIER	TRANSACTION TYPE	AMOUNT	SECTOR	DESCRIPTION
30-Nov	Atlas Renewable Energy	Brazilian Development Bank (BNDES)	Financing	\$448 million	Solar	Solar developer Atlas Renewable Energy secured \$448 million in financing from the BNDES to support the development of a 768MW solar complex in Brazil. The financing will be used by vehicle company Vista Alegre Comercializadora de Energia SA to build 18 solar PV parks and their respective transmission systems. Construction of the solar PV complex commenced in 2023 and the commercial operations are expected to begin in 2025.
30-Nov	SB Energy Global LLC	JP Morgan, Bank of America, Morgan Stanley Renewables Inc, Truist Bank, MUFG, Mizuho Americas, ING, SMBC, CIBC, Fifth Third Bank, and Societe Generale	Financing	\$2.4 billion	Solar	SB Energy Global LLC secured \$2.4 billion in financing from a consortium of banks to support a 1.3GW portfolio comprising 4 utility-scale solar projects in the US. The financing consisted of a \$800 million tax equity provided by JP Morgan, Bank of America, Morgan Stanley Renewables Inc and Truist Bank, a \$450 million term debt and a \$1.2billion construction debt provided by seven other financial institutions which included MUFG, Mizuho Americas, ING, SMBC, CIBC, Fifth Third Bank, and Societe Generale.
28-Nov	Hyperion Renewables	Mirova	Financing	\$153 million	Renewable Energy	Portuguese renewable energy developer Hyperion Renewables received \$153 million in financing from French sustainable investment manager Mirova, an affiliate of Natixis Investment Managers, to support its transition from a developer to an IPP. In particular, the funding will advance the initial deployment of Hyperion's current 3.4GW pipeline, which comprises solar, wind, storage and green hydrogen projects in Portugal.

DATE	BORROWER	FINANCIER	TRANSACTION TYPE	AMOUNT	SECTOR	DESCRIPTION
28-Nov	Excelsior Energy Capital	U.S. Bancorp Impact Finance, MUFG and Nord/LB, DNB, Zions Bank, Sumitomo Mitsui Banking Corporation, Societe Generale, CIBC, Huntington Bank, National Bank of Canada- Sumitomo Mitsui Trust Bank, Associated Bank and Comerica	Financing	\$1.3 billion	Solar	Excelsior Energy Capital received \$1.3 billion in financing for its 683MW Faraday solar project in Utah, US. The financing included \$400 million of tax equity, which came from U.S. Bancorp Impact Finance while MUFG and Nord/LB acted as coordinating lead arrangers on a \$460 million loan, \$300 million tax equity bridge loan, and ancillary facilities totalling \$250 million. DNB, Zions Bank, Sumitomo Mitsui Banking Corporation, Societe Generale, CIBC, Huntington Bank and National Bank of Canada served as joint lead arrangers and additional participants were Sumitomo Mitsui Trust Bank, Associated Bank and Comerica.
28-Nov	Primergy Solar	Norddeutsche Landesbank Girozentrale, Société Générale, the Crédit Agricole Corporate and Investment Bank, and SMBC	Financing	\$300 million	Solar	Primergy Solar received \$300 million in financing for the 100MW Prairie Mist solar project in the US state of Arkansas. The financing was provided in the form of a debt finance and a tax equity investment. The debt financing came from a syndicate of Norddeutsche Landesbank Girozentrale, Société Générale, the Crédit Agricole Corporate and Investment Bank, and SMBC while the tax equity investment was secured from an affiliate of PNC Financial Services Group.
28-Nov	Fluence Energy Inc	,	Financing	\$400 million	Renewable Energy	US-based energy storage specialist Fluence Energy Inc secured a four-year \$400 million Asset Backed Lending credit facility maturing in November 2027 to support the company's development and fund its future growth plans. The funding also replaces the company's existing \$200 million Revolving Credit Facility. Barclays is serving as an Administrative Agent while Barclays and J.P. Morgan both are serving as Joint Lead Arranger and Joint Bookrunner.
27-Nov	Soregies Group	The European Investment Bank	Financing	\$274 million	Renewable Energy	Soregies Group received \$274 million in financing from The European Investment Bank to support the development of its renewables platform and grid modernisation in France. The funding provided under the InvestEU programme will be used to commence Soregies' €500 million investment plan for 2024-2026, targeting renewables and the upgrade of the group's distribution grid

