

Alternative Energy Market Update – Q1'24

February 2024

Disclosure

This presentation is for informational purposes only and does not constitute an offer, invitation, solicitation, or recommendation to buy, sell, subscribe for, or issue any securities and shall not form the basis of any contract. This presentation is for discussion purposes only and is incomplete without reference to, and should be viewed solely in conjunction with, the oral briefing provided by GreenFront Energy Partners LLC.

Neither this presentation nor any of its contents may be used for any other purpose without the prior written consent of GreenFront Energy Partners LLC.

The information in this presentation is based upon GreenFront Energy Partners LLC estimates and reflects prevailing conditions and our views as of this date, all of which are accordingly subject to change. In preparing this presentation, we have relied upon and assumed, without independent verification, the accuracy and completeness of information available from public sources. GreenFront Energy Partners LLC does not render legal or tax advice, and the information contained in this communication should not be regarded as such.

Certain Principals of GreenFront Energy Partners LLC are registered representatives of [Frontier Solutions, LLC](#) Member [FINRA](#) | [SIPC](#).

Securities and Investment Banking Services are offered through [Frontier Solutions, LLC](#).

Alternative Energy | Recent Developments & Trends

Fundraising	<p>Recent activity highlighted by several large fundraises</p> <ul style="list-style-type: none">▪ Brookfield (\$10bn; Feb '24), Generate (\$1.5bn; Jan '24), and Sandbrook Capital (\$2.1bn; Dec '23)▪ While recent activity suggests a healthy start to 2024, it has notably been concentrated at the top of the market with smaller funds still struggling to hit fundraising goals
Capital Deployment	<p>Growth continued in energy transition investment in 2023 and marked a real shift towards decarbonization beyond just the power sector</p> <ul style="list-style-type: none">▪ Energy transition investment totaled ~\$1.8 trillion globally in 2023, representing a 17% YoY increase¹▪ For the first time, investment in electrified transport exceeded renewable energy at \$634bn vs. \$623bn, respectively¹. Meanwhile, major EV manufacturers have signaled lower growth in 2024 as Ford, GM, and VW downsize and/or delay expansion plans based on weaker-than-expected consumer demand
Supply Chain	<p>The U.S. progresses with onshoring manufacturing, while transmission uncertainty and labor shortages persist</p> <ul style="list-style-type: none">▪ Major panel manufacturers plan to bring new U.S. factories online in 2024, including First Solar, South Korea-based energy company Q Cells, India-based panel maker Waaree Energies, and Enel's N. American subsidiary▪ Craft labor shortages continue to bottleneck project development & construction. This headwind is partially offset by module and battery materials prices declining significantly from pandemic supply shock levels▪ Updates to the FERC's transmission framework are expected to come in 2024 and provide clarity on the long-term build out of the country's transmission networks
Policy	<p>Highly anticipated guidance on IRA provisions proved underwhelming for certain sectors</p> <ul style="list-style-type: none">▪ RNG: Treasury guidance excluded certain upgrading equipment from the definition of qualified biogas property under its recent proposed regulations, potentially reducing ITC value for RNG projects▪ H₂: Treasury guidance imposed relatively stringent criteria governing 45V PTC eligibility. Green Hydrogen developers are mobilizing during the current comment period to influence ultimate policy

