

# market intelligence

GETTING THE  
DEAL THROUGH 

# Project Finance

LNG to  
spearhead 2019?



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global interview panel*

# 2019

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# market intelligence

Welcome to GTDT: *Market Intelligence*.

This is the 2019 edition of *Project Finance*.

**Getting the Deal Through** invites leading practitioners to reflect on evolving legal and regulatory landscapes. Through engaging and analytical interviews, featuring a uniform set of questions to aid in jurisdictional comparison, *Market Intelligence* offers readers a highly accessible take on the crucial issues of the day and an opportunity to discover more about the people behind the most interesting cases and deals.

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# PROJECT FINANCE IN THE UNITED STATES

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David Armstrong



Megan Kultgen

**GTDT: What have been the trends over the past year or so in terms of deal activity in the project finance sector in your jurisdiction?**

**David Armstrong, Megan Kultgen and Sarah Kalin:** Skadden's energy and infrastructure projects group advises clients on a broad range of project finance and other energy-related transactions in the United States and in international markets. Here, we focus on project finance transactions in the United States, as opposed to US investing and lending worldwide. According to IJGlobal, US project finance commercial bank loans totalled approximately US\$42.2 billion in 2018, which represented an 11.4 per cent increase from 2017. The increased activity in the United States can be attributed to the overall strength and stability of the US economy, as well as a general influx of capital in the US market looking for projects to finance. As in recent years, a large group of commercial and investment banks were active in the US project finance market, with several new entrants and much of the capital coming from Asian and European banks. The increased liquidity and competition among banks in the market led to downward pressure on price, oversubscribed transactions and generally deals with borrower-friendly terms, including with respect to amortisation periods, merchant tail risk, hedging and debt service coverage ratios.

The US project finance bond market did not fare as well, with IJGlobal reporting that the number of bond financed deals in 2018 totalled approximately US\$10.7 billion, which is a 37.5 per cent year-over-year decrease. This decreased activity may have been related to the

generous pricing and flexible terms seen in the commercial loan market. For instance, while institutional investors remain increasingly willing to take on construction risk, they continue to demand fully contracted projects for the tenor of the notes, which is a distinguishing feature from certain commercial bank deals in the market. Like the US project finance bond market, the US project finance term loan B market saw decreased activity in 2018 with a notably difficult fourth quarter, in which sponsors pulled transactions from syndication or postponed them altogether with the hopes of waiting for a more stable market in the new year. A promising sign that the market may have started to turn around was when Competitive Power Ventures priced a US\$570 million refinancing of its Woodbridge Energy Center (CPV Shore) in the last weeks of December. According to IJGlobal, the term loan B market recorded approximately US\$2.2 billion of transactions in 2018. Finally, increased liquidity also meant that borrowers were coming to the market seeking to improve leverage on existing projects. Overall, according to IJGlobal, the total transaction value (both debt and equity) across sectors for primary financings in the United States was approximately US\$18.2 billion, compared with US\$15.1 billion of transactions refinancing existing debt on projects and US\$20.3 billion of transactions providing additional debt to existing projects.

Across all US project finance transactions in 2018, the oil and gas sector accounted for approximately 41.4 per cent, or US\$22.8 billion, of total transaction value by dollar volume; and the power sector (including both conventional power and renewables) accounted for approximately 42.3 per cent or US\$23.3 billion, with renewables



Sarah Kalin

*“While deal volume by number of transactions remained consistent across sectors in 2018 when compared with 2017, the overall deal volume by dollar value decreased by a notable 27.3 per cent.”*

accounting for approximately US\$16.2 billion of that share, in each case, as reported by IJGlobal. Comparable to 2017, the transportation sector accounted for approximately 9.1 per cent of the total transaction value of US project finance transactions, with mining, social defence, telecoms and water accounting for the remainder of all transactions.

While deal volume by number of transactions remained consistent across sectors in 2018 when compared with 2017, the overall deal volume by dollar value decreased by a notable 27.3 per cent from approximately US\$75.8 billion to US\$55.1 billion, according to IJGlobal. This decrease in deal volume by dollar value was noticeable across all sectors, except mining, social defence, telecoms and water. However, the power sector saw the biggest decrease from the 2017 figures, with total deal volume by dollar value decreasing by approximately 45.4 per cent. Though renewables played a role, the vast majority of the decline was seen in the conventional power sector, where total deal volume by dollar value dropped by 72.2 per cent and the average deal size fell by nearly half (down to approximately US\$340 million from US\$660 million) when compared to 2017 figures. The conventional power sector saw only five primary financings close last year – two in the gas-fired generation space and three LS Power-sponsored transactions in the transmission and distribution space.

In the renewables sector, debt financing and tax equity investments in solar and wind projects remained steady despite uncertainty regarding how investors and sponsors might re-evaluate renewables in light of both recent tax reform, phasing out tax incentives and

escalating trade disputes with China. According to IJGlobal, total deal volume by dollar value for renewables decreased modestly by 4.7 per cent in 2018. In contrast, the number of transactions in the renewables sector actually increased by 20.8 per cent from 77 in 2017 to 93 in 2018, suggesting that deals in this space are getting smaller and the days of seeing multiple large, utility-scale solar and wind projects of 250+MW come to market has come to an end until offshore wind projects, such as Deepwater Wind, begin taking off. In the meantime, as discussed further below, the number of corporate power purchase agreements (PPAs) executed in 2018 reached record highs, indicating a growing commercial and industrial (C&I) market that can encourage the development of new, albeit sometimes smaller, projects.

