

TURBULENCE CREATES US OPPORTUNITIES

THE EARLY 2020S HAVE BEEN A SERIES OF DRAMATIC UPS AND DOWNS FOR THE RENEWABLE ENERGY SECTOR IN THE US. THE FUTURE PROMISES TO BE BRIGHTER BUT NO LESS TUMULTUOUS. FOR THOSE WILLING TO TAKE A MEDIUM-TERM VIEW AND TO UTILISE CREATIVE DEAL STRUCTURES – WHETHER THE DEDICATED INVESTOR, CAPITAL ALLOCATOR, OR JUST THE SHREWD OPPORTUNIST – THIS MARKET TURBULENCE MAY CREATE A SIGNIFICANT OPPORTUNITY. BY **CHRIS GLADBACH, PARKER LEE AND MING LEI, MCDERMOTT WILL & EMERY LLP.**

In this article, we detail some of the current challenges experienced by renewable energy developers, as well as describe ways that private equity and institutional investors are seeking to creatively address capital needs despite these challenges.

First, some recent history. The second half of 2021 presented unparalleled exuberance toward renewable energy development, finance, and investing. From more traditional renewable power sources such as wind and solar, to newer energy transition-focused businesses – such as renewable natural gas, hydrogen, and carbon capture, utilisation and storage (CCUS) – project sponsors found cheap financing and were the beneficiaries of healthy equity valuations.

Buttressed by great expectations from a change in the US presidential administration, the industry expected support from promised legislation targeting increased renewable energy development and decreased demand for fossil fuel-generated power. Further, with heightened corporate, institutional, and investment-fund focus, and even mandates, on environmental, social, and corporate governance (ESG) driving additional investment, the renewables market's positive trend appeared never-ending.

For sponsors, this was great. Many renewable energy and energy-transition platforms and projects received very competitive equity and debt funding on this optimistic basis. But this was not wholly negative for investors either. Faced with lower-than-expected internal rates of return, some investors lowered their expectations. But other intrepid direct lenders and investors got creative and relied on more exotic fundings structures such as preferred equity and/or convertible debt investments to realise gains on a platform or portfolio-basis to stay within their investment committee guidelines.

The year 2022 brought a significant interruption to the seemingly unstoppable momentum of the renewable energy industry. Due to supply chain issues, inflation, panel supply constraints, and material interconnection delays, projects are taking longer to commence and costing more to assemble, and many power purchase contracts that were significantly “in

the money” are now either stressed or under water. Some less-fully capitalised developers and sponsors that were awash in liquidity a year ago are now scouring the financial landscape for cash to keep their projects moving forward.

Despite these challenges, one bright spot has emerged: the US Congress just enacted the most comprehensive climate legislation in US history, the Inflation Reduction Act (IRA), which includes extensions and expansions of existing renewable energy federal tax credits along with many new tax credits. This historic legislation is certain to provide greater financial certainty and rewards for developers and investors alike and is likely to fuel significant growth and opportunities in the renewables space for years to come.

Yet the IRA is not a panacea. The underlying challenges are still present and may prevent obstacles to a truly viable renewable energy market. Is the trend toward more complicated investment vehicles going to face a similar fate as the oil and gas market in the mid-2010s, as private equity and hedge funds engaged in ever-more complex investment structures and broader financial product offerings but could not sustain their investments in the face of plummeting commodity prices? Or are renewable investments now different with the breathing room created by the IRA to bridge short-term squeezes?

The challenge is finding the right renewable energy and energy transition opportunities, and appropriate methods of capital deployment, to prevent a rerun of the tragedy of writedowns and losses experienced by some oil and gas private equity investors in the recent past. Only time will tell, but there is no shortage of interested investors and creative structures seeking to capitalise on today's market opportunity. One thing is certain, project developers must find a way to ride out the choppy waters created by the current stresses to reach a promising future.

2022 – A unique set of challenges

Recent occurrences in the market have created challenges:

- *Inflation and rising interest rates* – Rising costs for steel, copper, nickel, aluminum, graphite, lithium

and other minerals have hit the capital-intensive renewable energy projects such as wind, solar and battery storage, very hard. The expected returns of many equity investors did not provide flexibility for or contemplate the increased costs of production present in today's market. Inflationary pressure has been particularly impactful in both the electric vehicle space and the energy storage space, as rising battery metal costs have contributed to both a slump in electric vehicle sales and a challenging environment for storage projects utilising lithium-ion batteries.

With inflation hitting both the industrial base and the consumer's bottom line, central banks are turning their attention to fighting inflation through upward interest rate adjustments – and this is happening on a global scale although some central banks are moving more swiftly than others. The US central bank has raised rates this year at its fastest pace since the 1980s, which many financial advisers see continuing through the rest of the year or further. With rising interest rates comes a rising cost of capital for traditional construction and term debt needed to support renewable projects.

- *Solar panel tariffs* – Shockwaves were sent through the US solar industry earlier this year when the US Department of Commerce (Commerce) initiated an investigation, pursuant to allegations by Auxin Solar, a domestic manufacturer, into whether solar modules from Cambodia, Malaysia, Thailand, and Vietnam are circumventing antidumping and countervailing duty orders on solar modules from China. The investigation threatened to impose significant import duties, ranging from 15% to 250%, on the vast majority of solar panels imported into the United States.

