ENVERUS

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Enbridge expands RNG portfolio in U.S. with $1.2B Morrow buy

Enbridge is acquiring seven operational renewable natural gas facilities in the U.S. from developer Morrow Renewables in a deal valued at $1.2 billion. President and CEO Greg Ebel said the acquisition represents a de-risked portfolio of operating and scalable RNG assets that will accelerate progress toward Enbridge's energy transition goals. The deal is expected to close in early 2024, with about 60% of the purchase price staggered over the following two years.

The facilities upgrade biogas from municipal landfills at six locations in Texas—Edinburg, Hinton, Tyler, Melissa, Longview and Alvarado—and one landfill in Fort Smith, Arkansas. Together, they produce an aggregate 4.5 Bcf of RNG per year, Enbridge said, or about 12.3 MMcf/d. Commercial structures are underpinned by long-term contracts with municipalities and offtake agreements with Shell and BP, allowing the portfolio to contribute to Enbridge's EBITDA next year. About 86 full-time plant and field operations employees from Morrow will also join Enbridge through the transaction.

During Enbridge's Q3 earnings call Nov. 3, EVP Cynthia Hansen noted that there was significant growth in RNG in North America, with 75 Bcf of production in 2022 expected to expand to 95 Bcf this year. ***Read more...***

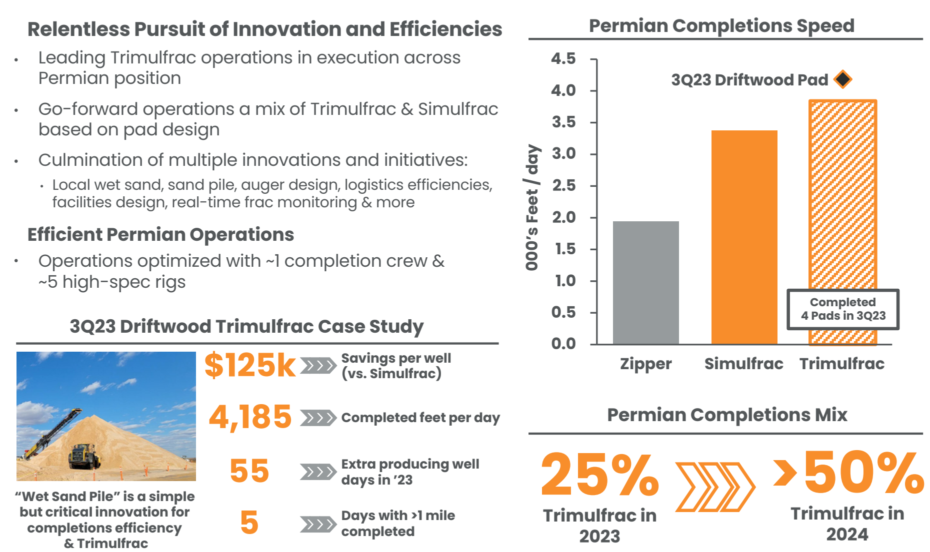
Trimulfrac shows up simulfrac in Ovintiv's Midland operations

You've heard of simulfrac, but Ovintiv is taking completion efficiency a step further in the Permian. CEO Brendan McCracken said on a Nov. 8 earnings call that the company's "trimulfrac" operations are "setting the leading-edge efficiency frontier in the Midland Basin." Trimulfrac is a technique that utilizes stockpiled wet sand sourced from local mines to complete three wells with a single frac spread at once. The technique is reducing cycle times and lowering well costs, Ovintiv said. So far in 2023, the company has used trimulfrac on a quarter of its Midland Basin wells, and it expects to use it on 50% of 2024 completions in the basin.

Brought online 16 net wells more than expected in Q3, with 15 in the Permian.

"On a recent Driftwood pad, we saved an additional $125,000 per well when compared to simulfrac," COO Greg Givens said. "We were also able to bring the pad online sooner with our increased efficiencies achieving almost 4,200 ft of completed lateral per day. With the pad online sooner, it will have an incremental 55 production days in 2023, directly increasing our capital efficiency." ***Read more...***

Ovintiv's Record Permian 'Trimulfrac' Performance



Source | Ovintiv 11/07/23 presentation via Enverus docFinder

Activity Index

Upstream

Devon opts for maintenance in 2024 with steady Delaware focus

Devon Energy intends to keep production flat in 2024 at 650,000 boe/d (48% oil) amid continued volatility in commodity markets. Capex spending will be in the $3.3-3.6 billion range, down 10% compared to 2023 and assuming 5% service cost deflation. At $80/bbl oil, free cash flow is expected to grow 20% YOY to $3.2 billion.

"With ongoing macro uncertainty and with the ample spare capacity that OPEC+ possesses, we have no intention of adding incremental barrels into the market at this point in time," CEO Richard Muncrief said on a Nov. 8 earnings call. "This disciplined approach reflects our commitment to pursuing value over volume, and shareholders will benefit from our high-graded slate of development projects designed to enhance capital efficiency and returns on capital employed."

Infrastructure buildout enables more New Mexico wells, boosting rates.

Devon intends to allocate more than 60% of its spending to the Delaware Basin, with an increased focus on multi-zone Wolfcamp development in New Mexico. Assisted by the continuing buildout easing recent constraints, the tighter focus on the New Mexico side of the basin should boost productivity and improve overall capital efficiency.

Williston Basin activity will be limited to high-impact opportunities—particularly infill drilling and exploring refrac potential—and reduced 50% compared to the 40 wells planned to come online in 2023. In the Eagle Ford, there will be decreased appraisal drilling and an increased focus on DeWitt County, Texas.

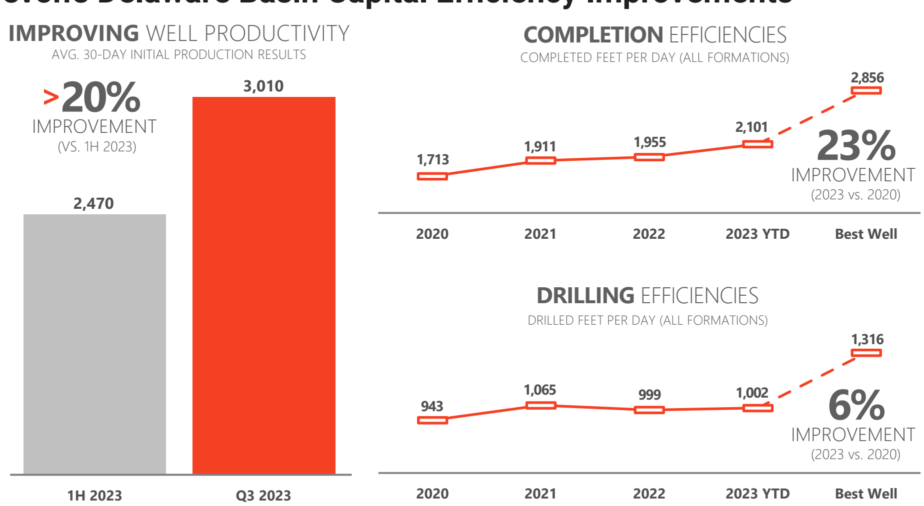
Having dropped a rig around mid-year in its Anadarko Basin JV with Dow, Devon intends to continue with a three-rig program into 2024. The JV hit 50% of Dow's 133-well drilling carry at the end of Q3. And in Wyoming's Powder River Basin, the company had considered a two- to three-rig program for next year after establishing commercial results across Converse County this year, but ultimately decided on a one-rig plan because of the basin's higher well costs.

"The fact of the matter is that we're still challenged somewhat on the well cost a little bit, and some of that's just a function of your activity level being somewhat depressed, quite honestly," Muncrief said. "They're slower than you need to drive those costs down."

Devon ran 16 rigs and brought online 59 wells in the Delaware Basin during Q3. A fourth frac spread was dropped around mid-year to build DUC inventory but will be added back in 1Q24.

Q3 well highlights from the Delaware include the Bora Bora Wolfcamp A project in the Todd area of Eddy County, New Mexico. The development's nine wells averaged 10,000-ft laterals and delivered IP30s of 4,600 boe/d (60% oil) per well. The wells came in under budget and returns are expected to be in the triple digits, COO Clay Gaspar said.

Devon's Delaware Basin Capital Efficiency Improvements



Source | Devon Energy 11/07/23 presentation via Enverus docFinder

Nearly four years after shut-in, Terra Nova comes back to life

Suncor has finally resumed production from Terra Nova field off Eastern Canada after completing a long-delayed life extension project. The operator said production is expected to ramp up over several months. Terra Nova was discovered in 1984 and began production in 2002. The project is expected to extend its producing life by 10 years and unlock 70 MMbo of additional recoverable resources.

Terra Nova has been offline since December 2019, when the Canada-Newfoundland and Labrador Offshore Petroleum Board ordered Suncor to halt operations following a series of safety and regulatory noncompliance incidents. The company and its partners sanctioned the life extension project in May 2019, but the project was temporarily shelved in 2020 while Suncor reviewed its options following the oil price crash.

Project is expected to extend its producing life by 10 years & unlock 70 MMbo.

It was almost scrapped entirely and the field shut down permanently, before the partners reached an agreement to restructure ownership and secure financial assistance from the provincial government. Operator Suncor now holds 48% WI in Terra Nova, Cenovus 34% and Murphy Oil Corp. 18%, following the exit of Equinor, ExxonMobil, Chevron and Mosbacher Operating.

The Terra Nova FPSO was upgraded at a state-owned naval shipyard in Spain and returned to Canada in February. However, the vessel was forced to remain dockside in Newfoundland and Labrador as it underwent further maintenance work, which caused Suncor to miss its previous Q2 restart date.

"Focusing on safety and operational integrity, we have brought this key offshore project online, providing additional cash flow for our shareholders as well as many benefits to the Newfoundland and Labrador and Canadian economies," Suncor president and CEO Rich Kruger said. "We appreciate the collaboration and support from the provincial and federal governments regarding this project."

Upstream

NOG grows Delaware position, expands into Ohio's Utica

Non-operating producer Northern Oil & Gas is acquiring additional Delaware Basin assets and its first assets in Ohio's Utica Shale in separate transactions with private parties for $170 million plus 107,657 common shares, valued at around $4 million. CEO Nick O'Grady said the company expects to reach its 1x leverage ratio target in 2024 based on current strip prices, adding that cash-generating assets such as these should add to dividend capacity over time.

Assets producing combined 6,600 boe/d; 2024 capex expected to range $33-38MM.

The Delaware Basin acquisition, expected to close in 1Q24, consists of about 3,000 net acres located primarily in Lea and Eddy counties, New Mexico. NOG already owns interests in about 90% of the leasehold. Current two-stream net production is 2,800 boe/d (67% oil), and 2024 production is expected to drop to 2,500 boe/d before ramping to an average of more than 3,500 boe/d from 2025 through 2030. The interests include 13 net producing wells, one net well in progress and 23.6 net undeveloped locations. Mewbourne Oil operates about 80% of the acreage.

The Appalachian Basin transaction, expected to close in Q4, consists of non-operated interests in Jefferson, Harrison, Belmont and Monroe counties, Ohio. The primary target on the acreage is the Point Pleasant/Utica Shale. Current net production is about 23 MMcf/d (100% gas) and is expected to grow slightly in 2024. The interests include 0.8 net producing wells and 1.7 net wells in progress. Substantially all of the acreage is operated by Ascent Resources.

"After closing, our Permian lands will approach 40,000 net acres and definitively become our most active and largest basin in terms of activity and production," NOG president Adam Dirlam said. "Our focus remains on low-breakeven, resilient inventory that works in nearly any price environment, and these assets deliver in spades. On the Appalachian front, we are acquiring assets in the core of the Utica under one of the most prolific operators, with a focus on near-term development. As we continue to build data in the area, there is significant potential for longer-term expansion."

NOG expects to spend capex of $33-38 million on the acquired assets in 2024. It will fund the acquisitions with cash on hand, free cash flow and borrowings under its revolving credit facility.

Federal court clears the way for Conoco's Willow development

A federal court upheld regulators' approval of ConocoPhillips' Willow oil development in the National Petroleum Reserve in Alaska. On Nov. 9, U.S. District Court Judge Sharon Gleason rejected a lawsuit brought by the Center for Biological Diversity and Sovereign Iñupiat for a Living Arctic that sought to vacate the Bureau of Land Management's record of decision and final supplemental environmental impact statement, as well as the U.S. Fish and Wildlife Service's biological opinion, all of which were released in Q1. The plaintiffs argued that the federal agencies had failed to consider how the project would exacerbate climate change and damage habitat for endangered species.

The BLM had originally approved Willow in 2020, but a federal court identified several deficiencies in the final EIS and biological opinion and vacated Willow's approvals. The agencies' 2023 reports were issued to address the deficiencies. Willow will be developed utilizing three pads, rather than the five originally proposed. A central processing facility will be capable of handling 180,000 bo/d and 250 MMcf/d.