Finally, despite decreased activity in 2018, the US oil and gas sector still proved to be notable on a global scale, primarily due to the continued growth of US natural gas production and the corresponding increase in US liquefied natural gas (LNG) export capacity. In 2018, three of the top five deals in the oil and gas sector globally were US deals, namely, according to IJGlobal, the Corpus Christi LNG Additional Facility in Texas, Dominion Cove Point LNG Facility in Maryland and Freeport LNG Development Additional Facility in Texas. In fact, the Corpus Christi LNG Additional Facility was the largest project finance deal in 2018 globally at approximately US\$6.1 billion. These projects are part of the rapidly growing and increasingly competitive landscape of the US natural gas industry. As discussed in greater detail below, 2018 marked a milestone as US dry natural gas production

## ***“The four largest transactions by dollar value that closed last year in the US were all in the oil and gas sector.”***

averaged 83.3 Bcf/d as reported by the US Energy Information Administration (EIA) (which is the government’s chief energy forecaster). The EIA also forecasts that as additional liquefaction facilities come online, production will continue to increase in 2019 and 2020 and, in turn, gross US exports of natural gas will grow by 31.5 per cent and 15.1 per cent, respectively. By the end of 2019, US LNG export capacity is expected to be the third largest in the world, falling behind only Australia and Qatar.

***GTDT: In terms of project finance transactions, which industry sectors have been the most active and what have been the most significant deals to close in your jurisdiction?***

**DA, MK & SK:** Notwithstanding the fact that 2018 was a slower year for most US project finance sectors, there were still several notable US transactions, particularly in the oil and gas sector. In fact, the four largest transactions by dollar value that closed last year in the US were all in the oil and gas sector. Separately, while the power sector generally saw a decline in deal volume by dollar value, the number of transactions completed in 2018 was comparable to 2017 (114 and 116, respectively), because of the 20.8 per cent growth in the number of transactions completed in the renewables sector. Relatedly, while the renewables sector saw an increase in transactions closed, it did not see a corresponding increase in overall deal volume by dollar value, indicating that the average deal size was down and that tides are changing in terms of the types of deals being completed and the players involved.

In the oil and gas sector, Cheniere Energy again topped the sponsor league tables for 2018 with approximately US\$7.3 billion spread across two transactions. Both transactions were additional facilities related to Cheniere’s Corpus Christi LNG project. The Corpus Christi LNG Additional Facility closed in May 2018 and increased the size of an existing credit facility to approximately US\$6.1 billion, also making it the largest project finance deal of 2018. The proceeds of the facility have been earmarked for the development, construction and placing into service of three LNG trains (which are anticipated to have an aggregate nominal production capacity of up to 13.5 metric tonnes per annum

of LNG), the Corpus Christi natural gas pipeline (connecting the Corpus Christi LNG plant to several interstate and intrastate pipelines) and other related business purposes. Cheniere’s second transaction closed in June 2018 and increased the size of an existing working capital facility to US\$1.2 billion. Since closing, Train 1 of the Corpus Christi project has gone live with first cargo being lifted in December 2018, while Trains 2 and 3 are anticipated to follow in 2019 and 2021, respectively.

Also in the oil and gas sector, Dominion Questar Gas closed the US\$3.8 billion Dominion Cove Point LNG Facility (consisting of a US\$3 billion term loan and US\$800 million in equity), which was the sixth-largest project finance deal globally and the second largest in the United States, according to IJGlobal. The Cove Point project has a nameplate capacity of 5.25 metric tonnes per annum of LNG and began operations in early 2018, well before the financing closed in September. The proceeds of the financing were used to reduce parent-level debt as part of Dominion Energy’s credit improvement initiative.

In the power sector, the biggest deal to be completed in 2018 according to IJGlobal, was Advanced Power’s US\$1.3 billion financing to develop South Field Energy, a 1,182MW combined-cycle natural gas generation facility in Ohio located in the PJM power market. This transaction featured a diverse investor group, including Kyushu Electric Power, NH-Amundi Asset Management and PIA Investment Management, a joint venture between Development Bank of Japan and Showa Shell Sekiyu, Shikoku Electric Power Company, and an affiliate of Bechtel Development Company, reflecting both the interest from Asian investors to take on equity stakes in US projects to gain experience in deregulated energy markets before their countries follow suit, as well as a possible new trend for engineering, procurement and construction contractors to become stakeholders and not just contractors in projects they are constructing. In terms of transaction value, South Field Energy was followed by Arclight Capital Partners’ approximately US\$1.2 billion additional facility for its Eastern Power Portfolio consisting of three natural gas and dual-fired generating facilities located in the NYISO power market and four natural gas-fired power

generation facilities located in the PJM power market, which collectively generate 4,961MW.