Source(s): ¹Bloomberg New Energy Finance

Alternative Energy | Public Market Overview

Ticker	Price 2/13/2024	Market Cap (\$mm)	Enterprise Value (\$mm)	YTD Total Returns (%)	Valuation			Credit		
					2024E EV / EBITDA (x)	2025E EV / EBITDA (x)	Debt / Total Cap (%)	2024 Net Debt / EBITDA (x)	S&P Credit Rating	
Alternative Energy										
Array Technologies	ARRY	\$14.41	\$2,179	\$3,069	(14.2%)	8.9x	7.3x	54.1%	1.6x	B+
Brookfield Renewable Corporation	BEPC	25.07	9,259	36,046	(10.9%)	13.8x	13.0x	48.4%	5.9x	BBB+
First Solar	FSLR	152.34	16,277	14,997	(11.6%)	7.6x	4.9x	7.9%	NA	NA
Hannon Armstrong	HASI	23.55	4,537	8,092	(14.6%)	28.6x	23.0x	63.6%	12.4x	BB+
Ormat Technologies	ORA	64.33	3,883	5,961	(15.1%)	11.2x	10.0x	45.5%	3.6x	NA
Sunnova Energy International	NOVA	10.70	1,310	8,679	(29.8%)	23.7x	16.6x	76.6%	18.4x	NA
SunPower Corporation	SPWR	3.70	648	909	(23.5%)	29.9x	9.3x	46.2%	8.6x	NA
Sunrun	RUN	15.23	3,318	14,715	(22.4%)	NA	NA	60.1%	450.2x	NA
Cleantech										
Bloom Energy Corporation	BE	\$11.25	\$2,521	\$3,427	(24.0%)	18.0x	10.7x	74.1%	4.7x	NA
Enphase Energy	ENPH	123.56	16,774	16,397	(6.5%)	30.0x	18.1x	57.3%	NA	NA
FuelCell Energy	FCEL	1.35	608	461	(15.9%)	NA	NA	14.5%	2.8x	NA
Plug Power	PLUG	4.17	2,525	2,930	(7.3%)	NA	84.6x	21.7%	NA	NA
SolarEdge Technologies	SEDG	76.55	4,349	4,054	(18.2%)	50.5x	8.5x	22.8%	NA	NA
Tesla	TSLA	184.02	586,065	567,519	(25.9%)	32.5x	24.4x	13.1%	NA	BBB
Solar / Wind IPP										
Clearway Energy	CWEN.A	\$21.34	\$2,497	\$12,159	(16.6%)	10.4x	10.0x	64.9%	6.4x	BB
EDP Renováveis	EDPR	14.91	15,263	24,530	(24.9%)	10.1x	9.1x	39.6%	3.1x	BBB
NextEra Energy Partners	NEP	27.97	2,613	19,116	(5.1%)	9.4x	9.3x	30.9%	3.0x	BB
Ørsted	ORSTED	57.69	24,242	31,701	7.2%	8.2x	6.9x	53.1%	1.8x	BBB
Alternative Fuels / RNG										
Ameresco	AMRC	\$21.92	\$1,145	\$3,091	(30.8%)	12.9x	10.1x	67.6%	7.8x	NA
Clean Energy Fuels Corp.	CLNE	2.89	645	702	(24.5%)	8.3x	4.2x	24.5%	0.6x	NA
Darling Ingredients	DAR	40.86	6,518	11,105	(18.0%)	6.9x	6.1x	50.8%	2.8x	BB+
Montauk Renewables	MNTK	6.10	866	862	(31.5%)	10.3x	8.1x	22.4%	NA	NA
Neste	NESTE	29.55	22,703	25,453	(14.4%)	7.9x	6.8x	32.5%	0.8x	NA
OPAL Fuels	OPAL	4.74	846	2,292	(14.1%)	16.8x	10.7x	30.3%	1.2x	NA
Electric Vehicle Infrastructure										
ChargePoint Holdings	CHPT	\$2.06	\$861	\$800	(12.0%)	NA	NA	43.8%	0.2x	NA
Evgo, Inc	EVGO	2.28	236	725	(36.5%)	NA	20.5x	9.0%	4.1x	NA
Blink Charging Co.	BLNK	2.68	181	130	(20.9%)	NA	15.7x	6.8%	1.4x	NA
Battery Storage										
Enovix Corporation	ENVX	\$11.15	\$1,871	\$1,675	(10.9%)	NA	NA	41.0%	1.7x	NA
Eos Energy Enterprises	EOSE	0.99	197	351	(9.3%)	NA	2.4x	253.1%	NA	NA
Fluence	FLNC	20.67	2,628	2,502	(13.3%)	34.0x	10.4x	11.2%	NA	NA
Li-Cycle	LICY	0.41	73	286	(29.9%)	NA	NA	53.6%	NA	NA
QuantumScape Corporation	QS	7.48	3,662	2,639	7.6%	NA	NA	6.8%	4.0x	NA
Stem Inc.	STEM	3.05	475	957	(21.4%)	70.4x	12.1x	57.2%	35.4x	NA

