

# THE YEAR IN RENEWABLES FINANCING TRENDS AND LOOKING AHEAD TO 2020

MINI BRIEF 2019

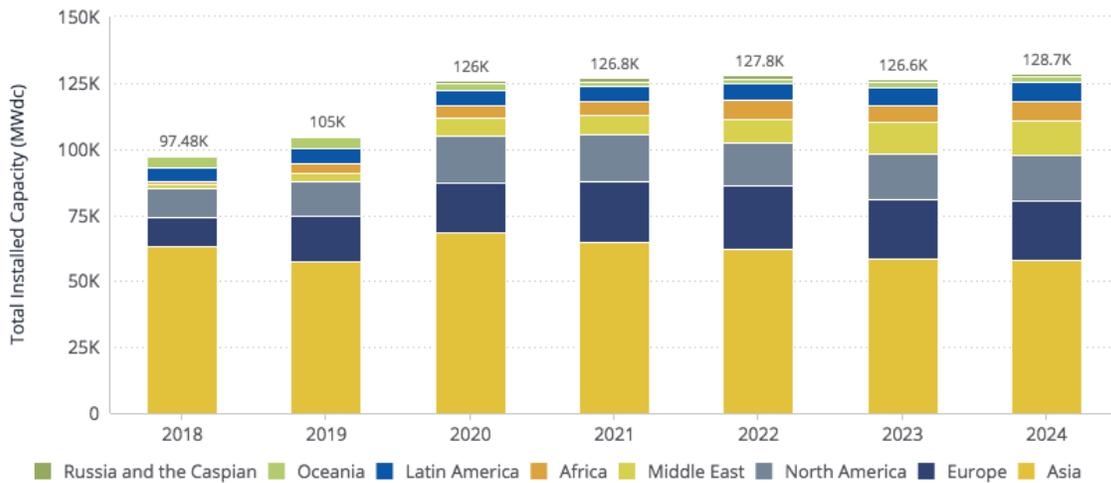


It was a good year for renewable energy. According to Wood Mackenzie Power & Renewables, global solar PV installations will exceed 100 gigawatts in 2019 and are expected to grow by more than 20 percent through 2024.

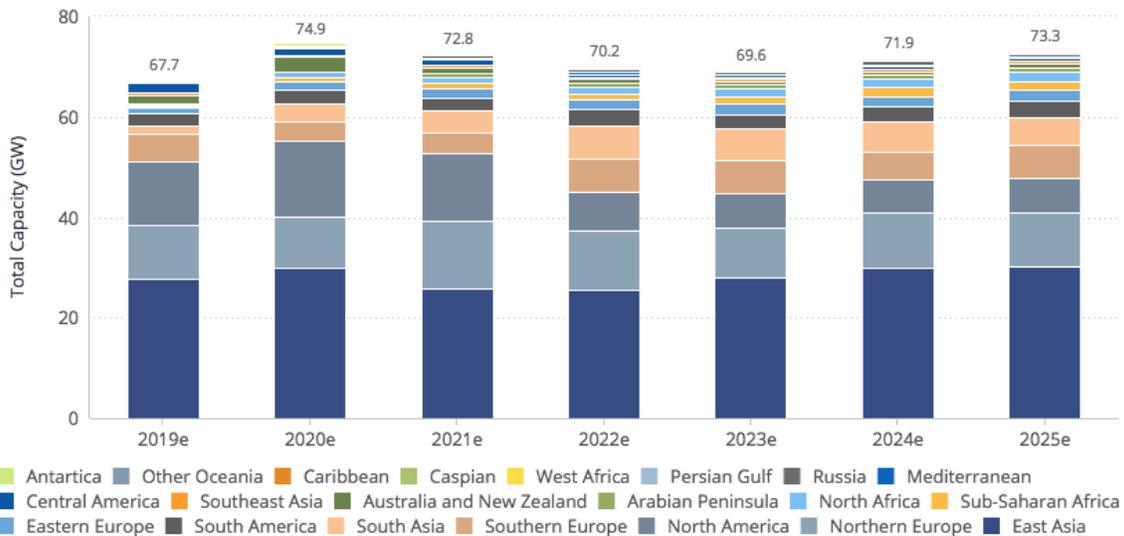
Wind is not being left behind. WoodMac also forecasts robust growth in wind deployments, with global capacity slated to grow by 60 percent over the next five years, driven in large part by players in the U.S. market leveraging the federal Production Tax Credit and striving to comply with state-level renewable