Turning to the renewables sector, as mentioned, 2018 featured a greater number of smaller deals or portfolio financings. That said, according to IJGlobal, the largest renewables deals by transaction value were:

- Consolidated Energy and OCI NV's refinancing of the Natgasoline Methanol Plant in Texas (a US\$961 million transaction comprised of municipal bonds, a term loan B facility, and a revolver);
- sPower's US\$602.7 million financing that builds on its success in the private placement market in 2017 and will finance the operations of 15 solar projects in California and one in Idaho; and
- Sunrun's US\$595 million financing for its Hera Solar Portfolio, a portfolio of residential solar systems across the United States.

In December 2018, Sunrun also announced that it closed its second securitisation of leases and PPAs, which included US\$322 million A-rated Class A notes said to be backed by a portfolio of 34,493 solar rooftop systems located across nineteen US states. As residential solar exists in the intersection of project finance and consumer credit, banks have had to consider carefully the appropriate level of diligence warranted to finance such portfolios to make these transactions viable. Sunrun's transactions reflect the market's increasing comfort in the residential space.

The C&I market also had a milestone year as various sources confirm that corporate PPAs were on the rise with respect to both wind and solar projects, with some citing that corporate PPAs made up 22 per cent of new PPAs. The rise in corporate PPAs follows the work done by early adopters, such as Facebook, Google and Microsoft, and can be attributed to corporate sustainability commitments, increased corporate experience in the energy space, as well as innovations in how PPAs or related agreements are both drafted and structured. For instance, Apple, Akamai, Etsy and Swiss Re collaborated on a transaction to develop both a new wind and a new solar project, which together will generate 290MW into the PJM power market. Aggregating corporate entities creates opportunities for them to invest in renewables, when otherwise they might not due to relatively low demand, cost of diligence and negotiating PPAs and general lack of experience.

In the transportation sector, the Los Angeles International Airport (LAX) Automated People Mover System PPP was the largest deal completed in 2018, according to IJGlobal. The total transaction value was approximately US\$1.7 billion, consisting primarily of debt, divided across nearly US\$1.3 billion senior lien revenue bonds with a 29-year tenor and a US\$269 million bank facility to finance the construction period. The Automated People



*“In the transportation sector, the Los Angeles International Airport Automated People Mover System PPP was the largest deal completed in 2018”*



**“The US energy and infrastructure sector features a broad range of both domestic and international investors and sponsors.”**

Mover System is phase one of a US\$5.5 billion Landside Access Modernization Program (LAMP), intended to improve LAX’s transportation system infrastructure, which includes, among others, planned upgrades to roadways and connecting airport stations with the metro system and rental car centres. Other significant PPPs in 2018 included the approximately US\$873 million financing for the Gordie Howe International Bridge PPP (which will connect Windsor, Ontario, Canada to Detroit, Michigan), and the US\$817 million financing for the Interstate 75 Modernization PPP in Michigan (which will be the first major upgrade of the highway since its construction in the 1960s).

Finally, according to IJGlobal, the approximately US\$2.3 billion Los Angeles Hollywood Park Stadium Additional Facility was the largest transaction completed in the social defence sector. The proceeds were allocated to the development and construction of the Los Angeles Stadium in California. This nearly US\$5 billion sports stadium, which will be home to the Los Angeles Rams and Los Angeles Chargers, is already under construction and scheduled to be complete in advance of the 2020 NFL season.

**GTDT: Which project sponsors have been most active in driving activity? Which banks have been most active in providing debt finance?**

**DA, MK & SK:** The US energy and infrastructure sector features a broad range of both domestic and international investors and sponsors. Given the magnitude of oil and gas transactions, the most active sponsors of 2018 by transaction value track the deals highlighted in the prior section. According to IJGlobal, Cheniere Energy led all project finance sponsors in 2018, with a total deal volume of approximately US\$7.3 billion spread across two transactions as previously discussed. Dominion Questar Gas was the second-largest sponsor by deal volume in 2018 with approximately US\$4.7 billion across three transactions. The third-largest sponsor was Freeport LNG Development with a total deal volume of approximately US\$3.0 billion across two transactions. Together, the top three sponsors made up over 27 per cent of all deal volume by transaction value in the United States in 2018 and again highlight the outsized impact that the US LNG transactions had on the broader project finance market. Sasol Group and LS Power rounded out the top five sponsors with approximately US\$2.3 billion and US\$1.7 billion in deal volume, respectively. The Sasol Group closed one transaction, namely a refinancing of its Lake Charles Chemical Plant in Louisiana. Finally, unlike the four preceding sponsors who all completed single transactions in excess of a billion dollars, LS Power’s place in the league tables was established by executing six smaller but notable transactions, including three primary

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## *“Many sponsors, including both traditional developers and private equity firms, that are engaged in the power sector have a diverse portfolio of generation and transmission assets.”*

financings and three refinancings. The primary financings related to three different electrical infrastructure projects that LS Power is developing across the United States: the Harry Allen Eldorado Transmission Line, which will connect Nevada and California (a US\$213 million transaction), the Republic Transmission Line, which will connect Indiana and Kentucky (a US\$263 million transaction), and the Silver Run Substation and Power Line, which will connect Delaware and New Jersey (a US\$156 million transaction).