DATE	BORROWER	FINANCIER	TRANSACTION TYPE	AMOUNT	SECTOR	DESCRIPTION
27-Nov	Longroad Energy		Financing	\$600 million	Renewable Energy	US renewables developer Longroad Energy secured US\$600 million in financing to support the development of its renewables portfolio. The financing consisted of a US\$275 million term loan, a US\$175 million revolving credit facility, and a US\$150 million letter of credit facility.
23-Nov	Statera Energy	Lloyds Bank, NatWest Santander, Siemens Bank	Financing	\$375 million	Energy Storage	UK-based battery storage developer and operator Statera Energy secured \$375 million in financing for its Thurrock Project, which comprises a 300MW/600MWh BESS facility and a 270MW gas-fired power plant. Out of the total financing, \$180 million was provided for the BESS facility while the rest was reserved for the "gas fired plant". In the transaction Lloyds Bank was the sole structuring bank for the debt facilities followed by other participants namely NatWest, Santander, and Siemens Financial Services through Siemens Bank.
22-Nov	European Energy	SEB and DNB	Financing	\$164 million	Renewable Energy	Danish renewables developer European Energy secured \$164 million in financing from Scandinavian banks SEB and DNB to advance the deployment of renewable energy projects across ten countries in Northern Europe
21-Nov	Summit Ridge Energy	MUFG	Financing	\$275 million	Solar	US based commercial solar company Summit Ridge Energy closed a \$275 million financing deal with Japanese bank MUFG to support the construction of its upcoming solar projects in Virginia and Illinois. MUFG will provide two fresh debt facilities to support the construction of up to 15 solar projects in Illinois and the construction and permanent financing of up to 15 solar projects in Virginia.
20-Nov	Middle River Power	First Citizens Bank, MUFG and Morgan Stanley Renewables In	Financing	\$250 million	Energy Storage	Middle River Power received \$250 million in financing for its 327MW BESS portfolio comprising 3 battery storage projects. First Citizens Bank and MUFG acted as co-lead arrangers on the financing package, which includes a construction loan that will become a term loan, a tax equity bridge loan, and a project letter of credit facilities. At the same time, Morgan Stanley Renewables Inc. provided the tax equity commitment for the portfolio.

DATE	BORROWER	FINANCIER	TRANSACTION TYPE	AMOUNT	SECTOR	DESCRIPTION
17-Nov	Leeward Renewable Energy	Wells Fargo Bank, Mizuho Bank, National Bank of Canada, Société Générale, and Sumitomo Mitsui Trust Bank	Financing	\$580 million	Onshore Wind and Solar	Leeward Renewable Energy secured \$580 million in financing in the form of of tax equity commitments and debt facilities for its White Wing Ranch Solar and GSG Wind projects. The tax equity commitment was provided by Wells Fargo Bank, and the debt facility came from Mizuho Bank, National Bank of Canada, Société Générale, and Sumitomo Mitsui Trust Bank.
15-Nov	PureSky Energy	Nomura Securities	Financing	\$150 million	Renewable Energy	PureSky Energy secured \$150 million as a revolving credit facility in financing from Nomura securities in the US. The financing enables the company to accelerate the buildout of its operating portfolio.
15-Nov	Element Energy	Cohort Ventures, Keyframe Capital Partners LP, Drive Catalyst, FM Capital and AFW Partners, LG Technology Ventures, Edison International, Prelude Ventures and Radar Partners	Financing	\$111 million	Renewable Energy	US battery management technology company company Element Energy raised \$111 million in debt and equity capital to advance the deployment of its systems in utility-scale applications before the end of the year. The secured funds include \$73 million raised in a Series B financing round and \$38 million in the form of a debt facility provided by Keyframe Capital Partners LP. The fundraising transaction was co-led by an unnamed investor alongside Cohort Ventures. It included new financiers such as Mitsubishi Heavy Industries, Drive Catalyst, FM Capital and AFW Partners, as well as existing investors LG Technology Ventures, Edison International, Prelude Ventures and Radar Partners.
14-Nov	DSD Renewables	Cox Enterprises, Inc.	Financing	\$250 million	Renewable Energy	DSD Renewables received \$250 million in financing from Cox Enterprises, Inc. to accelerate its growth of renewable energy. The strategic investment is aligned with Cox' commitment to building a more sustainable future and increasing focus on cleantech and renewable energy.
14-Nov	Ilmatar Energy	Copenhagen Infrastructure Partners, Kommunal Landspen- sjonskasse, P Capital Partners	Financing	\$535 million	Renewable Energy	Finnish renewable energy developer and producer Ilmatar Energy obtained \$535 million in financing to strengthen its position as an IPP. The transaction was led by Copenhagen Infrastructure Partners, Kommunal Landspensjonskasse, P Capital Partners and accounts managed by CIP.



