PFR Power Finance & Risk an IJGlobal Service

Exclusive Insight on Power M&A and Project Financing

M&A

Eneva closes BTG assets acquisition

Brazilian power generator Eneva has closed the acquisition of the Linhares Geradora, Tevisa Termelétrica Viana and Povoação Energia from BTG Pactual. *Page 12*

PROJECT FINANCE

Pine Gate closes \$578m for 1GW solar portfolio

Pine Gate Renewables has closed \$578 million in credit and preferred equity investments in 2 financing deals for 1GW of solar projects. Page 6

POWER MARKETING & TRADING Enfinity hires global head of operations

Renewable energy developer Enfinity Global has hired Hans Helmrich as global head of operations. Page 6

RESIDENTIAL

US Presidential Election 2024: status quo or the sledgehammer

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• TALK OF THE INDUSTRY

"The government of Chile wanted to send a message that they understood they have something unique on their hands and it is this ability to create enormous amounts of power in relatively uninhabited vast lands for clean hydrogen production and for export."

Christiaan Gischler Blanco, Lead Energy Specialist at IDB, told Reuters regarding Chilean President Gabriel Boric's National Green Hydrogen Strategy.

"Co-location arrangements of the type presented here present an array of complicated, nuanced and multifaceted issues, which collectively could have huge ramifications for both grid reliability and consumer cost."

FERC Commissioner **Mark Christie** said after the commission rejected Amazon's interconnection agreement to connect a data center directly into a nuclear power plant in Pennsylvania.

"For Ocean Winds, prioritising the generation of local value throughout the project life cycle is essential to contributing to social development."

OW Brazil and South America business development director **Rafael Palhares** said after OW signed an MoU with the Universidade Federal do Rio Grande do Norte to enhance Brazil's offshore wind energy capabilities.

Power Finance & Risk

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EDITORIAL Tom Duffell

Head of Content, Americas, IJGlobal and PFR tom.duffell@powerfinancerisk.com (212) 224 3196

Alix Publie Senior Reporter alix.publie@powerfinancerisk.com (212) 224 3304

Tatiana Louder Reporter tatiana.louder@powerfinancerisk.com (212) 224 3166

Natalie Boyer Reporter natalie.boyer@powerfinancerisk.com (212) 224 3213

PRODUCTION Tim Huxford Production

SUBSCRIPTIONS Guy Dunkley Sales Director guy.dunkley@ijglobal.com (212) 224 3443

SPONSORSHIP OPPORTUNITIES

Bradley Cole Head of Business Development bradley.cole@ijglobal.com (+44) 207 779 8357

CORPORATE Vicki Taylor

Managing Director vtaylor@ijglobal.com

Customer Service Email: helpdesk@ijglobal.com Phone: +1 212 224 3343

Editorial Office

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Please send all undeliverable Mail and changes of addresses to: PO Box 4009 Chesterfield, MO 63006-4009 USA

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Do you have questions, comments or criticisms about a story that appeared in **PFR**? Should we be covering more or less of a given area? The staff of **PFR** is committed as ever to evolving with the markets and we welcome your feedback.

Feel free to contact **Tom Duffell** Editor, at (212) 224 3196 or tom.duffell@powerfinancerisk.com.

• GENERATION AUCTION & SALE CALENDAR

These are the current live generation asset sales and auctions, according to Power Finance and Risk's database.

Generation Sale • DATABASE

	Seller	Assets	Location	Adviser	Status/Comment	
	ACON Investments, Eos partners	Proenergy Holdings	Texas, US	Latham & Watkins, Orrick, Herrington & Sutcliffe, Winston & Strawn, PEI Global Partners	Energy Capital Partners (ECP) has taken a majority stake in Proenergy Holdings, acquired from affiliates of Eos Partners and ACON Investments (PFR, 9/05)	
	Adapture Renewables AEP	DG portfolio AEP OnSite Partners	US US	RBC Capital Markets, Morgan Lewis & Bockius, TD Securities, Kirkland & Ellis	North American solar developer Adapture Renewables is selling its distributed generation (DG) assets (PFR, 9/30) American Electric Power has closed its \$315 million sale of distributed energy business AEP OnSite Partners to funds managed by Basalt Infrastructure Partners (PFR, 10/1)	
	Asja	Asja Paraíba thermal (5.7MW), AsjaPernambuco thermal (28.5MW)	Brazil		Orizon VR, through its subsidiary BioE, has acquired a pair of thermal power plants in Brazil from Italian group Asja (PFR, 9/24)	
	Avangrid	Kitty Hawk North (40,000-acre offshore	Virginia, US		Avangrid has finalised its sale of the Kitty Hawk North offshore wind lease area to Dominion Energy for \$160 million. The	
Ţ.,	BP	wind lease area) BP Wind Energy	US		40,000-acre lease has been renamed Coastal Virginia Offshore Wind-South (See page 10) BP is selling its US-based onshore wind energy business, BP Wind Energy, to consolidate its focus into the development of its	
	BTG Pactual	Portfolio (860MW, thermal)	Brazil	Rothschild & Co Brasil, BTG	remaining renewables projects through subsidiary Lightsource BP (PFR, 9/17) Brazilian power generator Eneva has closed the acquisition of the Linhares Geradora, Tevisa Termelétrica Viana and Povoação	
•				Pactual, Itaú BBA, Bradesco BBI	Energia from BTG Pactual (See page 12)	
	Caerus Piceance	12.18MW ground-mounted solar array	Colorado, US		Brookfield portfolio company Standard Solar has agreed to acquire a 12.18MW ground-mounted solar array from Colorado oil and gas business Caerus Piceance (PFR, 9/10)	
•	Carlyle, Electricity Generating Public Company Limited	Rhode Island State Energy Center (609MW CCGT)	Providence, RI		Shell Energy North America has agreed to acquire the Rhode Island State Energy Center, a 609MW 2-unit combined-cycle gas turbine power plant in Providence (See page 7)	
	Cypress Creek	Community solar business	US		Solar, energy storage, and independent power producer Cypress Creek Renewables has commenced the sale process for its community solar business. PR has learned (PFR, 10/21)	
	Energy Capital Partners	Terra-Gen Power (50% stake)	US	Lazard, Guggenheim Securities, Latham & Watkins, BMO Capital Markets, JP Morgan, White & Case, Covington & Burling, Mayer Brown	Community Solar Dustiness, PTR has learned (PTR, 10/21) UAE state-owned developer Masdarh as closed on the acquisition of a 50% stake in US-based independent renewable energy power producer Terra-Gen Power from Energy Capital Partners (PFR, 10/1)	
	Enerside	13.6GWh solar	Brazil		Spanish solar developer Enerside Energy has agreed to sell 2 solar distributed generation assets to Brookfield-owned IVI	
	EDP Renewables North America	Crooked Lake Solar Park (175MW solar)	Arkansas, US	Rock Creek Energy Group	Energia (PFR, 10/9) EDP Renewables North America has secured a sale-leaseback transaction with the City of Blytheville, Arkansas for a solar	
	Engie	2.7GW operating renewables portfolio	US		project and its associated interconnection equipment, PFR understands (PFR, 8/5) Engie North America has closed on the sale of a minority stake in a 2.7GW operating portfolio of US-based renewables projects	
	GEF Capital	(minority stake) Florida Power Management	Florida, US		Civic Renewables has acquired GEF-backed solar company Florida Power Management (FPM), its third investment since its early	
		_			2024 launch (PFR, 9/9)	
	GE Vernova	517MW duel-fueled simple-cycle power facility	Florida, US	Sidley Austin, Baker Botts	GE Vernova is selling its Florida-based Shady Hills gas-fired power plant to the state's Seminole Electric Cooperative (PFR, 9/10)	
	Hull Street	Basin Creek (54MW natural gas facility)	Montana, US	Troutman Pepper, Akin Gump	Hull Street Energy-owned Milepost Power is selling its controlling stake in the Silver Bow County, Montana-sited 54MW Basin Creek natural gas facility, to a consortium of investors led by privately owned investment firm Platform Partners (PFR, 10/21)	