In addition to the Sasol Group, other international sponsors ranking among the top 20 in the league tables, according to IJGlobal, included:

- Dutch fertilizer and chemical company OCI NV (sponsor of the OCI Beaumont integrated methanol and ammonia production facility in Texas and the Natgasoline methanol production complex also in Texas);
- Canadian institutional investor Alberta Investment Management Company (a sponsor of the 1.3 GW sPower renewables portfolio); and
- Spanish construction company ACS Group (a member of the consortium developing the Gordie Howe International Bridge PPP and a member of the consortium developing the LAX Automated People Mover System PPP).

Many sponsors, including both traditional developers and private equity firms, that are engaged in the power sector have a diverse portfolio of generation and transmission assets. In the renewables space, for instance, LS Power, mentioned above for their transmission work, also closed two refinancings for solar facilities (Arlington Valley PV Solar, a 125MW project in Arizona and Centinela Solar Energy Facility, a 170MW project in California). Similarly varied, NextEra Energy, which led the league tables in the renewables sector in 2017 due to several solar facility financings, continued to have a busy 2018 with approximately US\$1.2 billion in deal volume across five transactions. These transactions, included, among others:

- participation in the US\$1.5 billion refinancing of the Sabal Trail Pipeline;

- a US\$60 million refinancing of the Lone Star Crez Transmission Line; and
- a US\$60 million primary financing for the Pinal Central Solar Energy Center in Arizona, which is planned to also feature a battery storage system.

On the private equity side, Arclight Capital Partners continues to be prominent with an approximately US\$1.2 billion refinancing of their Eastern Power Portfolio, followed by Ares Management and DE Shaw with approximately US\$1.1 billion and US\$981 million of transaction value, respectively. According to IJGlobal, DE Shaw was the leading sponsor in the renewables sector in 2018, closing seven transactions.

As in 2017, Mitsubishi UFJ Financial Group (MUFG) continued to lead the commercial bank market last year with over 7.8 per cent of the market share by transaction value. In 2018, MUFG achieved approximately US\$3.3 billion in transaction volume (an increase of 14.9 per cent when compared with 2017 figures) spread across 43 transactions, according to IJGlobal. Rounding out the top 10 most active banks in commercial bank loans were Sumitomo Mitsui Financial Group, Morgan Stanley, Crédit Agricole, Santander, ING Group, Deutsche Bank, Key Bank, JPMorgan and Société Générale. Several of these banks were arrangers on the most significant transactions of 2018. For instance, a syndicate of over 40 banks, including MUFG, Sumitomo Mitsui Financial Group, Morgan Stanley, Crédit Agricole, Santander and several other large banks participated in the Corpus Christi LNG Additional Facility, and a syndicate of over 20 banks, including many of the same players (MUFG, Sumitomo Mitsui Financial Group, Crédit Agricole, ING Group, and Key Bank, among others) participated in the financing of the Dominion Cove Point LNG Facility. Otherwise, large insurance companies, pension funds and institutional investors remain active in the project bond market, both in Rule 144A/Reg S transactions and 4(a)(2) private placements, as well as in the term loan B market.

## ***“Geopolitically, the United States and China continued their trade dispute, leading to multiple escalations over the course of 2018.”***

***GTDT: What are the biggest challenges that your clients face when implementing projects in your jurisdiction?***

**DA, MK & SK:** While the United States continued to boast a strong economy in 2018, there were several geopolitical and domestic developments that impacted the energy and infrastructure space. Geopolitically, the United States and China continued their trade dispute, leading to multiple escalations over the course of 2018. Most notably for the energy and infrastructure space, these included:

- a US-imposed 30 per cent tariff on all solar panel imports (except those from Canada) in February 2018;
- a US-imposed 25 per cent tariff on steel imports (with certain exceptions) in March 2018; and
- a China-imposed 10 per cent tariff on US LNG in September 2018.

With China expecting to become one of the largest new sources of LNG demand in the coming years, as the country shifts away from coal to reduce pollution, this could have a chilling effect on executing new long-term sales contracts with Chinese customers. While the US and China agreed to a 90-day trade war truce in December 2018, investors and lenders will likely require more certainty before committing large amounts of capital to finance new LNG facilities.

Separately, in 2018, President Trump’s political party lost control of one of the legislative houses of Congress during the midterm elections, requiring the President, for the first time since his inauguration, to more actively engage with the Democratic party in order to advance his policies. In December 2018, as Congress failed to pass a spending bill, the US government partially shut down causing only employees deemed ‘essential’ to continue working. One of the consequences of what proved to be the longest government shutdown in US history is possible delays in the review of more than a dozen pending applications for LNG export. While the Federal Energy Regulatory Commission (FERC), the agency that leads the review of LNG export applications, remained open during the government shutdown, some of the government agencies that assist in the review, particularly from an environmental perspective, did not remain open or had limited

staff, such as the Pipeline and Hazardous Materials Safety Administration, Environmental Protection Agency (EPA), the US Coast Guard and the National Oceanic and Atmospheric Association. Delays in obtaining regulatory approvals can be unnerving to lenders and investors looking to get involved in the US LNG boom. The government shutdown may also have delayed the timing on long-term policy initiatives, such as the release of the EPA’s final power industry rule, which is supposed to include the Affordable Clean Energy Rule that is to replace the Clean Power Plan, as well as generally distracted lawmakers from progressing a bipartisan infrastructure package, which is anticipated to spur additional activity in the project finance space by introducing new incentives.