DATE	BORROWER	FINANCIER	TRANSACTION TYPE	AMOUNT	SECTOR	DESCRIPTION
13-Nov	Grenergy	Banco Santander SA	Financing	\$157 million	Renewable Energy	Spanish renewables developer and operator Grenergy Renovables SA secured \$157 million in financing from Banco Santander SA to develop its renewable energy projects including battery storage and achieve growth plans in Latin America.
13-Nov	Altus Power Inc	Blackstone Inc	Financing	\$200 million	Solar	Altus Power Inc secured \$200 million in financing as a construction facility to support the rollout of commercial solar assets. The financing was provided by alternative investment manager Blackstone Inc. to support the funding of equipment, labour, interconnection and development fees.
13-Nov	Madison Energy	Fifth Third Bank, Natixis, Société Générale, BNP Paribas, TD Bank, Siemens Financial Services and Forbright Bank	Financing	\$450 million	Renewable Energy	Madison Energy Infrastructure, a leading clean energy developer and asset owner secured \$450 million in debt financing to fund the development and deployment of Madison's cutting-edge clean energy projects for its rapidly growing network of partners and customers. The financing involves Fifth Third Bank, Natixis, Société Générale, BNP Paribas, TD Bank, Siemens Financial Services and Forbright Bank.
09-Nov	Aypa Power	First Citizens Bank, Trust Company, Nomura Securities, International Inc, National Bank of Canada and MUFG Bank, US Bancorp Impact Finance	Financing	\$550 million	Energy Storage	Aypa Power received \$550 million in debt and tax-equity financing to support the further development of 2 battery storage projects with a combined capacity of 250MW in Texas and California. The transaction was participated by a consortium of financial institutions comprising First Citizens Bank, Trust Company, Nomura Securities, International Inc, National Bank of Canada and MUFG Bank, US Bancorp Impact Finance.
08-Nov	Arevon Energy Inc	JP Morgan, MUFG, BNP Paribas, Sumitomo Mitsui Banking Corporation and First Citizens Bank, National Bank of Canada	Financing	\$529 million	Solar & Energy Storage	Renewable energy company Arevon Energy Inc. secured \$529 million in financing for the 157MWdc solar peaker plant project, coupled with battery energy storage in California, US. JP Morgan made a commitment to help Arevon purchase \$191 million of investment tax credits and production tax credits. In addition \$338million of debt facility was provided by MUFG, BNP Paribas, Sumitomo Mitsui Banking Corporation, First Citizens Bank and National Bank of Canada