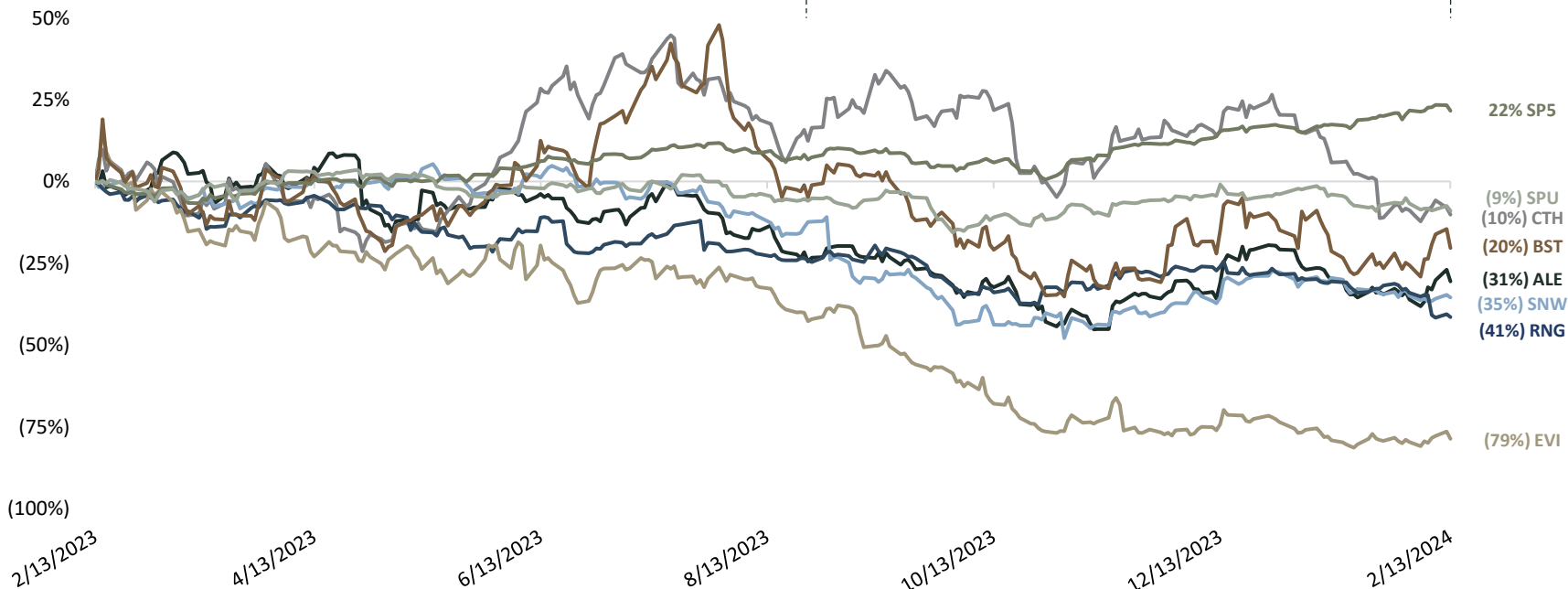
Source(s): S&P CapIQ Pro. Note: Prices as of 2/13/2024

Alternative Energy | Stock Market Performance

Alternative Energy (ALE)		Cleantech (CTH)		Solar/Wind (SNW)		Renewable Fuels/RNG (RNG)		EV Infrastructure (EVI)		Battery Storage (BST)		S&P Utilities Index (SPU)	S&P 500 (SP5)
ARRY	ORA	BE	PLUG	CWEN.A	NEP	AMRC	MNTK	CHPT	BLNK	ENVX	LICY		
BEPC	NOVA	ENPH	SEDG	EDPR	ORSTED	CLNE	NESTE	EVGO		EOSE	QS		
FSLR	SPWR	FCEL	TSLA			DAR	OPAL			FLNC	STEM		
HASI	RUN												

Indices Total Return (LTM)

Lack of regulatory clarity, interest rate uncertainty, and disappointing business performance have caused investors to take a wait-and-see approach



Source(s): S&P CapIQ Pro. Note: Prices as of 2/13/2024

Solar, Wind, & Battery Storage | Market Dynamics

Market participants are cautiously optimistic that markets conditions will improve in 2024

Platform Financing

- A tremendous amount of capital was raised and committed to solar & storage platforms from 2020 to 2022
 - Much of this came at very high valuations underpinned by aggressive expectations for project delivery
 - Higher interest rates brought asset values back down to earth, while broader development challenges delay timelines
- These dynamics are negatively impacting investor returns and sentiment, reflected in 2023 fundraising activity
 - Investors have become more skeptical and diligence efforts have ramped up considerably
 - Fewer funding options for early- and mid-stage development capital. Valuations ~50% of what they were at the peak
- Developers and asset owners are focused on recycling capital and high grading portfolios – 2024 should be a year of consolidation
- “Buyer’s market” for well-capitalized developers and liquid funds

Complex, Hybrid Financing

- New and existing financing structures are coming together to maximize return on equity
- Arevon recently announced the financial close of its 200MW CA battery storage project, which included a combination of preferred equity, tax credit transfers, and debt
 - Preferred equity from Blackstone to simplify monetization of tax credits and eliminate the need for traditional tax equity financing, plus
 - Commitment from Stifel to buy investment tax credits, plus
 - Syndicated debt facility, plus
 - Real estate financing from HASI related to underlying land position

Project Financing

- Broad consensus that cost of capital peaked in 2023, although some indicators suggest 2024 will be more of the same
 - Debt: 2023 volumes roughly even with 2022, another record year. Private capital stepped in to fill the void left by regional banks
 - Banks and private markets getting more active in the pre-NTP debt markets – heavily skewed toward large, repeat borrowers
 - Tax Equity: tax credit transfer market appears to be incremental to traditional tax equity partnership capacity, expanding overall supply in a historically constrained market
 - ~\$4 billion tax credit transfer sales closed in H2’23. More anticipated for 2024
 - Sponsor Equity: investors are more selective in this oversupplied market
 - High single digit, low double digit, unlevered after-tax return hurdles for high quality contracted opportunities, can be higher for smaller deals