	Inversiones Latin America Power	ILAP	Chile	BTG Pactual, Itaú, Tyndall Group	Chilean power company Colbún has closed the acquisition of Inversiones Latin America Power (ILAP) following ILAP's	
	Invenergy	Split Rail Solar (300MW solar)	Missouri, US	Perkins Coie	restructuring process completed earlier this year (PFR, 10/3) Ameren Missouri - formerly known as Union Electric Company - is acquiring a Warren County, Missouri-sited 300MW solar site	
	Invenergy	Number Three Wind (109MW onshore wind)	New York, US	Crowell & Moring	from US renewables developer Invenergy (PFR, 10/28) Invenergy will sell a majority stake in its operating Number Three Wind (NTW) farm to CDPQ Investments and Blackstone	
	JPower	Green Country Energy (795MW CCGT)	Oklahoma, US	McDermott, Will & Emery, Van	Infrastructure Partners (PFR, 10/28) Japanese utility JPower is selling the 795MW Green Country Energy combined cycle power plant to AEP-owned Public Service	
				Ness Feldman	Company of Oklahoma, PFR has learned (PFR, 10/21)	
	Lightsource BP	Solar portfolio (395MWac)	Arkansas and Louisiana, US	Husch Blackwell	JERA Nex has purchased Lightsource BP's 395MWac portfolio of Arkansas and Louisiana solar projects as it makes its debut in the US renewables market (PFR, 8/7)	
	NextEra Energy Resources	Nitro Renewables Holdings	US	Steptoe, Simpson Thacher, Kirkland & Ellis	NextEra Energy Resources has closed its 100% divesture of class B preferred interests in clean power business Nitro Renewables Holdings to Blackstone subsidiaries for around \$900 million (PFR, 10/9)	
	NextEra Energy Resources	Dunns Bridge II Solar	Indiana, US		NextEra Resources is selling its Dunns Bridge II Solar and Storage project to a joint venture managed by the North Indiana Public Service Company (NIPSCO) and an undisclosed tax equity investor (PFR, 10/4)	
	NextEra Energy Resources	Duane Arnold II (150MW solar facility)	lowa, US	Perkins Coie	NextEra Energy has commenced its process to sell the Duane Arnold Solar II (DAS II) project to a subsidiary of Alliant Energy, PFR has learned (PFR, 10/21)	
	Macquarie Asset Management	Lordstown (940MW CCGT)	Ohio, US	Solomon Partners, Kirkland & Ellis	Macquarie Asset Management has closed on the sale of the 940MW Lordstown Energy Center to Arclight Capital vehicle	
· · ·	OCI Global	OCI Clean Ammonia (low-carbon intensity	Texas, US	Morgan Stanley, A&O Shearman,	ArcLight Fund VII (PFR, 9/9) Woodside Energy has closed on its \$2.35 billion acquisition of a Beaumont, Texas-based clean ammonia project from OCI Global	
	One Power Company	hydrogen-based greenfield ammonia facility) One Power Company	US	Vinson & Elkins	(PFR, 10/1) The \$300 million business combination between One Power Company and special purpose acquisition company Tortoise Ecofin	
	Ørsted	132MW South Fork Wind, 704MW Revolution	US	Goldman Sachs, Ropes & Gray,	Acquisition Corp. III has been terminated (PFR, 9/3) Eversource Energy has completed its exit from the US offshore wind sector with the sale of its 50% interest in 2 projects it	
		Wind		JP Morgan Securities, Greenhill, Vinson & Elkins	co-owned with Ørsted (PFR, 10/1)	
	Ørsted	50% Sunrise Wind (Offshore wind, 924MW)	New York		Ørsted aims to sell 50% of its 924MW Sunrise Wind project off the coast of New York when the project nears financial close (PFR, 10/28)	
	Phillips 66	Portfolio (550 miles natural gas pipelines)	US	Bracewell, Sidley Austin	Voyager Midstream is acquiring a portfolio of Texas and Louisiana-sited natural gas gathering and processing assets from Phillips 66 (PFR, 9/3)	
	Proteus Power	Proteus Power	US		JBB Advanced Technologies has exclusively signed a letter of intent to purchase Houston, Texas-based utility-scale renewable	
	PUC TransCo	PUC TransCo (50% stake in business comprising 10km double-circuit 230kV	US		energy developer Proteus Power (PFR, 10/4) Axium Infrastructure-managed funds have acquired an 80% equity interest in PUC Transmission (PFR, 9/27)	
		transmission line and a 230kV transformer station)				
	Public Service Company of North Carolina	Public Service Company of North Carolina	North Carolina, US	Morgan Stanley, RBC Capital Markets, Sullivan & Cromwell, McCarthy Tétrault, Citigroup, Goldman Sachs, McGuireWoods, White & Case	Dominion Energy has closed on the \$3.2 billion sale of Gastonia, NC-based natural gas utility Public Service Company of North Carolina to Enbridge (PFR, 10/1)	
	Redeux	200MW solar and 40MW battery storage	Kentucky, US	Marathon Capital	Redeux Energy Partners has sold a 200MW solar and 40MW battery storage hybrid project to Colorado-based Scout Clean	
	Repsol	1GW Portfolio (Solar)	Chile		Grenergy has acquired 1GW of solar in Chile from Repsol and Ibereólica to expand its Oasis de Atacama project (PFR, 9/23)	
	Riverstone		US	Skadden, Arps, Slate, Meagher & Flom, Latham & Watkins	BTG Pactual affiliate Engelheart Commodities Trading Partners has closed on its acquisition of global energy and technology company Trailstone Group from private equity fund manager Riverstone (PFR, 9/3)	
	Siemens	Hickory Run Energy (1,034MW natural gas plant, 20% stake)	Pennsylvania, US	Eversheds Sutherland, McDermott Will & Emery	Siemens Financial Services has closed on the sale of its 20% share in the natural gas fired Hickory Run Energy power plant to Tyr Energy (PFR, 9/17)	
-	Taiyo Holdings	80.7MWp Portfolio (solar)	US		Alternus Clean Energy has cancelled its agreement for subsidiary ALT US 01 to acquire 100% of the membership interests in Japanese Taiyo Green Energy's portfolio of US solar parks (PFR, 9/24)	
	Tenaska	2GW portfolio (solar and storage hybrid)	US	Bracewell	Sol Systems is acquiring more than 2GW utility-scale solar and storage hybrid projects sited in the Midwest US from Tenaska	
	TCW Group	Homer City Generation coal plant (19.64%		Winston & Strawn, Latham &	(PFR, 9/10) Knighthead Capital Management and GoldenTree Asset Management have closed on an agreement to take larger stakes in the	
	Tennessee Valley Authority	stake) Johnsonville co-generation site (1,269MW)	Tennessee, US	Watkins	Pennsylvania-sited Homer City Generation plant (PFR, 8/28) TVA has entered an \$800 million lease-purchase agreement with private-equity owned Johnsonville Aeroderivative	
	Toyota Tsusho	25% of CPV Maryland (775.3MW power plant	Maryland and		Combustion Turbine Generation (PFR, 10/7) Toyota Tsusho has closed on the sale of shares in 2 gas-fired combined-cycle power plants located in Maryland and New Jersey	
•		and associated interconnection facilities) and 37.53% of CPV Shore (772.9 MW power plant and its associated interconnection facilities)	New Jersey, US		to Competitive Power Ventures (PFR, 10/28)	
	UGI Energy Services	UGI Development Company	US	Hogan Lovells, McGuirewoods	Management firm Riverview Investment Holdings has closed its 100% buy of UGI Energy Services subsidiary UGI Development Company (PFR, 10/7)	
-	Vesper Energy	96MW Portfolio (Solar)	US	Rock Creek Energy Group, Clifford Chance	Octopus Energy company Sky Renewables has closed on the Ohio-sited 80MW Nestlewood and Pennsylvania-sited 16MW Gaucho solar projects from Vesper Energy (PFR, 9/18)	
	Vitol Westbridge Renewable Energy	Big Sky Wind (240MW) Sunnynook Solar, Storage (270MWac/200MWh), Dolcy Solar, Storage (300MWac/200Mwh), Eastervale Solar, Storage (300Mwac/245MWh), Red Willow Solar, Storage (225MWac/220MWh)	Illinois Alberta, CA	Chance Sheppard Mullin, Sidley Austin	Gaucho solar projects from Vesper Energy (PFK.9718) Vitol is selling its 240M BigS Sky wind project to funds managed by Power Sustainable Energy Infrastructure (PSEI) (PFR.9716) Westbridge Renewable Energy Corporation has agreed to sell 4 Alberta-based utility-scale solar and battery storage projects to Metlen Energy & Metals (PFR. 9/30)	