Selected Recent Renewable Energy - PROJECT RELATED DEVELOPMENT

DATE	COMPANY	LOCATION	CAPACITY	SECTOR	DESCRIPTION
30-Nov	Reichmuth Infrastructure and MW Storage	Germany	100MW	Energy Storage	Swiss-based asset manager Reichmuth Infrastructure teamed up with Zug-based developer MW Storage to jointly construct a 100 MW/200 MWh BESS in Germany, further expanding its portfolio of renewable energy infrastructure. The majority shareholder of the project will be Reichmuth Infrastructure while the remaining minority shareholders will be German power producer Zukunftsenergie Nordostbayern GmbH (ZENOB) and local energy company Bayernwerk, part of E.on SE. The project is expected to become operational at the start of 2025.
22-Nov	Velto Renewables & Kenergy	Spain	1GW	Solar	Spanish independent power producer Velto Renewables partnered with renewables company Kenergy to develop 1GW of solar projects in Spain. Under the agreement, both companies will codevelop early-stage solar power projects.
22-Nov	Clēnera	USA	344MW and 688MWh	Solar & Energy Storage	US-based renewable energy firm Clenera Holdings LLC, a subsidiary of Israel's Enlight Renewable Energy Ltd, signed a 30-year PPA with the Sacramento Municipal Utility District to supply clean power to Sacramento County from a 344MW solar park. In addition to the solar power, the utility has also contracted the energy storage capacity from the park's 688MWh BESS facility for a 20-year term and signed an interconnection agreement for the project.
21-Nov	Copenhagen Infrastructure Partners P/S	Canada		Renewable Energy	Danish fund manager Copenhagen Infrastructure Partners P/S launched a renewable energy platform in Canada known as Horizon New Energy. The latter will convert into an IPP, with possesion of operational projects as well as projects under construction and development. Horizon's main focus will be on the origination, development and implementation of solar, onshore wind and battery storage projects.
17-Nov	Lemon Sistemi and Volt ESG	Italy	2GW	Energy Storage	Solar and storage installer Lemon Sistemi and investor Volt ESG entered into an agreement to develop a 2GW BESS project in Italy.
16-Nov	Enbridge and EDF Renewables	USA	577MW	Solar	Canadian oil and gas company Enbridge partnered with EDF Renewables North America to construct and operate the 577MW Fox Squirrel solar project in Ohio, US. Enbridge entered into a definitive deal for a 50% stake in the project, which will be built in three phases in Madison County. The first phase of about 150MW is expected to come online by the end of the year and the remaining capacity by the end of 2024. Enbridge will invest \$149 million in the initial phase. It will make a final investment decision on the other two phases during 2024, subject to terms and conditions being met.

Selected Recent Renewable Energy - PROJECT RELATED DEVELOPMENT

DATE	COMPANY	LOCATION	CAPACITY	SECTOR	DESCRIPTION
16-Nov	National Grid Renewables	USA	270MW	Solar	National Grid Renewables signed a long-term PPA with Japanese conglomerate Fujifilm Holdings Corp and pharma giant Bristol Myers Squibb Co to supply clean power to both the companies from its 270MW Blevins Solar Project in Texas, US. Under the contract, Fujifilm will extract 125MW, and Bristol Myers Squibb will extract 145MW of the project's output. The solar project will be commercially operational in 2025.
15-Nov	SUSI Partners and BIWO Renovables	Chile	232MWp and 900MWh	Solar & Energy Storage	Swiss fund manager SUSI Partners is to develop 232MWp of solar projects with its existing partner BIWO Renovables in Chile. Under the collaboration SUSI partners, through its SUSI Energy Transition Fund and BIWO Renovables, will develop solar PV projects coupled with 900MWh of storage capacity that is due to enter construction in 2025.
14-Nov	Intersect Power	USA	500MW	Solar & Energy Storage	Intersect Power commenced commercial operations at its 500MW Oberon solar plus storage project in California, US.
13-Nov	Swift Current Energy	USA	197MW	Onshore Wind	Swift Current Energy started the commercial operations of the 197MW Castle Gap Wind project in Texas, US.
02-Nov	D. E. Shaw Renewable Investments (DESRI) and Sacramento Municipal Utility District	USA	100MW	Solar	DESRI in partnership with Sacramento Municipal Utility District started the commercial operations at its 100MW Drew Solar project in California, US.



DATE	FUND NAME	GP	INVESTMENT	SECTOR	DESCRIPTION
17-Nov	Evergreen Infrastructure Func	BlackRock		Renewable Energy	US investment giant BlackRock's Evergreen Infrastructure fund, focused on investments in energy transition and energy security in Europe and North America, raised nearly USD1 billion at its first close. Evergreen Infrastructure has attracted commitments from various European founding partners, including Italian lender Intesa Sanpaolo SpA and pension fund Inarcassa. About 50% to 60% of its total capital is expected to be invested in Western Europe, including Italy. The fund has already started building its portfolio of investments and has agreed to acquire Lighthouse, which boasts an operating portfolio across six US states.
13-Nov		Technique Solaire		Renewable Energy	French independent renewable power producer Technique Solaire raised \$214 million in a funding round among its founders and existing shareholders Credit Agricole Group and Bpifrance. The fresh capital is aimed at supporting the company's efforts to expand both on the domestic market and abroad. Technique Solaire currently has more than 450MWp of solar assets, including ground-mounted, rooftop and carport installations, and a 2GWp pipeline.
02-Nov	Qualitas Energy Fund V	Qualitas Energy		Renewable Energy	Spanish renewables investor Qualitas Energy announced the final close of its latest flagship renewables fund, Qualitas Energy Fund V, amassing nearly €2.4 billion for investments in renewable energy and infrastructure. The oversubscribed Energy Fund had an initial target size of €1.6 billion and eventually exceeded its hard cap of €2.3 billion. The new fund targets investments in renewable energy assets both in operation and under development as well as assets with repowering potential and other infrastructure projects enabling the energy transition, mainly located in Europe