Solar, Wind, & Battery Storage | Utility-Scale Solar Transactions

Date	Investor(s)	Target	Commentary
Jan'24			Qualitas Energy, an Energy Transition focused investment manager, announced the acquisition of North Carolina-based Heelstone Renewable Energy, a utility-scale solar developer previously owned by Ares. Heelstone has a 20 GW portfolio of solar and storage assets, including 179 MW operational, 175 MW under construction, and the remainder as ready-to-build, and in-development projects. The deal value is rumored to be ~\$850mm (unconfirmed)
Jan'24		 A subsidiary of Canadian Solar	Recurrent Energy announced a \$500mm preferred equity investment commitment, convertible into common equity, from BlackRock. The investment will represent 20% of the outstanding fully diluted shares of Recurrent on an as-converted basis. As of 9/30/23, Recurrent had a global pipeline of 26 GW in solar and 55 GWh in storage, of which 13 GW and 12 GWh respectively are projects with interconnections
Jan'24			Sterling Power Opportunities, a subsidiary of Galway Sustainable Capital, acquired a majority interest in Forsite Renewables, a Charlotte-based developer of solar and battery storage projects. Forsite has projects located across the US, including Texas, Oklahoma, Louisiana, Arkansas, Illinois, Indiana, North Dakota and Maryland, mostly deploying a generator replacement model
Jan'24			Energy Capital Partners announced its acquisition of Triple Oak Power from EnCap, Yorktown, and Mercuria. Triple Oak's pipeline consists of more than 8GW of renewable development projects, comprised of predominantly utility-scale wind located in the central and western U.S.
Dec'23			Apex Clean Energy announced an agreement with ERG for the partial sale of a portfolio of operating solar and wind assets. Apex will continue to own a 25% stake and manage the operations of the facilities, with ERG acquiring a 75% stake. The portfolio includes 224 MW Great Pathfinder Wind in Iowa and 92 MW Mulligan Solar in Illinois
Dec'23			Shell sold partial stakes in two US-based renewable energy projects to InfraRed Capital Partners. Shell sold a 60% stake in Brazos Wind Holdings, a 182 MW onshore wind farm in Texas, and 50% of Madison Fields Class B Member, a 180 MW solar development in Ohio. Shell will retain 100% of power offtake from the Brazos project, while the Madison Fields project will retain an existing corporate PPA with a third party
Dec'23			Adapture Renewables acquired three planned solar projects with a total capacity of 450 MW _{dc} from Tyr Energy Development Renewables for an undisclosed amount. The MISO projects, located in Illinois and Arkansas, are expected to double Adapture's operating portfolio to ~800 MW _{dc} . The facilities are in the pre-notice to proceed stage and are expected to come online in 2025 and 2026, and are contracted under long-term PPAs with Meta





Source(s): Company Press Releases

Solar, Wind, & Battery Storage | Distributed Generation Solar Transactions

Date	Investor(s)	Target	Commentary
Feb'24			Standard Solar acquired an 84 MW community solar portfolio in Illinois, which contains a total of 14 projects. Of those fourteen assets, six collectively have a capacity of 47 MW, while four sites total 12 MW. Meanwhile, another four sites collectively represent 25 MW. Standard Solar acquired the projects from developer New Leaf Energy
Jan'24			Altus Power acquired 84 MW of commercial-scale solar arrays from Vitol for \$118mm; an acquisition multiple of ~\$1.40/W. For Altus, the acquisition adds thousands of new customers across the Northeast, notably NY, NJ, and ME. Altus funded the transaction using cash on-hand and expects to expand its funding facility with Blackstone in the near-term
Jan'24		 38 DEGREES NORTH	38 Degrees North, a community solar and distributed renewables platform, closed a growth equity investment from S2G Ventures. With the investment from S2G, 38 Degrees announced the acquisition of a 10-project community solar portfolio totaling 62 MW in New York State from Community Power Group
Jan'24			Scale Microgrids announced a definitive agreement with Gutami to acquire 500 MW of DG solar and storage projects across multiple states including CA and NY. Established in 2006, Gutami has a global footprint and invests, finances, and acquires solar, energy storage, and hydrogen assets
Jan'24		 INFRASTRUCTURE PARTNER RENEWABLE ENERGY PROVIDER	Altus Power announced the close of its acquisition of Project Hyperion, comprising 121 MW of solar assets. Hyperion was acquired from funds advised by Basalt and Soltage. Collectively, the portfolio is comprised of 35 sites across 6 states, but is primarily concentrated in NC and SC
Jan'24			HASI announced an investment in a portfolio of assets developed, owned, and operated by AES. Per the agreement, HASI will make a structured equity investment in a 605 MW portfolio of solar and solar-plus-storage assets spanning seven power markets and 11 states. The portfolio consists of more than 200 individually operating projects, mostly community and C&I solar, with more than a third of the total capacity paired with battery storage
Nov'23			Apex Clean Energy announced the sale of four solar projects to Summit Ridge. The projects have secured capacity in Virginia's Shared Solar Program, which allow Dominion Energy customers to subscribe to an offsite solar facility. The portfolio - comprising Martin Trail, Dogwood Lane, Route 360, and Powell Creek - totals 19 MW _{ac}
Nov'23	Pending		American Electric Power announced their intent to sell their Retail and Distributed Resources businesses. As of 9/30/2023, AEP's book value of the businesses were \$244mm for Retail and \$353mm for Distributed Resources. Management expects a sale agreement to be announced in 1Q24 and transaction close in 1H24