Conoco global operations SVP Andrew O'Brien said on a Nov. 2 earnings call that the company had started the first phase of module fabrication for the project and opened a gravel mine on the North Slope as it prepares for the 2024 construction season. Half the scope of the project is under firm contracts that are contingent on an FID. Of the contracts that have been secured, 75% are lump sum or unit rate, which limits Conoco's exposure to inflation. Willow's price tag to reach first production is still estimated at $7.0-7.5 billion.

BOEM must hold Lease Sale 261 by Dec. 20, per court

A ruling by the U.S. Fifth Circuit Court of Appeals gives the Biden administration until Dec. 20 to hold Gulf of Mexico Lease Sale 261. Four environmental groups led by the Sierra Club were found to lack standing to appeal a district court's ruling that required previously withdrawn parcels to be offered in the sale. The U.S. Bureau of Ocean Energy Management had sought 37 days to comply with the district court's injunction, which it was granted. After this lease sale is held, one is not scheduled until 2025, and only three sales are envisioned in the proposal for the next five-year plan.

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The parcels on offer for Lease Sale 261 have forced two delays. At issue are 1,225 blocks on 6.4 million acres that had been removed from the sale to protect endangered species, primarily the Rice's whale. The American Petroleum Institute, Chevron, Shell and the state of Louisiana sued the Department of the Interior following the final sales notice, and the U.S. District Court for the Western District of Louisiana ruled that the withdrawn acreage must be offered. Furthermore, the district court ruled that the BOEM must remove stipulations that were meant to further protect the whale but were argued to be exceptionally burdensome to the energy industry.

The sale was originally scheduled for Sept. 27 but was delayed until Nov. 8 to give the BOEM time to comply with the district court ruling. The sale was not held on that date either, in order for the Fifth Circuit to hear an appeal by the environmental groups.

Click for More!

BOEM approves Dominion's 2.6 GW Coastal Virginia wind farm

Upstream

WhiteHawk doubles royalty interests in its Marcellus position

WhiteHawk Energy LLC has acquired incremental mineral and royalty assets in the Marcellus Shale for $54 million. The company said the transaction increased its mineral and royalty ownership in its 475,000-gross-acre position by 100% and will double its net revenue interest in each well across its assets. The acreage is primarily located in Washington and Greene counties, Pennsylvania, and has about 1,315 producing horizontal wells. WhiteHawk also owns interests in 72 wells that are in progress, 64 permitted wells and nearly 900 undeveloped Marcellus locations, with additional potential in the underlying Utica Shale.

The Philadelphia-based company currently owns interests in 850,000 gross unit acres and 2,550 producing wells in the Marcellus and Haynesville shales. It acquired its Haynesville position earlier this year. Primary operators on the Haynesville acreage include Southwestern Energy, Chesapeake Energy, Aethon Energy Management and Comstock Resources. Operators on the Marcellus acreage include EQT, Range Resources and CNX Resources.

Total completes Canada oil sands exit with Fort Hills closing

Suncor Energy closed its acquisition of TotalEnergies' 31.23% stake in its Fort Hills oil sands mine for about C$1.47 billion. The French supermajor said that after closing adjustments it received a cash payment of C$1.83 billion at closing. The Canadian producer purchased all of TotalEnergies EP Canada, which besides the Fort Hills stake included associated midstream commitments.

The sale marks Total's exit from its last upstream assets in Canada. It originally agreed to sell all its Canadian assets to Suncor for C$5.5 billion in April. However, ConocoPhillips preempted that transaction in late May to secure Total's 50% WI in the Surmont steam-assisted gravity drainage oil sands project for C$4 billion. That deal closed Oct. 4, the same day the new Suncor transaction was first announced.

Total's 31.23% Fort Hills stake will give Suncor full ownership of the oil sands mine, adding 61,000 bbl/d of net bitumen production and 675 MMbbl of net 2P reserves to Suncor's totals. Importantly, Suncor secures additional long-term bitumen supply to fill its Base Plant upgraders past the end of the Base Mine life in the mid-2030s. The company previously said the additional stake in Fort Hills will be subject to its objective to achieve net zero emissions from operations by 2050.

"With these two divestments over the last couple of months, TotalEnergies effectively exits the Canadian oil sands, focusing our allocation of capital to oil and gas assets with low breakeven," Total CFO Jean-Pierre Sbraire said. "The company has hence received more than $4 billion from these sales during the fourth quarter 2023, out of which, as previously announced, $1.5 billion will be shared with shareholders as buybacks in 2023."

North American Upstream Stock Movers (Last Month)

Company	Ticker: Exchange	$/Share 11/27/23	$/Share 10/27/23	Δ (%)	Δ YOY (%)
Top 5					
Hammerhead Energy Inc.	HHRS:NASDAQ	$14.91	$12.66	18%	47%
Gulfport Energy Corp.	GPOR:NYSE	$133.75	$123.93	8%	70%
Advantage Energy Ltd.	AAV:TORONTO	$7.42	$7.13	4%	(14%)
Tenaz Energy Corp.	TNZ:TORONTO	$3.07	$2.96	4%	177%
Pine Cliff Energy Ltd.	PNE:TORONTO	$1.05	$1.04	1%	(14%)
Bottom 5					
Callon Petroleum Co.	CPE:NYSE	$31.78	$37.97	(16%)	(22%)
Crew Energy Inc.	CR:TORONTO	$3.62	$4.33	(16%)	(25%)
Surge Energy Inc.	SGY:TORONTO	$5.76	$6.94	(17%)	(18%)
Journey Energy Inc.	JOY:TORONTO	$2.96	$3.61	(18%)	(29%)
Paramount Resources Ltd.	POU:TORONTO	$19.65	$24.01	(18%)	(11%)

Note | Data includes public companies listed on NYSE, Nymex or TSX and primarily operating in U.S. and Canadian upstream oil and gas, limited to >$1.00/share and >100,000 daily share volume.
Source | FactSet

Tourmaline closes C$1.45B Bonavista buy in Deep Basin

Tourmaline Oil Corp. completed its acquisition of Bonavista Energy Corp. on Nov. 17 for C$1.45 billion of equal parts cash and stock. The company expects to exit 2023 with more than 600,000 boe/d of production, including Bonavista volumes, compared to Q3 output of 502,524 boe/d (23% liquids). Tourmaline said in its Q3 earnings that it anticipates 2024 output averaging 600,000-610,000 boe/d, including more than 140,000 boe/d of liquids.

Deep Basin pure-play Bonavista had 1.2 million net acres, 459 MMboe of 2P reserves as of Oct. 1 and 839 gross estimated horizontal drilling locations (656.7 net). The assets produce more than 60,000 boe/d (64% gas) with a base decline rate of 24% and are expected to generate net operating income of C$450 million next year. Tourmaline previously said Bonavista generates attractive free cash flow that it believes can be increased through its internal Deep Basin expertise and lower capital execution costs. It added that it sees considerable technical upside on Bonavista's acreage in the Glauconitic trend.

Ovintiv shares from EnCap buy to hit market at $44.35

An Ovintiv Inc. shareholder that got its stake as part of a $4.275 billion Midland Basin acquisition is selling 8.2 million shares to the public. NMB Stock Trust, a Delaware statutory trust, is selling 9.4 million shares at a price to the public of $44.35 each for gross proceeds of $417 million.

Ovintiv will keep some of those shares off the market, having agreed to buy $53 million worth, which comes to roughly 1.2 million shares at the price to the public. The company will get no proceeds from the sale. In June, Ovintiv closed the acquisition of substantially all the assets of EnCap Investments-backed Midland Basin drillers Black Swan Oil & Gas, PetroLegacy Energy and Piedra Resources for $3.24 billion cash and $1.12 billion in stock. The sellers' acquisition of roughly 31.8 million shares through the deal went into NMB Stock Trust, which sold 15 million shares in September. After the latest offering, NMB Stock Trust will own roughly 3% of Ovintiv shares, down from 11.6% immediately after the acquisition.

Upstream

Apex boosting output from Egyptian assets acquired in H1

Houston-based Apex International Energy has increased production from four fields in Egypt's Western Desert by 34% through an ongoing workover program. The fields were part of an acquisition, completed in June, of stakes in six concessions from Eni subsidiary IEOC Production. The company is now producing a total of 11,100 boe/d, including 4,800 boe/d from the acquired assets.

The 32-well workover program in Aghar, Raml, Faras and Zarif fields encompasses recompletions and returning wells to production. So far, Apex has increased production from the four fields by 1,000 bo/d to a total of 3,900 bo/d. The company said it also began reporting its first gas production in September from the Faramid project on the East Obaiyed concession, which is still operated by IEOC. Gross production is currently 24.4 MMcf/d, of which about 6.1 MMcf/d is attributable to Apex's 25% WI in the concession.

"The addition of the six acquired concessions, the comprehensive workover program executed by our team in the acquired fields and the startup of the Faramid gas project have contributed to increasing our working interest production by 62%, or 4,200 boe/d, since the beginning of the year," Apex president and CEO Thomas Maher said. "Importantly, these increases have been accomplished without a lost-time incident and while lowering unit operating costs by 20%, which is a tribute to the dedication and hard work of the Apex and PetroFarah teams."

Strike receives environmental nod for South Erregulla project

Strike Energy Ltd. received the primary environmental approval from Western Australia's Environmental Protection Authority for its planned South Erregulla Phase 1 project. The company said this completes the primary government approval process required prior to being able to contemplate an FID. The project, located in the Perth Basin, will involve building a 40 TJ/d (38 MMcf/d) modular gas plant and associated solar array. A potential second phase could expand production capacity to more than 80 TJ/d.

In early October, Strike announced a successful appraisal of the field through its SE-2 well. It encountered 16 meters of net pay across three sections of reservoir in the Kingia sandstone, with porosity averaging 11% and ranging up to 18% and reservoir pressures of about 6,730 psia. The company is currently drilling the SE-3 appraisal well, which was spudded Oct. 21 and is currently at 4,373 meters MD. After casing and cementing the 9-5/8-inch casing, Strike will drill through the primary Kingia target and to TD.

More than 20 companies place bids in Angola lease sale

Angola's latest oil and gas lease sale for onshore blocks in the Lower Congo and Kwanza basins attracted 53 bids from 22 companies, including Afentra, Apex, Corcel, Etu Energias, Serinus Energy, Simples Oil, Sonangol and Tusker Energy. The National Oil, Gas and Biofuels Agency will now review the bids and create a list of preferred bidders by YE23, with the winners to be announced in January.

In the Lower Congo Basin, the CON 8 block attracted the most offers at 10, and the CON 2, 3 and 7 blocks attracted 12 bids combined. In the Kwanza Basin, a total of 31 bids were placed on KON 7, 10, 13, 15 and 19, while KON 1, 3 and 14 received no bids.

Trimulfrac shows up simulfrac in Ovintiv's operations *From* PG.1

During Q3, Ovintiv brought online 116 net wells, 16 more than planned. Fifteen of the additional wells were in the Permian. Production of 572,000 boe/d outperformed the upper end of guidance by 12,000 boe/d, driven by strong well performance across Ovintiv's portfolio and base production exceeding expectations.

Ovintiv is increasing its guidance, with H2 oil and condensate production now expected to be 9,000 bbl/d higher than previously forecast, at 219,000 bbl/d. Full-year production guidance has been increased to 550,000-560,000 boe/d from 535,000-550,000 boe/d, and capex guidance has been narrowed to $2.745-2.785 billion from $2.680-2.850 billion despite 15-20 wells added to the 2023 program.

Orlen bolsters Norwegian portfolio as KUFPEC exits

Orlen Group subsidiary PGNiG Upstream Norway is acquiring the Norwegian subsidiary of Kuwait Foreign Petroleum Exploration Co. for $445 million, including more than $200 million of anticipated KUFPEC Norway cash on hand at closing. Orlen president and CEO Daniel Obajtek said the deal will bring synergies to the group's development portfolio in the country and increase its stakes in fields where it already holds working interests.

KUFPEC Norway holds stakes in 11 licenses off Norway, of which PGNiG already has interests in seven. Its core producing fields are Gina Krog (30% WI), Sleipner Ost (10% WI), Sleipner Vest (9.4% WI), Gungne (10% WI) and Utgard (6.2%), all of which are operated by Equinor. Upon closing, PGNiG Upstream Norway will hold 41% WI in Gina Krog, 25% in Sleipner Ost, 24.4% in Sleipner Vest, 25% in Gungne and 23.56% in Utgard. The company will also pick up 21.8% WI in the Equinor-operated Eirin discovery, which it said is scheduled for development as a tieback to Gina Krog.

PGNiG Upstream Norway's pro-forma production is forecast to exceed 100,000 boe/d in 2024. Its recoverable resources will increase to 400 MMboe, with over 80% of the added resources consisting of gas. Orlen said the group's gas production in Norway will increase by 33% to over 140 Bcf per year, or nearly 390 MMcf/d.

