



UNLIKELY ALLIES: Oil and gas companies embrace renewables and battery storage to meet global climate commitments

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RENEWABLE ENERGY HAS TAKEN CENTER STAGE

in the national energy discussion. Technology and innovation are continuing to progress in the energy sector, and traditional oil and gas companies are embracing clean energy alternatives to assist in powering O&G operations. The potential alliances between O&G players and renewable developers across sectors along with innovative technology creates an exciting time to be immersed in this industry.

With emerging partnership opportunities, the anticipated growth in the battery storage sector and clean energy tax credits available under the Inflation Reduction Act of 2022, there is greater optimism than ever that clean energy and reliability goals will be met across multiple sectors of the energy industry. O&G companies are committed to reducing their greenhouse gas emissions and making progress toward global corporate sustainability goals, as well as finding reliable sources of clean energy to power their increasingly electrified operations. This article provides a backdrop of how these common goals are bringing different sectors of the industry together.

STRATEGIC PARTNERSHIPS

Hydrocarbon-based polymers and other products made from crude oil are integral to the renewables supply chain.

In its 2022 World Oil Outlook, OPEC maintained that world demand for oil will plateau after 2035. Other experts have shorter-term predictions, but the fact remains that these operations are needed for the future of renewables. The industry is here to stay, but investors are demanding environmental, social and governance stewardship. There is no dispute that renewable energy can help O&G companies meet ESG standards through a number of products.

Virtual power purchase agreements: In contrast to a traditional power purchase agreement, a virtual PPA — or VPPA — does not involve the sale of the physical electricity. Instead, a buyer agrees to pay a fixed price for the electricity and the developer sells the physical energy to the market. The contract settles based on the difference between the agreed upon fixed price and floating price settled with the market. The incentive to enter into VPPAs for corporate buyers is the renewable energy credits. While the corporate buyer does not take title to the physical energy, it does receive the renewable energy credit associated with the generation of the physical energy from the renewable facility. Revenues from these VPPAs can help finance the construction of renewable generation facilities, and associated RECs can be retired to offset reportable emissions or monetized by the buyer.

Behind-the-meter PPAs: In these more traditional purchase agreements between energy consumers and renewable energy companies, there is a physical connection between the renewable energy-generating asset and the assets using the energy. These partnerships can reduce reliance on local distribution infrastructure buildout and scope 3 emissions, but they operate at scale and require large-load sources.

Surface acreage leases: O&G producers are distinctively positioned to benefit from the implementation and utilization of battery storage systems and renewable technologies like wind and solar at all stages of their recovery operations. Land and location, for example, are valuable assets for renewable developers. Exploration and production companies with large surface acreage ownership can lease that land to wind and solar companies to generate royalty revenue.

There are strategic advantages to combining behind-the-meter PPAs with surface acreage leases, including markedly reducing energy costs for O&G companies while also reducing reportable emissions. But before proceeding, there are important considerations to weigh when choosing a renewable energy partner. For instance, solar requires a larger permanent footprint than wind, whereas wind power can impact O&G operations during construction.

BATTERY STORAGE FOR 'RAINY DAYS'

Another opportunity to optimize clean energy usage is through battery storage. The energy output of intermittent renewable resources, such as wind and solar generation facilities, varies as a function of the weather conditions at any given moment. As a result, continuous 24/7 generation capacity is not possible, as is the case with traditional fossil fuel or nuclear generation. Battery storage systems, however, allow oil and gas producers a more reliable source of consistent energy by storing energy produced from an intermittent renewable resource during times when there is more supply than demand, and then utilizing that stored energy when supply from the intermittent renewable resource is unavailable.

RENEWABLE ELECTRICITY TAX CREDITS

The optimism surrounding clean energy and meeting reliability goals was bolstered on Aug. 16, 2022, when President Joe Biden signed into law the IRA, which represents the single-largest investment in climate and energy in American history. Among other incentives, the IRA significantly expanded the clean energy tax credits for electric generation projects. These credits, which represent a dollar-for-dollar offset to a taxpayer's federal income tax liability, can reduce the net costs of project development

to sponsors and developers and, therefore, are expected to encourage increased investment in and accelerated deployment of clean electricity projects.

