Issue 379
Summer 2020

# IJGlobal

Project Finance & Infrastructure Journal



IJGLOBAL AWARDS 2019 **WINNERS INSIDE**

## Awards special

This year's roll-call of victorious for deals closed in 2019

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Profiling all of the winning deals and companies in this year's *IJGlobal Awards*. Discover the transactions from all of the world which moved the market forward.



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# **Awards**, **infrastructure** and **staycations**

Welcome to the Summer 2020 edition of the *IJGlobal* Magazine. Those with a keen eye will notice there's been something of a design change as we freshen up the look of our quarterly mag – which this time is dominated by our awards. This issue is special to us at *IJ*, even moreso this year as it's the only platform we have to celebrate our awards season that we were sadly forced to cancel due to the coronavirus pandemic.

However, we've made a special effort to boost that coverage with most of the pages that follow dedicated to the people who should have been picking up awards – raising perspex on high – at our rather splendid events in London, New York, Singapore and Dubai. In the coming pages, there is extensive reporting on these transactions and a good number of articles early in the mag where we interview key players involved in the financing and delivery of major infrastructure around the globe.

As you will appreciate, we are sending out this magazine in digital format as printing was not an option in the Covid-19 world in which we currently operate… but we hope that does not detract from the experience.

One change you will immediately notice is the we have ramped up our coverage of people moves, giving it a whole 4 pages right at the front of book. Why have we done this? And why will we continue to do this? Well that rather makes me think of a story…

If you have ever been to Grantham in Lincolnshire (not a place I recommend), you will likely know a charming village by the name of Irnham. And if you know Irnham, you definitely know The Griffin Inn as there's not a lot more to the village than that!

We were staying there one weekend, breaking the road on the way up to visit cousins in Skipton, Yorkshire (most certainly is worth a visit), staying at this delightful and rather ancient inn. The owner, who was also head chef, would not let the food be delivered to the table unless he was on hand to witness the reaction.

It feels much the same with the magazine which (in happier times) we would leave on tables for delegates at our conferences to take away with them. Once they are laid out, it is fascinating to watch people pick their way through it… and the thing that holds their attention for longest is the people move section.

Having done as the Griffin Inn chef did, I resolved to give the people more of what they want. And this rather speaks to the nature of the infrastructure community – long-term relationships, knowing the person across the table from you, selecting advisers based on their skills but also your knowledge of the person/team (it's a long time to be stuck in a room with someone you can't stand).

Having said that, the number of times I have introduced people – staring blankly at each other – only after hearing the name to scoff, saying something along the lines of: "But, of course we know each other." Shaking hands vigorously (again pre-Covid). "We've sat across the table for months on end." They laugh. We all laugh. We all pretend not to have noticed that 30 seconds when neither had the foggiest who the other was!

So, perhaps with a friendly reminder of a name, a company and – where we can dredge one up – a photo, I feel we at IJ are doing something for the community!

For now, please enjoy the mag and if you have any suggestions for sections you would like to see built on – get in touch. Let me know. The worst that can happen is that you're told to go boil your head.

**Editorial Director**
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## AMP Capital

AMP Capital promoted global head of infrastructure equity Boe Pahari to CEO of the Australian fund manager. Based in the UK, he was both global head of infra equity and director, North West Region (UK, Europe and Americas).

Boe Pahari

Pahari took up the CEO role on 1 July, replacing Adam Tindall who is retiring. Tindall led the asset manager over the last 5 years.

## Apollo Global Management

Andrew Kirby exited AMP Capital to start in June at Apollo Global Management where he reports to Dylan Foo who was hired into the fund – also from AMP – in September (2019) to jointly lead the infra equity team. Kirby had been on Foo's team at AMP and last March was promoted to investment director, responsible for origination and asset management of infra investments, with a focus on North American communications infrastructure. His new role at Apollo has a similar focus.

## EQT

Stockholm-headquartered fund manager EQT opened an office in Paris, headed by Nicolas Brugère – now head of EQT France. Ten investment advisers will initially be based at the Paris office to strengthen local footprint in private equity, infra and real estate.  Brugère joined from PAI Partners where he was partner.

## InfraVia

InfraVia hired Pauline Fiastre as financing director in Paris. She joined from BNP Paribas Asset Management where she was an infra debt investment director.

