

Energy Perspectives

MONTHLY MARKET UPDATE

November 2023



November 2023 Review

Notable Mergers & Acquisitions and Asset Transactions

MERGERS & ACQUISITIONS

- US utility Duke Energy completed the sale of its utility-scale renewables arm to renewables asset owner Brookfield Renewables for an amount of \$2.8 billion. With the completion of the deal, Brookfield will add more than 3.4GW of solar, wind and battery storage projects in its portfolio across the US
- Brookfield Asset Management reached an agreement to acquire Banks Renewables- the renewable energy division of British property developer The Banks Group, for an amount undisclosed in the UK. Banks Renewables currently owns 11 operating wind farms with a combined capacity of over 250MW, in addition to a number of under-development projects comprising wind, solar and energy storage
- US-based energy holding company Duke Energy Corp finalised the divestiture of its commercial distributed generation (DG) portfolio to an affiliate of ArcLight Capital Partners LLC for an enterprise value of \$364 million. The transaction comprised REC Solar's operating assets, development pipeline and operations and maintenance (O&M) portfolio, and distributed fuel-cell projects managed by Bloom Energy

ASSET TRANSACTIONS

- Zurich-based utility EWZ acquired the 115MW Ånglarna wind farm from OX2 AB for an amount of 2.7 billion SEK in Sweden. Construction will start in the fourth quarter of 2023 and commissioning is planned at the end of 2026
- Arise sold its 105MW Fasikan wind farm to SCA, Europe's largest private forest owner in Sweden. The transaction covers all the shares in Fasikan Vind AB at an enterprise value of approximately SEK1.6bn. The project is sold in ready-to-build status at a share purchase price of approximately SEK125 million
- French utility Engie SA acquired a portfolio comprising 5 solar projects with a combined capacity of 545MWac from Atlas Renewable Energy. The deal was valued at \$659 million by Engie. The portfolio consists of the Juazeiro, Sao Pedro, Sol do Futuro, Sertao Solar and Lar do Sol projects, in the eastern Brazilian states of Bahia, Ceara and Minas Gerais

Notable Fund Raisings & Project Finance Transactions

FUND RAISINGS

- Appian Capital Advisory LLP reached the final close of its third fund, Fund III, raising its hard cap to US\$2 billion following strong support from both large, new investors and existing top-tier investors globally. Fund III is targeting mid-tier opportunities, prioritizing profitability over scale to generate maximum returns. Investment in energy transition commodities will be balanced by investments in precious metals
- French sustainable investment manager Mirova, an affiliate of Natixis Investment Managers, is to launch a new fund, Mirova Energy Transition 6 (MET6), seeking to raise up to \$2 billion to invest in decarbonisation infrastructure mainly in Europe. The fund, aimed at institutional investors, will focus on proven technologies, such as onshore and offshore wind power, photovoltaics, hydropower, storage and energy efficiency. It will also continue to support the development of low-carbon electric mobility and hydrogen
- NextPower UK ESG (NPUK ESG), the UK solar arm of NextEnergy Capital, has secured £600 million in commitments from investors, exceeding its £500million target. NPUK ESG achieved its first close in August 2022 and had further financial closes in the following months. The fund has already allocated circa 60% of its £595m committed capital, acquired 416MW across nine UK solar assets, and made its first distribution of circa 10% to investors

PROJECT FINANCE TRANSACTIONS

- BESS developer and operator Plus Power completed a \$1.8 billion financing for 5 projects including over \$400 million in tax equity and \$700 million for a single standalone project in Arizona and Texas, US. The financing comprised construction and term loans as well as tax equity financing for 5 projects with a combined capacity of 1.1GW. The name of the financier has not been disclosed in the transaction
- Naturgy Energy Group SA received \$743 million in financing from the European Investment Bank to support the modernisation of its electricity distribution grids in Spain, currently under construction. The name of the investors were not disclosed

FINANCIAL ADVISORY GROUP

PAF'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, PAF 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. PAF'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.

