

February 3, 2020

U.S. Renewables M&A: 2019 Review and Outlook for 2020

INTRODUCTION

Last year was another banner year for U.S. renewable energy mergers & acquisitions (M&A) in terms of high-profile deals and transaction volume. While moves toward the expiry and step-down of tax credits are on the horizon, we expect 2020 to be another active year for new build, legacy asset and platform M&A. Barring a macroeconomic shock, there are just too many projects in the pipeline and too much capital in the system for us to see a major pullback in deal activity.

We expect a continued focus on traditional clean energy technologies, complemented by meaningful growth in distributed solar and the realization of energy storage and hybrid projects. The potential uplift from offshore wind is not a question of “if” but “when.”

Additionally, with deep-pocketed capital providers continuing to be active acquirers, the “wall of capital” remains firmly in place. With sponsors and developers remaining acquisitive, a flow of deals across the project life-cycle will permeate 2020.

2019 OVERVIEW

As in previous years, the solar and onshore wind sectors dominated in 2019. We continued to see large deals get done with institutional investors seeking relatively stable return prospects offered by the sector, even if backend merchant risk may be significant. At the same time, most large developers with maturing queue positions have been capitalized with institutional funding, making major pipeline deals that boost MW deal totals less predictable.

Policy considerations were important drivers in 2019, with the production tax credit (PTC) cliff driving wind development and acquirers seeking PTC-qualified projects and portfolios. The late-2019 extension of the PTC was a significant development, but the extension will not affect 100% PTC-qualified projects charging toward a year-end 2020 placed-in-service deadline.

Section 201 remained a factor in the solar sector, although its impact was predictably muted by continuing system cost declines. At the same time, investor interest in commercial & industrial (C&I)

SUMMARY

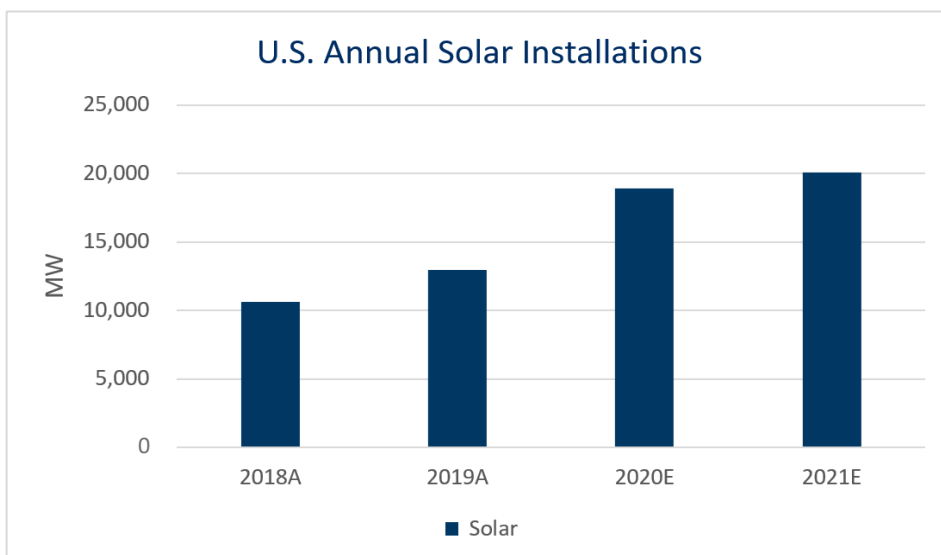
2019 was another strong year for renewable energy M&A, with onshore wind and solar leading the way as the standalone storage, hybrid storage and offshore wind sectors continue to emerge in the U.S.

Capital availability, robust demand and a heightened ESG environment across offtakers and institutional investors reinforces our bullish outlook on the renewables transition and will continue to drive clean energy M&A in 2020 and beyond.

solar portfolios grew, with several sponsors announcing acquisitions representing hundreds of MWs in the C&I space.

INTEREST FROM OIL & GAS MAJORS

Oil & gas (O&G) interest in the clean energy sector is a continuing theme – most visibly seen in the offshore wind sector where a concerted effort continues amongst European firms to develop opportunities in the U.S. space. To date, this strategy has been executed through consortiums and joint ventures (JVs), with both Equinor and Shell leading the charge. On land, Lightsource BP and Silicon Ranch, in which Shell is a major investor, continued to expand their project pipelines in the U.S., with BP also announcing an increase in its stake in Lightsource from 43% to 50% at the end of the year. The continued drive towards renewables is clear and we expect O&G players to be active M&A participants in the sector.