KUFPEC, a subsidiary of state-owned Kuwait Petroleum Corp., said the Norwegian portfolio delivered cumulative net income of over $600 million, with an approximate IRR of 14%, from its entry in 2013 through 2022. KUFPEC CEO Mohammad Salem Al-Haimer added that the company still views Norway as one of its core areas of interest. In early November, KPC laid out plans to address a KWD 14.1 billion ($45.7 billion) budget shortfall through 2027 in a response to a parliamentary inquiry. In the document, seen by Reuters, KPC said it planned to add address about 20% of the shortfall by divesting "non-core and unprofitable assets."

Midstream & Downstream

Summit gets 15-year extension in Bakken, adds Utica compression

Summit Midstream Partners secured a commercial win in the Williston Basin during Q3. The company signed a 15-year contract extension covering more than 30,000 net contiguous acres that are largely undeveloped in southern Williams County, North Dakota. The client plans to launch a one-rig program on the acreage in mid-2024. Also in the Bakken, an anchor client acquired another client, which Summit views as an opportunity.

"While integration has historically delayed development for a few months, we are excited about the highly contiguous pro forma dedicated acreage position," the company said in its Q3 earnings release. "We expect this will enable our anchor customer to develop more 3-mile laterals to its historic 2-mile laterals. There are currently three rigs running and approximately 117 DUCs behind the systems."

In Appalachia, Summit commenced construction on a centralized compression project for the Summit Midstream Utica system. The project, which is expected online by year's end, will boost system capacity by 20 MMcf/d and result in incremental compression fees in Q1. Summit said it continues to evaluate the timing of further compression additions.

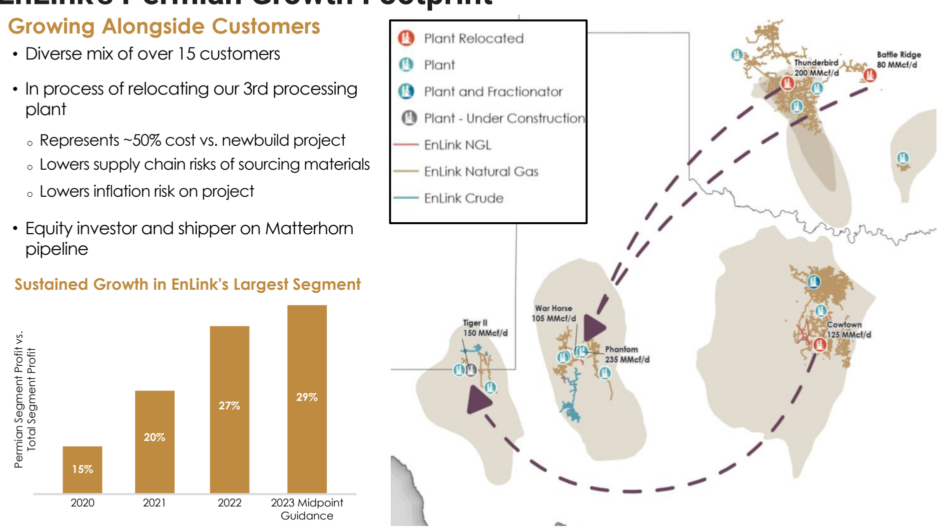
EnLink eyes fourth gas plant relocation to Permian beyond 2024

The Permian has delivered an increasing portion of EnLink Midstream's profits over the last two years. Permian profits were 15% of the company's total in 2020 and rose to 20% in 2021 and 27% in 2022. They are expected to constitute 29% of the 2023 total. To support future growth, EnLink is relocating a third gas processing plant from the Mid-Continent to the Permian. Known as the Cowtown plant when it was operating in the Barnett, the 150 MMcf/d Tiger II plant is still expected to come online in 1H24 in West Texas.

The prior two relocations were the 105 MMcf/d War Horse and 235 MMcf/d Phantom, both from Oklahoma. Relocation costs are about half the cost of a newbuild project. These projects also have lower inflation risk and lower supply chain risks of sourcing materials. CFO Benjamin Lamb believes a fourth relocation could occur after 2024.

"We've been on a pace for the last several years of adding about a plant a year," Lamb said on a Nov. 1 earnings call. "This year, the Phantom plant, next year will be the Tiger II plant in the Delaware Basin. And so we are watching carefully as our customer plans develop to understand when the right time to take the next step will be. I do think there will be an additional plant expansion promise in the Permian, but at this point, I don't think it's in 2024. … When the time does come, though, the good news is we've got great options, including more options to move existing plants because it has worked extremely well for us the first three times we've done it."

EnLink's Permian Growth Footprint



Source | EnLink Midstream 10/01/23 presentation via Enverus docFinder

EnLink & BKV reach first CO_2 injection at Barnett CCS project

EnLink Midstream and BKV Corp. injected the first CO_2 volumes at their joint CCS project in the Barnett in mid-November, ahead of schedule. Natural gas produced by BKV was processed at EnLink's Bridgeport, Texas, gas plant, yielding a CO_2 waste stream that was captured and transported to BKV's Barnett Zero CCS facility, a nearby underground injection control well. Barnett Zero is one of the first purpose-drilled Class II commercial carbon sequestration wells injecting CO_2 waste from gas processing plants in the U.S., and the startup puts BKV and EnLink among the first energy companies in the nation to have commercial CCS operations.

Another BKV CCS project, Cotton Cove, expected to start up by YE24.

Barnett Zero is forecast to achieve an average sequestration rate of up to 210,000 tonnes of CO_2-equivalent annually over the course of the project life. Privately held BKV, which is majority owned by Thai mining and power company Banpu, intends to use the project as a modular prototype that can be repeated and quickly scaled for future Class II and Class VI wells, as applicable.

"We are thrilled to officially commence our Barnett Zero project and begin our newest chapter—commercial CCS operations," BKV CEO Chris Kalnin said. "BKV has an actionable path to net zero Scope 1, 2 and 3 emissions from its upstream operations by the early 2030s and is committed to achieving net zero Scope 1 and 2 emissions from its upstream operations by the end of 2025."

BKV's second CCS project, Cotton Cove, is expected to reach commercial operations by YE24 and sequester up to 45,000 tonnes of CO_2 annually. Cotton Cove is a JV with Banpu Power US Corp., another affiliate of the Thai firm. BKV is pursuing expansions of both Cotton Cove and Barnett Zero. It is also considering three additional gas processing projects aimed at providing 0.97 mtpa or more of third-party CO_2e emissions for sequestration. It expects to each FID on these projects later this year or in 2024.

Midstream & Downstream

Looping of Oneok's W. Texas NGL line to more than double capacity

A looping project that has been progressing incrementally on Oneok Inc.'s West Texas NGL pipeline, acquired from Chevron in 2014, is nearing completion. The company announced plans for the remaining loop, which will connect with its Arbuckle II pipeline and expand the pipeline's capacity from 300,000 bbl/d to 740,000 bbl/d for a cost of $520 million. Expected in service in 1Q25, the project was driven by Permian contracting success; Oneok has secured seven new third-party processing plant connections and two existing plant expansions since 2018. The additional capacity will provide optionality to use the legacy system for NGLs, refined products or crude oil transportation service.

Provides optionality to use legacy system for NGLs, refined products or oil.

"We've been looping that system from West Texas all the way into the Fort Worth area where we tie into the Arbuckle II pipeline," commercial liquids and natural gas gathering and processing SVP Sheridan Swords said on a Nov. 1 earnings call. "When that loop is completed, which is in our West Texas project, we can segregate all out the legacy system, the system we bought from Chevron, and use it for a different product."

The West Texas NGL pipeline already provides a connection from the Permian to Gulf Coast markets and fractionation capacity at Mont Belvieu. Oneok is currently building its sixth Mont Belvieu fractionator, expected to come online in 1Q25.

Kinetik brings 1 Bcf/d-plus Delaware Link into service

Permian midstream provider Kinetik Holdings completed construction of its Delaware Link pipeline in September and brought the line into service Oct. 1. The 45-mile, 30-inch pipeline can transport at least 1 Bcf/d and connects the company's processing facilities in Reeves County, Texas, to the Waha hub. The project is backed by long-term minimum volumes commitments and acreage dedications.

Kinetik is part of the JV that owns the Kinder Morgan-operated Permian Highway Pipeline, which transports gas from Waha to the Gulf Coast. A 550 MMcf/d PHP expansion is expected to start up in December, bringing capacity on the 430-mile pipeline to 2.65 Bcf/d.

Kinetik is also working on an expansion of its gathering system into Lea County, New Mexico. The project consists of more than 20 miles of large-diameter, high-pressure pipeline and is supported by multi-year gathering and processing agreements with minimum volume commitments. Kinetik said in a Nov. 8 update that right-of-way for the route had been received and it continues to target an in-service date in 1Q24.

San Mateo gets revolver bump as Matador eyes new processing JV

San Mateo Midstream LLC received a $50 million increase in lender commitments on its revolving credit facility, bringing the total to $535 million. Additionally, JPMorgan Chase was added to the company's lending consortium, which now numbers nine institutions.

"The $50 million increase in lender commitments under San Mateo's revolving credit facility provides San Mateo with greater operational and financial flexibility," Matador Resources CFO Brian Willey said. San Mateo is 51% owned by Matador and 49% by Five Point Energy LLC. The midstream company provides flow assurance for Matador and other producers in the Delaware Basin through oil gathering and transportation, gas gathering and processing, and water gathering and disposal services in Eddy County, New Mexico, and Loving County, Texas.

Matador also wholly owns Pronto Midstream LLC, whose Marlan cryogenic processing plant in Lea County, New Mexico, is now operating at its 60 MMcf/d design capacity. Matador plans to connect Pronto's natural gas system to San Mateo's in Q4.

Matador is also moving forward with plans for a new 200 MMcf/d cryogenic processing plant and is seeking a JV partner to help build it. Matador owns stakes in 525 miles of oil, gas and water pipelines, 520 MMcf/d of gas processing and more than 475,000 bbl/d of water disposal.

USD reaches extension with lenders, waiving defaults

USD Partners LP received some breathing room on its debt, agreeing Nov. 21 to an amendment to its existing revolving credit agreement that extends the maturity until next November and waives prior defaults. The terminaling partnership had been operating under a trio of waivers to its credit agreement since Oct. 9.

In addition to the new maturity date of Nov. 2, 2024, the agreement establishes a new independent director on the USD Partners board with authority over certain material actions of the partnership. The agreement also waives interest payments, instead putting the interest onto the principal that USD Partners will have to pay at maturity.

Partnership owes $195MM on facility and ended Q3 with $14MM in cash.

The Houston-based partnership will most likely need some sort of refinancing or new source of cash before next Nov. 2. The company said in its Q3 earnings report that it had borrowed $195 million on the credit facility and ended the quarter with $14 million in cash and equivalents. CFO Adam Altsuler said Nov. 21 that USD Partners will work with "existing and potential new customers on advancing several ongoing commercial discussions that could benefit the partnership in the near future."

In that vein, USD Partners announced Nov. 20 that it has entered a one-year extension with its long-term refining customer at its Hardisty terminal in Alberta. The current agreement, which ends in January, contains a commitment for 15% of the terminal's capacity, while the one-year extension contracts 7% of capacity through January 2025, with an option to utilize up to an incremental 4% on a monthly basis. The renewal contains take-or-pay terms with minimum monthly payments and a slightly higher average rate than the original terminaling services agreement.

Midstream & Downstream

Pieridae puts Goldboro LNG subsidiary on the market

Pieridae Energy Ltd. is pivoting away from its LNG project on Canada's East Coast and toward its Alberta natural gas and processing business. The company initiated a process to sell its Goldboro LNG subsidiary. Potential cash proceeds would be used to repay debt, in particular Pieridae's C$20 million bridge term loan that matures in December 2024. The company plans to conclude the sales process in 1H24.

Goldboro is a proposed FLNG project off Nova Scotia. The project's 2.8 mtpa capacity is 70% smaller than the original, land-based design after Pieridae explored a new concept to address rising costs and challenges presented during the COVID-19 pandemic. Germany's Uniper signed a 20-year sales and purchase agreement to offtake the volumes of Train 1 for 20 years. The project has been in the works since 2014 but never reached FID.

Goldboro is not the only Eastern Canada LNG project to stall or be scrapped. In March, Repsol withdrew its proposal to build an LNG export terminal in Saint John, New Brunswick. After conducting a feasibility study, the company determined that the 7.5 mtpa project would be uneconomic because of the cost of transporting the gas from Western Canada. Goldboro would contend with the same feedstock issue. In September 2022, Pieridae sought assurances from Canadian regulators that TC Energy could secure permits in a timely fashion to expand its pipeline system in Eastern Canada that lacks spare capacity.