Selected Recent Renewable Energy - M&A TRANSACTIONS

DATE	BUYER	TARGET	TRANSACTION TYPE	AMOUNT	SECTOR	DESCRIPTION
31-Oct	Juwi	4 solar projects with a combined capacity of 267MW (Hive Energy)	Divestment		Solar	UK-based energy developer Hive Energy sold 4 solar projects with a combined capacity of 267MW to German solar developer Juwi for an undisclosed sum. The projects were acquired by the Greek unit of Juwi, Juwi Hellas and was developed to the ready-to-build status by Hive Energy. Juwi will begin construction works in the first quarter of 2024. However, the expected operational date of these projects has not yet been disclosed
31-Oct	Engie SA	5 solar projects with a combined capacity of 545MWac (Atlas Renewable Energy)	Acquisition	Deal Value \$659 million	Solar	French utility Engie SA acquired a portfolio comprising 5 solar projects with a combined capacity of 545MWac from Atlas Renewable Energy. The deal was valued at \$659 million by Engie. The portfolio consists of the Juazeiro, Sao Pedro, Sol do Futuro, Sertao Solar and Lar do Sol projects, in the eastern Brazilian states of Bahia, Ceara and Minas Gerais.
27-Oct	Credit Agricole Assurance	30% stake in Innergex	Divestment	Enterprise value €715 million	Renewable Energy	Canadian company Innergex Renewable Energy Inc. completed the sale of a 30% stake in its renewable platform in France to Credit Agricole Assurance to obtain an investment of \$137 million. Innergex's French platform comprises 17 operational assets, which includes 324MW of wind power, 9MW/9MWh of storage capacity and a set of projects in various stages of development. The enterprise value of Innergex France is estimated at €715 million, including €22 million of cash on hand.
27-Oct	Brookfield Renewables	Utility-scale renewables arm (Duke energy)	Divestment	\$2.8 billion	Renewable Energy	US utility Duke Energy completed the sale of its utility-scale renewables arm to renewables asset owner Brookfield Renewables for an amount of \$2.8 billion. With the completion of the deal, Brookfield will add more than 3.4GW of solar, wind and battery storage projects in its portfolio across the US.
26-Oct	Kyushu Electric	40% stake in a 400MW operating solar portfolio (Enfinity Global)	Divestment		Solar	Enfinity Global Inc. agreed to divest a 40% stake in a 400MW operating solar portfolio to Japanese utility Kyushu Electric Power Company Inc. for an undisclosed sum in the US. The portfolio comprises 28 active utility-scale solar power plants located across California, North Carolina and Idaho. As part of the deal, Enfinity Global will continue to remain the majority owner with a 60% equity interest besides being the long-term asset manager of the portfolio.

Selected Recent Renewable Energy - M&A TRANSACTIONS

DATE	BUYER	TARGET	TRANSACTION TYPE	AMOUNT	SECTOR	DESCRIPTION
26-Oct	TotalEnergies	Quadra Energy	Acquisition		Renewable Energy	TotalEnergies entered into an agreement with the Aloys Wobben Foundation to acquire Quadra Energy, a German aggregator of renewable electricity, for an undisclosed amount. Quadra Energy is one of the top aggregators in the German market, with 9GW of capacity in the form of a “virtual power plant”.
25-Oct	Sonneditx Power Holdings Ltd	A solar portfolio comprising 4 solar farms with a combined capacity of 416MW(Enel Chile)	Acquisition	Consideration Value \$556 million	Solar	European renewable energy developer Sonnedix completed the acquisition of a 416MW solar portfolio from Arcadia Generacion Solar SA, a vehicle jointly owned by Italian utility group Enel SpA and its Chilean subsidiary, Enel Chile SA. The duo sold their entire stakes for a consideration value of \$556 million. Arcadia owns 4 solar farms in the Chilean regions of Atacama and Antofagasta- The 36MW Diego de Almagro, 97MW Carrera Pinto, 79MW Pampa Solar Norte and the 204MW Domeyko.
24-Oct	Macquarie Asset Management	49.9% stake in Norsk Hydro ASA	Acquisition	\$332 million	Renewable Energy	Macquarie Asset Management is to acquire a 49.9% stake in the renewable energy business of Norsk Hydro ASA, Hydro Rein. The former will purchase the interests in Hydro Rein for \$332 million in equity leaving Norsk Hydro ASA with a controlling interest of 50.1%. As a consequence, Hydro Rein will be operating as a JV company with a 6.9GW gross portfolio of renewable energy projects at different stages of development, located in Brazil, Denmark, and Sweden.
24-Oct	Hitachi Energy	A controlling stake in Eks Energy(Powin LLC)	Acquisition		Renewable Energy	Swiss-based Hitachi Energy acquired a majority interest in Spanish power electronics and renewable energy management systems provider, Eks Energy, from US energy storage group Powin LLC for an undisclosed sum.
20-Oct	SCA	The 105MW Fasikan wind farm (Arise)	Divestment	Enterprise Value SEK1.6bn	Onshore Wind	Arise sold its 105MW Fasikan wind farm to SCA, Europe's largest private forest owner in Sweden. The transaction covers all the shares in Fasikan Vind AB at an enterprise value of approximately SEK1.6bn. The project is sold in ready-to-build status at a share purchase price of approximately SEK125 million.
19-Oct	Allianz Capital Partners	2 solar plants with a combined capacity of 300MW (Grenergy)	Divestment	Deal Value \$286 million	Solar	Grenergy agreed to divest 2 solar plants with a combined capacity of 300MW to Allianz Capital Partners in a deal valued at \$286 million in Spain. The transaction will close by the end of June 2025.