Source: SEIA

INTERNATIONAL PARTICIPANTS

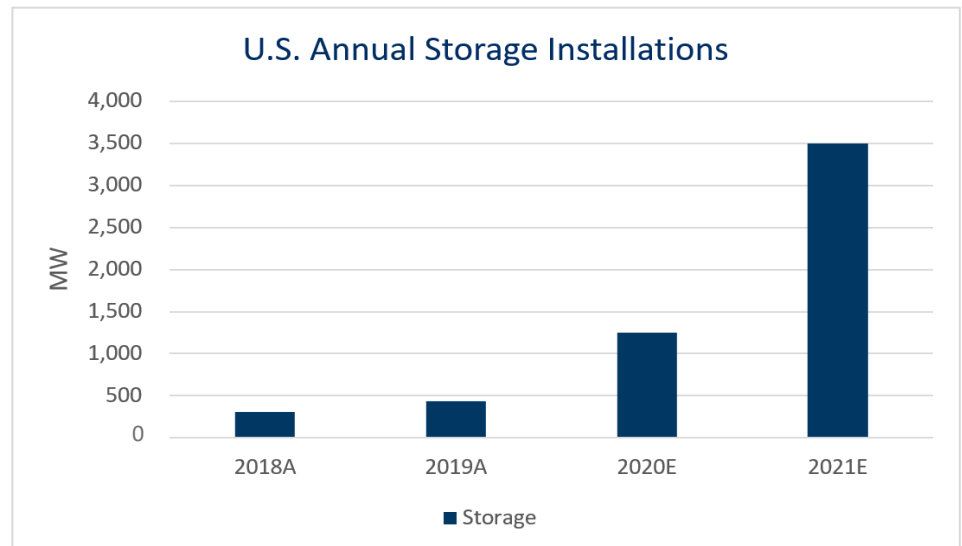
Beyond O&G participants, the domestic renewables market continues to attract significant levels of high and low risk international capital, with robust inflows from Canada and Europe having continued over the last twelve months. On the buy-side, several major transactions took place, including Acciona's acquisition of a greenfield portfolio of 3 GW of solar and 1 GW of co-located solar-plus-storage from Tenaska. We view transactions such as Acciona's as indications of investor desire to jump ahead in backlogged interconnect queues, whereby there is a more direct line of sight on reaching NTP (be it to trigger a development fee or to fund long-term capital).

STORAGE MARKET

While the actual deployment of new energy storage remained limited in 2019, interconnection queues and contracted project backlogs continued to impress. Per PJM, as of year-end 2019, there were 4 GW of standalone storage and 6.6 GW of hybrid solar-plus-storage in the interconnection queue. We also note the constant flow of major utilities and technology companies entering generation-plus-storage PPAs. At the platform level, notable deals included Shell's acquisition of Sonnen (although non-U.S.) and Energy Capital Partners' purchase of Convergent. We view these as examples of big capital backing scalable platforms not focused exclusively on utility-scale applications.

OFFSHORE WIND MARKET

While there was limited offshore M&A activity in 2019, the sector did deliver major project and development announcements, primarily driven by industry heavyweights including Avangrid Renewables, CIP, EDP Renewables, EnBW, Equinor and Ørsted. JVs remain the preferred structure in all material offshore developments to-date. Regulatory risks related to permitting, environmental impacts, grid connections and tax credits continue to draw attention, with what appears to be the United States' first ready for construction utility-scale offshore wind project continuing to wait for the results of the Bureau of Ocean Energy Management's (BOEM) supplemental Environmental



Source: ESA

Impact Statement (expected in early 2020). If the 84 turbine, 800 MW Vineyard Wind project backed by CIP and Avangrid Renewables is approved in 2020, it will likely open the door for other projects to proceed under more accelerated timelines.

YIELDCOS

While not yet closed, Canada Pension Plan Investment Board (CPPIB) announced in November a definitive agreement to acquire and take private Pattern Energy Group Inc. and its 4.4 GW operating portfolio for a total enterprise value of \$6.1 billion. If closed, the transaction would leave NextEra Energy Partners as the key publicly-traded YieldCo that has not traded hands in recent years. The Pattern announcement follows a heavy year of YieldCo consolidation in 2018. Conversely, numerous press releases in September noted that Goldman Sachs had raised an additional \$1.9 billion in its renewable power subsidiary, bringing the total to \$4 billion of investable capital in its YieldCo-like venture. Goldman's structure of acquiring projects from unrelated entities avoids the potential conflict of interest that existed with early YieldCos (in which the parent company of the YieldCo was also the developer platform selling projects into the YieldCo).