New or updated listing

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To report updates or provide additional information on the status of financings, please call Tom Duffell at (212) 224 3196 or e-mail tom.duffell@powerfinancerisk.com.

• PROJECT FINANCE DEAL BOOK

Deal Book is a matrix of energy project finance deals that Power Finance & Risk is tracking in the energy sector.

Live Deals: Americas

Sponsor	Project	Location	Lead(s)	Deal Type	Loan Amount	Tenor	Notes
Arevon Energy	Ratts 1 (192MW, solar) and Heirloom Solar (73MW)	Indiana, US	Crédit Agricole, Commerzbank, Bank of America, Llyods Bank, and BNY Mellon	Construction loan, tax equity and bridge loan, and letter of credit	\$119m, \$159m, and \$21m		Arevon Energy has closed a \$299 million financing with a consortium of banks for 2 solar projects in Indiana (PFR, 9/9)
Arevon	Gibson Solar (251MW)	Indiana, US	CoBank, PNC Bank, Société Générale	Construction loan	\$351m		Arevon has secured \$351 million in debt financing led by CoBank for its Gibson Solar project in Indiana (PFR, 9/23)
Atlas Renewable Energy Shangri-La solar (160M		Colombia	IDB Invest, Bancolombia		\$113m		Atlas Renewable Energy has reached financial close on a COP\$474 billion (\$113m) longterm loan for its Shangri-La solar project in Colombia (PFR, 9/16)
Blue Energy	SMR development	US	Engine Ventures, At One Ventures, and others	Series A financing	\$45m		Newly launched nuclear company Blue Energy closed a \$45 million Series A fundraise led by Engine Ventures and At One Ventures to accelerate the deployment of its modular nuclear power plants (PFR, 10/14)
Boralex	Témiscouata II (52MW, wind farm)	Quebec	Desjardins	Term loan, letter of credit	\$52m		Boralex has closed a \$95 million financing for the 52MW Témiscouata II wind farm in Quebec (PFR, 8/26)
BrightNight	Box Canyon Project (Solar and BESS, 300MW/600MWh)	Arizona, US	JP Morgan and Capital One	Tax Equity	\$260m		BrightNight and development partner Cordelio have inked a \$260 million tax equity financing from JP Morgan and Capital One North America for the Arizona 300MW/600MW Box Canyon solar and storage project (PFR, 10/21)
Clearway Energy Group	Rosamond South 1 (solar and storage, 140MW/118MWh)	California, US	Société Générale, ANZ, Banking Group Limited, Siemens, Commerzbank, CoBank, DNB Bank, and NordLB	Term loan	\$550m		Clearway Energy Group has closed a \$550 million construction loan with a consortium of banks for a 140MW/118MW solar-plus-storage project in California (PFR, 9/3)
Doral Renewables	Mammoth Solar Project (1.3GW)	Indiana, US	Keybanc, HSBC, and Santander	Construction loan and letters of credit	\$200m and \$85m		Doral Renewables has secured \$285 million in project financing from a consortium of banks for the second part of its 1.3GW solar project in Indiana (PFR, 9/9)
EDP Renováveis	Monte Verde IV and V (Solar, 50MW and 48MW)	Rio Grande do Norte, Brazil	FDNE	Term loan	R\$150m		EDP Renováveis has received an additional R\$150 million (\$28m) loan from Northeast Development Fund (FDNE) for a solar project the company is developing in Brazil (PFR, 9/30)
Elera Renováveis	Janaúba solar complex (1.6GW)	Minas Gerais, Brazil	BNDES	Term loan	R\$600m		Elera Renováveis has landed R\$600 million (\$109m) for the expansion of the Janaúba solar complex in Brazil (PFR, 10/14)
Emergen Energy	Project Redbird (100MW, BESS)	Texas, US		Tax equity	\$80m		Emergen Energy has signed a tax credit transfer agreement to sell up to \$80 million of federal investment tax credits (ITCs) from a Texas battery energy storage system (PFR, 9/16)
Enel Colombia	Guayepo I and II (solar, 486MW)	Atlantico, Colombia	EIB	Term loan	\$300m		Enel Colombia has secured a loan in Colombian pesos equivalent to \$300 million from the European Investment Bank to support the company's generation and distribution operations (PFR, 10/21)
Fervo Energy	Cape Station Phase I (geothermal, 90MW)	Utah, US	X-Caliber Capital	Bridge loan	\$100m		Fervo Energy has closed a \$100 million bridge loan with an X-Caliber Capital affiliate to support Phase I development of its Cape Station geothermal project in Beaver County, Utah (PFR, 9/16)
Form Energy	Form Factory 1 (BESS manufacturing)	West Virginia, US	T Rowe Price and others	Series F financing	\$405m		Battery storage developer Form Energy has closed a \$405 million Series F financing round led by T Rowe Price and plans to collaborate with GE Vernova on the commercial deployment of its battery systems (PFR, 10/14)
Golden State Clean Energy	Portolio (1.9GW, solar and BESS)	California, US	Leyline Renewable Capital	Term loan	\$28m		Leyline Renewable Capital has provided a \$28 million financing package for Golden State Clean Energy (PFR, 10/7)
Harvestone Low Carbon Partners	Blue Flint Ethanol	North Dakota, US	Bank of America	Tax equity	\$205m		A Harvestone Low Carbon Partners subsidiary has closed a \$205 million tax equity financing with Bank of America for a North Dakota carbon capture and sequestration project (PFR, 9/16)
Heliene	Rogers Factory (Solar, 550MW)	Minnesota, US	Transition Equity Partners	Equity financing	\$54m		North American solar manufacturing company Heliene has closed a \$54 million equity investment led by Transition Equity Partners (PFR, 10/14)
Instituto Costarricense de Electricidad	Tejona Wind Farm (42MW)	Costa Rica	Bank of Costa Rica	Term loan	\$72m	20y	Costa Rican state-owned powerand telecommunications, provider Instituto Costarricense de Electricidad, secured financing to remodel and expand the Tejona Wind Farm (PFR, 9/16)
Invenergy	Samson Solar Energy Centre II (200MW)	Texas, US	Monarch Private apital	Tax equityy	\$170m		Monarch Private Capital and Invenerg have closed a \$170 million tax equity financing fora 200MW solar facility in Texas (PFR, 9/23)
NineDot	Portfolio (BESS, 35MW)	New York, US	Monarch Private Capital	Tax equity	\$40m		Battery storage developer NineDot Energy has closed a \$40 million tax equity financing with Monarch Private Capital for 7 projects in the New York City area (PFR, 10/14)
Nordic Solar	San Isidro Solar (14MW)	León, Nicaragua	BIO ad EDFI Management Company	Term loan	\$10.7m		Nordic Solar has secured a \$10.7 million loan for a solar project the company is developing in Nicaragua (PFR, 9/23)
Ørsted and GIP	Revolution Wind (704MW)	Connecticut and Rhode Island, US	MUFG, BNP, Mizuho, and others	Letter of credit, Term Ioan, and Tax Equity Bridge Loan	\$55m, \$613m, and \$1.077bn	8y, 8y, and 7y and 11 months	Ørsted and Global Infrastructure Partner have closed a \$1.745 billion project financing for its 704MW Revolution Wind (PFR, 10/21)
Pine Gate Renewables	Portfolio (1GW, solar)	US	Blackstone Credit & Insurance funds and NordLB, Santander, and SMBC	Preferred equity and debt	\$288m and \$290m	4y	Pine Gate Renewables has closed \$578 million in credit and preferred equity investments in 2 financing deals for 1GW of solar projects (See page 6)
Primergy Solar	Ash Creek Solar-plus-storage (408MW/300MWh)	Texas, US	Truist Bank and unamed Fortune 500 telecomunications company	Tax equity Financing	\$350m		Primergy Solar has signed a \$350 million tax equity agreement for its 408MW/300MWh Ash Creek solar-plus-storage project in Texas. The tax equity investors were Truist Bank and an unnamed Fortune 500 telecommunications company (PFR, 10/28)
Sabanci Renewables	Oriana Solar (232MW) and Storage (60MW)	Texas, US	Advantage Capital	Tax equity financing	\$137m		Sabanci Renewables has signed a \$137 million tax equity financing from Advantage Capital for its 232MW Oriana solar-plus-storage project in Texas (PFR, 10/7)
Swift Current Energy	Renewables pipeline	US	First Citizens Bank, Deutsche Bank, Truist Securities, National Westminster Bank, Sumitomo Mitsui Banking Corporation	Senior secured revolving credit facility	\$300m		Swift Current Energy has closed a \$300 million senior secured revolving credit facility to provide capital for its pipeline of US wind, solar and energy storage projects (PFR, 9/16)
Toyota Tsusho America	Norton Solar Poject (159MW)	Texas, US	MUFG	Construction and term loan	\$204m		Toyota Tsusho America has closed the financing for the 159MW Norton Solar Project in Runnels County, Texas, which is being constructed by Avantus, PFR understands a construction and term financing agreement of \$204 million was struck with MUFG (PFR, 9/3)
UBS Asset Management, Captona	Energy storage portfolio (730MW)	Texas, US	Deutsche Bank, First Citizens Bank, Societe Generale, Siemens, BankUnited, Mitsubishi HC Capital, Bayern LB		\$315.7m		UBS Asset Management has secured \$315.7 million in financing for 4 battery energy storage projects in Texas from a consortium of banks (PFR, 9/16)
Vision RNG	Seneca and Tunnel Hill RNG facilitites	Ohio, US	HASI	Construction loan and investment tax credit bridge loan	\$130 million \$77 million		Pennsylvania-based Vision RNG secured \$207 million in project financing from HASI (PFR, 10/28)
X-Energy Reactor Company	Oak Ridge Factory (SMRs)	Tenessee, US	Amazon, Ares Management Corporation, NGP, University of Michigan, and others	Series C	\$500m		X-Energy Reactor Company has closed a \$500 million Series C investment round led by Amazon to advance its small modular nuclear reactor production (PFR, 10/21)

New or updated listing

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To report updates or provide additional information on the status of financings, please call Tom Duffell at (212) 224 3196 or e-mail tom.duffell@powerfinancerisk.com.

AlphaGen seals \$3.7bn in first corporate financing

Arclight Capital Partners affiliate Alpha Generation has closed its inaugural corporate financing at \$3.7 billion.

The corporate financing was led by Citi and included:

- Senior secured term loan \$2 billion with a 7-year term
- Senior notes \$1 billion with an 8-year term
- Senior secured revolving credit facility - \$700 million with a 5-year term
- *PFR* understands the lenders on the deal to include: Term Loan:
- Mizuho \$124 million

- Revolving Credit Facility:
- Citigroup \$88.75 million
- Bank of Montreal \$50 million
- Barclays \$75 million
- Morgan Stanley \$75 million
- BNP Paribas \$50 million
- Goldman Sachs \$75 million
- Mizuho \$50 million
- MUFG \$68.12 million
- RBC \$50 million
- Santander \$50 million
 SMBC \$68.12 million

In addition to the financing closure, AlphaGen also absorbed several companies purchased by ArcLight over the past few years, including:

- <u>Parkway Generation</u> a 4.8GW natural gas-fired power portfolio bought from SPEG for \$1.37 billion
- <u>Generation Bridge</u> (I and II) over 6.5GW power generating portfolio purchased from NRG and PSEG
- <u>Lordstown Energy Cen</u>tre a 69.8% share in the 940MW combined cycle gas turbine bought from Macquarie

AlphaGen plans to use the net proceeds from the term loan and senior notes to repay the indebtedness of these subsidiaries, grow its commercial and strategic plans, and fund other corporate needs.

Launched <u>earlier this year</u> <u>by ArcLight</u>, AlphaGen owns 22 power infrastructure projects totalling 14GW across PJM, MISO, ISONE, and CAISO. ArcLight founded the company to oversee its domestic power portfolio, bringing in \$2 billion annually. Advisers:

- White & Case counsel to AlphaGen
- Cahill Gordon & Reindel lenders' counsel

Pine Gate closes \$578m for 1GW solar portfolio, US

Pine Gate Renewables has closed \$578 million in credit and preferred equity investments in 2 financing deals for 1GW of solar projects.

Today (24 October), Pine Gate closed a \$288 million preferred equity investment from Blackstone Credit & Insurance funds to support 6 solar projects across 2 states totalling 780MW. All of the projects have secured corporate offtake agreements.

Meghan Comiskey, executive VP for structured finance at Pine Gate, said: "Leading Pine Gate's first preferred equity investment was a significant milestone for our team and the enterprise at large. A multiportfolio transaction with the exceptional partnership of Blackstone enables us to scale our business efficiently."

Pine Gate also closed a \$290 million financing for a 235MW portfolio in Texas and Alabama. The financing included:

- DSR letter of credit \$6.31 million with a 4-year and 1-month tenor
- Project letter of credit \$11.95 million with a 4-year and 1-month tenor
- Credit facility \$88.9 million with a 1-year and 3-month tenor
- Tax equity Bridge loan \$90.49 million with a 1-year and 1-month tenor
- Term loan \$92.5 million with a 4-year and 1-month tenor The lenders included:
- NordLB

• Santander

• SMBC

The Ashville, North Carolina-based renewable developer has closed more than \$7 billion in project financings since its founding in 2016. Pine Gate has more than 2GW of operating solar projects and a pipeline of 30GW.