Selected Recent Renewable Energy - M&A TRANSACTIONS

DATE	BUYER	TARGET	TRANSACTION TYPE	AMOUNT	SECTOR	DESCRIPTION
11-Oct	Sabancı Holdings	The 232MW Oriana solar-plus-storage project (Advanced Power)	Divestment		Solar & Energy Storage	Swiss-based power producer Advanced Power closed the sale of the Oriana solar-plus-storage project to Sabancı Renewables, the renewables unit of Turkish financial firm Sabancı Holdings for an undisclosed sum in Texas, US. The project comprises a 232MWdc solar farm co-located with a 60MW/120MWh battery storage system. The investment in the Oriana Solar project is worth \$330 million. Construction works on the project are scheduled to start in the first quarter of 2024, while the commissioning is anticipated in 2025.
10-Oct	Newave Energia	A 420MW solar project (Voltaia)	Divestment		Solar	Voltaia divested a ready-to-build 420MW solar project to Newave Energia, a partnership between Gerdau and Newave FIP, for an undisclosed sum in Brazil. The project is part of the larger Arinos cluster, which has the potential to generate 1.8GW of clean energy. Newave Energia has also acquired other ready-to-build solar projects within the cluster.
10-Oct		A portfolio comprising 17 BESS projects with a combined capacity of 2GW (Hexagon)	Divestment		Energy Storage	Developer Hexagon is to sell a BESS portfolio comprising 17 projects with a combined capacity of around 2GW. Of the total projects 16 have a capacity of 100MW each and the remaining one has a capacity of 200MW. Financial details of the transaction and the name of the buyer remain undisclosed.
6-Oct	EWZ	The 115MW Änglarna wind farm(OX2 AB)	Acquisition	2.7 billion SEK	Onshore Wind	Zurich-based utility EWZ acquired the 115MW Änglarna wind farm from OX2 AB for an amount of 2.7 billion SEK in Sweden. Construction will start in the fourth quarter of 2023 and commissioning is planned at the end of 2026
5-Oct	Capital Dynamics	2 solar projects with a combined capacity of 170MW	Acquisition		Solar	Global private asset manager Capital Dynamics acquired 2 solar projects with a combined capacity of 170MW in the southernmost region of Sicily, Italy. The name of the seller and financial details of the transaction were not disclosed.

Selected Recent Renewable Energy - M&A TRANSACTIONS

DATE	BUYER	TARGET	TRANSACTION TYPE	AMOUNT	SECTOR	DESCRIPTION
5-Oct	ArLight Capital Partners LLC	Commercial distributed generation (DG) portfolio (Duke Energy Corp)	Divestment	Enterprise Value \$364 million	Solar	US-based energy holding company Duke Energy Corp finalised the divestiture of its commercial distributed generation (DG) portfolio to an affiliate of ArLight Capital Partners LLC for an enterprise value of \$364 million. The transaction comprised REC Solar's operating assets, development pipeline and operations and maintenance (O&M) portfolio, and distributed fuel-cell projects managed by Bloom Energy.
3-Oct	Brookfield Asset Management	Banks Renewables'	Acquisition	1 billion (Insider's estimate)	Renewable Energy	Brookfield Asset Management reached an agreement to acquire Banks Renewables—the renewable energy division of British property developer The Banks Group, for an amount undisclosed in the UK. Banks Renewables currently owns 11 operating wind farms with a combined capacity of over 250MW, in addition to a number of under-development projects comprising wind, solar and energy storage.
3-Oct		The 150MWp Belinchon solar farm (Grenergy Renovables SL)	Divestment	Consideration Value 182 million	Solar	Spanish renewables firm Grenergy Renovables SL finalised the divestiture of its 150MWp Belinchon solar farm to an undisclosed IPP for a total consideration value of \$182 million in Cuenca, Spain.