As a result, in the context of executing transactions to finance energy and infrastructure projects that can easily have tenors ranging from five to 30 years, increased political uncertainties that can adversely affect project timelines, introduce unexpected costs to financial models or materially change incentive structures may lead to increased scrutiny as investors and lenders carefully assess and possibly reconsider where their capital is best spent.

***GTDT: Are there any proposed legal or regulatory changes that may give rise to new opportunities in project development and finance? Do you believe these changes will open the market up to a broader range of participants?***

**DA, MK & SK:** In early 2018, there was widespread speculation that the implementation of a base erosion and anti-abuse tax (BEAT) (which imposes tax on certain companies with significant intercompany cross-border transactions) in the act commonly referred to as the Tax Cuts and Jobs Act of 2017 would affect the tax equity market and specifically the value of tax credits to the extent that a taxpayer is limited in applying the value of renewable energy tax credits against the BEAT. So far, however, this has had a limited impact on tax equity investors. The BEAT functions like an alternative minimum tax and in determining BEAT liability, the value of the renewable energy tax credits is decreased by 20 per cent, reducing their value for taxpayers subject to the BEAT.

Nevertheless, generally, tax equity investors have stayed in the market and new entrants have exceeded those who departed. Furthermore, the BEAT has had a limited impact on tax equity pricing, though some deals 'price in' BEAT as an alternative computation of any 'After-Tax IRR' to ensure the tax equity's return is not too low after BEAT.

Additionally, in January 2018, President Trump approved a 30 per cent tariff (which will decline by 5 per cent each year over a four-year span) on imported crystalline silicon photovoltaic cells and modules (which are key components for solar panels), with the first 2.5GW of imported cells excluded from the additional tariff. Furthermore, as mentioned, over the first half of 2018, the Trump administration announced a number of other tariffs related to the renewables market, including steel tariffs that could affect wind turbine prices. Despite these changes, however, most believe that the impact of the tariffs will be negligible compared with the desire to take advantage of tax credits before they are phased out. Furthermore, mid-year, the US solar market received confirmation that the same 'start construction' guidance that applies to wind projects, also similarly applies to photovoltaic projects, generally giving developers to the end of the fourth succeeding calendar year to finish building a project after the start of construction, which should have positive effects on that market.

In February 2018, Congress expanded section 45Q of the US tax code to provide more incentives for carbon capture and sequestration (CCS). The changes extend tax credits to carbon capture projects under construction by the end of 2023. The tax credits can then be claimed, for up to 12 years after a project is placed in service, on carbon dioxide that is captured and placed in secure geological storage, used for enhanced oil recovery or put to certain other commercial uses in a manner that eliminates the CO<sub>2</sub>. Further, the expansion of 45Q eliminates the prior cap, which only allowed the credit to be applied to the first 75 million metric tons of qualified carbon oxides claimed by all projects. Additionally, the value of the credit was increased. As such, the expansion of 45Q may lead to a much more robust tax equity market for CCS, where tax equity investors and developers would enter into a partnership to own the carbon capture equipment and contract with a power plant or other facility to capture CO<sub>2</sub> for it and then contract with a party to dispose of or buy the CO<sub>2</sub>.

In addition, while debates about how best to address fuel security and grid resiliency are likely to continue in 2019, some utilities are moving forward by adding new distributed options to their demand response programmes, in an effort to more efficiently match supply with load and to manage grid reliability. As such, we anticipate more resources being added to the grid in 2019, including batteries, electric vehicles, distributed



"Over the first half of 2018, the Trump administration announced a number of other tariffs related to the renewables market, including steel tariffs that could affect wind turbine prices."

## *“The United States exported more natural gas than it imported in 2018.”*

solar and smaller appliances. While one challenge the renewables industry faces is the potential for large-scale deployment of renewable energy to improve grid reliability, since renewable power is generated by intermittent resources (eg, wind and sun), advancements in energy storage technology have made deployment of battery storage projects attractive opportunities that would help mitigate reliability concerns. Further, FERC’s Order 841 directed Independent System Operators (ISOs) and Regional Transmission Organizations (RTOs) to open their wholesale energy, capacity and ancillary services markets to energy storage resources in a non-discriminatory manner and to submit compliance filings by 3 December 2018. The direct result of this order will likely be for a great deal of energy storage capacity to come online. There is the question, however, as to whether operators will be able to meet the 3 December 2019 deadline to implement these changes. Nevertheless, 2019 is posed to be the biggest year yet for energy storage.