This created high levels of uncertainty within the solar industry. Solar development pipelines were generally pushed out significantly, and financing of solar project development became challenging. However, on June 6 2022, President Biden issued a presidential proclamation effectively delaying the imposition of any duties resulting from the circumvention investigation for two years – giving much needed relief to the industry. Commerce's decision on whether circumvention is taking place will likely be issued before February 2023, and the industry will thereafter have a better picture on what the price landscape will look like and will be able to choose manufacturers less impacted by tariffs going forward.

- *UFLPA* – On June 21 2022, the Uyghur Forced Labor Prevention Act (UFLPA) went into effect, replacing a Withhold Release Order that only applied to silica-based products from a single, albeit major, Chinese manufacturer. The UFLPA aims to prevent the importation of goods that are alleged to be produced using forced labour in China, including goods from the Xinjiang region of China. Pursuant to the UFLPA, US Customs & Border Protection (Customs) presumes that imports containing polysilicon sourced from

China are in violation of UFLPA and will not be allowed into the US. Thus solar cells, panels, and modules from China will be denied entry by Customs unless the importer establishes by clear and convincing evidence that the merchandise was produced without any involvement by forced labour. Customs has already held over 5GW of solar panels entering the United States on this basis and is projected by some to hold up to 12GW of panels on an annual basis. This is creating a material shock in the solar panel development market, and it is not yet clear how these issues will be resolved with Customs.

- *Global supply chain disruptions* – It is difficult to pinpoint the causes of the global supply chain disruptions that have occurred this year – eg, lasting Covid impacts on consumer demand, global labour shortages, etc – but the supply chain is thinly stretched, and in some cases, broken. For renewable energy and energy transition projects with long lead times, heavy capital investment, and reliance on third parties for supply and transportation of project components, supply chain disruptions have been particularly impactful. Project development timelines have been delayed, and these delays have resulted in significant increases in development costs.

- *Tax credits* – Renewable energy federal tax credits started their expected phase-down in recent years, which led to reduced investor returns and increased tax credit risk. The recently passed IRA extends and expands existing tax credits, along with many new credits, and provides economic certainty for years to come for renewable energy projects. However, the IRA also includes byzantine new rules and requirements for new tax credit bonuses and penalties, which may soften the market for a time while investors and developers adapt to the new rules and wait for clarifying guidance and regulations from the IRS. This lack of clarity around the nature and size of tax credits has acutely impacted (and may continue to impact) energy transition projects such as CCUS, as many CCUS projects are predominantly dependent on tax credits or related direct-pay benefits for their economic justifications.

- *Under water PPAs* – Project developers historically tried to secure power purchase offtake arrangements relatively early in the development process, ie, after site control and initial interconnection applications. Also, there has traditionally been a shortage of offtake and significant competition between developers, whether in the form of responses to utility RFPs or bidding on PPAs with commercial and industrial offtakers. This competition led certain developers to make assumptions about the ultimate cost of capital, which they forecast as coming down, and the price of materials and equipment, which again were forecast as improving. Those bets proved correct for decades as inflation remained low, the cost and availability of capital improved, and panel and turbine prices continued to decline.

These assumptions were all recently proven to be incorrect. Thus, power pricing is increasing in the US for the first time in recent memory – and those PPAs that were signed based on these faulty assumptions are, in many cases, either challenged or under water. Developers now routinely talk about “just in time” PPAs – meaning getting a PPA for a project signed right before construction debt funding and tax equity commitments. And the offtake market, because so many PPAs are distressed, seems to be shifting to embrace projects that are further along in the development cycle.

- *Interconnection delays* – Interconnection challenges have plagued developers for years, and these challenges have grown as increased renewable development has led to a flood of new interconnection requests. PJM recently sought to overhaul its interconnection procedures to deal with new interconnection requests that have more than tripled over the last three years, while FERC observed that there were over 8,100 interconnection requests pending throughout the nation at the end of 2021.

This explosion of new requests has resulted in significant delays in the completion of interconnection studies and processing. There can also be substantial cost uncertainty due to projects dropping out of interconnection queues, and as available transmission capacity is exhausted. Certain transmission providers have already modified their procedures to attempt to streamline the interconnection process and deter speculative interconnection requests, and FERC has also proposed modifications to its interconnection rules. Nonetheless, significant delays continue to be expected as transmission providers try to clear existing backlogs. PJM, incredibly, has indicated that, even under its proposed new procedures, projects for which interconnection requests were submitted in late 2021 would not receive interconnection agreements until the end of 2027.

Projects are taking longer to develop, costing more to build, and having to progress with different economics than previously expected. These development risks principally rest with the developers and sponsors, and foreshadow difficult conversations with banks and investors down the road. From the developer’s perspective, additional, differently structured capital is often what is needed to overcome these challenges. For investors, there is an opportunity to bridge the gap between the gloomy short-term outlook and the long-term promise of the industry by providing needed, and correspondingly expensive, capital to developers to move projects forward.