Advisers:

- Stance Renewable Risk Partners - insurance adviser to lenders
- Latham & Watkins counsel to lenders
- Enertis Solar technical adviser to lenders
- Stoel Rives counsel to Pine Gate
- Milbank counsel to Blackstone





Corporate financing closed by Arclight Capital Partners affiliate Alpha Generation which owns 22 power infrastructure projects totalling 14GW



Acre offshore wind lease area known as Kitty Hawk North that Avangrid sold to Dominion Energy for \$160 million



Solar portfolio to be funded by Enfinity Global's \$97 million structured credit facility with Nomura



Read more on these stories at www.powerfinancerisk.com

Enfinity, Nomura ink \$97m solar financing

Enfinity Global has closed a \$97 million structured credit facility with Nomura to fund its 608MW solar portfolio across several US markets.

Enfinity has the option to upsize the facility to \$400 million as it continues to expand its development and construction portfolio, which spans CAISO, WECC, and SERC.

Vinod Mukani, global head

of Nomura's infrastructure and power business, said: "We are pleased to have another opportunity to partner with Enfinity as it continues to build on its track record of successful deployment of large-scale clean energy assets supporting the energy transition."

Earlier this year, <u>Enfinity inked</u> <u>a \$195 million long-term financ-</u> <u>ing deal with Nomura</u> and Aozora Bank to fund a 70MW solar power plant in Aomori Prefecture, Japan.

Enfinity Global has a US operating portfolio of 400MW across California, Idaho, and North Carolina and expects to bring an additional 1GW online by the start of 2026. The company has a 9.3GW pipeline of projects in Alabama, New Mexico, Oregon, Utah, and Wyoming.

One Equity nears close on EthosEnergy buy

One Equity Partners (OEP) is nearing close on its acquisition of EthosEnergy from John Wood Group (Wood) and Siemens Energy, *PFR* has learned.

PFR understands EthosEnergy will be purchased via the OEP VIII fund for an estimated valuation of \$300 million and the deal awaits approval from a single European regulatory entity for close which is expected in Q4 (2024).

Wood expects to receive net cash proceeds from the sale of

\$95 million on completion. The deal also includes loan notes to be issued to Wood with a face value of up to \$42 million, plus interest, to be paid around 5 years after completion.

EthosEnergy provides maintenance, repair and overhaul (MRO) as well as outsourced O&M to power generation and other customers operating industrial gas turbines.

OEP is a middle market private equity firm focused on the indus-

trial, healthcare, and technology sectors in North America and Europe. The firm was founded in 2001 and spun out of JP Morgan in 2015. The firm closed OEP VIII in April 2022 with committed capital of \$2.75 billion

Advisers:

- KPMG International financial, One Equity
- Alantra financial, John Wood, Siemens
- Davis Polk & Wardwell legal
- Arnovia commercial advice

Shell to buy Rhode Island CCGT power plant

Shell Energy North America has agreed to acquire the Rhode Island State Energy Center, a 609MW 2-unit combined-cycle gas turbine power plant in Providence.

The Rhode Island plant is currently owned 51% by funds managed by global investment firm Carlyle and 49% by a subsidiary of Electricity Generating Public Company Limited (EGCO), the first independent power producer in Thailand.

Financial details of the transaction were unavailable at press time, but it was understood Shell would pay for the power plant in cash.

The acquisition secures longterm supply and capacity offtake for Shell in the ISO New England "Shell has had a successful integrated gas and power business in the growing ISO New England market for over 20 years."

Huibert Vigeveno, Shell downstream, renewables & energy solutions director

power market, where Shell has held 100% of the plant's energy offtake since 2019. The power plant has been in operation since 2022.

The transaction is subject to regulatory approvals and is expected to close in Q1 2025.

Huibert Vigeveno, Shell downstream, renewables & energy solutions director, said: "Shell has had a successful integrated gas and power business in the growing ISO New England market for over 20 years, and this acquisition secures valuable trading opportunities by guaranteeing SENA's position in the market.

"Our strong understanding of this plant's performance positions Shell to capitalise on its value within our existing trading portfolio."

Altus hires head of community solar, US

Renewable energy developer Altus Power has hired Skylar Werde as head of community solar.

Werde will oversee the entire Altus community solar business, both B2B and B2C, including team management, strategy, revenue, customer acquisition, marketing and customer support.

He joins from Clean Energy Associates where he was senior director of US sales. Prior to CEA, he was the chief revenue officer of Novel Energy Solutions.

Full story click **HERE**

Local groups sue over Maryland

US Wind's Maryland Off-

shore Wind becomes the lat-

est offshore wind project to

Offshore Wind

approval

Stonepeak closes Coastal Virginia Offshore Wind deal

Stonepeak has completed its acquisition of a 50% non-controlling interest in Dominion Energy's 2.6GW Coastal Virginia Offshore Wind Project for \$2.6 billion.

Coastal Virginia Offshore Wind (CVOW) is set to be the largest offshore wind project in the US. It is currently under construction and will come online by the end of 2026. The project is currently installing its monopole foundations for more than 176 turbines and 3 offshore substations.

PFR understands that the acquisition was financed through: • Term loan

- Construction loan
- Transferability bridge loan Lenders are understood to in-

clude:

- MUFG
- Standard Chartered

The transaction included the offshore wind sector's first tax transfer structure. Per the IRS

guidelines, offshore wind is eligible for both production tax credits (PTCs) or 30% investment tax credits (ITCs) on both onshore and offshore construction, from undersea cables to offshore wind vessels (10% of the sale price). Additionally, the project can qualify for a 10% domestic content bonus if 20% of the project is made in the US and a 10% bonus for being located in an energy community, including ports.

There is a lot of opportunity for projects to take advantage of the many tax credits and projects are likely to follow in Coastal Virginia's footsteps to utilise them.

The deal was initially announced in <u>February</u> (2024), 3 months after the Bureau of Ocean Energy Management gave its final approval to the project. CVOW was the fifth offshore wind project approved by the Biden-Harris Administration, which has now given the green

light to 10 such projects.

Dominion and Stonepeak plan to split the remaining capital necessary for the project's construction, estimated to cost between \$9.8 and \$11.3 billion. Stonepeak has the option to make additional capital contributions for any additional costs above \$11.3 billion.

CVOW is the first offshore wind project for Dominion Energy, which purchased the lease for the project in 2013. The project has a long-term power purchase agreement with Virginia Power and Electricity Company, a subsidiary of Dominion.

Financial advisers:

- Greenhill & Co Stonepeak
- Santander Stonepeak
- Citi Dominion
- Goldman Sachs Dominion
- Legal advisers:
- Vinson & Elkins Stonepeak
- McGuireWoods Dominion
- Morgan Lewis Dominion

face a lawsuit as local groups filed against the federal government regarding this large-scale project.

Ocean City, a tourist town, filed a lawsuit against the Bureau of Ocean Energy Management (BOEM) on 25 October regarding the project, which received full approval in September. The lawsuit centres around negative ocean views, local environmental impacts, and effects on the tourism and fishing industries. Marzulla Law is representing the town and other plaintiffs.

Full story click HERE

Toyota Tsusho closes sale of US power plants

Toyota Tsusho has closed on the sale of shares in 2 gas-fired combined-cycle power plants located in Maryland and New Jersey to Competitive Power Ventures (CPV), PFR can reveal.

The company sold a 25% interest in CPV Maryland, the owner of the CPV St. Charles Energy Center a 775.3MW power plant and associated interconnection facilities, and a 37.53% share in CPV Shore, a 772.9MW power plant and its associated interconnection facilities in Middlesex County.

CPV will double its share, from 25% to 50% in the Maryland-sited project while Marubeni Corporation and Osaka Gas will each retain their 25% stake in the power plant.

CPV has a 68.78% stake in the New Jersey-located power plant with Osaka Gas (20%) and John Hancock Life Insurance (11.22%) as co-owners.

Toyota Tsusho America operates throughout North America in supply-chain management, new manufacturing, logistics, importing and exporting.

CPV is a North American electric power generation development and asset management company headquartered in Silver Spring, Maryland with a power portfolio of more than 5.3GW across the US. ■

Oaktree, GCM take stake in Brookfield US wind project

GCM Grosvenor and Oaktree Capital are acquiring a stake in Shepherds Flat Wind from Brookfield, *PFR* understands.

GCM's Infrastructure Advantage Strategy is acquiring 25% of the membership interests in the project while a jointly owned Oaktree and Brookfield fund, Brookfield Infrastructure Income Fund FCP-RAIF, will take another 25%.

Financial details of the transaction were not available at press time.

The assets – acquired from Brookfield Renewable – stands as

one of the largest repowered wind farms in North America. Brookfield pushed the asset through a comprehensive repowering, increasing the wind farm's generation capacity, enhancing its operational efficiency and extending the plant's lifespan.

The 845MW Arlington, Oregon-sited Shepherds Flat Wind site is made up of:

- 290MW Horseshoe Bend Project
- 265MW Shepherds Flat North
- 290MW Shepherd Flat South Developer, owner and operator

Caithness built the assets in 2012, selling the projects to Brookfield in

2021 for \$700 million. Shepherds Flat Wind Farm is fully committed on a long-term firm basis to 20-year power purchase agreements (PPA) with Southern California Edison.

Advisers:

- Thorndike Landing financial, Grosvenor
- BMO financial, Brookfield
- Wells Fargo financial, Brookfield
- King & Spalding legal, Brookfield
- Rock Creek Energy Group legal, Shepards Flat
- Kirkland & Ellis legal, Grosvenor

Radial Power finds partner for US solar DG

Houston-based Radial Power has teamed up with the New York subsidiary of Pineapple Energy on solar distributed generation and other renewables.

This strategic partnership will harness the combined expertise of both companies to deliver innovative renewable energy solutions.

Radial Power is a developer-owner-operator of distributed clean energy assets across large real estate portfolios. Founded in 2022, the company has offices in Houston and New York. Pineapple Energy, through its portfolio of brands SUNation, Hawaii Energy Connection and E-Gear, provide homeowners and businesses solar, battery storage, and grid services.

Full story click **HERE**

Enfinity hires global head of operations

Renewable energy developer Enfinity Global has hired Hans Helmrich as global head of operations.

Helmrich joins from steel manufacturing conglomerate Acerinox where he was chief operating officer and managed global operations and 8,000 employees.