Pauline Fiastre

She was 1 of 3 senior portfolio managers at BNP's infra debt platform launch, developed alongside BNP AM's private debt and real asset arm.

## Amber Infrastructure Group

Amber Infrastructure Group named Heimo Stauchner senior investment director prior to opening its Vienna office where he will lead in sourcing energy sector opportunities across Amber's mandates. Stauchner is a former MD and head of the financial sponsors and energy group at Erste Group Bank.

Heimo Stauchner

## AES Corporation

Shirish Jajodia, a former power and renewables investment banker at Rubicon Capital Advisors, started a new role in investor relations with AES Corp where he is a director. He left Rubicon in April, having been there for almost 2 years at AD level. The AES IR team is overseen by Ahmed Pasha, who was in April promoted to corporate treasurer and VP.

## Generate Capital

Sven Semmelmann in June joined Generate Capital as VP in the San Francisco office, taking a key role in its project finance division. He joined from ICBC where he was a director in the structured finance and PF team for just under 4 years, operating out of New York.

## Cbus

Australian superannuation scheme Cbus appointed Alexandra Campbell as its head of infra, hiring her from AustralianSuper where she has been senior investment director since September 2018. She starts the new role in September in Melbourne reporting to Grant Harrison, portfolio head for private markets.

Alexandra Campbell

It emerged in January that Cbus Super's former head of infra Diana Callebaut was leaving to join New South Wales Treasury Corporation as head of real assets. Cbus' chief exec David Atkin also announced that he was leaving mid-2020 after 12 years in the role.

## HSBC

HSBC's London-based EMEA infra and energy business suffered 2 losses, leaving 2 directors to lead the team. The departing directors are Vasco Bouça Vitorio, director of project and export finance for Europe and Sub-Saharan Africa; and Nikolay Iankov, director of oil and gas finance.


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## Santander

Alejandro Ciruelos, Santander MD for project and acquisition finance in London, exited this role and is understood to be setting up an advisory boutique. He built the Santander team post GFC, taking over the reins from Harry Bright. Fellow Santander MD Javier Jimenez is also no longer at the London branch.


Alejandro Ciruelos

VP Jaime Ridaura returned to Spain, but remains with the bank. Maria de Juan, executive director in the London projects and acquisition finance team, also exited. Emma Whitfield – now Emma Towers – exited a couple of months earlier from her role as a VP in the London team and cropped up at Maple Power, the renewable energy branch of CPPIB. Jaime Fernandez-Cuervo, exited in April from his role as associate on the Santander M&A team and is now at Gingko Tree Investment. Bart White, European head of infrastructure debt advisory, took over from Ciruelos.

## Swiss Life Asset Managers

Swiss Life Asset Managers in June appointed Stéphane Rainard as head of infrastructure debt in Paris. He joined from Ostrum Asset Management where he was a senior portfolio manager for 2 years. He was an executive director of European infra debt fund management for institutional investors at Natixis (2014-18).

## IFC

The IFC appointed Carlos Miguel López Leiria Pinto to general manager for Brazil. Pinto previously worked as IFC's regional manager for the Andean region (2014-18). Since then, he was a board member of Portugal's Montepío Bank and president at asset manager Montepío Valor. He replaced Hector Gomez Ang, now IFC's regional general manager for Angola, Botswana, Mozambique and Zambia.

## NY Green Bank

NY Green Bank bolstered its investments and portfolio management team while replacing group co-head Nicholas Whitcombe, who left at the end of 2019. The new MD and co-head, Gregory Randolph, had been with Greenhill & Co for 15 years and started in April. He oversees the team with Andrew Kessler, who has been with the state agency since 2018. They report to president Alfred Griffin. It added 2 directors to the team: Lindsay Drogin, a leveraged and PF client executive from SMBC; and Sara Roccisano, who has an investment banking and infra fund background.

## EBRD

Hannes Takacs was given the lead role for EBRD in Mongolia starting mid-July, and relocating to Ulaanbaatar when conditions allow. He follows Irina Kravchenko who led that office for the past 3 years and now serves as the bank's deputy head for Ukraine. Takacs joined the EBRD in 2014 after more than 20 years in capital market development, IPOs and business development.


Hannes Takacs

## Eversheds Sutherland

Ashley Halewood joined the partnership at Eversheds Sutherland in Dubai after 12 years in the energy and infra sectors.