NextDecade targets Rio Grande Train 4 FID in 2H24

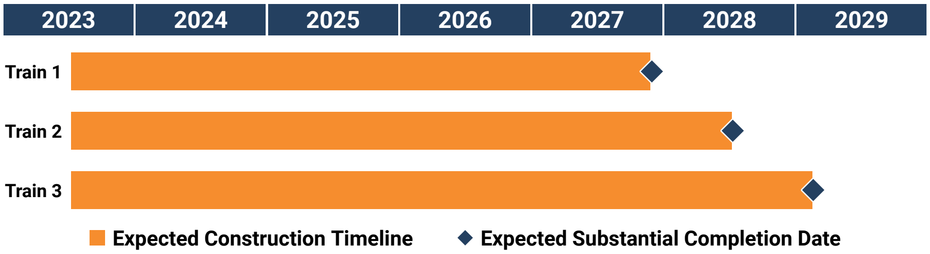
Since making an FID for Trains 1-3 of the Rio Grande LNG facility in Q3, NextDecade has shifted its commercialization efforts to Train 4, which it aims to sanction in 2H24. When fully developed, Rio Grande will be a five-train, 27 mtpa LNG export facility near Brownsville on the Texas Gulf Coast.

Phase 1 equity partners Global Infrastructure Partners, Mubadala, Singapore's GIC and TotalEnergies have options to participate in Trains 4 and 5, which if fully exercised would result in these companies providing 60% of the equity financing required for the two trains. Total's 10% equity option is conditional on exercising a sale and purchase agreement option for the final two trains. Total has already agreed to offtake 5.4 mtpa from Trains 1-3 and has an option to contract another 1.5 mtpa of long-term offtake from each additional train. Assuming Total fully exercises its option, only about 3 mtpa of long-term offtake would still need to be sold from each of the new trains to support FIDs.

"Construction of Train 4 and Train 5 should be advantaged due to the common facilities and full site preparation included in the Phase 1 EPC contracts, as well as potential labor optimization with a timely Train 4 FID," CEO Matt Schatzman said.

Work on Trains 1 and 2 was 8.1% complete as of September, breaking down into 35.7% of engineering, 14.1% of procurement and 0.2% of construction. Bechtel has made meaningful progress on purchase orders for Train 3 and is focused on mobilizing labor and equipment and preparing temporary facilities at the site.

Rio Grande LNG Phase 1 Construction Timeline



Project Completion as of September 2023

- Trains 1 and 2 – project completion 8.1%
  - Engineering 35.7%
  - Procurement 14.1%
  - Construction 0.2%
- Train 3 – Bechtel has made meaningful progress on purchase orders and is focused on mobilizing labor and equipment and preparing temporary facilities at the site

Source | NextDecade 11/13/23 presentation via Enverus docFinder

FERC Permitting Status of U.S. LNG Export Projects

Pending Applications

- Port Arthur LNG (Sempra, Trains 3 & 4, 1.86 Bcf/d), TX
- CP2 LNG (Venture Global, Blocks 1-18, 3.96 Bcf/d), Cameron Parish, LA
- Calcasieu Pass LNG (Venture Global, 0.06 Bcf/d), Cameron Parish, LA
- Plaquemines LNG (Venture Global, 0.45 Bcf/d), LA
- Corpus Christi Midscale Expansion (Cheniere, Trains 8 & 9, 0.45 Bcf/d), TX
- Elba Island Optimization Project (Kinder Morgan, 0.06 Bcf/d)

Projects in Pre-Filing

- Delta LNG (Venture Global, 2.76 Bcf/d), Plaquemines Parish, LA
- Port Fourchon LNG (0.65 Bcf/d), Lafourche Parish, LA
- Corpus Christi (Cheniere, Midscale Trains 8-9, 0.45 Bcf/d), TX

Approved, Under Construction

- Calcasieu Pass LNG Units 7-9 (Venture Global, 0.55 Bcf/d), Cameron Parish, LA
- Golden Pass LNG (ExxonMobil, 2.57 Bcf/d), Sabine Pass, TX
- Plaquemines LNG (Venture Global, 3.4 Bcf/d), LA
- Driftwood LNG (3.81 Bcf/d), Calcasieu Parish, LA
- Corpus Christi Stage 3 (Cheniere, 1.58 Bcf/d), TX

Approved, Not Under Construction

- Lake Charles LNG (Energy Transfer, 2.27 Bcf/d), LA
- Magnolia LNG (Glenfarne, 1.19 Bcf/d), Lake Charles, LA
- Cameron LNG (Sempra, Train 4, 0.97 Bcf/d), Hackberry, LA
- Port Arthur LNG (Sempra, Trains 1 & 2, 1.86 Bcf/d), TX
- Freeport LNG (Train 4, 0.74 Bcf/d), TX
- Gulf LNG (Kinder Morgan, 1.5 Bcf/d), Pascagoula, MS
- Jacksonville LNG (Eagle LNG, 0.13 Bcf/d), FL
- Texas LNG (0.55 Bcf/d), Brownsville, TX
- Rio Grande LNG (Next Decade, 3.6 Bcf/d), Brownsville, TX
- Alaska LNG (Alaska Gasline; 2.63 Bcf/d), Nikiski, AK
- Commonwealth LNG (1.18 Bcf/d), Cameron Parish, LA
- Delfin LNG (1.8 Bcf/d), Gulf of Mexico

Source | Enverus Intelligence

Oilfield Services

Diamond Offshore rig to collect highest day rate in nine years

A Diamond Offshore drillship secured a contract that calculates to as high as a $513,000 day rate, the highest for any drillship since 2014. While the contract is just for one well offshore Guinea-Bissau, the Ocean BlackRhino drillship's contract is valued at $15.4 million excluding mobilization, with a minimum duration of 30 days.

While Diamond Offshore did not name the client, Upstream reported that it would be for Dubai-based Apus Energy at the deepwater Atum 1X NFW on the Block 2 license, home to the Sinapa discovery. Apus agreed to acquire the Block 2 license in June from PetroNor E&P from $85 million. Apus is majority owned by Petromal, which is also the largest shareholder in PetroNor.

The well is now expected to spud next July, a delay from 2023. The Ocean BlackRhino will mobilize to the Atum 1X site following the completion of its contract with Woodside Energy on Sangomar field off Senegal. Former operator Svenska had been planning to drill the Atum 1X since 2018, but plans were indefinitely suspended in early 2020, as a result of a failed CNOOC farm-in deal and the COVID-19 pandemic.

Seatrium's backlog slips waiting for Petrobras to award FPSOs

Marine engineering and shipbuilding company Seatrium Ltd. saw its backlog decline by 10% over three months to S$17.7 billion ($13 billion). Meanwhile, it waits to finalize a contract to build one or two more FPSOs for Petrobras and an FID on a Shell deepwater project in the Gulf of Mexico.

Singapore-based Seatrium has yet to nail down the order from Petrobras for either the P-84 or P-85 FPSOs, or both. During a Nov. 8 conference call, Seatrium CEO Chris Ong confirmed that Petrobras is going through technical clarifications with Seatrium and another bidder, but said the process is "taking longer than expected because of the complexity of the contract." The other bidder is China's Offshore Oil Engineering Co., Upstream reported. Seatrium is already constructing four FPSOs for Petrobras in its shipyards: P-78, P-80, P-82 and P-83.

Borr Drilling catches up on nine-jackup buy, giving Seatrium a shot of cash.

The company's most notable win in Q3 was an LOI from Shell Offshore Inc. in August to build the floating production unit for the Sparta deepwater project. Seatrium will replicate the topsides single-lift integration methodology that it used for the FPUs at two other Shell GOM projects, Vito and Whale, which have already been delivered. The final contract will be issued with Shell's FID, which is expected in a matter of months.

Seatrium also said that its PPL Shipyard had received a S$968 million payment in November from Borr Drilling that pays off nine jackups. Borr agreed to buy the newbuild jackups, which included six that PPL originally built under canceled contracts, for roughly $1.3 billion in 2017, making a down payment of $500 million and agreeing to pay the balance within five years of delivery.

All the rigs were delivered over the next two years, but Borr was unable to meet the earlier deliveries' payment deadline. PPL gave Borr extensions that pushed the rigs' due date to 2025, and the recent payment beats the new due date by two years.

The payment gives Seatrium a boost of liquidity amid a difficult year. It revealed in its Q3 business update that it will report a net loss for the year. The company, which issues full earnings information only twice a year, reported a net loss of S$267 million in H1.

Seatrium said it will receive results of a strategic review by YE23 and will make the results public during an investor day in 1H24. The company, formed by the merger of Sembcorp Marine Ltd. and fellow shipbuilder Keppel Offshore and Marine Ltd., launched the strategic review March 1, one day after the merger closed.

Click for More!
Petrobras increases capex 31% in latest five-year plan

First newbuild jackup delivered to ARO with plans for 19 more

Saudi Arabia-based International Maritime Industries delivered its first newbuild jackup rig. The recipient is ARO Drilling, a JV of Saudi Aramco and Valaris, which marked the project's significance to the Saudi energy sector by naming the jackup Kingdom-1.

JV operating since 2017, with 5 jackups from Valaris & 2 from Aramco.

The jackup is the first of up to 20 newbuild jackups that ARO expects to receive over the next decade, supported by contracts with Aramco. The JV has been operating since 2017, with five existing jackups contributed by Valaris and two from Aramco.

Designed to the Letourneau Super 116E Class standard, Kingdom-1 was constructed in Hamriyah, UAE, in collaboration with Lamprell, before its transfer to IMI's yard in Ras Al Khair, Saudi Arabia, for final commissioning. IMI is a JV of Saudi Aramco, Bahri, Lamprell and Hyundai Heavy Industries.

In late October, ARO entered a $359 million term loan with a syndicate of local Saudi Arabian banks to finance delivery of the Kingdom-1 and the Kingdom-2, another IMI newbuild jackup that is slated for delivery in 1Q24. The loan matures in eight years and has a 16-year amortization profile with a 50% balloon payment due at maturity.

"The delivery and naming ceremony of Kingdom-1 signals the beginning of an ambitious long-term partnership with IMI to construct 20 offshore rigs in-kingdom," ARO CEO Mohamed Hegazi said. "This significant and unprecedented investment uniquely positions ARO to be the best-in-class drilling contractor for decades to come and enhances localization of the energy sector value chain."

Oilfield Services

Odfjell semisub receives extension from Equinor for Breidablikk

Equinor has exercised options for seven wells to extend the use of the Odfjell Drilling semisubmersible Deepsea Aberdeen at the Breidablikk oil field in the Norwegian North Sea. The options have a value of $138 million, excluding integrated services, performance and fuel incentives.

The exercised options are planned to start in mid-1Q25 in direct continuation of the semisub's current contract with Equinor at Breidablikk, which started in May 2022. The options extend the firm backlog on the Deepsea Aberdeen to YE25.

Includes options that could keep semisub contracted for additional 4 years.

In addition to the exercised wells, the contract now includes further options that, if exercised, could keep the Deepsea Aberdeen contracted for an additional four years. The upcoming periods consist of a six-well option followed by three eight-well options. Equinor and Odfjell will agree to the rates for the optional periods prior to exercise.

"With the exercised optional wells, Odfjell Drilling will see substantial cash flow earlier than forecasted as the rig moves to a higher day rate level," CEO Kjetil Gjersdal said. "The extension mechanisms now agreed could see the Deepsea Aberdeen remain in continuous operation with Equinor until 2029, delivering strong, predictable cash generation from the unit."

Production at Breidablikk started in October, four months ahead of schedule. The field, which is tied back to the Grane platform, is expected to produce at a plateau of 55,000-60,000 bo/d from 2024 to 2026 and has recoverable resources of 192 MMbo. Equinor and partners Vår Energi, Petoro and ConocoPhillips are expected to invest a total of NOK 21 billion ($1.9 billion) in the field.

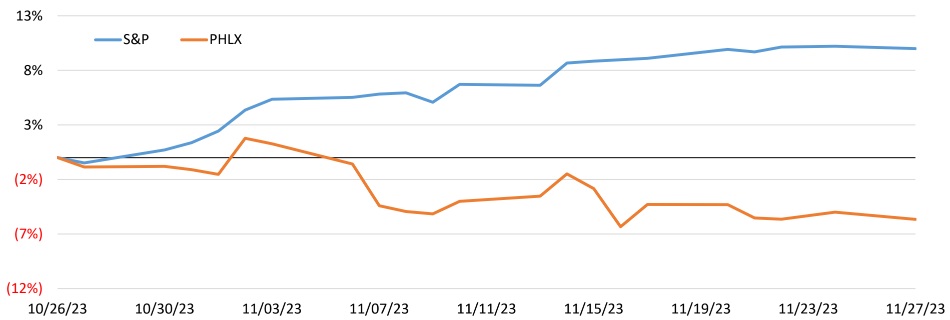
Subsea 7 to join in decom of Bijupirá and Salema off Brazil

Subsea 7 secured a contract from Shell for the decommissioning of subsea infrastructure associated with the FPSO Fluminense at Bijupirá and Salema fields, located in 700 meters of water in Brazil's offshore Campos Basin. The service company described the contract as sizable but did not give a dollar amount.