Selected Recent Renewable Energy - FINANCING RELATED TRANSACTIONS

DATE	BORROWER	FINANCIER	TRANSACTION TYPE	AMOUNT	SECTOR	DESCRIPTION
30-Oct	Cobra IS	Natixis CIB	Financing	\$742 million	Solar	Cobra IS, a unit of Vinci SA, secured \$742 million in financing from French corporate bank Natixis CIB for the development, construction, commissioning and operation of 21 solar farms across Spain. Cobra IS will develop the projects via vehicle Spanish Portfolio SL. In the transaction Natixis CIB served as the mandated lead arranger, joint bookrunner and green loan coordinator.
30-Oct	Aypa Power	Milbank LLP, MUFG, Nomura, National Bank of Canada and First Citizens Ban	Financing	\$350 million	Energy Storage	Aypa Power secured \$350 million in financing for the development and construction of its 150MW/330MWh Borden battery energy storage in Texas and the 100MW/400MWh Cald project in California. Global legal services provider Milbank LLP led the transaction along with other investors that included MUFG, Nomura, National Bank of Canada and First Citizens Bank.
27-Oct	Enfinity Global	ICG	Financing	\$316 million	Renewable Energy	US-based IPP Enfinity Global received \$316 million in financing from global alternative asset manager ICG, with another \$105 million expected to close within a year. The financing will support the former's growth and execution of its business strategy, accelerate the deployment of its 20GW portfolio, 1GW of which is currently operational globally.
20-Oct	Innergex	JP Morgan and Capital One	Financing	\$323 million	Onshore Wind	Canadian electricity producer Innergex Renewable Energy Inc. received a \$323 million tax equity investment for its 330MW Boswell Springs wind project that is under construction in the US state of Wyoming. The financing was provided by JP Morgan and Capital One.
18-Oct	Opdenergy	Banco Bilbao Vizcaya Argentaria SA, Intesa Sanpaolo SpA, MUFG Bank Ltd & RBC Community Investments LLC	Financing	\$252 million	Solar	Spanish renewables developer Opdenergy Holding SA completed a project financing of \$252 million for 2 solar projects, namely- The 100MW DC Blake solar project and the 160MW DC Elizabeth in the US. The debt financing was provided by Banco Bilbao Vizcaya Argentaria SA, Intesa Sanpaolo SpA and MUFG Bank Ltd while RBC Community Investments LLC provided tax equity commitments. Both the solar parks will sell their output to 2 major North American utilities, with Blake having a 15-year PPA with AEP Energy Partners Inc. and Elizabeth a 20-year contract with Entergy Louisiana LLC.

Selected Recent Renewable Energy - FINANCING RELATED TRANSACTIONS

DATE	BORROWER	FINANCIER	TRANSACTION TYPE	AMOUNT	SECTOR	DESCRIPTION
17-Oct	Plus Power		Financing	\$1.8 billion	Energy Storage	BESS developer and operator Plus Power completed a \$1.8 billion financing for 5 projects including over \$400 million in tax equity and \$700 million for a single standalone project in Arizona and Texas, US. The financing comprised construction and term loans as well as tax equity financing for 5 projects with a combined capacity of 1.1GW. The name of the financier has not been disclosed in the transaction.
12-Oct	Naturgy	European Investment Bank(EIB)	Financing	\$743 million	Renewable Energy	Naturgy Energy Group SA received \$743 million in financing from the European Investment Bank to support the modernisation of its electricity distribution grids in Spain.
11-Oct	Schroders Greencoat LLP	UK Local Government Pension Schemes	Financing	\$406 million	Renewable Energy	Schroders Greencoat LLP secured \$406 million in financing from the UK local pension schemes with a mandate to make long-term investments in renewable energy infrastructure and energy transition assets in the UK.
4-Oct	Eranovum, Noy Fund and Nofar Energy Ltd		Financing	€132 million	Solar	Spanish solar developer Eranovum, along with its international partners Noy Fund and Nofar Energy Ltd, secured a financing of €132 million for its 238MW Sabinar solar project. The project comprises 2 phases - Sabinar I, with 155MW, which is already operational; and Sabinar II, with 83MW, which is currently under construction. The name of the investors were not disclosed.
1-Oct	Ashtrom Renewable Energy	BHI, a US unit of Bank Hapoalim Group, Bayerische Landesbank, ING Capital, Rabobank and Societe Generale	Financing	\$270 million	Solar	Ashtrom Renewable Energy secured a financing of \$270 million from BHI, a US unit of Bank Hapoalim Group, Bayerische Landesbank, ING Capital, Rabobank and Societe Generale for the 306MW/400MW DC Tierra Bonita solar project in Texas, US.