Potentia plans 2 onshore wind farms in Québec

Toronto-based Potentia Renewables is developing 2 onshore wind projects in Québec alongside local partners.

Potentia is teaming up with Kruger Energy, the Eastern Energy Alliance and the Wolastoqiyik Wahsipekuk First Nation on the 196MW Saint-Paul-de-Montminy (SPDM) wind project.

The firm is also partnering with Kruger Energy, the Jardins-de-Napierville RCM and the Mohawk Council of Kahnawà:ke on the 147MW Les Jardins Wind Project.

Jean Roy, senior vice presi-

dent and chief operating officer at Kruger Energy, said: "This collaboration, which brings together a private company, a financial partner, RCMs, and First Nations, serves as an excellent example of sustainable and socially responsible development."

Both projects have been awarded power purchase agreements with Hydro-Québec. Last week (October 2024), Hydro-Québec and a regional energy-focused collective partnered to develop a 1GW wind farm in the Lower St. Lawrence region of the province. Hydro-Québec and L'Alliance de l'énergie de l'Est, or Eastern Energy Alliance, have a 50:50 partnership and plan to invest CA\$3 billion (\$2.18 billion) in the project.

Potentia is owned by Power Sustainable, the Canada-based investment manager which is a wholly owned subsidiary of publicly traded holding company Power Corporation of Canada.

Kruger Energy develops and manages green and renewable energy power plants in Canada and the US. ■

BP takes full control of solar developer Lightsource BP

BP has closed its acquisition of the remaining 50% stake in solar developer Lightsource BP for around \$500 million.

The UK oil giant <u>originally</u> <u>announced</u> it would buy the remaining 50.03% of Lightsource BP in December 2023 for \$322 million. The final buyout agreement closed at \$518 million and an addition of \$2.7 billion in debt.

BP initially invested in the company in December 2017 by acquiring a 43% stake for \$200 million. In December 2019, it increased its stake, making Lightsource BP a 50:50 joint venture.

Anja-Isabel Dotzenrath, executive vice president for gas and low-carbon energy at BP, said: "This is a natural evolution of the partnership we have built over the past 6 years – now we will be able to take Lightsource BP to the next level of profitable growth and performance. We will continue to scale this successful business, and also apply its capabilities and expertise to help meet BP's growing demand for low carbon power from our transition growth engines."

With the integration of Lightsource BP, the energy company plans to focus on hydrogen, EV charging, and biofuels.

Following the deal closure, Joaquin Olivera joined Lightsource BP's founder Nick Boyle as co-CEO. The solar and storage developer and operator will remain an independent brand with its own operating model.

Last month (September), BP announced that it planned to divest from its US-based onshore wind energy business, BP Wind Energy, to focus on Lightsource BP.

BP Wind Energy's portfolio consists of 10 operating onshore wind energy assets – 9 of which BP operates – spanning 7 US states with a 1.7GW capacity.

William Lin, BP EVP for gas and low carbon energy, said: "BP Wind Energy's assets are high-quality and grid-connected but are not aligned with our plans for growth in Lightsource bp. So, we believe the business is likely to be of greater value for another owner. This planned divestment is part of our strategy of continuing to simplify our portfolio and focus on value."

- Legal advisers:
- Latham & Watkins Lightsource BP
- Linklaters BP

SouthCoast Wind receives key MA approvals

The Massachusetts Government has granted 3 key permitting approvals to Ocean Winds' South-Coast Offshore Wind Farm.

Owned by a JV between EDP Renewables and Engie, the 1.287GW offshore wind farm is set to come online in 2030. Located 23 miles south of Nantucket, the farm has the potential to generate more than 2.4GW.

The approvals included:

- Construction and operations plan for transmission facilities at Brayton Point, MA
- Ch. 91 Waterways license for project-related nearshore

equipment and work

 Federal Consistency Review sign-off

The project's proposed undersea cable route will run through federal and state waters, including Rhode Island's Sakonnet River, across a portion of Portsmouth, RI, Mt. Hope Bay, and the Lee River. The cable will come ashore at the electrical grid connection site at Brayton Point.

Jennifer Flood, head of permitting for SouthCoast Wind and OW North America, said: "These important permitting milestones bring our project closer to construction. We are grateful to the Commonwealth's thorough review and look forward to providing clean power, good jobs and economic growth to the region."

In September, <u>SouthCoast</u> <u>Wind secured two offtake con-</u> <u>tracts</u> in the New England Offshore Wind tender, 1.087GW with Massachusetts and 200MW with Rhode Island. SouthCoast, which was joined by Vineyard Wind 2 and New England Wind 1, did not receive a PPA with Connecticut, which delayed its decision.

The project's PPAs are currently being negotiated with state utilities.

In August 2023, SouthCoast Wind <u>terminated its previous pow-</u> <u>er purchase agreements</u> with Massachusetts utilities Eversource Energy, Unitil, and National Grid. To do so, SouthCoast Wind paid \$60 million, giving \$32.4 million to Eversource, \$27.3 million to National Grid, and \$591,000 to Unitil.

Shell North America, a former co-sponsor, <u>sold its 50% stake</u> <u>in the project</u> to Ocean Winds in March.

The project is expected to begin construction in late 2025 once all permits are completed and pending FID.

Scout secures PPA for California wind project

Scout Clean Energy has secured a power purchase agreement (PPA) with the San Francisco Public Utilities Commission's (SFPUC) community choice energy program for its Gonzaga Ridge wind project.

The Merced County, California sited onshore wind project will provide 147.5MW of clean wind energy as well as 50MW of energy storage.

Gonzaga Ridge is a redevelop-

ment of an existing wind farm at the same site in Pacheco Park. The project is anticipated to come online in May 2026.

SFPUC's energy program, known as CleanPowerSF, has now secured contracts to purchase energy from more than 600MW of new solar, wind and geothermal projects. This is enough energy to power more than 500,000 average San Francisco homes. Additionally, CleanPowerSF energy storage contracts now total over 300MW.

Scout is a renewable energy developer, owner, operator headquartered in Boulder, Colorado. It has around 1,400MW of operating and under construction renewable energy assets in the US, 800MW of which the company owns and operates.

Scout<u>last week</u> acquired a 200MW solar and 40MW battery storage hybrid project from utility-scale solar and power storage development company Redeux. The Ohio County, Kentucky-sited project connects to the MISO transmission switchyard, adjacent to a 400MW coal-fired plant.

The company is currently developing a pipeline of approximately 19,000MW of wind, solar and storage projects across 23 states, including more than 2,100MW of advanced-stage projects.

Scout is a portfolio company managed by Brookfield Asset Management.

Quantum Capital locks in \$10bn for energy investing

Quantum Capital Group has pooled more than \$10 billion, including co-investment, across its energy-focused private equity, structured capital, and private credit platforms.

The total raised includes \$5.25 billion for the firm's private equity flagship, Quantum Energy Partners VIII, \$2.8 billion for the firm's structured capital fund, Quantum Capital Solutions II, and around \$2 billion for other associated funds on the Quantum platform.

Quantum invests in oil and gas, midstream, thermal and renewable power generation, energy infrastructure, and energy transition sectors.

In August <u>Quantum acquired</u> <u>Cogentrix Energy</u>, a US independent power producer, for around \$3 billion from Carlyle.

The Cogentrix platform is comprised of 5.3GW of natural gas-fired power plants located throughout PJM, ERCOT, and ISO-NE markets. The company, headquartered in Charlotte, North Carolina, is known for acquiring, developing, constructing, operating, and optimising both conventional and renewable power generation.

Also in August, Quantum <u>ac-</u> <u>quired Colorado-based Caerus Oil</u> and Gas for \$1.8 billion, including the assumption of asset-backed securities. Quantum's Houston-based portfolio company Trace Midstream Partners also <u>agreed to</u> <u>acquire natural gas gathering and</u> <u>transportation assets</u> in New Mexico from LM Energy.

Charles Baillie, co-president of Quantum, said: "Since our inception in 1998, Quantum has invested in nearly 150 leading companies across the energy industry. As we continue to grow our franchise, we are well positioned to support the world's leading energy and sustainability entrepreneurs and help achieve their visions."

Advisers: • Kirkland & Ellis – legal

Engie NA signs TX solar PPA with Google

Engie North America has signed a power purchase agreement (PPA) with Google for 90MW of energy from its Chillingham solar project in Bell County, Texas.

Chillingham is a 350MW facility will be Engie's largest single solar project in the US, will join the company's portfolio of around 8GW of renewable projects including solar, wind and battery storage in operation or construction across North America.

Avangrid completes Kitty Hawk North sale to Dominion

Avangrid has finalised its sale of the Kitty Hawk North offshore wind lease area to Dominion Energy for \$160 million.

The 40,000-acre lease has been renamed Coastal Virginia Offshore Wind-South (CVOW-South). In addition to renaming the site, Dominion announced that it could support an 800MW offshore wind farm that could come online in the 2030s. The farm could provide power to more than 200,000 customers in Virginia.

The \$160 million purchase agreement consists of a lease acquisition (\$117 million) and associated development cost reimbursement (\$43 million).

In 2017<u>, Avangrid secured the</u> <u>site</u> from the Bureau of Ocean Energy Management (BOEM) for \$9 million.

Dominion purchased the area through its subsidiary Virginia Electric and Power Company, which is constructing the 2.6GW Coastal Virginia Offshore Wind project 25 miles north of the Kitty Hawk site.

Avangrid chief executive, Pedro Azagra, said: "Closing this transaction is a tremendous development



"Closing this transaction is a tremendous development for our key business objectives and strategic priorities, positioning us to pursue new opportunities for investment across our renewables portfolio."

Pedro Azagra, Avangrid chief executive

for our key business objectives and strategic priorities, positioning us to pursue new opportunities for investment across our renewables portfolio. As we close this sale, focus on delivering on our capital investment plan, and continue the development of Kitty Hawk South, Avangrid is proud of its work to accelerate the clean energy transition in the United States."