Comparable Companies Trading Analysis (as of December 20, 2023)

Utilities and IPPs Large Cap (in \$ Millions)											
Company Name	HQ	Stock Price	% of 52-Wk. High	Normalized EBITDA					Normalized EV/EBITDA		
				TTM EBITDA	1YR EBITDA Growth (CY)	TTM EBITDA Margin	Enterprise Value	Market Cap	TTM	2023CY (E)	2024CY (E)
NextEra Energy	United States	61.57	71.2%	11,826.00	6.3%	43.2%	207,551	126,324	17.6x	17.6x	15.9x
Iberdrola	Spain	12.92	96.7%	14,937.21	7.1%	26.3%	137,939	79,697	9.2x	8.7x	8.2x
Duke Energy	United States	96.81	91.0%	16,420.00	4.1%	56.2%	158,509	74,613	9.6x	12.1x	11.0x
Enel	Italy	7.32	98.4%	22,677.95	6.6%	21.2%	153,920	74,344	6.6x	6.4x	6.4x
E.ON	Germany	13.40	96.2%	10,390.41	-59.7%	9.4%	70,337	34,987	6.8x	7.4x	7.7x
RWE	Germany	44.37	93.4%	9,681.93	-60.4%	28.2%	62,543	33,003	7.0x	7.6x	10.0x
Verbund	Austria	94.32	97.4%	5,096.72	73.4%	38.2%	33,298	32,769	6.5x	7.1x	7.6x
Marubeni	Japan	15.57	82.3%	5,336.43	36.4%	10.1%	36,266	26,157	6.8x	N/A	N/A
SSE	United Kingdom	23.28	95.5%	4,142.71	N/A	29.0%	36,125	25,445	8.7x	8.7x	8.0x
EnBW Energie Baden-Württemberg	Germany	88.48	85.8%	5,566.84	30.2%	10.2%	36,221	23,965	5.4x	N/A	N/A
Ørsted	Denmark	52.76	51.4%	3,737.96	54.8%	27.7%	28,673	22,180	7.7x	9.2x	7.4x
EDP Energias de Portugal	Portugal	4.97	86.6%	5,015.67	20.2%	27.6%	48,256	20,692	9.8x	8.9x	8.5x
EDP Renováveis	Spain	19.44	83.3%	1,629.12	17.9%	65.6%	29,137	19,910	17.9x	13.6x	11.6x
AES	United States	19.36	66.5%	561.00	166.4%	4.4%	42,790	12,964	76.3x	12.5x	10.6x
Fortum	Finland	14.21	81.9%	2,804.07	-76.8%	31.7%	14,259	12,751	5.7x	6.4x	7.9x
Mean			85.2%	7,988.27		28.6%	73,055	41,320	13.4x	9.7x	9.3x
Median			86.6%	5,336.43		27.7%	42,790	26,157	7.7x	8.7x	8.2x