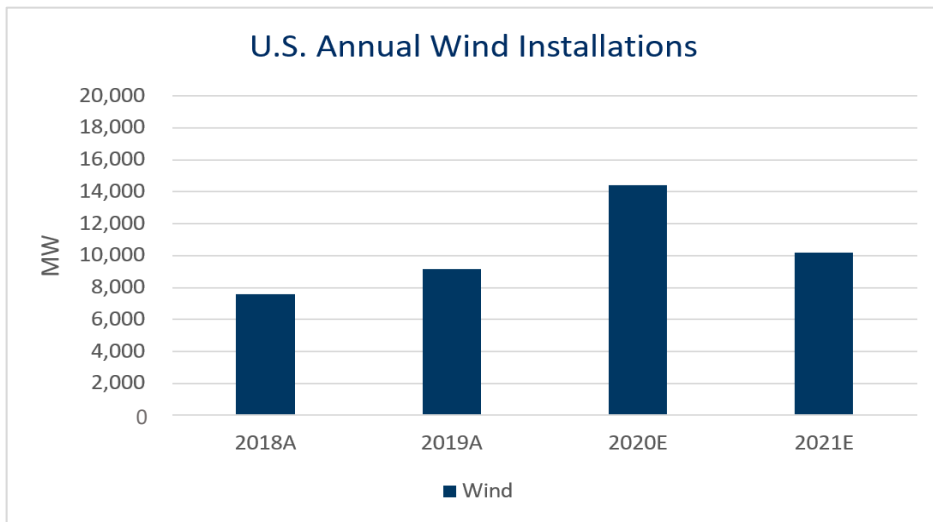
2020 OUTLOOK

We expect plenty of noise in the market from Q2 onwards due to the presidential

election, as buyers and sellers do their best to maximize value – which will likely involve negotiation over fixed and variable tax assumptions, PTC/ investment tax credit (ITC) extensions and other “what ifs.” Irrespective of final election results, we expect renewable energy M&A activity will remain robust, even if some 2020 deals get pushed to 2021.

On the structuring side, and as more assets near the end of their initial PPAs, owners will be forced to get comfortable with the merchant tail and/or recontract in a market where they are competing against new ITC or PTC eligible generation assets. In turn some project owners will likely seek to farm-down some or all of that risk to a new investor. While contracted operating project returns may be showing up as relatively stable, the move toward shorter PPAs amplifies the importance of a buyer's view on merchant prices. In a shorter contracted offtake environment, even a 5% sensitivity on merchant assumptions can meaningfully impact a buyer's ability to win a project. Notwithstanding current investor comfort around or acceptance of merchant exposure, we fundamentally view current tail assumptions to be generally aggressive and a significant source of investment risk – albeit a risk which may not manifest operationally in the near term.

M&A activity at the project, portfolio



Source: AWEA

and platform level will continue to be dominated by onshore wind and solar (with an increase in solar-plus-storage) transactions, and with PTC and ITC considerations remaining a key factor.

The recent extension of the PTC will give wind a boost, adding one more year for projects to achieve a 60% PTC. We forecast strong transaction activity as purchasers look to lock-in projects with known economics prior to the PTC phase-out. At the same time, solar is entering the first year of the ITC step down, with projects commencing construction this year eligible for a 26% ITC on eligible costs. However, the step down will likely have a muted impact on solar build-outs, with projects that have already safe harbored equipment serving as attractive targets for acquirers.

Considering emerging markets in the sector, we are particularly excited about late 2020 and 2021 as more projects incorporating storage begin developing operational and financial track records. As operating history materializes, cheaper capital providers should begin to flow into the sector, facilitating competitive buyside markets for well-structured deals.

In the offshore wind space, there is a higher level of uncertainty; however an approval of the Vineyard Wind project by BOEM could represent a rising tide that lifts all boats. Absent such a

transformational catalyst, we expect offshore wind will continue to be dominated in the near term by a handful of well capitalized conglomerates with patient investment horizons. As such, our expectations for deal activity in the offshore sector remain somewhat tempered over the next 12-24 months.

Our crystal ball is clouded by many things, most notably the 2020 election (and the fact that we're not actually clairvoyant). Cheeky caveats aside, we feel very confident that the U.S. renewables buildout will continue and, barring a true recession, capital availability will remain robust. If we had one major macro concern to highlight, it would be the risk of a step-change in interest rates which, if viewed by capital providers as long-lasting, could meaningfully reset valuations. If such a scenario were to occur, a significant portion of the development market (including those with PPAs in place) could find themselves meaningfully underwater. But as we close out our thoughts on a 2020 M&A outlook, a return to fundamentals is in order. Wind and solar technologies are already very cheap, which, combined with a much more robust ESG environment across offtakers and institutional investors, reinforces our bullish view on the renewables transition. While macro considerations such as election results, interest rates, merchant prices and tariff considerations cannot be ignored, one needs to look no further than BlackRock's

letter to its clients and to CEOs - highlighting that climate risk is investment risk¹ as a positive sign of the times.

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