Avangrid retains the Kitty Hawk South lease and will continue developing the area with a 2.4GW generating capacity. The southern area lease is the proposed site for the 800MW Kitty Hawk Offshore Wind Farm, which <u>Avangrid submitted for</u> environmental review in 2021.

Earlier this week (23 October), Dominion finalised its <u>sale of</u> <u>the 50% non-controlling stake</u> <u>in CVOW</u> to Stonepeak Partners for \$2.6 billion. When it comes online at the end of 2026, the offshore wind farm will be the largest in the US.

The deal was announced in February 2024, 3 months after the BOEM approved the project, its fifth offshore wind authorisation under the Biden-Harris Administration.

Full story click HERE

1PointFive inks CCS pipeline agreement with Enterprise

1PointFive, a carbon capture and sequestration company, has signed a transportation services agreement with Enterprise Products Partners to develop a pipeline for its Texas project.

A subsidiary of international oil and gas company Oxy, 1PointFive is developing the Bluebonnet Sequestration Hub in Chambers County, Texas, to permanently store CO2 from nearby industrial plans in the greater Houston Area.



EverWind advances Newfoundland green hydrogen project

EverWind Fuels has received a regulatory nod from Newfoundland and Labrador's Department of Environment and Climate Change to advance its Burin Peninsula Green Hydrogen and Ammonia Project.

The Canadian green hydrogen developer must now undertake an Environmental Impact Statement (EIS). While this work is conducted EverWind will develop a layout for the Lower Burin Peninsula wind project site and develop a solution to ensure that the project does not require significant interconnection to the Newfoundland and Labrador grid.

EverWind in September (2023) won the bid from the Newfoundland government to develop the green hydrogen project on the Burin Peninsula, Newfoundland.

Expected to commence operations in 2027, the project will use wind power to produce green "This project will result in direct economic benefits and jobs for Newfoundlanders, Labradorians, and their communities."

Trent Vichie, founder and chief executive at EverWind Fuels

hydrogen and then green ammonia. The ammonia will then be used as green fertiliser, in addition to green energy.

Trent Vichie, founder and chief executive at EverWind Fuels, said: "We are dedicated to working hand in hand with residents of the Burin Peninsula and every level of government to see this project take shape with environmental stewardship at the forefront. This project will result in direct economic benefits and jobs for Newfoundlanders, Labradorians, and their communities."

EverWind in March (2024) completed front-end engineering design (FEED) and front-end loading engineering (FEL-3) with contractor Black & Veatch for the first phase of its <u>Point Tup-</u> <u>per</u> green hydrogen to green ammonia project in Nova Scotia.

The project obtained environmental approval last year (February 2023) and its construction is slated to begin later this year, with first production set for 2026.

The Canada-based developer secured C\$125 million (\$91.7m) in project financing for Point Tupper from Export Development Canada (EDC) in <u>November (2023)</u>.

EverWind is a North American independent green hydrogen developer, currently developing of a pipeline of 15GW of renewables across Atlantic Canada.

Swift Current inks deals with PNC and Target for MS solar

Swift Current Energy has closed a tax equity financing with PNC Bank and a power purchase agreement with Target for its 138MW Harvest Gold Solar project in Mississippi.

Currently operational, the Sunflower County-based project provides power to over 23,000 homes annually and marks Swift's first renewable project in the state. It connects to the local grid via the Round Lake switching station, operated by Entergy.

In addition to the tax equity financing, including a tax credit transfer agreement, Swift signed a PPA and renewable energy credit (REC) deal with Target. Swift Current is expected to maintain its status as the long-term owner and operator of the project.

This is the duo's second partnership. In 2023, Target executed a virtual power purchase agreement with Swift for its 197MW Castle Gap Wind project in Central Texas. The project was funded by a **debt** financing led by MUFG and a Goldman Sachs tax equity financing agreement.

Last month (September), Swift closed a \$300 million senior secured revolving credit facility to fund its 10GW multi-technology pipeline across the US. By the end of 2024, the developer will own and operate 1GW of renewable energy projects.

Moss was the EPC contractor on the Harvest Gold project, which used US-manufactured First Solar modules. ■

Trinasolar sues again amid sector-wide IP disputes

Trinasolar has filed with the US District Court of Delaware and the US International Trade Commission in an ongoing intellectual property dispute within the solar manufacturing industry.

The manufacturer filed a lawsuit with the US District Court of Delaware against Canadian Solar patent infringements on Trinasolar's IP, specifically its TOPCon technology.

With the ITC, Trinasolar requested a limited exclusion and cease-and-desist order against Canadian Solar and other related entities. The order applies to certain solar cells, modules, panels, and other Trinasolar technology.

Adam Walters, general counsel, Americas for Canadian Solar's modules and systems solutions business, responded: "Canadian Solar respects and takes very seriously its own intellectual property rights and those of third parties. In our view, this is a frivolous lawsuit, and we expect the court will find that our proprietary TOPCon technology does not infringe on the patents claimed by Trina."

Earlier this month, the Shanghai, China-based manufacturer also <u>filed a complaint with the</u> <u>ITC</u> against Runergy and Adani Green Energy for patent infringement, specifically 2 tunnel oxide passivated contract solar patents.

Trinasolar has over 2,000 patents, many centred on its TOP-Con technology. Its lawsuit and order requests with the ITC are only part of the ongoing IP dispute in the sector. In April (2024), Maxeon Solar, which is developing a 3GW module factory in New Mexico, <u>sued</u> <u>QCells, First Solar, and Canadian</u> <u>Solar</u> for copying its patented tech. The companies are some of the 30 manufacturers planning to build facilities in the US after the IRA's tax incentives have drawn interest from companies worldwide.

The US Department of Commerce is addressing solar component tariffs on China, circumvention duties, and illegal dumping by Asian companies. In November, it will announce its decision on countervailing duty investigations for crystalline photovoltaic cells from Cambodia, Malaysia, Thailand, and Vietnam, following over a year of investigations into illegal government subsidies. LATIN AMERICA

Eneva closes BTG assets acquisition

Brazilian power generator Eneva has closed the acquisition of the Linhares Geradora, Tevisa Termelétrica Viana and Povoação Energia from BTG Pactual.

Eneva and BTG Pactual first agreed to a deal earlier in July (2024) that sees Eneva add close to 860MW of thermal generation located in the states of Espírito Santo and Maranhão to its portfolio.

- The assets include:
- UTE Viana and Viana I 212MW
- UTE Povoação 75MW
- UTE LORM (Linhares Geradora) - 240MW

• UTE Geramar I and II - 332MW The acquisition of Geradora de Energia do Maranhão which holds the UTE Geramar I and II power plants is still pending.

Other shareholders that make up the share capital of Gera Maranhão together with BTGP exercised the tag along right to sell their shares to Eneva and conditions still need to be implemented or waived in order for the parties to proceed with the closing of the transaction.

Eneva will pay R\$640 million for Linhares Geradora in addition to R\$215 million corresponding to 100% of the debentures issued by the asset.

For the Tevisa and Povoação assets, Eneva entered an association agreement with BTG Pactual under which the power generator will acquire all the shares in both assets in exchange for 119,322,767 new common shares issued by Eneva and 3 bonus subscriptions for up to 15,905,437 new Eneva shares, dependent on subject to the realisation of capacity reserve contracts.

Advisers to Eneva:

- Rothschild & Co Brasil financial
- Lefosse legal. 🗖

LATIN AMERICA

360Energy raises \$22m for solar in Argentina

Renewable developer 360Energy has raised \$22.3 million in green bonds to finance solar projects in Argentina, *PFR* has learned.

The dollar-denominated bonds will mature in October 2027 and the proceeds will be used to finance the development and construction of renewable projects or refinance operational projects.

The company's portfolio includes about 250MW of operational solar assets in the provinces of San Juan, Catamarca and La Rioja and an additional 200MW of capacity under construction or in development. Projects in construction/development eligible under $the \,green\,bond\,framework\,include:$

- PSF Córdoba Solar 8.1MW, September 2025 COD
- PSF Palomar Solar 11.9MW, January 2026 COD
- PSF Colón Solar + BESS -23MW, April 2026 COD
- PSF Arrecife Solar + BESS -19MW, June 2026 COD
- Realicó Solar + BESS 18MW, September 2026 COD
- PSF Colonia Elía 200MW, end of 2028

Pilar, Buenos Aires-based 360Energy develops and operates solar and storage projects across Argentina.

Placement agents:

- Banco Galicia structuring and placement agent
- BBVA structuring and placement agent
- ICBC
- Banco Comafi
- BST
- BACS
- Balanz
- Invertir en Bolsa
- Banco Mariva
- PP Inversiones
- Legal advisers:
- Bruchou & Funes de Rioja -360Energy
- Tavarone, Rovelli, Salim & Miani structuring and placement agents

Casa dos Ventos signs green hydrogen supply deal

Renewables developer Casa dos Ventos has signed a memorandum of understanding with Swiss fertiliser producer Atlas Agro for the supply of green hydrogen.

Under the agreement, the company will conduct technical and economic feasibility studies to supply green hydrogen for the production of sustainable nitrogen fertiliser in Atlas Agro's Uberaba, Minas Gerais, factory.

The factory will need 300MW of renewable output which will come from Casa dos Ventos's portfolio of wind and solar assets. The factory will have production capacity of 530,000 tons of fertilisers per year and is scheduled to start operations in 2028.

São Paulo-based Casa dos

Ventos has a 3.1GW portfolio of projects in operation or under construction in Brazil and a development pipeline exceeding 30GW.

Earlier this month (October 2024), the developer and data centre provider Odata <u>signed a</u> <u>long-term agreement for output</u> from the Babilônia Sul wind complex in Brazil.

BNDES to finance biogas plant in Brazil

Brazilian development bank BNDES has agreed to finance the expansion of biomethane and biogas production at a plant owned by Geo bio gas&carbon.

The bank will provide a R\$37.6 million (\$6.6m) loan to the company for its Tamboara unit located in the state Paraná. The expansion will require a total of R\$41 million.