Selected Recent Renewable Energy - PROJECT RELATED DEVELOPMENT

DATE	COMPANY	LOCATION	CAPACITY	SECTOR	DESCRIPTION
31-Oct	Opdenergy	Chile	108MW	Solar	Spanish IPP Opdenergy signed a 12-year PPA to supply clean power from its 108MW Alcones solar PV plant in Chile. The name of the buyer remains undisclosed.
30-Oct	New Haven PV I	USA	100MW	Solar	New Haven PV I received planning consent from the Public Service Commission of West Virginia, US, to develop and construct a 100MW solar park. The project is estimated to require around \$97 million in investments.
30-Oct	Octopus Energy	Ireland & Portugal	250MW	Solar	Octopus Energy's renewable energy generation arm is to develop 100 solar projects totalling 250MW by investing in 2 clean energy developers in Ireland & Portugal. The investments were made by ORI SCsp, managed by Octopus Energy Generation.
24-Oct	Iberdrola	Germany	170MW-200MW	Onshore Wind	Iberdrola won 3 onshore wind energy sites in a tender by Forst Baden-Württemberg with a combined capacity between 170MW-200MW in Germany.
24-Oct	TotalEnergies	USA	380MWp & 225MWh	Solar & Energy Storage	TotalEnergies has started the commercial operations of its 38MWp Myrtle Solar co-located with a 225MWh battery storage facility in Texas, US. 70% of Myrtle's capacity will supply clean power to the Company's industrial plants in the U.S. Gulf Coast region. The remaining 30% will supply green electricity to Kilroy Realty, a publicly traded real estate company, under a 15-year CPPA.
19-Oct	Clearway Energy Group	USA	762MW	Solar & Energy Storage	Clearway Energy Group started commercial operations of Daggett solar-plus-storage facility in California. The facility comprises a 482MW solar capacity and a 280MW battery storage plant.
18-Oct	EDF Renewables and ESB	UK	200MW	Onshore Wind	EDF Renewables UK entered into a partnership with Irish company ESB to form a JV to progress the 200MW Stornoway wind farm on the Western Isles in Scotland, UK.
17-Oct	Harmony Energy Income Trust	UK	149MW	Energy Storage	Harmony Energy started the commissioning of 2 BESS projects with a combined capacity of 149MW in the UK. The projects are the 99MW Bumpers site in Buckinghamshire and 50MW Little Raith facility in Fife, Scotland.
17-Oct	Harmony Energy Income Trust	UK	149MW	Energy Storage	UK-based battery storage investor Harmony Energy brought online 2 BESS facilities with a combined capacity of 149MW in the UK. The 2 facilities are the 99MW Bumpers project in Surrey, England and the 50MW Little Raith project in Fife, Scotland. The pair became operational in early October.

Selected Recent Renewable Energy - PROJECT RELATED DEVELOPMENT

DATE	COMPANY	LOCATION	CAPACITY	SECTOR	DESCRIPTION
16-Oct	Savion LLC	USA	110MW	Energy Storage	Savion LLC received planning consent from the Public Service Commission to develop a 110MW BESS project in the US. The project will be developed by Holtsville Energy Storage LLC, a subsidiary of Savion LLC. Holtsville Energy intends to bring the project online by 2025.
16-Oct	EDP Renovaveis SA	USA	162MW	Solar	EDP Renovaveis SA, the majority-owned renewable energy arm of Portuguese utility, EDP has signed a 15-year PPA with an unnamed off-taker to supply 162MW of clean electricity from a 180MW solar park in Texas, US. The project is expected to enter into operation in 2025.
12-Oct	Tokyu Land and Renewable Japan		1GW	Renewable Energy	Japanese real estate developer and investor Tokyu Land partnered with clean energy developer Renewable Japan to jointly develop and install 1 GW of renewable power plants across southern Europe, mainly in Spain and Italy. The partners will initially develop the projects through Renewable Japan's Spanish subsidiary RJ Development SL, as well as local companies.
10-Oct	Leeward Renewable Energy	USA	196MW	Solar	Solar developer Leeward Renewable Energy started the commercial operations of its 196MW Big Plain solar PV plant in Ohio, US.
10-Oct	KGAL	Italy	150MW	Solar	German investment firm KGAL signed a 10-year PPA with Italian utility and EDF's subsidiary Edison to supply clean power of 150MW to the latter from its Tuscania solar project in Italy. KGAL expects to commission the project, which is currently under construction in central Italy, in the second half of 2024.
09-Oct	Iberdrola SA	Spain	200MW	Solar	Spanish utility group Iberdrola SA commenced the commissioning of its 200MW solar complex, known as Tagus I-IV, in the region of Extremadura, Spain.
09-Oct	Innova	UK	400MW	Energy Storage	UK renewable energy developer Innova secured planning consent for its 400MW Blackdyke BESS project in England, UK.
05-Oct	Lightsource bp	Spain	149MW	Solar	Chemical manufacturer LyondellBasell signed a 10-year PPA with UK-based solar energy developer-operator Lightsource bp to procure clean power from the latter from a 149 MW solar project in Spain. The project will be operational from 2026.