Ashley Halewood

The move is Halewood's first appointment as partner, having worked at Linklaters for nearly 9 years (2011-20) as an associate and then managing associate in the firm's PF division in Dubai.

## BNP Paribas

Trusha Pillay started in June at BNP Paribas in London, having been on gardening leave from MUFG Bank. She is now head of structured capital markets for energy, resources and infra at BNP, having previously been head of structured finance solutions at MUFG. She reports to Romain Talagrand, MD and head of renewables and power; and with a dotted line to sector chief Severine Matteo, head of the energy, resources and infra business.

## AECOM

AECOM promoted Troy Rudd to chief executive, replacing Michael Burke who is retiring. Formerly CFO, Rudd joined the company in 2009 and has held various leadership roles including operational and financial responsibility for AECOM's Americas design and consulting services business, as well as leadership roles in AECOM Capital M&A business. EMEA chief executive Lara Poloni was also promoted to president of AECOM. She has been at AECOM for more than 25 years, serving as CEO of its Australia and New Zealand operations and then as CEO for EMEA from October 2017.

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[1] Project finance deals YTD 2020

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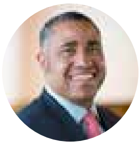

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## Mizuho Bank

Mizuho is launching a US power and utilities investment banking business, having poached several bankers from rivals. David Whitcher is to lead the team as MD. He joins from UBS Investment Bank. He is joined by 2 VPs – Rutuja Jagtap from Lazard and Robert Luthringer from Citi.

## CDPQ

Louis Jean Chartier has exited his role as infra investment officer at CDPQ to set up his own business in Mexico City. He was CDPQ MD of energy, telecoms and transport across LatAm. His new company will focus on restructuring infra portfolio companies for institutional investors in Mexico, Peru and Colombia.

## Cranmore Partners

Cranmore Partners in June hired Mrugank Inamdar as a director in Singapore from SMBC. The boutique's primary focus to date has been on transactions in the Middle East, Africa and Central Asia.

Mrugank Inamdar

Earlier this year, it hired Steven Barnes to the Abu Dhabi office as executive director, after 12 year at Mizuho Bank in London; and Mehmet Gocmen joined as a senior adviser and member of the advisory board in Turkey. He had been CEO of Sabanci Holding up to mid-2019.

## Capcora

Consulting firm Capcora has brought on Andreas Bodensohn as an investment specialist in Frankfurt, following the hire of an investment director earlier in May. He joins the energy and infra team after 10 years in renewable energy. Bodensohn started his career at Munich-based financial service provider Copex Investment Partners.

## KPMG

UK-based KPMG infra veteran Richard Threlfall was made the firm's global head of IMPACT, its social investment arm. KPMG IMPACT is its ESG and sustainability business bringing together expertise and knowledge from around the world to help businesses, governments, and organisations address ESG issues.

Richard Threlfall

## SOAC

The team that led the restructuring of GenOn Energy has launched a special purpose acquisition company in Dallas targeting strong ESG profiles. Sustainable Opportunities Acquisition Corp (SOAC), is led by CEO Scott Leonard, who was GenOn's chief restructuring officer and executive VP of finance. David Quiram is the CFO having been head of financial planning, analysis and tax at GenOn; and Gina Stryker is general counsel. SOAC is backed by Minnesota-based PE firm Northern Pacific Group, whose founder and managing partner, Scott Honour, serves as the SPAC's chairman.

## Addleshaw Goddard

UK-based law firm Addleshaw Goddard appointed 2 new partners – Suzanne Moir and Martin Stewart-Smith – to its infra projects and energy practice. Moir will operate out of the Edinburgh office while Stewart-Smith will be at its HQ in London. Moir was previously head of construction at DWF, while Stewart-Smith left his partnership at Bracewell in 2019.

## Hunton Andrews Kurth

Hunton Andrews Kurth hired Martin Skehill as a special counsel in Dubai where he will work with the firm's energy and infra practice. He joins from Winston & Strawn where he was a counsel. The law firm also hired James D Simpson Jr and Jason Parker from Winston & Strawn as partners for its London office.

## Philae Advisory

Structured finance veteran Christophe Wartel joined French infra and energy boutique Philae Advisory as partner.