The financing includes:

- R\$33.6 million from the Climate Fund
- R\$3.9 million from FINEM The biomethane production capacity will be increased from 70 Nm³/h to 1,500 Nm³/h, and

"BNDES' support was crucial for this plant to be implemented, as is this new financing, which allows Geo to take a major step in expanding its portfolio of projects for biomethane production."

Alessandro Gardemann, chief executive of Geo

biogas production capacity from 1,750 Nm³/h to 3,500 Nm³/h.

The Tamboara unit was the first large-scale commercial biogas production plant in Brazil to process waste from sugarcane production and has been in operation since 2012.

Alessandro Gardemann, chief executive of Geo, said: "BNDES' support was crucial for this plant to be implemented, as is this new financing, which allows Geo to take a major step in expanding its portfolio of projects for biomethane production."

Earlier this month (October 2024), BNDES provided <u>a \$88 million loan for an industrial-scale ethanol production plant that</u> Agrícola Alvorada is developing in the state of Mato Grosso.

<mark>≆≣</mark> \$263m

Numbers:

News in

Rialma is issuing \$263 million in debentures to finance transmission projects in Brazil



Fotowatio is seeking permitting for the 317MW Loncualhue wind project in Chile



MidOcean Energy closed its acquisition of a 15% stake in Peru LNG from Hunt Oil Company



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LATIN AMERICA

Orygen lands concession for Peru solar

Actis-backed Orygen has secured a definitive concession for a solar project the company is developing in Peru.

The Ministry of Energy and Mines granted the concession to the Wayra solar project, a 94MW solar project located in the department of Ica.

Actis launched its energy plat-

form Orygen following the company's acquisition of Enel's Peruvian generation business for around \$1.4 billion earlier this year (2024).

The platform comprises a 2.2GW diversified energy generation portfolio including solar, wind, hydroelectric and thermal gas assets, and an additional 12GW development pipeline of renewable projects.

Earlier this month, Actis <u>land-ed a total of \$1.45 billion to re-finance</u> the Enel acquisition. The financing consisted of \$1.2 billion in a senior secured notes 144A/Reg S offering, a \$100 million medium-term syndicated loan and a \$150 million revolving credit facility. ■

Eletrobras lands \$400m loan in Brazil

State-owned electric utility Eletrobras has landed a \$400 million loan from a syndicate of banks in Brazil.

The financing was led by Citibank and comes with a 10-year tenor and a 3-year grace period. The loan is guaranteed at 80% by SACE, the Italian export credit agency also known as Servizi Assicurativi Del Commercio Estero SPA, and the remaining 20% will be guaranteed by the syndicate of banks.

The loan comes as Eletrobras looks to diversify its instruments for raising funds and obtaining credit lines for project financing purposes.

Eletrobras is the largest electric utility in Latin America with more than 44GW of installed capacity from hydro, thermal, wind and solar assets, and around 73,600km of transmission lines across Brazil.

The company is also branching out to develop new sectors including offshore wind. Earlier this week, Eletrobras <u>agreed to</u> <u>partner with offshore wind de-</u> <u>veloper Ocean Winds</u> to collaborate on offshore wind projects along the Brazilian coast.

Rialma plans \$260m in bonds for transmission

Rialma SA is planning to issue R\$1.5 billion (\$263m) in debentures to finance transmission projects in Brazil.

The company is issuing the debentures in 2 series of R\$785 million and R\$715 million respectively. The proceeds will be used to finance transmission projects constituting Lot 2 the company

won in a 2023 auction.

Lot 2 includes 1,614km of transmission lines across Bahia, Minas Gerais and Espírito Santo. The projects will enable greater renewable energy integration into the grid and increase reliability.

The projects are scheduled to be completed in 2029 and re-

quire a total investment of R\$2.4 billion.

Brasília-based Rialma SA operates in the energy including transmission and generation, agriculture and mining sectors across 8 states.

Coordinators on the issuance:

- BTG Pactual lead
- Bradesco BBI 🔳

Fotowatio preps 317MW wind project in Chile

Spanish developer Fotowatio Renewables Ventures (FRV) is seeking permitting for the Loncualhue wind project in Chile.

Located in the region of Maule, the Loncualhue project will have an installed capacity of 317MW and generate about 762GWh of output per year. The project includes a substation and a 24.2km transmission line that will interconnect it to the Nueva Cauquenes substation.

Construction on the project is expected to begin in July 2026, and it is set to come online in July 2028. Fotowatio is anticipating that the project will require \$340 million.

The sponsor had first submit-

ted the project Chile's Environmental Evaluation Service for permitting in April 2023.

Madrid-based Fotowatio is developing several utility-scale renewable projects in Chile including the 432MW Llanos de Marañón and <u>the Medialuna energy storage project</u> located in the region of O'Higgins.

MidOcean closes Peru LNG acquisition

EIG-backed MidOcean Energy has closed its acquisition of a 15% stake in Peru LNG from oil and gas firm Hunt Oil Company.

Following the acquisition, the company holds 35% of the total interests in Peru LNG. MidOcean <u>acquired</u> <u>20% of Peru LNG</u> earlier this year, purchasing SK Innovation's entire stake in the LNG company.

Hunt retains a 35% stake in PLNG and will continue to operate the company. The parties <u>first agreed to a</u> <u>deal</u> in August (2024). Other PLNG stakeholders include Shell (20%) and Marubeni (10%).

The transaction will be funded entirely by Aramco which will increase its stake in MidOcean to 49%.

PLNG owns and operates the only LNG export facility in South America, which is located in Pampa Melchorita. Peru LNG's assets include:

- a natural gas liquefaction plant with 4.45mmtpa processing capacity
- a fully-owned 408km pipeline with a 1,290 mmcf/d capacity
- 2 x 130,000m³ storage tanks
- a 1.4km marine terminal
- a truck loading facility with capacity up to 19.2 mmcf/d Advisers:
- Morgan Stanley financial, MidOcean
- Latham & Watkins legal, MidOcean
- Bracewell legal, Hunt 🔳

US Presidential Election 2024: status quo or the sledgehammer

The biggest talking point among power sector executives in the build-up to the election has been the future of the Inflation Reduction Act (IRA). A marquee legislative move from the Biden Administration to bolster the clean energy economy recently celebrated its second anniversary, and investment data indicates it has had early success. Estimates that nearly half a trillion dollars have been invested, with investments from the federal government largely comprised of tax credits and private investment.

How each presidential candidate is expected to treat the IRA has been a point of consternation for the sector.

"Harris sees the IRA as one of the big accomplishments of her vice-presidency. It's a legacy item for both President Biden and her, so it would be my expectation that she would be using all the levers she has in her control to keep it," Timothy Urban, who leads the Bracewell tax policy practice out of the firm's Washington, DC-based Policy Resolution Group, told PFR.

"With Trump, it may be very different. President Trump has identified various energy technologies and energy technology subsidies that he thinks should be looked into. And there are Republican members of the House and Senate who think the IRA should be repealed or revised. If there were a Republican takeover of Congress and the White House, they would like to look at everything in the Internal Revenue Code, including the energy tax support mechanisms, and require stakeholders to justify why taxpayer dollars should support them."

Should Trump return to office, the future of the IRA is unlikely to be a zero-sum game. Many in the industry point to 5 vulnerable areas: tax credits from electric vehicles, the Department of Energy's loan guarantee program, the acceleration of tax credit phaseouts, \$80 billion given to improve the Inland Revenue Service, and permitting for new offshore wind projects.

"The next administration has a period of time where they can easily undo what the other one did. That's why there's a big scramble for the Treasury and DOE [to] get money out, get things finalized," Roger Kranenburg, VP energy strategy and policy at Eversource said at S&P Global's Financing US Power conference in Houston, Texas earlier this month.

When asked last month how Republicans would approach the IRA if Trump were elected, House Speaker Mike Johnson told CNBC that it would be impossible to dismantle the IRA entirely. "You've got to use a scalpel and not a sledgehammer, because there's a few provisions in there that have helped overall," he said, adding that "most of the law was terribly harmful to the economy."

ELECTION

Johnson and other Republicans have refused to specify which portions of the law would be on the chopping block and which would be safe.

In response, some developers are trying to 'Trump Proof' their projects. Two ways to do so are to start construction (including signing specific construction-related contracts) or prove detrimental reliance and be grandfathered in with tax credits.

Others have taken a more 'wait and see' approach to the political uncertainty that is coupled with some regulatory uncertainty as some of these IRA regulations haven't been finalised.

According to Bracewell's Urban: "Many investors are sitting on their hands and waiting because they don't want to write a big check and then find out that the facility they're underwriting won't be eligible for tax credits.

"So, I think that for investors to really, get the green light and go for it with new economic development, we need both a sense of political certainty and a sense of regulatory certainty."

Renewable Republicans

Yet due to the IRA's significant momentum in spurring renewables activity and investment across the US, a large number of projects are in traditionally Republican states. While the IRA is typically considered highly partisan—not a single Republican voted for it as it was passed through a reconciliation process—that attitude is changing.

Longtime Republican strategist Matt Gorman told PFR that Republican politicians at all levels of government "don't want to be accused of gutting a bunch of jobs."

For various reasons, including land prices, labour union concentration, and community energy locations, Republican and swing states have received more than triple the number of new green energy projects, jobs, and funding than Democratic states since the start of the IRA. Georgia and North Carolina alone have seen over 50 new projects come online, creating over 25,000 jobs in mainly red and purple areas, according to Department of Energy (DOE) and Bloomberg research.

While renewable energy generation accounts for a large percentage of these new projects, manufacturing, from EVs to battery components to solar modules, provides long-term job opportunities and large paychecks.

The largest DOE investment under the IRA has been the \$9.2 billion loan agreement with BlueOval SK, a joint venture between Ford Motors and Korean EV battery company SK ON, for manufacturing plants in Kentucky and Tennessee. Over their multi-year construction period, these projects alone will create 27,000 jobs, including over 6,000 permanent jobs.

Because of the Red-skewed financial and job-creation benefits from the IRA, some Republican leaders are pushing against calls for IRA removal.

In October, over a dozen members of Congress wrote to House Speaker Johnson, urging him to prioritise business certainty in any changes to the IRA provisions. They warned that repealing energy tax credits could jeopardise private investments and disrupt ongoing development. Repealing the IRA would be a "worst-case scenario" in which billions of taxpayer dollars were spent with little return.