Selected Recent Renewable Energy - PROJECT RELATED DEVELOPMENT

DATE	COMPANY	LOCATION	CAPACITY	SECTOR	DESCRIPTION
05-Oct	Redelfi SpA and WRM Group	Italy	2.8GW	Energy Storage	Italian ESG management company Redelfi SpA partnered with a unit of British investor WRM Group, Flash S.r.l, to form a JV company to develop a 2.8GW portfolio of BESS projects over a 3-year period in Italy. The JV company will be owned 51% by Redelfi and 49% by Flash S.r.l.
04-Oct	Votalia SA	Brazil	260MW	Solar	French renewables company Votalia SA started the commercial operations of its 260MW SSM3-6 solar farm in Rio Grande do Norte, Brazil.
04-Oct	National Grid Renewables	USA	274MW	Solar	National Grid Renewables started the commissioning of the 274MW Amazon Solar Farm Ohio - Yellowbud, IN Texas, US.
03-Oct	MaxSolar GmbH	Germany	125MWp	Solar	German developer MaxSolar GmbH brought online a 125-MWp solar farm in the municipality of Bundorf in Bavaria.
02-Oct	Statkraft AS	UK	126MW	Onshore Wind	Norwegian state-owned utility Statkraft AS secured planning approval to develop a 126MW Energy Isles wind farm in Shetland, UK. Construction works of the farm are expected to begin in 2025.

Selected Recent Renewable Energy - FUND RELATED TRANSACTIONS

DATE	FUND NAME	GP	INVESTMENT	SECTOR	DESCRIPTION
16-Oct	CI Advanced Bioenergy Fund I (CI ABF I) and CI Green Credit Fund I (CI GCF I)	Copenhagen Infrastructure Partners		Renewable Energy	Danish firm Copenhagen Infrastructure Partners has reached the final close for two of its funds, CI Advanced Bioenergy Fund I (CI ABF I) and CI Green Credit Fund I (CI GCF I), with a total of c.€2 billion of investor commitments. Institutional investors, pension funds, life insurance companies, sovereign wealth funds, family offices, asset managers, and corporate investors from across the world came together to invest in CIP's 2 new funds. CI ABF I has a remit to invest in projects that produce clean fuels such as renewable natural gas from food waste, agricultural residues and other organic waste streams. CI GCF I focuses on providing private project finance debt to renewable energy projects in Europe, North America, and selected Asia Pacific regions, including greenfield and brownfield projects.
12-Oct	NextPower UK ESG	NextEnergy Capital		Solar	NextPower UK ESG (NPUK ESG), the UK solar arm of NextEnergy Capital, has secured £600 million in commitments from investors, exceeding its £500million target. NPUK ESG achieved its first close in August 2022 and had further financial closes in the following months. The fund has already allocated circa 60% of its £595m committed capital, acquired 416MW across nine UK solar assets, and made its first distribution of circa 10% to investors.
09-Oct	Fund III	Appian Capital Advisory LLP		Renewable Energy	Appian Capital Advisory LLP reached the final close of its third fund, Fund III, raising its hard cap to US\$2 billion following strong support from both large, new investors and existing top-tier investors globally. Fund III is targeting mid-tier opportunities, prioritizing profitability over scale to generate maximum returns. Investment in energy transition commodities will be balanced by investments in precious metals.
05-Oct	Mirova Energy Transition 6 (MET6)	Mirova		Renewable Energy	French sustainable investment manager Mirova, an affiliate of Natixis Investment Managers, is to launch a new fund, Mirova Energy Transition 6 (MET6), seeking to raise up to \$2 billion to invest in decarbonisation infrastructure mainly in Europe. The fund, aimed at institutional investors, will focus on proven technologies, such as onshore and offshore wind power, photovoltaics, hydropower, storage and energy efficiency. It will also continue to support the development of low-carbon electric mobility and hydrogen.