Christophe Wartel

He started in June from Lazard and will operate out of the firm's headquarters in Paris. His primary function will be to focus on projects in Africa.

## Pinsent Masons

Matthew Escritt left Norton Rose Fulbright to lead the banking and finance division at Pinsent Masons' Dubai office. He will oversee the firm's interests in the UAE and the MENA region. The PF lawyer joins after 19 years at NRF, where he was promoted to partner in May 2012.

## DLA Piper Martinez Beltran

Paola Aldana joined DLA Piper Martinez Beltran as a partner and head of the infra practice in Bogota, Colombia. She joined from Posse Herrera Ruiz. Her practice focuses on infra and PPP, including toll roads, airports and railways. Previous experience includes a spell at Dechert's office in New York as an international visiting attorney. She has also acted as deputy general counsel of contracts and infrastructure at CCX Colombia and led legal departments of Bogota-Girardot road concessionaire and Odinsa Group.

## Equinor

Norwegian energy company Equinor promoted Bastien Gambini to MD. He operates out of London and Oslo and was promoted to MD from investment director, having joined the company in that capacity in June 2017.

## Rock Rail

UK-based rail infra specialist Rock Rail made 3 significant hires – 2 in Germany, and 1 in London who joins in September. Well-known UK infra specialist David Rose, who exited Operis in April, joins Rock Rail as partner on 27 September. Rock Rail also hired Hans Leister as a member of the advisory board to its newly-established German business, working alongside Andrew Chivers. In the last few months, Rock Rail has made 2 other major hires: James Le Couilliard, partner for operations in the UK and Australia; and Jim Eldridge, regional MD, heading new operations in Australia.

## Ørsted

Ørsted CEO Henrik Poulsen announced he was to resign by January 2021, and a search for his replacement was launched in June.


Henrik Poulsen

Poulsen oversaw Ørsted's transformation from an O&G producer and distributer within Denmark – formerly DONG Energy – to one of the world's largest offshore wind developers. He joined the company in 2012.

## NextEra Energy Resources

NextEra Energy Resources has hired Michael Puckett – who previously worked in grid integration, research and asset management at Pacific Gas & Electric Co – as a BD manager for commercial and industrial solar. He held several roles across almost 5 years at PG&E, including senior manager, electric asset management, and principal, electric research and development. He now operates out of San Francisco.

## APA Group

Australian gas infra company APA Group hired Julian Peck from Morgan Stanley. He starts on 1 September (2020) as group executive for strategy and commercial. ASX-listed APA Group owns and operates natural gas and electricity transmission and distribution infrastructure in Australia, as well as being invested in gas and LNG storage and processing, gas-fired power stations, electricity interconnectors and wind farms.

## University Partnership Programme

UK-based University Partnership Programme named Adam Tyson construction director for its specialist asset management unit.


Adam Tyson

He will oversee delivery and construction of UPP's portfolio and is responsible for the strategic alignment of building design and choice materials and systems. Tyson was previously at Balfour Beatty.

## EdgeConnex

PF veteran Eelco Holst in June joined digital infra company EdgeConnex as VP of corporate finance.


Eelco Holst

He is based at the company's Amsterdam office with responsibility for debt raising and managing existing financing programmes. Holst was previously at ABN AMRO for 20 years.

## Northland Power

Wendy Franks exited CPPIB to join Northland Power in June as executive VP in strategy and investment management in Toronto.


Wendy Franks

Franks had been with CPPIB – most recently as senior principal – since 2012, prior to which she worked at McKinsey & Co. At CPPIB she worked in the active equities department, leading coverage of financials, utilities, renewables and clean technology in North America.

## NEC

James Hewitt has joined NextEnergy Capital (NEC) as a VP in investor relations, having previously been on BlackRock's EMEA institutional client business for 6 years. Hewitt now reports to NEC managing director and head of IR Shane Swords who started this role in October 2019.


James Hewitt

Hewitt in his last role worked on a number of key relationships across the institutional investor space selling across BlackRock's full product suite with a focus on renewable energy and infrastructure.

At NEC, his primary focus will be on the international fund NextPower III which is slated for deployment ahead of schedule. He will also be involved with NextPower UK ESG, NEC's new UK solar fund.