Investment tax credit for electricity generation: The IRA extends the ITC for projects placed in service until at least 2033. Initially, taxpayers will be eligible for the ITC for generation technologies that were creditable before the IRA, including solar, wind, fuel cell and geothermal. For projects placed in service during or after 2025, taxpayers will be eligible for the ITC regardless of the nature of the generation technology, as long as the project has a greenhouse gas emissions rate of zero or below. The IRA also creates a stand-alone ITC for energy storage projects, including battery storage.

Under the IRA, a taxpayer's ITC for a taxable year generally will equal the product of the tax basis of eligible projects placed in service during the year and a 30% rate, which is subject to an 80% reduction if a project fails to satisfy either the prevailing wage requirements or the apprenticeship requirements under the IRA.

The IRA also created additional bonus credits for projects produced with qualifying amounts of domestic content (maximum of 10 percentage points); projects located in high fossil fuel employment areas, referred to as "energy communities" (maximum 10 percentage points); and for small solar and wind projects located in low-income communities (maximum 20 percentage points). Accordingly, the typical ITC-eligible project may qualify for a 50% ITC while small solar and wind projects may be able to attain a maximum 70% rate.

Production tax credit for electricity generation: The IRA extends the PTC for projects placed in service until at least 2033. Taxpayers are eligible for the PTC for generation technologies that were creditable before the IRA, including wind, biomass, landfill gas and hydropower. The IRA also reinstates the solar PTC, which had phased out in 2006.

The PTC is available for the first 10 years after a generation facility is placed in service at a rate of 1.5 cents (as adjusted for inflation, 2.75 cents) per kilowatt hour of electricity that the taxpayer produces from solar, wind, geothermal or closed-loop biomass facilities and sells to unrelated parties, although this rate is subject to an 80% reduction if a project fails to satisfy either the prevailing wage requirements or the apprenticeship requirements.

Like the ITC, the PTC generally will become technology neutral for projects placed into service during or after 2025, provided that the facility has a greenhouse gas emissions rate of zero or below.

A PTC-eligible project generally qualifies for additional bonus credits if the project is produced with qualifying amounts of domestic content (10% increase to base credit)

or located in an energy community (additional 10% increase on the base credit).

MONETIZATION OF CLEAN ENERGY TAX CREDITS

The typical sponsors or developers of electric generation projects may not have sufficient taxable income capacity to utilize clean energy tax credits efficiently. Prior to the IRA, sponsors and developers in this position often would seek special investors, referred to as tax equity investors, that have sufficient taxable income to utilize a project's tax credits in the year in which they arise. Tax equity investors typically contribute cash capital to a project holding company in exchange for a preferred equity interest, the economic return of which is comprised of a small cash return and a non-pro rata allocation of the tax credits and accelerated depreciation deductions from the project. The tax equity investor is willing, in part, to accept tax attributes rather than cash as its economic return, and, from the perspective of the sponsor/developer, the tax equity investor represents relatively inexpensive financing.

Tax equity investments, however, bring significant complexity and additional costs to an electric generation project.

The IRA permits taxpayers to sell clean energy tax credits to unrelated third parties for cash, which arguably presents a less complex and more efficient way for a sponsor or developer to unlock the value of clean energy tax credits. Although the market for credit transfers is in its infancy, the current price per credit typically ranges from 88 cents to 92 cents per dollar of credit, meaning that the credit buyer should recognize an economic spread, before transaction expenses, between 8% and 12% on the typical credit purchase. Credit buyers usually require the same suite of protections from a credit seller that a tax equity investor would require from a sponsor/developer, including an opinion of counsel confirming the validity of the purchased credits and an indemnity for recaptured or disallowed credits, backstopped by a tax credit insurance policy.

CONCLUSION

Partnerships that seemed unlikely a few years ago have forged ahead, as common goals are bringing different sectors of the energy industry together. O&G producers are distinctively positioned to benefit from the implementation and utilization of battery storage systems and renewable technologies to power their operations at all stages of oil and gas recovery. There is a growing anticipation of continued development of hybrid facilities and growth in the battery storage sector with the opportunity to benefit from certain tax incentives. Optimism has flourished

for renewables and battery storage as O&G companies embrace these unlikely partners in meeting global climate commitments. ♦

ABOUT THE AUTHORS



Danielle Garbien, a partner in Bracewell's New York office, represents developers, private equity investors, energy companies and offtakers in a wide range of complex energy financing, development and infrastructure projects with a focus on power, renewable energy and energy storage. Her practice also includes providing advice on transactions involving carbon capture and sequestration, as well as renewable energy transactions, including solar, wind and hydrogen development and offtake arrangements.