Despite the demise of the Clean Power Plan, which mandated a 32 per cent reduction in carbon emissions from existing power plants by 2030 and specific goals for states to decrease use of coal-fired electricity generation and increase reliance on renewable energy and natural gas, the annual energy outlook of the EIA (which has been historically conservative on renewables) predicts that renewables will surpass coal-fired generation in the US by the middle of the next decade. The EIA forecasts a 31 per cent share for renewables in the energy mix by 2050, which is only second to the 39 per cent prediction for natural gas. The Trump administration’s lack of support for climate change has not stopped the decline of coal-fired generation, with approximately 15GW of coal-fired capacity retired last year. Further, many Midwestern utilities have plans to partially replace coal plants through investment in wind over the next three years to take advantage of the production tax credit while it remains. The EIA forecasts 50GW of wind installations and 357GW of solar installations between now and 2050.

While solar power generation remained one of the more active industries within the US project finance market in 2018 and appears poised to continue as such in 2019 with the mentioned ‘start construction’ guidance, the domestic natural gas market has continued to expand as well. US natural gas production capabilities have grown and we

expect such development to continue, positioning the United States as a significant exporter of gas, which coincides with an increased global appetite for LNG. This environment has led to greater domestic investment in facilities that convert natural gas to LNG. The United States exported more natural gas than it imported in 2018. Rising LNG exports have contributed to a shift from the US being a net importer of natural gas as recently as early 2017. The annual energy outlook of the EIA forecasts that gross US exports will rise by 31.5 per cent in 2019 and another 15.1 per cent in 2020. The EIA expects US LNG exports to increase from an estimated 3.0 Bcf/d in 2018 to 5.1 Bcf/d in 2019 and to 6.8 Bcf/d in 2020, as three additional liquefaction projects come online. Further, the EIA forecasts that US LNG export capacity will almost double by the end of 2019 with new trains at Cameron LNG, Freeport LNG and Elba Island LNG set to be commissioned.

Finally, as a follow-up to the 2019 Proposed Budget, in President Trump’s 5 February 2019 State of the Union address, the President called on Congress to ‘unite for a great rebuilding of America’s crumbling infrastructure’. After asking Congress in his 2018 address to produce an infrastructure bill that generates at least US\$1.5 trillion and the White House issuing an outline of its plan for federal infrastructure policy, which included spending US\$200 billion of federal funds to spur state, local and private investment, the remarks in the 2019 State of the Union were a high-level request to Congress to work together to create an infrastructure plan. While both parties are generally in agreement that a comprehensive infrastructure plan is needed and a possible area for bipartisanship, there is still no detail around how such an investment should be funded. That said, several weeks earlier, on 16 January 2019, Senator John Hoeven of North Dakota and Senate Finance Committee Ranking Member Ron Wyden of Oregon reintroduced the Move America Act, which is bipartisan legislation to spur investment in the United States’ aging infrastructure. The Move America Act seeks to expand tax-exempt private activity bonds and create a new infrastructure tax credit, helping fund infrastructure projects via public private partnerships. Qualified projects include roads, bridges, transit, ports, rail, airports, water and sewer facilities, and broadband. The Move America Act intends to leverage US\$8 billion in federal investment into US\$226 billion worth

of bond authority over the next 10 years or up to US\$56 billion over 10 years in tax credits. If the Move America Act is passed, it could be the first major step in spurring investment in infrastructure repair and development.

**GTDT: What trends have you been seeing in terms of range of project participants? What factors have influenced negotiations on commercial terms and risk allocation? Are there any particularly innovative features?**

**DA, MK & SK:** As mentioned, according to IJGlobal, US project finance loan volumes decreased by 27.3 per cent to US\$55.1 billion (across 162 transactions) in 2018 from US\$75.8 billion (across 159 transactions) in 2017. This decrease in activity was consistent across the oil and gas, renewables, conventional power and transportation industries, with only the mining, social defence, telecom and water industries showing an increase in dollar value as compared to 2017 levels. That said, on the lending side, the sources and structures of funding remained diverse across all industries in the project finance space. In 2018, the total number of commercial bank finance deals in the United States was US\$42.2 billion (across 155 transactions), up from US\$37.8 billion (across 122 transactions) in 2017, according to IJGlobal. Additionally, the number of bond-financed deals was US\$10.7 billion (across 22 transactions) in 2018, down from US\$17.1 billion (across 38 transactions) in 2017, according to IJGlobal.

Perhaps the greatest determinant of commercial terms and risk allocation in US project finance is the lending market in which a particular project is being financed. For instance, in commercial bank transactions, the covenant packages and deal structures tend to be tighter than in term loan B and Rule 144A/Reg S project bond transactions. Among the rationales for this distinction is that amendments and waivers are more manageable in commercial bank transactions because of the traditionally closer relationship between sponsors and commercial bank lenders. Accordingly, although covenants may be tighter, sponsors believe that they have greater flexibility to seek amendments and waivers to such covenants. Commercial banks also tend to have less appetite for risk than term loan B lenders (which is reflected in the rates and fees paid by borrowers in each of those markets), resulting in riskier projects (including less sponsor support, increased merchant risk and heightened technology, permitting or other risks) being financed in the term loan B or high-yield bond markets.