As a result, many manufacturers are more confident that their provisions in the IRA, such as the 45X Advanced Manufacturing Production Tax Credit, will be less likely to be eliminated.

"The energy transition, particularly solar power generation, is happening because it's the right economic decision, regardless of who is in government," said Martin Pochtaruk, CEO of Heliene Solar, which is operating and developing solar module factories in Minnesota and Georgia.

The growth of the DOE loan program and Inflation Reduction Act tax credits has been aiding the domestic manufacturing boom in these states and private investment is starting to catch up.

In August 2024, Standard Chartered invested \$235 million in a Texas solar modular factory developed by global renewable company Trinasolar. The Wilmer, Texas, manufacturing facility is expected to produce 5GW of PV solar modules per year, including 3 different types of modules for utility-scale, C&I, and residential solar projects.

This follows Korean renewable energy business Qcells, which has plans to invest more than \$2.5 billion to build a complete solar supply chain in the US, while Enel North America said last year it will build an industrial-scale production facility in the US for manufacturing solar photovoltaic (PV) modules. Both cited the IRA's incentives for domestic production.

California-based Natron Energy also revealed plans to develop a \$1.4 billion utility-scale battery manufacturing plant in North Carolina.

The facility is expected to produce 24GW of sodium-ion batteries per year, 40 times more than the company's current production rate.

"The old, worn-out paradigm that all Republicans are against renewable energy and Democrats are for it is less accurate now. We're seeing a new world where several Republican Congresspeople and Senators have constituents making money or being employed in their neighbourhoods and benefiting from the supply chains associated with these energy facilities," said Urban. "I think there will be a number of Republicans who will stand up and try to defend various technologies or facilities or investments or loans, etc., as being additive to the economy and domestic employment."

Tariff threats

Developers and manufacturers are already bracing themselves for some supply chain disruption, as the US raised tariffs on a host of imported goods from China, including solar panels, batteries, and EVs, in May. President Biden previously introduced tariffs on panel manufacturers in Cambodia, Malaysia, Thailand and Vietnam for allegedly circumventing existing tariffs on Chinese solar companies. However, the government rowed back on the tariffs with a two-year waiver in June 2022, ahead of the IRA. President Biden called it "a 24-month bridge as domestic manufacturing rapidly scales up to ensure the reliable supply of components that US solar deployers need."

The moratorium has expired, and the fear, certainly from the solar sector, is that it could stop utility-scale project development in the US and lead to many projects being put on hold, with developers unable to obtain enough solar panels.

"This is one of the issues where there isn't a ton of daylight between the two candidates," said Paul Nathanson, a senior principal in Bracewell's Policy Resolution Group who has worked on trade and tariff issues for mover 20 years. "It's not expected that Harris' approach will be tremendously different from that of President Biden, who toned down the Trump administration rhetoric but was no free trader."

"Companies move around in reaction to tariffs, and now Mexico is a big focus. USMCA is coming up for review in 2026, so both Harris and Trump would have an opportunity to update its terms. Trump will threaten to renegotiate or withdraw, Harris will focus on labour provisions, but with both, there will be a focus on tightening rules related to preventing Chinese circumvention of tariffs through Mexico, which has been a bipartisan concern," he added.

Nuclear agreement

As power demand in the US surges, only exacerbated by the rise

of AI and the need to energise data centres, nuclear power is gaining the attention of the largest offtakers.

Regardless of the election outcome, nuclear development is an area that is expected to continue to grow.

"It has been exciting and fulfilling to see the strong bipartisan support that nuclear energy has enjoyed over the last several years. Both political parties address the issue from a slightly different perspective, but it's resulted in significant, bipartisan, legislative wins," said Andrew Shaw, partner at Bracewell and an expert on nuclear energy policy.

Constellation signed a 20-year power purchase agreement with Microsoft in September, paving the way for the restart of the Three Mile Island (TMI) Unit 1 nuclear plant.

Microsoft will purchase energy from the renewed plant, which was shut down 5 years ago, as part of its goal to help match the power its data centres in PJM use with carbon-free energy.

Earlier in the year, Duke Energy signed memoranda of understanding (MoUs) with Amazon, Google, Microsoft, and Nucor to develop power contract terms with electric utilities in North Carolina and South Carolina. The goal is to lower the cost of building new nuclear technologies and batteries.

The companies proposed developing new electricity rate structures, known as "tariffs," to lower the long-term costs of clean energy investments.

While some parts of the US power sector, like nuclear, remain sanguine that any election result will unlikely have a major impact on development, for most all eyes will be on whether the result of 5 November means status quo or the sledgehammer.



Swing states

As we head into the final days of the presidential election campaign, polls indicate a tight race between the 2 candidates: Republican Donald Trump and Democrat Kamala Harris.

Given energy security, tax cuts, and climate change have played a large part in the election rhetoric, sentiment towards the US power sector could have an impact the outcome, especially if the outcome hinges on a few thousand votes across the swing states.

In addition to their significant influence in the electoral college, swing states have been leaders in green energy investment and project numbers since 2021. Nevada, Arizona, Georgia, Michigan, and North Carolina are among the top 15 states that have received immense clean energy investments. Here we explore what power and renewables activity has been taking place in Arizona, Nevada and Pennsylvania.

Arizona

Arizona currently has 1,000MW of operating energy storage, and renewable energy makes up 12% of the state's electricity mix.

By 2030, Arizona anticipates adding 7,600MW of util-

ity-scale solar power, 1,700MW of wind power, and 5,900MW of battery storage—enough clean electricity to power the equivalent of over 5 million homes.

VOTE

Developers have been busily taking advantage of the growing demand, with Recurrent securing \$513 million in project financing for its 1,200MWh Papago Storage project Energy in June (2024).

The Papago Storage project is currently in construction and scheduled to commence operations in 2025. The developer also signed a pair of 20-year tolling agreements with Arizona Public Service Company (APS) for its Desert Bloom Storage and Papago Solar projects in Arizona.

All 3 investments are being built in Maricopa County, which in 2020 <u>Democrat</u> and delivered President Biden the state's 11 electoral votes.

Also in Maricopa, Nextracker and Atkore expanded their tracker factory in the Phoenix area, KORE Power is investing in a battery manufacturing plant in Buckeye, and Amphenol Industrial opened a new facility for solar junction boxes.

Clean energy investment could play a huge part in garnering votes. According to a Solar Energy Industries Association (SEIA) battleground state polling, solar is the most popular energy source in Arizona. More than 8 in 10 believe that solar is good for the state's economy, and 70% believe solar can help, "replace many of the manufacturing and blue-collar jobs that the country has lost over the last few decades."

Nevada

Nevada has seen developers plan and advance transmission projects connecting wind and solar assets between the Rockies and Pacific Coast. Just this month, US regulators issued the final environmental impact statement for the Cross-Tie transmission project being developed by TransCanyon.

TransCanyon, a joint venture between Pinnacle West Capital and Berkshire Hathaway Energy subsidiary BHE US Transmission, is developing approximately 214 miles of high-voltage transmission line.

Arevia Power is also advancing its 700MW/2.8GWh Libra Solar project in Nevada. The solar-plus-storage project, estimated to cost \$2.3 billion, is set to be the largest in the state. The Libra project will be developed on 5,500 acres of federally managed public land in Mineral County, Nevada.

The project is part of the Bureau of Land Management's (BLM) roadmap for solar projects across the western US known as the "Western Solar Plan". At the start of the year, the agency detailed the next steps for several renewable projects processed in Arizona, California, and Nevada, totalling 1.7GW and 1.3GWh storage.

Not that these development plans have been universally popular in the state. Indigenous tribes in the state and environmentalists have opposed the speed of development, fearing fragile ecosystems and sacred sites are at risk. Some local officials too have sought to fight the plan and Nye County has imposed a moratorium on solar applications.

Pennsylvania

Pennsylvania has a long history of energy leadership, especially in oil and gas, but also nuclear power.

Only around 3% of the state's electricity comes from renewables, and a recent PennEnvironment Research & Policy Center report slammed the state's slow progress. The report ranked Pennsylvania 48th among all states (and the District of Columbia) in growing renewable energy in the last 10 years.

Not that renewables are being entirely forgotten. The state has in place its Climate Action Plan 2021 to reduce emissions by 26% by 2025. And Governor Shapiro issued a two-pronged legislative package to dramatically increase the percentage of Pennsylvania's electricity sourced from clean energy; and establish a PA-specific cap-and-invest program that would generate billions of dollars to reinvest in communities.

As part of the Department of Energy's hydrogen hub awards, Pennsylvania was the only state to win funding for 2. The federal government will invest \$750 million to build the renewable Mid-Atlantic Clean Hydrogen Hub (MACH2) in Philadelphia and the surrounding region, creating over 20,000 jobs. The Biden Administration also selected the ARCH2 Hydrogen Hub based in West Virginia, creating 21,000 jobs for the Appalachian region, including in Southwestern Pennsylvania.

These new decarbonisation efforts in PA need many more years to catch the legacy energy economy. An economy that may be boosted if Pennsylvania state Senator Gene Yaw's Pennsylvania Baseload Energy Development Fund takes off.

Yaw touted in August a bill that would create a development fund based on the \$10 billion Texas Energy Fund (TEF) for dispatchable energy to support the state's grid. He said the PJM needs an additional 80GW of necessary base load over the next decade, and the fund would support dispatchable generation projects through a low-interest revolving loan process. According to Yaw's statement, the state manages 25% of the 13-state grid's baseload generation.

In July (2024), the <u>PJM received dramatically high prices</u> in its 2025/2026 power market auction, signifying the extent of its reliability concerns. The average auction price was \$269.92/MW-day across most of the PJM area, which includes 13 states and the District of Columbia. PJM said that this price was more than 960% higher than \$28.92/MW-day for the 2024/2025 auction. ■

More than 8 in 10 believe that solar is good for the state's economy, and 70% believe solar can help, "replace many of the manufacturing and blue-collar jobs that the country has lost over the last few decades."