The IRA bright spot

In the overall gloomy 2022, the IRA offered a bright spot. The IRA includes extensions and expansions of investment and production tax credits relating to solar, wind, fuel cell, geothermal, waste, microturbine, biomass and

carbon capture, as well as offering new incentives for clean hydrogen and storage technology. It also provides new tax credits for renewable projects constructed in traditional coal, oil and gas, and low-income, communities, and offers generous incentives meant to ramp up domestic supply chains for these projects. Most of the credits and related incentives will be in place for at least 10 years, which is a stark contrast from the past where credits were either reviewed on a year-to-year basis or were in the process of phasing out.

Challenges and opportunities

Other than the recent passage of the IRA, where’s the good news for project developers? Demand for renewable energy and energy transition projects is growing. According to the US Energy Information Administration (EIA), US energy consumption will increase over the next 30 years as population and economic growth outpace energy efficiency gains, and renewable energy will grow more quickly than any other energy source through to 2050. EIA also estimates renewables to account for 22% of US electricity generation in 2022 and to increase to 24% in 2023, as more generating capacity from wind and solar come online and other generation sources are retired.

Challenges in the renewable energy market may create significant opportunities to invest in projects that just six to eight months ago were priced higher and fully subscribed. The riddle to solve is, in what form should such investments take place, and how do they fit into capital structures with existing obligations that are being pressed by the challenges of this year’s market? Some of these structures and their pros and cons include:

- *Platform investments, structured alternatives* – Investing in a renewable energy/energy transition management team or business is an alternative that has become increasingly popular over the past few years. These platforms for investment may take the form of an aggregation of assets by acquisition, organic development or a combination thereof. For oil and gas private equity veterans, this is old hat. Now the experiences and lessons learned from the use of these structures in oil and gas can be applied, and the terms improved upon, for renewable energy. Investing at the platform level potentially allows for scaled investment over time, a diversity of risk across several projects, and a pipeline of additional future projects.

Yet there are some obstacles to this structure. In 2021, a flurry of platform investments from large corporates/strategics and institutional investors caused many to view these investments



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as currently over-priced, chilling some activity. In order to reduce these risks, more recent platform deals are being pursued by implementing more structured investments such as earn-outs based on achievement of critical milestones for a certain number of projects in a developer's pipeline. And as development uncertainty has increased, earn-outs and contingent payments represent a larger portion of the investment amount.

- **Convertible debt** – In addition to changing the level at which investments are made, investors can also change the instrument they use to deploy funds. Recent renewable energy investments have increasingly included the use of convertible debt, which can be used to fund ongoing development expenses for a portfolio of projects, and which converts to equity upon a company sale or other negotiated liquidity events. This convertible or preferred debt can have pre-funded interest reserves or payment-in-kind (PIK) features. Convertible debt investors should be aware of the heavy negotiations around convertibility terms, including anti-dilution provisions, mandatory conversion triggers and pre-money valuations. Tax analysis here is critical as well, as convertible debt gives rise to the question of whether such convertible debt is deemed to be "debt" or "equity" for tax purposes.

- **Preferred equity** – Preferred equity is also gaining popularity. Preferred equity investments often are characterised by a pre-negotiated target internal rate of return (IRR) and/or multiple on invested capital (MOIC). Determining at which entity or level in the investment structure to invest is an important consideration as investors should understand how cashflow will be managed and upside gains captured. Absent terms permitting conversion to a common equity instrument, preferred equity generally has limited upside based on the pre-agreed investment return targets, and unlimited downside because it is on the equity side of the capital structure. This inherent characteristic, potentially mitigated only through a common equity "kicker" or

conversion feature, should be considered when crafting the terms of the deal.

A repeat of the past

If the above structures sound familiar, it is likely because they largely mimic those that were developed in the oil and gas markets in the 2010s. When oil and gas prices plummeted, the growth of development came to a screeching halt because it became uneconomic. In many instances, investors were left holding positions relying on equity upside and stuck with companies that were cashflow negative, and in need of extensive capital expenditures for continued development and production. What may be the critical difference for investors in renewable projects and platforms is the ongoing federal support, bolstered by the IRA, that renewable projects receive. If that support remains sustained, and investors exercise diligence around issues related to cashflow and achievable rates of growth, these structures may just have the time needed to fare better than their oil and gas predecessors. But risk management and investment diligence remain important.

Fortune will favour the bold

In the end, investors that were forced to forego numerous renewable energy projects in the past may find themselves in a great position to put their investment dollars to work and be in line for outsized returns. While this year's market has presented challenges, many still believe renewable energy is a sound investment and that supply-and-demand economics are present, especially given the recent passage of the IRA. Some long-term players may see this as a chance to never let a good crisis go to waste. ■

Footnote

1 - We are grateful for receiving article contributions from the following individuals, alphabetised by last name – Christopher Benedik, Heather Cooper, Seth Doughty, Tyler Kimberly, Andrew Lehman, Stephanie Lim, and James Salerno.

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