Source(s): Company Press Releases

Solar, Wind, & Battery Storage | Battery Storage Transactions

Date	Category	Involved Parties	Commentary
Feb'24	Joint Venture	 	CleanCapital and Available Power, a pure-play BESS developer, entered a JV to build a pipeline of distributed energy storage projects across the U.S. CleanCapital will provide project financing, development, and construction expertise; Available Power will provide market insights, technology, and engineering expertise
Feb'24	Acquisition	 	SMT Energy, a developer, owner, and operator of BESS assets, announced a sale totaling 400 MW to UBS Asset Management. The projects are located in Texas and are expected to be operational in 2024 and 2025
Feb'24	Financing	 	SpearMint Energy closed a \$48mm project finance term loan from Manulife. The term loan will support the commercial operation of Revolution, SpearMint's 150 MW / 300 MWh BESS project located in West Texas' ERCOT power market
Jan'24	Joint Venture	 	Apex announced a JV with SK Gas and SK D&D to own energy storage facilities in the United States. The JV will be funded 60% by SK and 40% by Apex, which will manage construction and operations. The JV, SA Grid Solutions, owns Great Kiskadee, a utility-scale battery project under construction in Texas, and anticipates purchasing and advancing additional Apex storage projects in the future
Jan'24	ITC Transfer	 	Key Capture (KCE) and Enhanced Capital announced an ITC transfer to a third party with immediate monetization for three of KCE's operating standalone battery energy storage projects with a total nameplate capacity of 120 MW. The transaction includes the transfer of ITCs from two operating projects in Texas, KCE TX 19 and KCE TX 21 in Williamson County, totaling 100 MW and one project in New York, KCE NY 6 in Erie County, a 20 MW project
Jan'24	Equity Commitment	  	NineDot Energy, a developer of community-scale BESS in the NYC-metro area, announced it secured a \$225mm equity capital commitment headlined by Manulife and followed by Carlyle, NineDot's existing institutional investor. Manulife led the round with a \$135mm commitment and concurrently acquired an equity interest
Dec'23	Acquisition	 	BW Solar announced the sale of two BESS projects with a combined capacity of 525 MW _{ac} to SpearMint Energy. The projects sold included a 125 MW project and a 400 MW project, located in Indiana and part of MISO. Both projects are anticipated to reach commercial operation in 2027
Nov'23	Financing	 	Middle River Power secured \$250mm in financing for a portfolio of 327 MW, 1hr duration battery storage projects being developed in California. The portfolio of three battery storage projects will be paired with existing gas-fired peaking generation. First Citizens served as lead arranger

Source(s): Company Press Releases

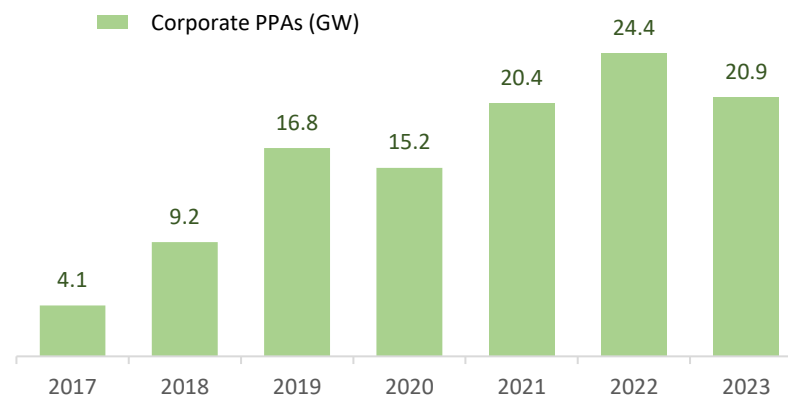
Corporate Sustainability | Corporate PPA Market Overview

Prices stabilize on supply chain relief; mega-buyers slow procurement as broader corporates become more active