Given the breadth of the US project finance market, it is difficult to discuss with any specificity the innovative structures and relevant risk allocations being used and applied. Instead, we will focus for illustrative purposes on the solar



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## *“As predicted, the number of successful solar securitisations of residential portfolios of PPAs and leases or loans completed in 2018 increased even more from those that closed in 2017.”*

industry and the diversity of debt and equity activity seen in the market in 2018. In 2018, we saw back-leverage debt facilities put into place to fund construction costs and early operations of solar projects. In addition, we saw further inroads into the 4(a)(2) private placement market for solar financing, including the sPower transaction mentioned previously, the proceeds of which are being used to fund operating expenses of existing projects and to refinance underlying debt facilities.

In addition, solar tax equity remained a popular revenue-generating approach, with partnership flips and inverted (or pass-through) leases continuing to provide a consistent source of tax equity investment into the solar space. In a partnership flip (which remained by far the most popular structuring approach), the solar developer and the tax equity investor form a joint venture and the allocation of upside (profits, cash, tax benefits) flips between the parties during the life of the investment. With an inverted lease, the solar developer leases projects to the tax equity investor and assigns its rights under the PPA and related agreements to the investor, who then contracts the servicing of those projects back to the solar developer or its affiliate. Historically, the inverted lease structure was more attractive than the partnership flip in a scenario where owner-level debt was contemplated, as a foreclosure on a project owned by a partnership flip during the ITC recapture period would result in recapture, so tax equity investors would typically seek complete forbearance from the lenders. In contrast, a foreclosure on a project owned by a lessor in an inverted lease during the recapture period results in recapture only if the project is transferred to a disqualified person, so investors seek a limited forbearance, which has been viewed more favourably by lenders in the market. In addition, inverted leases have been viewed positively because the cash flows are predictable as they are fixed on a lease schedule with no cash sweeps, as opposed to in a partnership flip where the cash flows are pro rata distributions.

Furthermore, as predicted, the number of successful solar securitisations of residential portfolios of PPAs and leases or loans completed in 2018 increased even more from those that closed in 2017. Solar loans are generally thought to be a more securitisable product relative to PPA and lease contracts, as their direct cash flows are

not complicated by tax equity and the need for either back leverage or complex intercreditor agreements between the tax equity investors and the bondholders. That said, many securitisations of PPA and lease contracts have now taken place. With respect to securitising PPA and lease contracts, the inverted lease was initially more attractive as described above and because the debt is senior to the tax equity, whereas it is pro rata in the partnership flip structure. However, some of the risk in the partnership flip structure can be mitigated by the introduction of insurance to cover tax basis risk, which arguably could make investors more comfortable in opening themselves up to another risk-foreclosure exposure (particularly as, with basis risk covered by insurance instead of the sponsor interest in the partnership indemnifying for that risk, more money remains in the system and lessens the chance of default on debt (therefore indirectly mitigating foreclosure risk)). Given the strong preference by many tax equity investors to structure as a partnership flip, the inclusion of tax basis insurance and debt-friendly provisions with respect to cash sweeps has become prevalent to better allow for securitisation of the product.

We expect solar securitisations to continue to dominate at least the residential solar market. In a solar securitisation, a bankruptcy-remote special purpose entity is used to combine thousands of rooftop solar projects and the monthly cash flows related thereto. The special purpose entity issues new debt securities based on these cash flows and investors buy the securities and receive interest payments. Furthermore, to satisfy the Security Exchange Commission's credit risk retention rules, the originator, either directly or through a majority-owned affiliate, must retain a membership interest in the issuer, known as 'horizontal' risk retention, or in each class of assets issued, known as 'vertical' risk retention (or a combination thereof). In the early stages, SolarCity/Tesla led the solar securitisation market; however, in 2018, SunRun, Mosaic, Dividend, Vivint, SunPower and others all successfully completed solar securitisations. As such, it is clear that other players are interested in and capable of playing in the field. Furthermore, average deal sizes have increased substantially, which is particularly noteworthy given that it is a relatively new asset class.

# THE INSIDE TRACK

## *What three things should a client consider when choosing counsel for a complex project financing?*

First, clients should consider breadth of expertise. In addition to project finance capability, complex financings often require tax, real estate, environmental, regulatory, cross-border and intellectual property specialists, to name a few. Thus, it is imperative that the firm has wide-ranging experience. Secondly, specific industry knowledge and understanding of the core business are important. This applies on the lender side (where designing covenants to address industry-specific risks is essential) and on the sponsor side (where ensuring the company has flexibility to run its business effectively is a must). Finally, clients should consider whether the firm's style aligns with the client's approach to the transaction.

## *What are the most important factors for a client to consider and address to successfully implement a project in your country?*

While it is difficult to narrow the factors in a market as diverse as the United States, we consider the following to be among the most important: knowledge of, and adequate legal counsel in respect of, regulations at all levels (federal, state and local) applicable to the project; adequacy of funds to support project development, particularly given the long lead time in many industries; understanding of the debt market that the project is expected to be financed in and structural considerations to ensure that risks associated with that project will be financeable; and tax considerations, to ensure the project achieves optimal tax savings.