Steven Lorch, a partner in Bracewell's New York office, advises publicly held businesses and private clients on U.S. tax aspects of a wide range of renewable energy projects. These include planning related to the production tax credit and investment tax credit for wind and solar, and the utilization of tax equity structures related to these credits. He also advises clients on the tax aspects of other energy transition technologies, including energy storage, renewable natural gas and renewable fuels.



Jared Berg, an associate in Bracewell's Houston office, works with public and private companies in mergers and acquisitions and general corporate matters. He is also at the forefront of the energy transition working with oil and gas companies, developers of renewable energy generation and renewable natural gas processing facilities, cryptocurrency miners and other interested parties on novel and complex commercial transactions, project development and other arrangements designed to achieve his clients' ESG and business goals.

opportunities. The REP hosted three education sessions on Thursday.

In “Renewables: It’s Not Texas’ First Rodeo,” Marcelo Ortega, senior renewables analyst at Rystad Energy, highlighted that Texas is not only the oil and gas capital of the world but is in fact an all-energy capital.

“The Lone Star State has a long history with renewable energy and a key role to play in the energy transition,” she said.

In “Opposites Attract: How Oil & Gas and Renewables + Storage Are the Perfect Match,” Danielle Garbien and Jared Berg, attorneys at Bracewell LLP, shared how traditional oil and gas companies are embracing clean energy alternatives to power recovery operations.

“Oil and gas producers are distinctively positioned to benefit from the implementation and utilization of battery storage systems and renewable technologies to power their operations at all stages of oil and gas recovery,” Garbien said. Read their article on how oil and gas companies are



NAPE supports the Houston Police Department Mounted Patrol Unit by sponsoring “NAPE Dealmaker.” The quarter horse greeted NAPE-goers as they arrived at the GRB. (Photo by Caleb Rogers)

embracing renewables and battery storage to meet global climate commitments on page 41.

In “Financing Tax Equity in the Post-IRA World,” Jim Cole, transactional tax partner at Latham & Watkins LLP, addressed the Inflation Reduction Act’s impact on tax incentives for wind, solar, hydrogen and other clean energy projects. He also discussed how carbon capture tax credit rules are simplified and expanded and provided insights on the new tax credit transfer regimes.

BITCOIN MINING PAVILION

New for 2023, the Bitcoin Mining Pavilion included education, exhibitors and company presentations showcasing technology and investment opportunities, enabling oil & gas professionals to explore how to incorporate this powerful tool into an effective asset management strategy. The BMP hosted three education sessions.

In “Bitcoin Mining: Monetizing Stranded Gas & Alternatives to Flaring,” Brent Whitehead, co-founder of Giga Energy, explained how bitcoin and flared gas collide and why bitcoin is the best solution to flaring. He also discussed emissions reduction with flare gas in bitcoin mining.

“There is no longer a reason to be routinely flaring,” he said. “Bitcoin mining now allows stranded energy to have liquidity — something that wasn’t possible before without physically moving the gas to the end user.”

Audience feedback was enthusiastic, with many questions about the quality of the gas needed.

“We hope the BMP will be even bigger and better next year,” Whitehead said. “Bitcoin mining will be a huge part of the energy industry, and every oil and gas company should be paying close attention to it.”

In “Bitcoin Mining: The Wildcatter Spirit Lives On,” Gideon Powell, chairman and CEO of Cholla Inc., explained that bitcoin mining’s location agnostic, high energy consumption and flexible load profile are perfectly suited to strengthen, grow and incubate global energy grids with the right regulatory framework.

Bitcoin mining and oil and gas development require similar capabilities: They are both cyclical and capex heavy, involve significant risk mitigation tools and require the need to imagine something that isn’t obvious, he said.

For Powell, the best part of the BMP was introducing his bitcoin friends to seasoned oil & gas professionals with complementary capabilities. He also enjoyed seeing his young software and bitcoin friends who are interested in energy marveling at the sheer magnitude of what the oil and gas business has accomplished, he said.

In “Large Format Digital Flare Mitigation: Eliminating Flaring Through Computation at Scale,” Cully Cavness,