PPA Market Dynamics

- Total Americas PPA volume was down by about 15% from 2022, largely due to retrenchments from big tech players like Amazon and a pivot to favorable relative pricing trends in Europe by some corporates
- ERCOT, the most active single market in the U.S., saw PPA signings constrained for much of the year on fears that its legislature would overhaul regulatory requirements on intermittent resources. While some reforms passed, the more draconian outcomes were avoided
- After rapid PPA price inflation in 2021 and 2022, prices for both wind and solar largely stabilized, or were even slightly down, in 2023. The market appears to have found an equilibrium as the dual supply side pressures of interest rates and supply chain begin to (slowly) subside
 - PJM is a notable exception to this new price stability, with its PPA prices continuing to climb as a result of interconnection reform constraining the availability of contract-ready projects
 - Weakness in the forward natural gas market and the new (higher) stabilized PPA prices have partially eroded the economic case for PPA buyers, making it harder to structure acceptable contracts without accepting unreasonable amounts of risk
- Demand for PPAs has never been more broadly displayed as it was in 2023, with several first-time buyers participating, including WestRock, Universal Corp, Rivian, and Steel Dynamics. Demand from the largest data center buyers has decelerated a bit, with global PPA volume from Amazon, Google, and Microsoft down 38%, 20%, and 50% YOY, respectively
- A few transactions from 2023 may suggest that PPA activity outside of the major RTO/ISO markets is picking up, but the historical dominance of hub-settled contracts in liquid markets will continue for the foreseeable future

Americas Corporate PPA Volume (2017 – 2023)



Noteworthy Recent PPA Announcements

Corporate	Seller	Size (MW)	Resource	Location
AdventHealth	SCOUT CLEAN ENERGY	90	Wind	ERCOT
Microsoft	APEX CLEAN ENERGY	125	Solar	PJM
Bloomberg	Orsted	80	Solar	ERCOT
Universal	Clearway	30	Solar	ERCOT
Meta	ADAPTURE RENEWABLES	330	Solar	MISO
CVSHealth.	Constellation.	110 ¹	Solar	PJM CAISO

Source(s): American Clean Power, Infralogic, S&P Clean Energy Procurement, BNEF, ¹CVS Capacity estimated by GFEP based on annual MWh announcement

Renewable Fuels | Carbon Capture

CCS market momentum is accelerating



CF Industries Blue Point formally submitted a permit application to the New Orleans Engineer District, seeking approval for the establishment of a blue ammonia facility and associated marine terminal along the Mississippi River in Ascension Parish. The selected site is positioned on the right descending bank of the river at Mile 184, in close proximity to Modeste, Louisiana



1PointFive announced **Trafigura** has agreed to purchase carbon dioxide removal credits to be produced from 1PointFive's first industrial-scale DAC facility, STRATOS, which is currently under construction in Texas. STRATOS is designed to capture up to 500,000 metric tons of CO₂ annually when fully operational and is expected to be the largest facility of its kind in the world



8 Rivers announced the Cormorant Clean Energy Project, a low-carbon ammonia production facility in Port Arthur, Texas. The facility will produce an estimated 880,000 tonnes of ammonia and capture more than 1.4 million tonnes of CO₂ annually with a greater than 99% CO₂ capture rate



Canada Business Growth Fund announced a strategic investment in **Entropy**, a Calgary-based modular carbon capture and storage solutions provider. CBGF agreed to a \$200mm investment coupled with a fixed-price carbon credit purchase agreement of up to one million tonnes per year

Other Noteworthy Themes

1 IRS 45V guidance favors blue hydrogen (with CCUS)

- IRS 45V guidance for clean hydrogen production creates distinct obstacles for many green electrolytic hydrogen projects to advance
 - Additionality, regionality, and time-matching requirements are difficult to achieve in many instances
- A follow-on effect is that blue hydrogen projects are left in an advantaged position as the preferred approach for clean hydrogen
- Many of these projects are more likely to monetize 45Q credits instead of 45V

2 Gulf Coast (LA/TX) continues to lead the way

- Exxon developing first-mover advantage in the Gulf Coast
 - Denbury acquisition included the CO₂ green line & injection zones, which offers significant logistical optionality
 - CO₂ Capture & Storage Agreements in place with major emitters: Linde, CF Industries, Nucor
 - Baytown blue hydrogen plant moving forward
- Significant activity from other players; GreenFront aware of numerous strategic Gulf Coast opportunities in marketing phases

Source(s): Company Press Releases, Public Filings.

Renewable Fuels | Renewable Natural Gas

The build-out and importance of RNG has continued into 2024



Jan. 31, 2024 – Hearing on Reducing Methane Emissions from Landfills, Chairman Cooper:

1. “While composting and waste diversion are important tools to reduce methane emissions from landfills, it’s also important that our landfills are equipped with technology that’s necessary to mitigate emissions for years to come.”
2. “Deploying innovative methods and technologies to limit methane leakage will go a long way toward reducing landfill emissions across the United States.”

Jan. 30, 2024 – WM signed an agreement with **NW Natural** to construct a RNG project in Washington state. Under the agreement, NW Natural will construct a RNG facility at WM’s Greater Wenatchee Regional Landfill. The facility is expected to convert landfill gas into roughly 300,000 MMBtu, per year, and will begin generating RNG in 2025. The gas produced will be enough to heat roughly 10,000 homes.