Selected Recent Renewable Energy - FUND RELATED TRANSACTIONS

DATE	FUND NAME	GP	INVESTMENT	SECTOR	DESCRIPTION
03-Oct	Quinbrook Renewables Impact Fund	Quinbrook Infrastructure Partners		Renewable Energy	Energy infrastructure investment manager Quinbrook Infrastructure Partners reached the final close of its UK-focused fund, Quinbrook Renewables Impact Fund (QRIF), anchored by the UK's largest solar and battery storage project, Cleve Hill in Kent, which comprises 373MW of solar and 150MW of battery storage. Quinbrook's 3rd managed fund seeks to capitalize on the opportunities emerging from the UK government's aim to create a fully decarbonised power system by 2035. The fund's portfolio includes various long-term inflation-linked contracts with counterparties like National Grid and the UK government, spanning the Pathfinder programme, the Contract for Difference regime and the Capacity Market. It also includes inflation-linked power purchase agreements with UK companies.

Comparable Companies Trading Analysis (as of November 29, 2023)

Utilities and IPPs Large Cap (in \$ Millions)											
Company Name	HQ	Stock Price	% of 52-Wk. High	Normalized EBITDA			Enterprise Value	Market Cap	Normalized EV/EBITDA		
				TTM EBITDA	1YR EBITDA Growth (CY)	TTM EBITDA Margin			TTM	2023CY (E)	2024CY (E)
NextEra Energy	United States	58.36	65.9%	11,826.00	6.3%	43.2%	200,554	119,327	17.0x	15.9x	15.0x
Iberdrola	Spain	12.12	90.7%	14,937.21	7.1%	26.3%	134,379	76,137	9.0x	8.5x	8.0x
Enel	Italy	6.54	92.0%	22,677.95	6.6%	21.2%	151,168	71,592	6.5x	6.4x	6.4x
Duke Energy	United States	90.71	85.2%	16,420.00	4.1%	56.2%	154,131	70,235	9.3x	11.6x	11.1x
E.ON	Germany	11.91	88.1%	10,390.41	-59.7%	9.4%	69,575	34,225	6.7x	7.3x	7.6x
Verbund	Austria	89.60	97.3%	5,096.72	73.4%	38.2%	32,796	32,267	6.4x	6.9x	7.3x
RWE	Germany	38.35	80.7%	9,681.93	-60.4%	28.2%	61,729	32,189	6.9x	7.6x	9.5x
Marubeni	Japan	15.34	81.1%	5,336.43	36.4%	10.1%	35,932	25,823	6.7x	N/A	N/A
SSE	United Kingdom	20.67	85.9%	4,142.71	N/A	29.0%	35,808	25,127	8.6x	8.7x	8.1x
EnBW Energie Baden-Württemberg	Germany	87.67	85.0%	5,566.84	30.2%	10.2%	35,664	23,408	5.4x	N/A	N/A
EDP Energias de Portugal	Portugal	4.47	78.0%	5,015.67	20.2%	27.6%	47,480	19,916	9.7x	8.7x	8.4x
Ørsted	Denmark	42.02	41.0%	3,737.96	54.8%	27.7%	25,266	18,773	6.8x	8.1x	6.5x
EDP Renováveis	Spain	17.14	71.9%	1,629.12	17.9%	65.6%	27,262	18,035	16.7x	12.7x	11.0x
Fortum	Finland	13.00	74.9%	2,804.07	-76.8%	31.7%	14,086	12,579	5.6x	6.5x	7.9x
AES	United States	17.22	57.6%	561.00	166.4%	4.4%	41,324	11,498	73.7x	11.5x	10.2x
Mean			78.4%	7,988.27		28.6%	71,144	39,409	13.0x	9.3x	9.0x
Median			81.1%	5,336.43		27.7%	41,324	25,823	6.9x	8.5x	8.1x