"Twenty years ago, Subsea 7 installed the flexibles and umbilicals for Shell's Bijupirá and Salema fields and, two decades later, we're proud to be one of Shell's chosen contractors to take part in the completion of this field's life cycle," Subsea 7's Brazil VP Yann Cottart said. The contract's scope includes the disconnection, recovery and disposal of 10 flexible risers, three umbilicals and nine mooring lines. Offshore works are planned to start in December.

In October 2022, Shell awarded Helix Energy Solutions Group Inc. a deepwater well decommissioning contract for subsea wells at Bijupirá and Salema. The project was scheduled at the time to commence in early 2024 for a minimum firm period of 12 months, with customer options to extend. Helix will provide the riser-based well intervention vessel Q7000, a 10,000 psi intervention riser system and ROVs.

PHLX Oil Service Sector Index vs. S&P 500



Source | FactSet

KCA Deutag to connect Equinor jackup to platform power

U.K.-based KCA Deutag received a contract to electrify Equinor's Askepott jackup offshore Norway. Delivered by KCA Deutag's Kenera business unit, the project will make the Askepott the first rig in Equinor's portfolio to be powered from shore when it is completed in 4Q24. Financial terms were not disclosed about the project, which is Kenera's latest effort to reduce Equinor's emissions.

Equinor's first rig to be powered from shore when completed in 4Q24.

The Askepott will receive power from high-voltage cabling via the Martin Linge A platform, which is already supplied with power from the shore through the world's longest AC cable and is located 42 km west of Oseberg field on the Norwegian Continental Shelf. Based on historic records and predicted calculations, the project will cut 20,000 tons of CO_2 per year versus running with traditional diesel generators, KCA Deutag said.

As part of the project, Kenera will convert the existing mud treatment room on Askepott to an electrical power room and install transformers, variable frequency drives and high-voltage switchboards. Kenera will provide a turnkey solution from initial procurement, detailed engineering, installation and commissioning before handing the project over to Equinor and KCA Deutag's team in Norway for day-to-day operations.

Previous Kenera campaigns to reduce Equinor's emissions included the energy optimization of both of Equinor's Cat J jackups, the Askepott and the Askeladden. These projects deployed technologies to reduce CO_2 and nitrogen oxides as part of Equinor's long-term emissions strategy for 2050 and resulted in the elimination of more than 85% of NOx emissions.

Oilfield Services

CGG advances its asset-light mission through deal with TAQA

Paris-based geoscience company CGG is close to the end of its journey toward becoming an asset-light firm after entering a definitive agreement to sell its entire 49% stake in Arabian Geophysical and Surveying Co. to Abu Dhabi-based energy company TAQA. The transaction is expected to close this year, subject to satisfying relevant conditions. Financial terms were not disclosed.

"The sale of our stake in ARGAS marks a final step in the strategic plan that we launched back in 2018 to become an asset-light company, by exiting the data acquisition services business and strengthening the focus on our differentiated high-end technology businesses," CGG CEO Sophie Zurquiyah said. She added that CGG will continue to offer to TAQA "our high-end subsurface imaging and seismic acquisition systems to support their business objectives."

Since 2017, CGG has engaged in at least eight divestment transactions. The most notable of these was the 2019 deal that sold CGG's streamers and its 50% stake in five high-end seismic vessels and two legacy vessels to Shearwater GeoServices for an undisclosed amount, which effectively removed CGG from the data acquisition sector.

By making ARGAS a wholly owned company, TAQA believes it can fully access synergies, CEO Khalid Nouh said. He added that TAQA will invest in ARGAS to "leverage its survey capabilities and enable us to tap into the region's natural resources and mining industries."

TechnipFMC divests measurement business to PE firm One Equity

TechnipFMC will sell its Measurement Solutions business to New York-based private equity firm One Equity Partners for $205 million, deeming it a non-core business. Part of the Surface Technologies segment, the Measurement Solutions business provides metering products and systems and related services in North America and Europe.

"This transaction reflects TechnipFMC's broader portfolio strategy to further focus on our core products and market-leading technologies, as well as integrated solutions and services for our clients," CEO Doug Pferdehirt said. Closing is expected during 1H24.

One Equity Partners considers the Measurement Solutions business an "established global player with exciting growth potential as a standalone company," senior managing director J.B. Cherry said. The business' metering products include positive displacement, turbine, ultrasonic and Coriolis meters used in custody transfer applications. It also offers packaged flow measurement and fully automated systems as well as digital solutions related to capturing physical material and fiscal data from within interconnected infrastructure. The business employs 450 and operates six facilities, including manufacturing locations in Erie, Pennsylvania, and Ellerbek, Germany.

DOF wins contract for one vessel, signs charter for another

DOF Group announced that it secured a contract for one of its vessels and agreed to charter another vessel from Maersk. The client for the secured contract will be Subsea 7, which will hire the Skandi Acergy for a minimum of 18 months, adding $85-105 million to DOF's firm backlog.

The Skandi Acergy is a 2008-built large construction vessel equipped with a 400-ton crane, a 2,000-square-meter deck and two installed ROV systems that DOF will operate under the contract. Commencement is expected in 1Q25 after the vessel completes a subsea umbilicals, risers and flowlines contract off West Africa for what the company called "a tier 1 contractor and operator" in an Aug. 7 announcement. Scheduled to commence in Q4, the $80-100 million earlier SURF contract for the Skandi Acergy includes a 326-day firm period and 75 days of options.

DOF also agreed to charter a subsea support vessel from Maersk Supply Service for two years starting in 1Q24. The Maersk Installer was delivered in 2017, making it among the newest subsea vessels on the market. It is equipped with a 400-ton crane, a 100-ton crane and an 1,800-square-meter deck. DOF said the Maersk Installer would "perfectly fit" in its fleet because of its design for maximum efficiency, reliability and redundancy. Financial terms were not disclosed.

ExxonMobil buys FPSO Liza Unity from SBM for $1.26B

ExxonMobil completed the purchase of the FPSO Liza Unity from SBM Offshore, a few months ahead of the end of the maximum lease term. The supermajor's Guyana subsidiary paid $1.26 billion to take ownership of the FPSO, which SBM Offshore will continue to operate and maintain until 2033.

The FPSO Liza Unity left the Keppel shipyard in 2021 and started production at the Stabroek block in February 2022, operating through an integrated operations and maintenance model. The lease term would have expired in February 2024. The Liza Unity has a nameplate capacity of 220,000 bo/d, but Exxon's Stabroek partner Hess said in July that the FPSO is exceeding that production level thanks to debottlenecking improvements.

SBM Offshore will use the net proceeds for the full repayment of the $1.14 billion project financing. This will reduce SBM's net debt, which stood as $7.5 billion at the end of Q3.

Precision closes on CWC, expanding its service rig fleet

Precision Drilling Corp. completed its acquisition of CWC Energy Services Corp., which the company said was valued at C$127 million ($92 million) on Nov. 7. The purchase price consists of 947,807 Precision common shares, C$14 million cash, plus the assumption of CWC's net debt of C$38 million.

"With the projected synergies, we expect the transaction to be accretive on a 2024 cash flow per share basis and to support our ongoing deleveraging plan," CEO Kevin Neveu said. Precision expects to deliver C$20 million in annual operating synergies and raise C$20 million from excess real estate sales.

Originally announced Sept. 7, the acquisition continues Precision's expansion from contract drilling into well servicing following 2022's purchase of the well servicing business of High Arctic Energy Services. Including CWC's fleet, Precision now has 72 active service rigs in Canada, 73 active drilling rigs in Canada and 51 active drilling rigs in the U.S.

Oilfield Services

Essential exits TSX after shareholders barely OK Element deal

Element Technical Services Inc. completed its acquisition of Calgary-based Essential Energy Services Ltd., taking TSX-listed Essential private in a C$77.7 million ($57.4 million) transaction after shareholders approved it by a razor-thin margin. Through an amalgamation transaction, Essential shareholders received C$0.40 for each share, a 10% premium from the previous day's closing price when the deal was announced Sept. 15.

Essential shareholders narrowly approved the transaction during a special meeting Nov. 7, and the transaction closed Nov. 10. The amalgamation, which required approval by two-thirds of shares voting, got 66.79% support, winning by roughly 77,000 shares out of nearly 65 million cast.

Element is a privately held, Calgary-based provider of fracturing and coiled tubing operations. Essential's business consisted of its coiled tubing service and its Tryton Tool Services division.

Borr intends to approve first dividend with hopes of growth

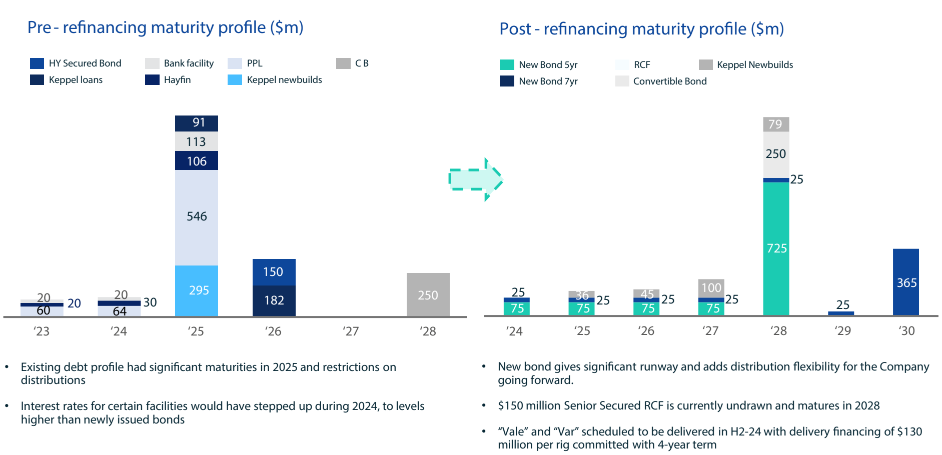
After refinancing its debt and securing work for all 22 of its delivered rigs to be operating in December, Borr Drilling believes it is ready to start issuing dividends. Borr directors intend to authorize a $0.05/share quarterly dividend at a special general meeting Dec. 22, the company's first dividend since it was founded in 2016. The jackup contractor also expects to raise its dividend over time.

"With the way that we have been communicating and setting up the company and the development we have seen in day rates and the outlook of the business, it is a full expectation to be generating increased cash in the quarters and years going forward," CEO Patrick Schorn said during a Nov. 16 earnings call. "So therefore, I think it is safe to assume that in that we have the opportunity to eventually increase the returns to shareholders."

Borr recently repaid all its outstanding secured borrowings, using proceeds from $1.54 billion of new senior secured notes across two tranches, a private placement of shares and a new $180 million super senior revolving credit facility. The refinancing pushed the maturities of the bulk of Borr's debt from 2025 to 2028. Schorn said deleveraging remains a priority even with the start of dividends.

For Q3, Borr reported technical utilization of 99%. One jackup started a new contract in October and another in November. The jackup Gerd is scheduled to start a nine-month contract in December for Bunduq Oil Co. offshore the UAE, at which point all 22 delivered Borr rigs will be working. Borr has two jackups under construction with delivery expected in late 2024.

Refinancing Creates Long-Term Foundation



Source | Borr Drilling 11/20/23 presentation via Enverus docFinder

Energy Transition

Braya finds an offtaker in Macquarie for RNG project

Newfoundland and Labrador-based Braya Renewable Fuels closed two transactions to support its refinery conversion project. It executed a supply and offtake agreement with Macquarie Energy Canada, a subsidiary of Macquarie Group's Commodities and Global Markets unit, to provide inventory monetization for renewable feedstock and products. The company also signed a C$75 million senior secured term loan with HPS Investment Partners LLC to further the conversion project.

Braya's development is repurposing a petroleum refinery in Come by Chance, Newfoundland and Labrador, to produce renewable diesel and sustainable aviation fuel. Once the first phase is completed, it will be able to produce 18,000 bbl/d of renewable diesel, and minor additional equipment can be added to enable SAF production. The conversion is expected to be completed in December, after which Braya will begin startup procedures for commercial operations. A future second phase will add facilities to convert less expensive feedstocks for additional hydrogen production to increase renewable diesel output to 24,000 bbl/d.