## *What was the most noteworthy deal that you have worked on recently and what features were of key interest?*

A recent transaction of note was our representation in 2018 of Investec Bank plc, as lead arranger, syndication agent

and administrative agent, and its affiliate Investec Inc, as lead arranger and syndication agent, in connection with an aggregate US\$363 million senior secured refinancing of the Rhode Island State Energy Center (RISEC), a 594MW combined-cycle gas-fired power plant in Johnston, Rhode Island. The refinancing consisted of a US\$318 million term loan facility syndicated in the commercial bank market and a US\$45 million revolving facility to satisfy debt service reserve requirements, letter of credit obligations and working capital needs. The RISEC plant is indirectly owned by an affiliate of Cogentrix Energy Power Management LLC, who purchased the plant from Entergy in 2015. We represented the lenders in Cogentrix's acquisition financing, which was refinanced with the proceeds of the Investec-led facilities.

A critical factor that drove the refinancing effort was the project's entry into a three-year tolling agreement with Shell. Under the new tolling agreement, which took effect in January 2019, Shell is responsible for purchasing RISEC's scheduled power production and for delivering the plant's supply of natural gas, obviating the need for the plant to have a hedging program for power sales and gas supply during the tolling agreement's term. In anticipation of the toll's expiration in three years, the parties negotiated a first-of-its-kind 'toggle' feature in the loan documents. This toggle feature requires the project to enter into new energy hedges or post credit support that lock in a threshold gross margin for specific periods after the tolling agreement's expiration, or otherwise trigger an increase to the interest rate payable under the loan documents. We have subsequently seen other transactions in the market based on this novel structure.

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## **GTDT:** *What are the major changes in activity levels or new trends you anticipate over the next year or so?*

**DA, MK & SK:** We expect the US solar market to continue to thrive in 2019. Furthermore, the US wind market is expected to continue to grow for the next several years as the production tax credit phases out, in particular the development pipeline for offshore wind projects, which has grown substantially in recent years, to approximately 25GW, according to the EIA. With renewable tax credits left undisturbed by the Tax Act, we anticipate activity levels in the solar and wind tax equity space to remain fairly consistent with 2018 levels (and then increasing in 2020) and for the partnership flip to remain the most popular structuring tool for tax equity financings.

As mentioned, we anticipate continued activity in the 4(a)(2) private placement market throughout the energy industry. In 2018, we continued to

see a shift from Rule 144A/Reg S transactions to 4(a)(2) private placements. Historically, 4(a)(2) transactions were primarily used for smaller transactions in the energy space; however, with the massive amount of liquidity currently available in the 4(a)(2) market, we have seen many larger transactions completed in the past year (including the sPower Finance 2 portfolio financing transaction, which was the second such transaction completed by sPower in as many years).

We expect the formation of private equity, pension and infrastructure funds seeking to deploy capital in large portfolios of renewable generation assets to continue to increase as demand from financial investors grows for portfolios of high-quality renewable generation assets. We also expect sponsors to continue to use innovative transaction structures at the portfolio level to complement the wide variety of construction debt,



*“We believe US LNG exports will continue to increase with the growing export capacity and streamlined permitting process for small-scale export.”*

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tax equity and other more traditional sources of project-level financing available in the market.

Finally, in 2019, we expect to see a greater number of opportunities for US project finance in the areas of large-scale LNG export facilities, greenfield combined cycle gas turbines, quasi-merchant power plants, and offshore wind. In particular, in the LNG export sector, in addition to the aforementioned new trains at Cameron LNG, Freeport LNG and Elba Island LNG set to be commissioned, four additional export terminals – Magnolia LNG, Delfin LNG (pipeline and related onshore facilities only), Lake Charles, Golden Pass – and a sixth train at Sabine Pass have been approved by FERC. We expect these projects, among others, to make final investment decisions in the first half of 2019. These projects represent a combined additional LNG export capacity of 7.6 Bcf/d. Furthermore, in July 2018, the US Department of Energy (DOE) announced a final rule (which went into effect 24 August 2018) to provide for faster approval of applications for small-scale exports of natural gas, including LNG. Per this rule, upon receipt of a complete application to export natural gas (including LNG)

to non-FTA countries, the DOE will grant the application provided two criteria are met:

- the application proposes to export no more than 51.75 Bcf/yr of natural gas; and
- the proposed export qualifies for a ‘categorical exclusion’ under DOE’s National Environmental Policy Act regulations.

According to the DOE, the US small-scale LNG export market involves exports primarily to countries in the Caribbean, Central America and South America, many of whom do not generate enough natural gas demand to support the economies of scale required to justify LNG imports from large-scale LNG terminals via conventional LNG tankers. The small-scale LNG export market has developed as a solution to the practical and economic constraints limiting natural gas exports to these countries. The House of Representatives has passed a bill to codify this rule and similar legislation is awaiting a vote by the full Senate. Accordingly, we believe US LNG exports will continue to increase with the growing export capacity and streamlined permitting process for small-scale export.

*Also available online*



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