portfolio standards. In the burgeoning U.S. offshore wind market, WoodMac expects more than 16 gigawatts of offshore wind in the U.S. by 2028, though red tape is putting a damper on some early large-scale projects, such as Vineyard Wind.

### Annual Installed Solar Capacity by Region



### Annual Installed Wind Capacity by Sub-region



Source: Wood Mackenzie

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# BECAUSE RENEWABLES FINANCING IS COMPLEX AND CONTINUOUSLY EVOLVING, THERE ARE MANY OTHER TRENDS THAT INVESTORS MUST WEIGH AS THEY SEEK TO TAKE ADVANTAGE OF OPPORTUNITIES.

The chief drivers of this growth are the macro trends of declining prices for renewable energy and increasing demand for wind and solar energy from utilities, large corporations, investors and consumers. But underpinning these big-picture forces are trends in renewables financing that have helped shape the U.S. market in 2019 – many of which will continue to have an impact in 2020.

Significant trends in renewables financing in 2019 that will continue to be important in 2020 include:

- **Institutional investors' interest in renewables continues to grow.** One indication of the maturity of renewable energy is the intense interest and competition it has engendered among large institutional investors, particularly pension and infrastructure funds. A survey by U.K.-based financial services firm Octopus Group found that global institutional investors plan to invest an additional \$210 billion in renewables over the next five years. WoodMac projects that the role of institutional investors in wind asset ownership will more than double from 2017 to 2022. This thirst for renewables projects to invest in has spurred changes in the nature and scope of asset sell-downs. In the past, independent power producers would typically sell a 49 to 51 percent stake in individual projects. Today the trend is for sell-downs to reach stakes as high as 80 percent and to span a platform of projects, which helps satisfy the need of institutional investors to make investments as large as \$150 million to \$200 million.
- **The demand for increased scale extends to commercial and industrial.** Investor interest in C&I solar projects has accelerated in 2019 and will continue to strengthen in 2020. In the past, tax equity investors have struggled to back C&I projects because individual projects often lacked the necessary scale, required high costs for due diligence, and involved credit-quality issues for offtakers. But deals with corporate offtakers can provide attractive returns and

long-term contracts, attributes that have sparked demand among investors, prompting the industry to initiate steps to overcome the inherent challenges. These strategies include forming partnerships with developers that can grant access to a broad portfolio of projects and standardizing documentation and operating agreements that minimize transaction costs. In other cases, investors have acquired a controlling interest in development firms to take a more hands-on approach to the process, a move that involves more risk but can also yield better returns.

Because renewables financing is complex and continuously evolving, there are many other trends that investors must weigh as they seek to take advantage of opportunities.

In this paper we will examine the trends that were top of mind for investors, developers and other industry stakeholders as 2019 comes to a close and 2020 gets underway, including:

- The Investment Tax Credit stepdown
- Corporate demand for renewables
- The state of the U.S. economy

## THE ITC STEPDOWN

As of late 2019, the federal Investment Tax Credit is scheduled to drop from its current level of 30 percent to 26 percent in 2020. Not surprisingly, in 2019, many developers were busy taking steps to ensure that their projects qualify for the full 30 percent ITC. Common activities included:

- Purchasing equipment totaling 5 percent of the eligible ITC in order to qualify for the full value of the ITC under its “safe-harbor” provisions. While some such purchases have included panels, concerns that panels could become technologically obsolete also motivated purchases of compatible inverters, racking systems and other equipment.