Jan. 24, 2024 – Kinder Morgan announced they anticipate an annual production capacity of 6.4 billion cubic feet of RNG by the end of 2024. The energy infrastructure company brought three RNG facilities online in 2023 and expects another by the second half of 2024. The company is also eyeing additional opportunities to convert other landfill-gas-to-electricity assets it owns to RNG facilities.

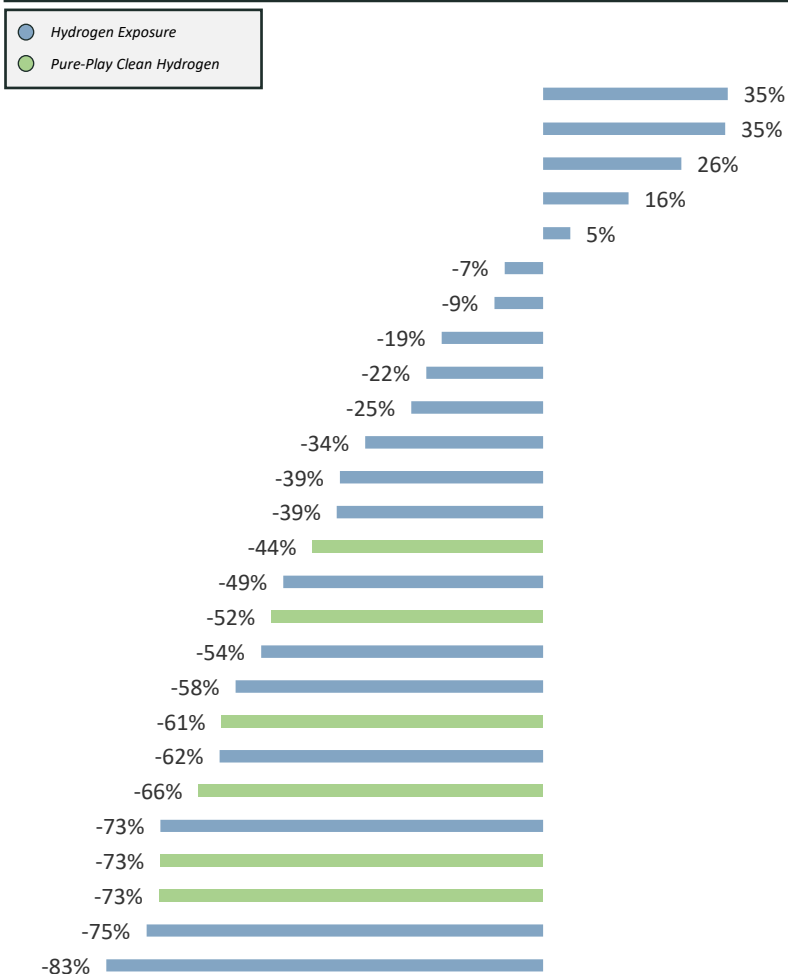
Dec. 19, 2023 – CARB issued its Proposed Amendments to the LCFS, which were far more lenient toward RNG than what was outlined in the Standardized Regulatory Impact Assessment from September. In essence, RNG projects that begin construction prior to 2030 will a) not be subject to deliverability requirements, and b) enjoy three full 10-yr avoided methane crediting periods.

Source(s): Company Press Releases, Public Filings, Marvel Power Group

Renewable Fuels | Hydrogen Related Stocks Basket

The table below includes pure-play hydrogen companies and companies with exposure to hydrogen through equipment, products and services offerings

LTM Total Return %



LTM Trading Table

Ticker	Listing	Company	Market Cap (\$mm)
FTI (NYSE)	U.S.	TechnipFMC plc	8,269
8088 (TSE)	Japan	Iwatani Corporation	2,731
LIN (NYSE)	U.S.	Linde plc	201,836
3407 (TSE)	Japan	Asahi Kasei Corporation	9,682
CMI (NYSE)	U.S.	Cummins Inc.	36,103
GTLS (NYSE)	U.S.	Chart Industries, Inc.	5,124
BKR (NASDAQ)	U.S.	Baker Hughes Company	29,036
NFE (NASDAQ)	U.S.	New Fortress Energy Inc.	6,499
APD (NYSE)	U.S.	Air Products and Chemicals, Inc.	48,375
JMAT (LSE)	United Kingdom	Johnson Matthey Plc	3,686
ACC (OB)	Norway	Aker Carbon Capture ASA	571
A336260 (KOSE)	Korea	Doosan Fuel Cell Co., Ltd.	1,042
ITM (AIM)	United Kingdom	ITM Power Plc	490
NXH (TSX)	Canada	Next Hydrogen Solutions Inc.	12
BLDP (TSX)	Canada	Ballard Power Systems Inc.	922
BE (NYSE)	U.S.	Bloom Energy Corporation	2,521
HYZN (NASDAQ)	U.S.	Hyzon Motors Inc.	172
HYSR (OTCPK)	U.S.	SunHydrogen, Inc.	55
FCEL (NASDAQ)	U.S.	FuelCell Energy, Inc.	608
CWR (AIM)	United Kingdom	Ceres Power Holdings plc	435
HTOO (NASDAQ)	U.S.	Fusion Fuel Green PLC	18
NKLA (NASDAQ)	U.S.	Nikola Corporation	791
NEL (OB)	Norway	Nel ASA	752
PLUG (NASDAQ)	U.S.	Plug Power Inc.	2,525
PCELL (OM)	Sweden	PowerCell Sweden AB (publ)	184
MCPHY (ENXTPA)	France	McPhy Energy S.A.	68