Utilities and IPPs Mid/Small Cap (in \$ Millions)											
Company Name	HQ	Stock Price	% of 52-Wk. High	Normalized EBITDA			Enterprise Value	Market Cap	Normalized EV/EBITDA		
				TTM EBITDA	1YR EBITDA Growth (CY)	TTM EBITDA Margin			TTM	2023CY (E)	2024CY (E)
Acciona	Spain	140.11	67.3%	2,183.76	28.7%	16.0%	17,181	7,605	7.9x	8.3x	7.5x
Brookfield Renewable Partners	Canada	24.70	75.9%	2,113.00	21.2%	43.0%	54,790	7,177	25.9x	25.0x	22.6x
Neoen	France	26.56	67.1%	513.97	48.2%	88.3%	7,210	4,463	14.0x	14.2x	12.1x
ERG	Italy	24.58	74.6%	546.30	28.9%	73.9%	5,745	4,248	11.0x	10.2x	8.6x
Solaria Energia	Spain	15.41	70.2%	175.70	58.1%	107.8%	3,241	2,262	18.4x	14.9x	11.9x
NextEra Energy Partners	United States	23.37	28.7%	1,017.00	21.9%	79.2%	19,173	2,147	18.9x	10.0x	9.5x
Enlight Renewable Energy	Israel	15.08	64.8%	122.45	N/A	73.7%	4,302	2,012	N/A	N/A	N/A
Terna Energy	Greece	15.65	67.1%	117.32	-25.8%	39.0%	2,833	1,884	25.5x	14.4x	10.7x
Innogy Renewable Energy	Canada	7.01	52.6%	459.57	88.6%	66.7%	6,004	1,410	12.8x	11.3x	10.6x
Canadian Solar	Canada	20.91	46.2%	N/A	33.4%	N/A	5,078	1,337	6.8x	7.1x	5.7x
Voltaia	France	9.71	49.0%	N/A	N/A	N/A	1,276	1,276	N/A	5.3x	4.3x
Scatec	Norway	5.55	60.1%	195.60	-28.9%	62.5%	3,141	1,043	16.1x	10.4x	8.8x
Grenergy Renovables	Spain	26.07	68.9%	54.14	17.6%	43.1%	1,541	950	31.1x	11.8x	11.9x
Opdenergy	Spain	6.19	96.3%	120.11	4661.5%	72.2%	1,704	933	14.2x	21.5x	9.9x
Nofar Energy	Israel	22.14	72.5%	55.87	1099.6%	65.4%	1,424	794	25.5x	N/A	N/A
Econergy Renewable Energy	Israel	2.68	52.6%	3.92	N/A	43.8%	297	151	75.8x	N/A	N/A
Azure Power	India	1.25	21.3%	N/A	N/A	N/A	92	92	N/A	0.4x	0.4x
Mean			59.5%	281.83		68.0%	4,204	1,667	22.5x	11.0x	8.7x
Median			64.8%	149.08		69.5%	3,141	1,337	17.3x	10.8x	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 November 29, 2023)

Energy Storage (in \$ Millions)											
Company Name	HQ	Stock Price	% of 52-Wk. High	Normalized EBITDA			Enterprise Value	Market Cap	Normalized EV/EBITDA		
				TTM EBITDA	1YR EBITDA Growth (CY)	TTM EBITDA Margin			TTM	2023CY (E)	2024CY (E)
EnerSys	United States	88.30	77.9%	118.54	2.6%	3.2%	4,226	3,570	35.65x	11.46x	8.23x
Fluence(Energy Storage)	United States	25.09	80.1%	(118.78)	N/A	-6.0%	2,318	2,410	N/A	N/A	20.90x
Stem	United States	2.79	20.5%	(33.59)	N/A	-7.5%	815	405	N/A	N/A	85.59x
Microvast	United States	1.17	40.2%	(73.73)	N/A	-27.6%	392	324	N/A	N/A	10.97x
Eos Energy Enterprises	United States	1.11	19.6%	(123.18)	N/A	-990.6%	315	161	N/A	N/A	N/A
Invinity Energy Systems	United Kingdom	0.48	61.0%	(20.47)	N/A	-564.2%	70	75	N/A	N/A	N/A
RedFlow	Australia	0.12	51.2%	N/A	N/A	N/A	24	28	N/A	N/A	N/A
Mean			50.1%	(41.87)		-265.5%	1,166	996	35.7x	11.5x	31.4x
Median			51.2%	(53.66)		-17.6%	392	324	35.7x	11.5x	15.9x

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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