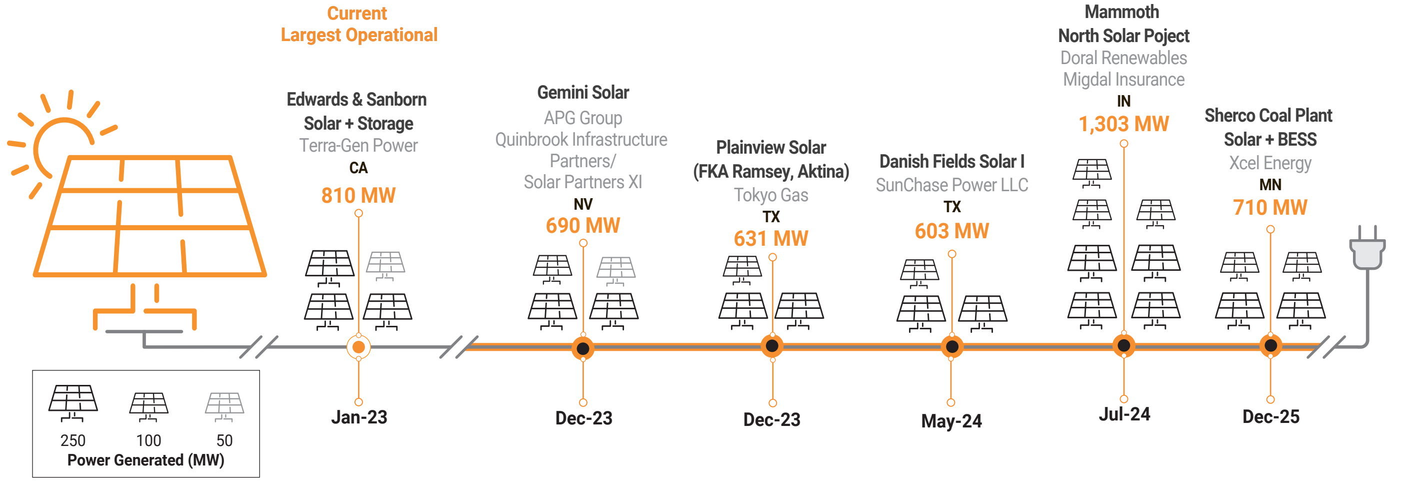
The developer also has an agreement in place with ABO Wind for joint development of green hydrogen production at the facility. ABO's proposed multi-phase project will provide hydrogen for Braya's refinery operations as well as green ammonia for export. The company won exclusive rights to develop its Toqlukuti'k wind and hydrogen project on 267,000 acres near the refinery in a Crown Land auction in September.

ABO ultimately aims to develop up to 5 GW of wind capacity to support green hydrogen production. The pilot phase of the project, however, will use interruptible power from the NL Hydro grid to run a 30 MW electrolyzer facility at the refinery. The pilot is expected to come online in 2025 and could meet 13% of Braya's hydrogen needs.

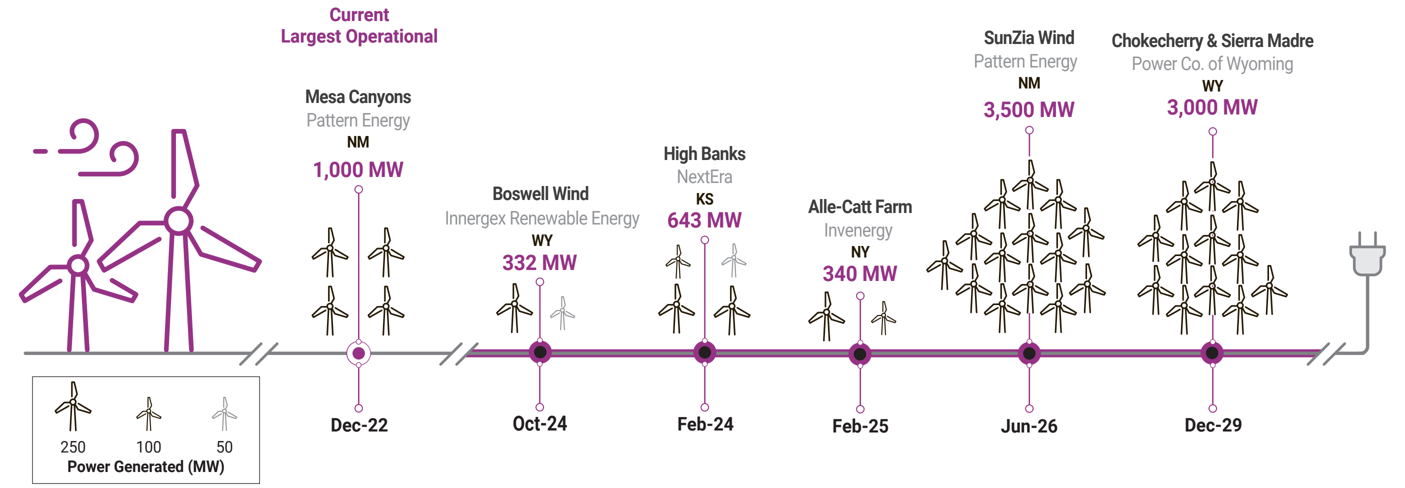
Braya is majority owned by Cresta Fund Management. North Atlantic Refining Corp., which is managed by Silverpeak, and Energy Capital Partners are minority owners. ECP made its C$300 million equity investment in Braya in April.

Largest Near-Term U.S. Renewable Generation Projects

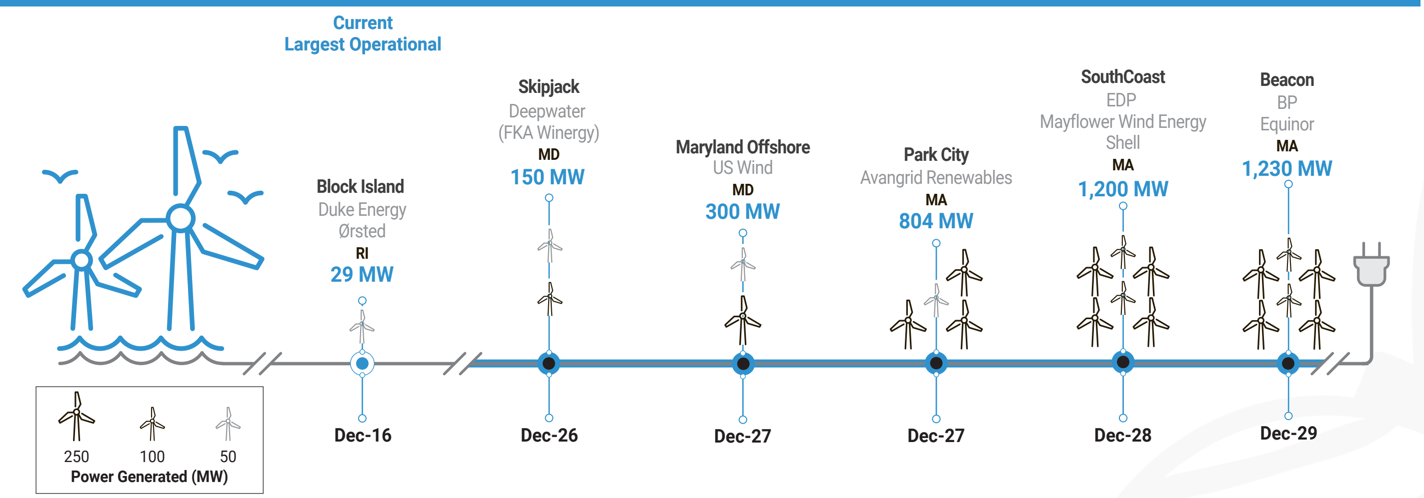
Solar PV



Onshore Wind



Offshore Wind



Note: Pre-operational solar PV and onshore wind projects are under construction; pre-operational offshore wind projects are in state permitting process.
Source | Enverus Energy Acuity

Energy Transition

Cayuga RNG finishes its 2nd and 3rd cow pie-to-gas facilities

Natural gas distributor UGI Corp. announced that Cayuga RNG Holdings, its JV with energy project developer Global Common Ventures LLC, has completed construction on two more facilities that will turn dairy waste into renewable natural gas. The two facilities, located at Allen Farms and El-Vi Farms in upstate New York, will provide up to 135 MMcf/d of RNG.

Upstate New York facilities will provide up to 135 MMcf/d of RNG.

The 85 MMcf/d Allen and 55 MMcf/d El-Vi facilities are two of the five RNG projects planned by Cayuga, all in upstate New York. The JV's first, the 50 MMcf/d Spruce Haven project, started operations last year. Cayuga RNG is still building the other two, both scheduled for completion during UGI's fiscal 2024, which ends next Sept. 30.

Ammongas, majority owned by European Energy, said it provided and installed a biogas upgrading facility at Allen Farms. While Ammongas did not mention the El-Vi project specifically, the Denmark-based company said it was working on three other Cayuga RNG projects.

The newly installed unit is capable of transforming waste from locally sourced agricultural residues into biomethane. The facility operates by purifying a mixture of methane and CO_2 sourced from the biogas plant. Through an advanced process, it effectively removes CO_2, ensuring the product is at least 98% pure biomethane, Ammongas said. This biomethane is then compressed, dried and analyzed for purity before being supplied to the client.

BP upgrades 25% of Fowler Ridge 1 wind turbines in Indiana

BP has completed a partial repowering project at its Fowler Ridge 1 wind farm in Indiana. Repowering wind farms involves replacing older turbines with new, higher-capacity turbines or retrofitting them with more efficient components to increase production and extend operational life.

The supermajor said it upgraded 40 turbines out of 162 total with new nacelles and blades. It added that the new Vestas turbines are expected to generate up to 40% more electricity and can produce power more efficiently at lower wind speeds. The decommissioned wind blades will be recycled, keeping up to 3.3 million pounds of materials out of landfills. The blades will be shredded and blended with other raw materials to make cement products, the company said.

BP has 1.7 GW of gross onshore wind capacity in the U.S. It operates all three Fowler Ridge wind farms, and it owns 100% of Fowler Ridge 1 and 3. According to the company's website, Fowler Ridge 1 had around 300 MW of capacity before the repowering project, Fowler Ridge 2 has about 200 MW and Fowler Ridge 3 almost 100 MW.

Monarch gets boost for green hydrogen through LS Power

California-based green hydrogen developer Monarch Energy and energy infrastructure manager LS Power are forming a JV to develop projects in the U.S. LS Power will invest up to $400 million into projects developed by Monarch as part of the so-called Clean Hydrogen Fuels LLC platform.

The company also provided $25 million in preferred equity financing for Monarch and will hold a seat on its board of directors. Monarch will use the investment to advance its project pipeline, expand into new regions in the U.S. and continue adding talent to its team. The company said the JV will enable it to leverage LS Power's platform of expertise across project development, commodities, environmental attributes and credit risk management, power marketing, public policy, market development and project finance.

Monarch was formed in 2021 and currently has 4 GW of electrolysis capacity in its development pipeline. New York-based LS Power has developed or acquired 47 GW of power generation since its inception in 1990, including natural gas-fired power plants and utility-scale renewables such as wind, solar, hydropower and battery energy storage systems. It also operates 680 miles of high-voltage transmission lines and has more than 200 miles under construction or development.

BlackRock secures $1B for Evergreen Infrastructure

BlackRock said it has secured nearly $1 billion in client commitments from European founding partners for its Evergreen Infrastructure fund. The firm said the fund is already beginning to commit capital and has signed an agreement to acquire Lighthouse, a U.S. commercial and industrial solar and battery platform that currently operates in six states.

Announced in June, Evergreen Infrastructure is a core, open-ended infrastructure equity fund focused on investing in infrastructure businesses in Europe and North America that are aligned with the energy transition and energy security. It will also focus on thematic sectors such as transportation, digital infrastructure and the circular economy.

Cornerstone commitments to Evergreen Infrastructure came from several European institutional investors, including Italian bank Intesa Sanpaolo SpA and pension fund Inarcassa. The fund is led by portfolio managers James Berner and David O'Brien.

Swift Current starts up Castle Gap wind farm in central Texas

Swift Current Energy began commercial operations at its Castle Gap wind farm in Mills and Lampasas counties, Texas. The project has 197 MW of installed capacity and will produce energy equivalent to the annual consumption of more than 50,000 homes. Retail giant Target is purchasing power from the project under a long-term virtual power purchase agreement.

Goldman Sachs provided tax equity for Castle Gap, and Mitsubishi UFJ Financial Group and CaixaBank provided project financing. The project was developed and will continue to be owned and operated by Swift Current. The company was formed in 2016 and is majority owned by BAES Infrastructure, with IFM Net Zero Infrastructure Fund and Lookout Ridge Energy Partners holding minority stakes. The Boston-based company has developed and commercialized more than 2 GW of renewable energy projects since its inception and has over 10 GW in development.

Energy Transition

Intersect completes solar farm with BESS in California desert

Oregon-based renewables developer Intersect Power began commercial operations at its Oberon hybrid solar and storage project in Riverside County, California. Oberon hosts 679 MWp/500 MWac of solar generation capacity and a co-located 250 MW/1 GWh battery energy storage system. Electricity, renewable energy credits and resource adequacy generated by the project will be purchased by several offtakers including Calpine Energy Solutions, Constellation Energy, Ava Community Energy, Microsoft and San Diego Community Power.