Utilities and IPPs Mid/Small Cap (in \$ Millions)											
Company Name	HQ	Stock Price	% of 52-Wk. High	Normalized EBITDA					Normalized EV/EBITDA		
				TTM EBITDA	1YR EBITDA Growth (CY)	TTM EBITDA Margin	Enterprise Value	Market Cap	TTM	2023CY (E)	2024CY (E)
Acciona	Spain	145.28	69.8%	2,183.76	28.7%	16.0%	17,520	7,943	8.0x	8.4x	7.0x
Brookfield Renewable Partners	Canada	26.82	82.4%	2,113.00	21.2%	43.0%	55,315	7,702	26.2x	25.3x	23.1x
Neoen	France	32.46	85.1%	513.97	48.2%	88.3%	7,674	4,926	14.9x	14.8x	12.8x
ERG	Italy	30.35	94.7%	546.30	28.9%	73.9%	5,989	4,491	11.4x	10.5x	8.9x
NextEra Energy Partners	United States	30.57	39.6%	1,017.00	21.9%	79.2%	19,882	2,856	19.5x	10.4x	9.9x
Solaria Energia	Spain	19.99	91.0%	204.52	58.1%	107.5%	3,387	2,498	16.6x	15.5x	12.4x
Enlight Renewable Energy	Israel	19.43	86.9%	122.45	N/A	73.7%	4,581	2,291	N/A	N/A	N/A
Terna Energy	Greece	17.06	73.2%	117.32	-25.8%	39.0%	2,914	1,966	26.2x	14.8x	11.0x
Canadian Solar	Canada	25.31	55.9%	N/A	33.4%	N/A	5,377	1,636	7.2x	7.5x	6.0x
Innergex Renewable Energy	Canada	6.90	55.6%	459.57	88.6%	66.7%	6,004	1,411	12.8x	11.2x	10.3x
Voltalia	France	10.57	53.4%	N/A	N/A	N/A	1,385	1,385	N/A	5.7x	4.6x
Scatec	Norway	7.68	85.1%	195.60	-28.9%	62.5%	3,318	1,221	17.0x	10.6x	9.6x
Grenergy Renovables	Spain	34.19	90.4%	54.14	17.6%	43.1%	1,598	1,007	32.3x	12.5x	13.7x
Opdenergy	Spain	6.31	98.3%	120.11	4661.5%	72.2%	1,704	934	14.2x	20.6x	9.4x
Nofar Energy	Israel	25.84	84.7%	68.39	1099.6%	76.4%	1,611	919	23.5x	N/A	N/A
Econergy Renewable Energy	Israel	3.58	70.4%	(4.21)	N/A	-46.6%	341	163	99.3x	N/A	N/A
Azure Power	India	1.25	25.0%	N/A	N/A	N/A	80	80	N/A	0.3x	0.3x
Mean			72.6%	284.60		61.3%	4,390	1,852	24.6x	11.2x	9.1x
Median			84.7%	159.03		72.9%	3,318	1,411	16.8x	10.9x	9.7x

Note: Public Comparable data has been taken from Pitchbook. For ease of calculation, data in other currencies have been converted to USD using applicable exchange rate.

(E) = Median consensus estimate



Comparable Companies Trading Analysis (as of December 20, 2023)

Energy Storage (in \$ Millions)											
Company Name		Stock Price	% of 52-Wk. High	Normalized EBITDA					Normalized EV/EBITDA		
	HQ			TTM EBITDA	1YR EBITDA Growth (CY)	TTM EBITDA Margin	Enterprise Value	Market Cap	ттм	2023CY (E)	2024CY (E)
EnerSys	United States	96.75	85.4%	118.54	2.6%	3.2%	4,565	3,909	38.51x	12.38x	8.89x
Fluence(Energy Storage)	United States	27.24	87.0%	(61.39)	N/A	-2.8%	3,299	3,440	N/A	N/A	33.20x
Stem	United States	4.12	36.3%	(33.59)	N/A	-7.5%	1,052	642	N/A	N/A	110.48x
Microvast	United States	1.25	43.0%	(73.73)	N/A	-27.6%	461	394	N/A	N/A	15.80x
Eos Energy Enterprises	United States	1.12	19.8%	(123.18)	N/A	-990.6%	379	225	N/A	N/A	N/A
Invinity Energy Systems	United Kingdom	0.37	49.0%	(20.47)	N/A	-564.2%	66	70	N/A	N/A	N/A
RedFlow	Australia	0.10	42.6%	N/A	N/A	N/A	20	24	N/A	N/A	N/A
Mean			51.8%	(32.30)		-264.9%	1,406	1,243	38.5x	12.4x	42.1x
Median			43.0%	(47.49)		-17.6%	461	394	38.5x	12.4x	24.5x

Note: Public Comparable data has been taken from Pitchbook. For ease of calculation, data in other currencies have been converted to USD using applicable exchange rate.

(E) = Median consensus estimate



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Sustainable Energy



Climate Finance



Sustainable Living



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