Source(s): S&P Market Intelligence. Market Cap and LTM prices as of 2/13/2023

GreenFront Energy Partners - Overview



GreenFront Energy Partners | Founding Partners and Service Offering

Track record of execution for developers, investors, and corporate clients

GreenFront Founding Partners



Robert Birdsey – Managing Director

- Head of GFEP renewable fuels
- Head of BB&T Energy IB 2013-2020
- J.P. Morgan Energy IB 2007-2013
- MBA, University of Virginia; BA, Sewanee
- Board Member, Virginia Solar Energy Development & Battery Storage Authority



Adam Hahn – Managing Director

- Head of corporate renewable advisory
- Led BB&T's Utility Investment Banking coverage 2015-2020
- Prior to BB&T, worked in the CFO's group at Dominion Energy
- MBA, University of Richmond; BBA, James Madison University



Whit Wall – Managing Director

- Head of GFEP traditional renewables
- Led BB&T's Infrastructure Investment Banking coverage 2015-2020
- Environmental consultant for JJ Blake & Associates prior to BB&T
- MBA, University of Virginia; BS, James Madison University

Service Offering – Exclusively Focused on Renewable Energy



Capital Formation

Raising capital for projects and platform growth initiatives



M&A Advisory

Advising on purchase/sale of alternative energy assets + equity



Corporate Renewable Advisory

Representing corporates in renewable energy procurement efforts

GreenFront Energy Partners | Coverage Universe

GreenFront's go-to market strategy enables significant synergies

Closely-Linked Coverage Universe



Traditional Renewables

Solar, Wind, Storage



Renewable Fuels

Renewable Natural Gas, Carbon Capture, Hydrogen



Corporate Renewable Advisory

Corporate procurement of renewable energy & products

GreenFront Differentiation

- **Regional Market Intelligence:** Our experience negotiating PPAs gives us on-the-ground information specific to different RTO/ISOs across the country
- **Corporate Finance:** As solar/wind/storage move from alternatives to incumbent resources, financing structures are evolving. GreenFront's deep experience in traditional corporate finance helps our clients evolve beyond project financing strategies

GreenFront Differentiation

- **Experience:** Prior O&G background has enabled GreenFront to already transact in very early-stage markets (RNG, CCUS, H₂, LFG, GTL)
- **Environmental Attributes:** Deep knowledge around revenue pathways for LCFS, 45Q, voluntary CO₂ credits
- **Corporate Network:** PPA advisory assignments keep us in regular dialogue with corporate sustainability decision-makers

GreenFront Differentiation

- **Risk Management:** GreenFront provides clients with proprietary analytics around correlation/covariance between weather, resource production, and market pricing
- **Negotiating Edge:** GreenFront builds project models to understand seller economics, identifying leverage points that benefit our corporate clients. We know where developers can bend on certain terms and where they can't

GreenFront Energy Partners | Credentials

Deal execution spanning multiple segments across the Alternative Energy value chain



Has contracted for offtake from on-site solar projects developed by



PPA Advisor
2024



Has signed a PPA for offtake from a solar project with



PPA Advisor
2024



Has received development and growth capital from



Placement Agent
2023



Has closed on a private placement to advance its green H2 dev portfolio



Financial Advisor
2023



Has signed an exclusive solar PPA totaling 250 MW of procurement with



PPA Advisor
2023



Has closed on a private placement to advance its biogas monitoring technology

Undisclosed

Financial Advisor
2022



Has closed an equity investment to support its low-carbon hydrogen production technology

Undisclosed

Financial Advisor
2022



Has closed on a JV and funding commitment from



Financial Advisor
2022



ENERGY ASSURANCE

Has been acquired by



Sell-side M&A Advisor
2022



Has secured a structured equity private placement from



Financial Advisor
2021



Has secured a \$50 million equity commitment from

Hartz Capital

Financial Advisor
2021



Has signed a wind PPA totaling 100 MW of procurement with



PPA Advisor
2021