Oberon was primarily built with U.S.-made components, including First Solar modules, Nextracker solar trackers and U.S.-made structural steel. The BESS component was built with batteries from Tesla's facility in Lathrop, California. Intersect said the project was the first to achieve commercial operations through a streamlined approach under the U.S. Bureau of Land Management's Desert Renewable Energy Conservation Plan, which designated more than 10 million acres of conservation and recreation lands in Southern California while centering renewables development in designated focus areas.

B2U turning used EV batteries into grid-connected storage

Los Angeles-based B2U Storage Solutions started operations on its second grid-connected storage facility, which uses batteries recycled from electric vehicles. The 12 MWh SEPV Cuyama facility in Santa Barbara County, California, uses hundreds of batteries sourced from Honda that have reached the end of life for automotive purposes.

The Cuyama hybrid storage facility is interconnected to the Pacific Gas & Electric distribution system, selling power and grid services into the CAISO wholesale power market. The system charges from 1.5 MW of solar generation with supplemental grid charge.

Using its patented EV Pack Storage technology, B2U deploys the EV battery packs in plug-and-play fashion, virtually eliminating repurposing costs, it said. EPS technology provides safe and reliable operation and continuously monitors and controls each battery, the company added. Battery packs are automatically disconnected if any component deviates from its operating specifications and design limits.

B2U completed its first facility, SEPV Sierra, in February in Lancaster, California. The Sierra facility has 28 MWh of storage capacity consisting of more than 1,300 EV battery packs from multiple automotive manufacturers, the world's largest operational energy storage system site utilizing second-life EV batteries. A third B2U-owned facility, One Ten Partners, is a 2.7 MW solar farm that has been in operation for five years. The team plans to convert that site to a hybrid solar and second-life EV storage facility in 2024.

Canada supporting EverWind's hydrogen project with debt facility

Canadian green hydrogen developer EverWind Fuels Co. announced Nov. 17 that it is receiving financial support from the country to accelerate development of its planned Point Tupper project in Nova Scotia. The company said it reached an agreement in principle on terms for a C$125 million ($91 million) debt facility from Export Development Canada, the country's export credit agency.

The C$6 billion project will produce green hydrogen and convert it into 1 mtpa of green ammonia in the first phase, using a mix of certified renewable energy from the Nova Scotia grid and onshore wind power. EverWind acquired the Point Tupper terminal in early 2022, and its existing marine terminal at Port Hawkesbury is the deepest ice-free berth on North America's East Coast. The company previously said the Point Tupper site has capacity to ultimately produce up to 10 mtpa of green ammonia, and it has C$1 billion of existing storage and logistics assets, including road, rail and pipeline connections.

Ammonia from Point Tupper will be delivered to German firms E.ON and Uniper. EverWind signed MOUs with both companies in 2022—when a number of hydrogen projects were announced as Canada and Germany launched their hydrogen alliance—saying at the time that it intended to negotiate binding offtake agreements with each firm for 0.5 mtpa of green ammonia. The company received environmental approval for the first phase of the project earlier this year.

Sabanci to use GameChange Solar trackers at Oriana in TX

Solar trackers supplied by GameChange Solar will be used for Sabanci Renewables' 232 MWdc Oriana solar project in Victoria County, Texas. GameChange said its tracker technology includes backtracking features and dynamic stow modes that will help protect the system from damage during severe weather events common to the Gulf Coast.

Construction on Oriana is scheduled to begin in early 2024 and will be completed in mid-2025. The solar farm will also include a co-located 60 MW/120 MWh battery energy storage system. The project will serve load centers on the Texas Gulf Coast, including Houston, Corpus Christi and Freeport.

Sabanci selected Bechtel in late October to design and deliver the project, including EPC activities, commissioning and project management. The company, a subsidiary of Turkish conglomerate Sabanci Holding, acquired Oriana from developer Advanced Power in early October.

Marathon-ADM JV opens soybean facility for biodiesel

Marathon Petroleum Corp. and grain trader Archer-Daniels-Midland officially opened their JV soybean processing complex Nov. 14. Located in Spiritwood, North Dakota, Green Bison Soy Processing will source and process local soybeans to produce oil, which will be supplied exclusively to Marathon as a feedstock for renewable fuels.

The partners said the facility will process 150,000 bushels per day and produce about 600 million pounds of refined soybean oil annually, enough for about 75 million gallons of renewable diesel per year. The $350 million complex began receiving soybeans in September and is currently in the commissioning and startup phase of processing soybeans for meal and oil.

Earlier this year, ADM was reportedly also discussing a potential biofuels JV with Phillips 66. According to Reuters, the companies were discussing putting ADM's dry corn mill operations into a JV that would convert grain-based alcohol into sustainable aviation fuel.

Energy Transition

Ørsted exits race for Norwegian wind, parts ways with CFO & COO

Danish renewables developer Ørsted is exiting its partnership with Fred. Olsen Seawind ASA—a renewables subsidiary of Norwegian billionaire Anette Olsen's holding company Bonheur ASA—and Hafslund Eco, which was pursuing offshore wind developments in Norway. The company, which has been battered by issues with its U.S. portfolio, decided to exit the group to prioritize investments elsewhere in its portfolio, Bonheur said in a Nov. 13 statement.

Bonheur added that Fred. Olsen Seawind and Hafslund will continue to pursue their proposal for the 1.5 GW Utsira Nord wind area and wind in Norway generally. However, the partners are not in a position to pursue a proposal for the 1.5 GW Sørlige Nordsjø II wind area, the company said. The Norwegian government in mid-October extended the application deadline for the Sørlige Nordsjø II auction to Nov. 15 and postponed the application deadline for Utsira Nord without setting a new date, although it aims to do so in 1Q24.

Separately, Ørsted announced Nov. 14 that CFO Daniel Lerup and COO Richard Hunter are stepping down and leaving the company with immediate effect. The developer has initiated a process to identify a new CFO and COO and expects to complete the process in 2024. CEO Mads Nipper said the board agreed that the company needs new and different capabilities to lead the finance and EPC and operations functions amid a "challenging and volatile business environment."

The company's Europe region CEO and EVP Rasmus Errboe will serve as interim CFO. Andrew Brown, who was the CEO of Portuguese energy firm Galp from 2021 through 2022 and joined Ørsted's board in March, will serve as interim COO.

Parkwind completes turbine installation at Arcadis Ost 1

Belgian wind developer Parkwind completed installation of the last turbines for its Arcadis Ost 1 wind farm offshore Germany. The final three turbines out of 27 total were installed in less than eight days despite stormy weather in the Baltic Sea. The company credited the floating installation method for overcoming the challenging weather conditions. Parkwind said offshore activities are continuing with cable termination and commissioning work, and the wind farm is expected to be completed by the end of the year.

Arcadis Ost 1 is located northeast of Rügen Island and has 257 MW of installed capacity. It is already delivering power to the German grid. The project was developed by Parkwind, PMV and OstseeWindEnergie—a consortium consisting of Oberhessische Versorgungsbetriebe, Stadtwerke Bad Vilbel and WV Energie. Heerema Marine Contractors carried out installation activities for the Vestas turbines.

Parkwind is a wholly owned subsidiary of Jera, the Japanese JV of Tokyo Electric Power Co. Holdings Inc. and Chubu Electric Power Co. Inc. Jera acquired the Belgian firm in July from Virya Energy NV for €1.6 billion.

National Grid unit signs PPAs for planned Texas solar farm

Minneapolis-based renewables developer National Grid Renewables, a non-regulated U.S. venture of U.K. utility National Grid plc, signed two power purchase agreements for its Blevins solar project in Falls County, Texas. U.S. pharmaceutical company Bristol Myers Squibb has contracted 145 MW of the project's installed capacity, and Japanese conglomerate Fujifilm is contracting the remaining 125 MW.

The 270 MW project is scheduled to begin construction in 2024 and start commercial operations in 2025. Once completed, National Grid Renewables will have nearly 1 GW of installed capacity in the ERCOT market, including the Great Plains wind farm and Noble and Copperhead solar-plus-storage projects. Blevins will also be the company's second utility-scale project in Falls County, after Copperhead.

Edison Energy LLC served as an independent advisor for Bristol Myers Squibb to assess implications of its investment. Fujifilm retained World Kinect Energy Services to identify projects that will accelerate its strategy to cover 100% of its total electricity consumption in the U.S. and Canada with renewable energy.

Falcon Capital Dakhla & HDF Energy plan Morocco hydrogen

Morocco-based Falcon Capital Dakhla is partnering with French hydrogen firm HDF Energy to develop a green hydrogen project in the North African country. Falcon said the initial investment for the White Dunes project is expected to be around $2 billion, and the partners are aiming to begin production by 2030. The development, if built, will have 8 GW of electrolysis capacity that will be powered by 10 GW of wind and 7 GW of solar generation capacity.

Falcon founder and president Majid Slimani said the firm has devoted nearly two years to feasibility studies, preliminary project design and phased planning across a projected area of 150,000 hectares. He added that the company has conducted preliminary environmental and social impact studies to identify sensitive areas in the region. Managing partner Anas Belmamoun said the Dakhla region stands out as having average wind speeds of 10 meters per second at a height of 100 meters, positioning it among "Class I" sites for wind energy production.

Iberdrola brings in Masdar as partner on Baltic Eagle wind

Iberdrola has completed the sale of a 49% stake in its planned Baltic Eagle offshore wind farm in the German Baltic Sea to Masdar. The Spanish energy firm, which retained the remaining 51% majority stake, said the terms of the transaction valued the entire project at around €1.6 billion, in line with the original announcement in July.

Baltic Eagle will have 50 wind turbines, each with 9.53 MW of capacity, for a total of 476 MW of installed capacity. It is expected to begin commercial operations in 2024, producing about 1.9 TWh and offsetting 800,000 tonnes of CO_2 emissions per year. It will have a minimum regulated tariff of €64.60/MWh for the first 20 years, and Iberdrola has already secured long-term power purchase agreements covering 100% of the wind farm's capacity.

Click for More!
Masdar aims to add 500 MW to Cirata floating solar in Indonesia

Energy Transition

Statkraft buys Enerfin for $2B to expand in Spain and Brazil

Norwegian renewable electricity generator Statkraft agreed to acquire Enerfin, the renewables subsidiary of Spain-based engineering and construction company Elecnor Group, in a transaction with an estimated enterprise value of €1.8 billion ($2 billion). Enerfin is responsible for the construction and operation of 1.73 GW of renewable energy in Spain, Brazil, Canada and Colombia and has a project portfolio totaling more than 10 GW. Elecnor had been looking to sell part or all of Enerfin for much of the past two years but had been unable to find a buyer.

Statkraft considers the deal a "milestone" acquisition, said its CEO, Christian Rynning-Tønnesen. The company said Enerfin's portfolio features significant growth opportunities through installation of new turbines to wind farms, hybridization and battery storage possibilities.

"The acquisition reinforces Statkraft's position as Europe's largest producer of renewable energy and places the company among the top 10 wind power producers in Spain, complementing our solar projects portfolio there," Rynning-Tønnesen said. "The acquisition will also position Statkraft among the three largest wind power producers in Brazil, with over 1.5 GW of installed capacity, and increasing our operational scale."

Statkraft, which ended 2022 with 16.6 GW of renewables capacity, aims to have an annual renewable energy development rate of 2.5-3.0 GW in 2025 and 4.0 GW per year from 2030. It generated 60 TWh of electricity in 2022, 97% of it from renewable sources.

Click for More!

Norway's Statkraft expands Zeiss relationship with new PPAs

Macquarie invests in SkyNRG as it seeks to build SAF plants

Macquarie Asset Management is investing up to €175 million ($191 million) in Netherlands-based sustainable aviation fuel firm SkyNRG through its Macquarie GIG Energy Transition Solutions fund. The company said its investment will support SkyNRG's next phase of growth as it seeks to develop, own and operate SAF production facilities.

SkyNRG aims to have operational facilities in both Europe and the U.S. by 2030. It is currently developing three projects. Its Delfzijl, Netherlands, facility is scheduled to open in 2025 and will produce 100,000 tonnes of SAF annually and 35,000 tonnes per year of sustainable byproducts such as LPG and naphtha. Another 0.1 mtpa SAF facility will be located in the Port of Amsterdam. The company's first U.S. facility will be located in the Pacific Northwest and is expected to produce 90,000 tonnes per year.

The company already has partnerships with KLM Royal Dutch Airlines, Boeing and others that could result in up to €4 billion in long-term offtake commitments. SkyNRG was founded in 2010 by KLM, Spring Associates and EME. It initially focused on developing the SAF market and supplied the world's first commercial flight with the fuel in 2011. SkyNRG currently supplies SAF to airlines and corporations globally and is one of the most active participants in the market.