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# AN IMPORTANT QUESTION, OF COURSE, IS WHAT THE ITC STEPDOWN MEANS FOR TAX EQUITY INVESTORS EAGER TO FUND SOLAR PROJECTS.

- Securing loans to support the purchase of equipment that qualifies under safe-harbor provisions.
- Initiating physical work on projects, including building foundations for racking systems or installing transformers.

Not all solar developers scrambled to qualify their projects for the full ITC. This is in sharp contrast to the wind industry's reaction to the 2017 phase-down of the federal Production Tax Credit. Receiving the full value of the PTC is so important to the economics of wind projects that the vast majority of 2019 projects still found ways by which to qualify for the full value of the credit.

An important question, of course, is what the ITC stepdown means for tax equity investors eager to fund solar projects.

- In the near term, including all of 2020, the impact will be minimal because already-financed projects will continue to qualify for the 30 percent ITC.
- Over the longer term, especially as the ITC shrinks to 10 percent for commercial and utility projects in 2022, the change will put pressure on traditional tax equity structures. The standard partnership-flip structure is designed to monetize the ITC as efficiently as possible because the ITC and depreciation benefits are what provide most of the value to a tax equity investor. As the ITC's value is reduced, sponsors will need to make up for the gap in the capital stack from tax equity investors with more equity or debt. This will likely increase interest in other deal structures, such as sale leasebacks.

## CORPORATE DEMAND FOR RENEWABLES

Corporate interest in long-term wind and solar power-purchase agreements has been gathering momentum for years, driven by plummeting renewable energy costs as well as demand from consumers, shareholders and employees. 2019 saw numerous large renewables procurement announcements from corporates,

including well-known names like Google, Facebook, Walmart and even ExxonMobil. Here's why this trend will accelerate in 2020 and beyond:

- Renewable energy accounts for just 5 percent of the total power mix of Fortune 1000 companies, according to a recent analysis by WoodMac and the American Wind Energy Association. The research pegs total potential demand in the U.S. at 85 gigawatts through 2030.
- Globally, the demand for renewables is even bigger, with around 200 corporations pledging to reach 100 percent renewables targets as part of the RE100 initiative.

Though the trend of corporations procuring renewable energy will continue to gain traction in 2020, an ongoing question is how U.S. utilities can meet that demand. Utilities have rolled out renewable energy tariffs, also known as green tariffs, to better serve corporate customers.

For example, Duke Energy Carolinas and Duke Energy Progress filed a petition for a 600-megawatt Green Source Advantage Program to serve North Carolina commercial and industrial customers, the military and the University of North Carolina system. But utilities must also weigh business-model and regulatory changes in order to compete with independent power producers and developers owned by foreign utilities that are eager to help corporations achieve their renewables goals.

## WATCHING THE ECONOMY

Will the U.S. economy slide into a recession? In August 2019, three out of four economists surveyed by the National Association of Business Economics predicted the U.S. would enter a recession by 2021. By November the consensus on Wall Street was that the economy was in reasonably good health, though indicators such as bond market yield curve still seemed to point toward recession risk.

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# BEYOND WIND AND SOLAR, SIGNS OF LIFE COULD BE EMERGING IN THE CARBON CAPTURE AND STORAGE MARKET IN 2020.

What does it mean for renewables and renewables financing if the U.S. does fall into a recession? As a general proposition, renewables do well when the economy does well. Growth has been spurred by the fact that wind and solar are low-cost sources of power which customers of utilities and companies alike are demanding. That demand may wane if there's a recession. The tax equity investors that have been such a vital source of support to the growth of renewables would also be impacted by a recession. Good economic times mean companies are profitable and have tax equity capacity; the opposite is true when the economy slows.

Then again, when downturns occur, money tends to flow to low-risk investments. Infrastructure investments, including renewables and particularly projects in the U.S., are likely to be regarded as safe bets, meaning that they could hold up comparatively well during a recessionary cycle.

## CARBON CAPTURE, UTILIZATION AND SEQUESTRATION

Beyond wind and solar, signs of life could be emerging in the carbon capture and storage market in 2020. When Congress passed the budget deal in February 2018, it included revisions to Section 45Q, which addresses carbon capture, utilization and sequestration (CCUS). Additional guidance from the Treasury Department and Internal Revenue Service is expected by the end of 2019.

The regulations and policy guidance have the potential to significantly enhance the development and deployment of carbon capture technologies in industrial and power applications with tax equity financing.

The 2018 amendments to Section 45Q increased the amount of the tax credit from \$22.66 to \$50 per ton of CO<sub>2</sub> for sequestration and from \$12.83 to \$35 per ton for enhanced oil recovery. In

addition, the amendments removed the 75-million-ton cap on the total amount of CO<sub>2</sub> that can be injected underground to be eligible for tax credits.

CohnReznick has been actively advising CCUS projects. Based on preliminary market sounding, we believe there is a meaningful supply of economically feasible projects and strong demand from sponsors and tax equity investors. The leading banks and insurance companies that participate in wind PTC investments are searching for a way to replace this historic investment volume, and the 12-year PTC profile provided by CCUS projects appears to be a viable means to do so.

These prominent investors have mobilized around this growing industry and are currently working through the key commercial risk and tax structuring issues so they will be prepared to move quickly when guidance is released. We expect the financing structures to look and feel similar to wind PTC partnerships, with a focus on pay-as-you-go structures with contingent tax equity contributions based on the actual amount of carbon dioxide captured.

To our knowledge, the Petra Nova plant in Texas is the only U.S. conventional power plant currently generating electricity and capturing CO<sub>2</sub> at scale. Globally, the Boundary Dam Power Station, located in Estevan, Saskatchewan, Canada, is the only other large-scale power plant with CCUS. Both facilities added carbon capture technology to units of existing plants, and both offset a portion of the cost of CCUS by selling captured CO<sub>2</sub> for the purpose of enhanced oil recovery.

As part of the ever-growing focus on global decarbonization and sustainability, we believe this will help move the needle on grid-critical conventional power assets with the same renewables and power players moving at scale in this space. We look to 2020 for the initial financings to get underway with a handful of closings; meaningful multibillion-dollar transaction volumes will start to pick up significantly in 2021.

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# CORPORATE DEMAND FOR RENEWABLES ONLY CONTINUES TO GROW, AND EVEN THE STEPDOWN OF THE ITC SEEMS UNLIKELY TO HAVE A NEGATIVE IMPACT.

## CONCLUSION

Most of the major trends impacting renewables and renewables financing are positive. Institutional investors are eager to finance renewables projects and are evolving in order to back portfolios of large utility-scale and smaller C&I projects alike. Corporate demand for renewables only continues to grow, and even the stepdown of the ITC seems unlikely to have a negative impact.

There are obviously some unknowns, especially because 2020 is an election year.

It's difficult to imagine that any result would lead to transformative policy change, such as a national renewable portfolio standard or a carbon tax. But the outcome of next year's election could result in an extension of the ITC and PTC and improve the chances of policy support for battery storage and offshore wind. However, the real policy and incentive implications won't take shape until after November 2020 and likely into 2021. In the ever-evolving renewable energy industry, much could change between now and then.

To fully understand the risks and opportunities of a shifting renewable energy market, it's important to choose a team with deep advisory, financial, tax and audit expertise in this sector. Together, CohnReznick and CohnReznick Capital make up one of the largest renewable energy advisory practices in the nation. We provide trusted M&A advisory, tax and audit services for many of the largest and most active renewable energy companies including project developers, IPPs, infrastructure and private equity funds, tax equity investors and utilities.

To learn more, please visit:

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