Harvestone achieves first injection on Blue Flint Ethanol CCS

Harvestone Low Carbon Partners has initiated CO_2 injection as a part of its 0.2 mtpa Blue Flint Ethanol CCS project near Underwood, North Dakota, after receiving final approval from the North Dakota Department of Mineral Resources. The ethanol plant is capturing 100% of its CO_2 emissions from the fermentation process and injecting 600 tonnes of CO_2 per day about 1 mile underground into the Broom Creek formation, said Harvestone, a portfolio company of equity and credit investor Energy Capital Partners.

"We are excited to reach this milestone in our larger initiative called Vision Carbon ZERO, a multi-phased approach to reducing our fuel's carbon intensity to zero," Harvestone CEO Jeff Zueger said. North Dakota was the first state to be granted primacy for CCS permitting from the Environmental Protection Agency in 2018, followed by Wyoming in 2020. Blue Flint is the first facility in the U.S. to begin actively capturing and injecting CO_2 after the passage of the Inflation Reduction Act in August 2022, Franklin, Tennessee-based Harvestone said.

Neste issues €600MM in green bonds under €2.5B program

Finnish refiner and renewable fuels producer Neste has issued €600 million aggregate principal amount of green bonds under its medium-term note program established in March. The new green bonds, which were 5x oversubscribed, will have a 7.5-year term and will bear fixed interest of 3.875%. Proceeds from the issuance will be used for eligible projects and assets as set out in the company's green finance framework. Neste may ultimately issue up to €2.5 billion aggregate principal amount through its medium-term note program.

Eligible investments for the green bonds must relate to eco-efficient and circular economy-adapted products, production technologies and processes, according to the green finance framework. Projects will also include investments in renewable and circular solutions such as renewable fuel refineries, or research and development into those solutions.

OEG buys Bluestream to boost subsea & topsides offering

OEG Energy Group Ltd. signed a sale and purchase agreement to acquire Netherlands-based contractor Bluestream Offshore BW. Financial terms were not disclosed. Bluestream represents OEG's fifth acquisition of 2023 and the 11th since the U.K.-based company began growing OEG Renewables in 2020.

The acquisition will increase OEG's subsea and topsides capabilities while expanding its operating footprint to be able to pursue further opportunities in the growing offshore renewables industry in mainland Europe. OEG intends to retain Bluestream as an established brand, operating as a subsidiary within OEG Renewables. Closing is expected in late Q4 subject to receipt of regulatory approvals.

Bluestream includes more than 300 offshore subsea and topsides specialists. They are highly skilled in surface supplied diving, ROVs, working at height, rope access and unmanned aerial vehicles during the installation, maintenance and decommissioning of offshore assets, OEG said.

Energy Transition

Enbridge catches Fox Squirrel in Ohio by investing in EDF JV

Enbridge Inc. signed a definitive agreement to participate in the construction and operation of the Fox Squirrel solar project in Ohio through a 50% interest in a JV with EDF Renewables. The project's initial phase is expected to enter service by YE23 to generate 150 MW of solar energy.

Fox Squirrel, located in Madison County, is set to become EDF Renewables' largest onshore renewable project and Ohio's largest solar complex. The project will be constructed in three phases and is designed to ultimately deliver up to 577 MW of renewable energy to the utility grid by YE24. Enbridge will invest $149 million in the first phase and plans to reach FIDs on the following phases in 2024, assuming certain conditions are met.

"The project is expected to be immediately accretive to [distribution cash flow] per share and will be complementary to both our growth outlook and energy transition leadership," Enbridge power president Matthew Akman said. The project has 20-year fixed-price power purchase agreements with an investment-grade counterparty for the full generation capacity.

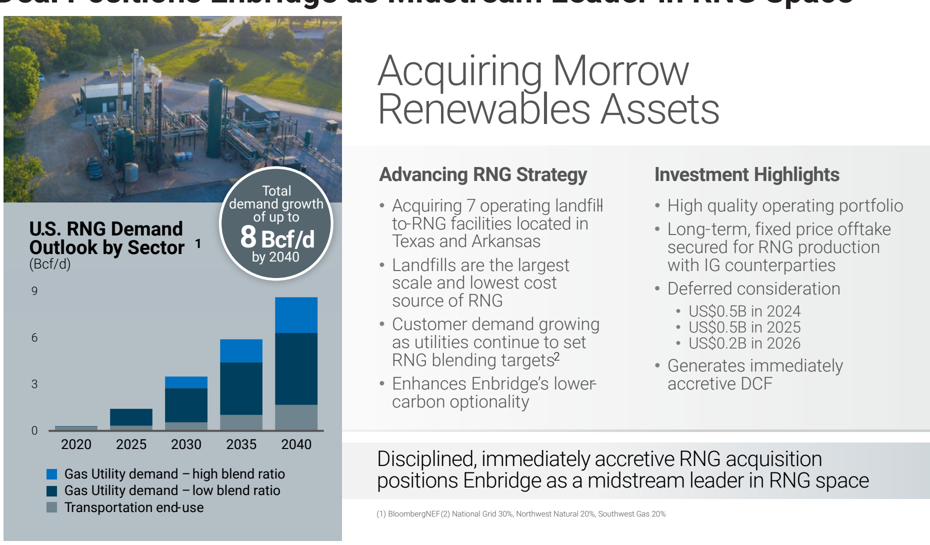
Enbridge and EDF Renewables are frequent collaborators in renewables, having developed several wind farms in Canada and France. EDF and Maple Power, a JV of Enbridge and the Canada Pension Plan Investment Board, developed and built France's first offshore wind farm, a 480 MW project off Saint-Nazaire that started operations in late 2022, and have five other projects under development.

Enbridge expands RNG portfolio in U.S. with Morrow From PG.1

She said the company will continue to take a disciplined look at additional RNG opportunities, adding that the Morrow deal positions Enbridge as a leader in the space to be able to understand and evaluate future growth opportunities.

"The facilities we are acquiring currently collect, compress, treat and sell approximately 4.5 Bcf of pipeline-quality renewable natural gas each year. And as the landfills continue to grow, that production number will continue to grow at approximately 3% annually with minimal required capital investment," Ebel said during the call. "RNG fundamentals are strong in the United States and indicate continued growth in demand over the long term as gas utilities increasingly continue to set RNG blending targets. This was the perfect opportunity to meaningfully add to our RNG portfolio, with an accretive Enbridge-like tuck-in, which has long-term, full-volume offtake agreements with Shell Energy North America and BP."

Deal Positions Enbridge as Midstream Leader in RNG Space



Source | Enbridge 11/03/23 presentation via Enverus docFinder

U.S. supermajors tapped for Indonesia CCS projects

Indonesia's state-owned Pertamina signed several agreements with U.S. supermajors to explore CCS, geothermal and other opportunities in the country in mid-November ahead of the Asia Pacific Economic Cooperation summit in San Francisco. On Nov. 14, company officials in Washington, D.C., signed an amendment to a previous agreement from last November with ExxonMobil relating to a potential CCS hub in the Java Sea.

The proposed project could cost more than $2 billion and store at least 3 gigatons of CO2 in saline aquifers from domestic and regional carbon-intensive industries, Pertamina said. Indonesian President Joko Widodo said in a Nov. 16 statement that Exxon plans to invest up to $15 billion in the country on green petrochemical refinery and CCS facilities. Carole Gall, the president of ExxonMobil Indonesia, said the large-scale opportunities could substantially boost industrial growth and decarbonization in the country and the region as a whole.

Also on Nov. 14, Pertamina signed another joint study agreement with Chevron to explore a potential CCS or CCUS development in East Kalimantan. The state-owned firm said the companies will share information on potential developments, including geological and geophysical data, maps, models and interpretations, records, summaries and commercial information. The new agreement builds on a previous partnership that began in March, and the companies have been exploring and collaborating on CCS initiatives since 2022, Pertamina said. The East Kalimantan project could integrate emission-producing areas in the Balikpapan and Bontang industrial clusters.

Lastly, Pertamina's geothermal subsidiary signed a joint study agreement with Chevron and Abu Dhabi's Mubadala Energy to explore the geothermal potential in Kotamobagu, North Sulawesi province. The company said the agreement provides a comprehensive framework to conduct a study into developing the Kotamobagu geothermal working area. Indonesia aims to add 3.3 GW of installed geothermal capacity by 2030.

Energy Transition

BlackRock to take 40% interest in Oxy DAC project

BlackRock is betting on nascent direct air capture technology with a $550 million investment in Occidental Petroleum's Stratos facility in Ector County, Texas. Through a fund managed by its Diversified Infrastructure business, BlackRock will form a JV with Occidental subsidiary 1PointFive that will own Stratos, the world's largest DAC facility. Designed to capture up to 0.5 mtpa of CO2, Stratos is 30% complete and expected to be commercially operational in mid-2025.

"This joint venture demonstrates that direct air capture is becoming an investable technology, and BlackRock's commitment in Stratos underscores its importance and potential for the world," Occidental president and CEO Vicki Hollub said. The BlackRock investment represents about 40% of the $1.3 billion project cost. Stratos will generate carbon removal credits that are expected to fetch $580-$810 a tonne. 1PointFive has already signed CO2 removal credit purchase agreements with customers including TD Bank Group, Amazon, Airbus and All Nippon Airways.

"Stratos represents an incredible investment opportunity for BlackRock's clients to invest in this unique energy infrastructure project and underscores the critical role of American energy companies in climate technology innovation," said Larry Fink, chairman and CEO of BlackRock.

Alberta & Canada set to announce long-awaited CCUS subsidies

Canadian oil producers planning one of the world's biggest CCS projects will have a better idea of subsidies available as the Canadian and Alberta governments prepare to unveil their incentives over the next three weeks in the leadup to the COP28 climate summit. In a fiscal update in late November, the federal government is expected to present legislation detailing the long-awaited tax breaks for CCUS and net zero energy projects estimated at more than C$20 billion over five years, an unnamed source told Reuters. The oil and gas industry has been agitating for clarity, warning that some C$50 billion in projects could be at risk.

The federal government previously said it would provide investment tax credits for CCUS, machinery for green technologies, low-emission hydrogen production and clean electricity. The CCUS subsidies have been on the drawing board since 2021. Like the 2022 Inflation Reduction Act in the U.S., Ottawa's ITC legislation is expected to contain labor provisions requiring projects to provide union-level wages to gain full benefits. It could also provide long-term guarantees like contracts for difference that ensure the incentives are not changed by future governments.

Legislation for all categories of incentives will be presented by the end of next year following public consultations. Ottawa is also expected to outline contentious oil and gas emissions reduction targets during COP28, which gets underway Nov. 30-Dec. 12 in Dubai.

The Pathways Alliance of major oil sands producers has promoted a CCS scheme to capture CO2 from several high-emissions-intensity oil sands facilities in the Fort McMurray area and pipe it to burial sites in the Cold Lake area. The alliance has said the project could sequester 20 mtpa of CO2 by 2030, provided more subsidies are forthcoming. Previously, Alberta Premier Danielle Smith said the province would announce its own incentives for CCUS during the U.N. climate change conference, which she plans to attend. The federal and Alberta governments have been at loggerheads over who should bear the biggest costs of CCUS for several months.

Heirloom inaugurates U.S.'s first commercial DAC facility

It may be tiny, but Heirloom Carbon Technologies' direct air capture facility near San Fransico marks a milestone as the first commercial DAC project operating in the U.S. At just 1,000 tonnes of annual CO2 capture capacity, it will soon be dwarfed by 0.5-1 mtpa plants in the planning and construction stages that seek to capitalize on incentives in the 2021 Bipartisan Infrastructure Law and the 2022 Inflation Reduction Act. Heirloom, which targets the removal of 1 billion tonnes of CO2 by 2035, has already lined up buyers for its carbon dioxide removal credits, including Microsoft, Stripe, Shopify and Klarna.

Heirloom uses accelerated mineralization to remove CO2 from the atmosphere and permanently store it in concrete that is supplied to construction projects across the region. The DAC startup moved rapidly from conducting lab experiments to capture grams of CO2 in a petri dish just two years ago to commercial operations today. Heirloom claims that its technology represents one of the lowest-cost pathways to permanent CO2 removal. It aims to operate at a cost of $100 per tonne of carbon removed by 2030, down from upward of $1,000 per tonne today.

Heirloom uses renewable energy-powered kilns to separate CO2 from cheap and abundant limestone, then spreads the resulting calcium-based powder onto vertically stacked trays where it acts like a sponge to reabsorb CO2 from the air before repeating the process. The key is to speed mineralization from years to about three days. Heirloom developed algorithms to optimize limestone's ability to uptake CO2 under various conditions. Earlier this year, Heirloom and Nova Scotia-based partner CarbonCure developed the DAC-to-concrete storage process that is being used to sequester carbon captured at Heirloom's Tracy, California, facility.

The **Pulse Report | Holiday Edition,** published weekly through the end of 2023, includes full coverage of the Upstream, Midstream and Downstream, Oilfield Services and Energy Transition sectors. The individual Upstream Pulse, Midstream Pulse, Oilfield Pulse and Energy Transition Pulse reports will return in January.

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