# Global deal progress
## the interesting bits

In spite of a global pandemic, the market has continued to witness deals making it to financial close. Here we delve into the "interesting bits" from the last couple of months. By **Angus Leslie Melville**

In a global procurement and financing environment that has been hugely hampered by the coronavirus pandemic, there were times in the last few months that it almost became a default setting to write that the next stage of development was scheduled for September (fingers crossed).

Given that so many transactions have been postponed until the market settles down post-Covid, it is all the more impressive to have logged some significant financial closes, among them a few market firsts.

Beyond the flurry of deals that made it over the line in the early days of the Covid-19 pandemic – usually where lending was already committed and deadlines were looming – there has been a surprising amount of activity. Perhaps the most impressive deal to make it over the line is the 50MW Kincardine Floating Offshore Wind Farm, south east of Aberdeen off the coast of Scotland. This was achieved by ACS Cobra and a team of relationship lenders who arranged a bridge loan of £380 million ($473m) until the end of the year, at which time it will be fully operational.

The market will be keeping a close eye on this project where a 2MW tester turbine has been in operation since October 2018, with the other 48MW being installed in the coming months. This will provide yet another example of new technology being deployed and leaping from "emerging" status to established in the blink of an eye.

At the time of going to press, there was no view on the pricing achieved on the bridge loan, but it is likely to have been chunky. However, when ACS goes to market at the end of the year seeking to retire the bridge loan with a longer-tenor financing structure, it will be interesting to note how comfortable lenders immediately are with the sector.

Kincardine aims to serve as a robust bellwether for a slew of similar deals that are being pushed through around the world as floating offshore wind opens up deeper water for development.

Staying in Europe, Finland broke new territory achieving financial close on its first social infrastructure transaction – Espoo Schools PPP – with local construction firm YIT and Meridiam. This was an interesting deal given that it allowed a certain degree of flexibility on financing with the EIB – through its European Fund for Strategic Investments – lending a fixed amount of €60 million ($67.3m), Nordic Investment Bank in for "up to" €75 million and the only commercial lender OP Corporate Bank providing "up to" €35 million.

Most infrastructure purists will suck their teeth at this "up to" element preferring more rigid structures around financing that keeps everything clean and tidy, but the City of Espoo wanted to retain a degree of flexibility and as long as they remember the partnership element of PPP, this will likely achieve its goals.

Shifting towards MENA, an ACWA Power-led consortium impressed the market by achieving financial close on the $400 million, 500MW Ibri II Solar PV project in Oman. The long tail on the PPA enabled a large utility-scale solar PV to be signed on a 25-year project agreement in a nation where offtake agreements are almost always for 10 or 15 years (at the most).

Meanwhile in Saudi Arabia, Dammam West ISTP was the first independent wastewater treatment plant to be delivered in the country. The sponsor – a Metito-led consortium – had lenders lined up long in advance for the $160 million soft mini-perm, but it was held up by coronavirus and was pushed to financial close deep into the pandemic.

In North America, a deal that definitely warrants remark is the University of Iowa Utility System PPP-style transaction, being delivered by Engie and Meridiam. Now this is not the first time we have seen a deal like this make it over the line… and it definitely is not the last. Ohio State University's utility and energy systems was one of the market leaders having reached financial close in July 2017, backed by Engie North America and Axium Infrastructure, and there are a lot more to follow.

Heading south to Chile, and we have Atlas Renewable Energy reaching financial close on 2 solar PV projects – the 244MW Sol del Desierto and 69.6MW Javiera Solar. Atlas raised $253 million in debt to fund a project under construction and refinance an operational one. This involved a private placement with 3 institutional investors over long tenors in a turbulent Chilean economy, riven with social unrest, and where the government froze power prices, directly impacting project revenues.

*Given lockdown conditions, the market has performed curiously well – if at a reduced level – and has set organisations firmly on the route to greater home-working in the future.*

In Bangladesh, another market first was achieved with financial close on the country's first IPP financed only by commercial banks. Summit Gazipur II – wholly owned by Singapore-headquartered Summit Power International – is the project company of the 300MW heavy oil-fired power plant in Kodda, around 30km from the capital city of Dhaka. The power plant, which has been operational since May 2018, is supplying power at 230kV to Tongi and Kaliakoir grid substations.

The joint lead coordinating banks – Clifford Capital and SMBC – provided a $140 million refinancing debt package to the project SPV. The nearly $200 million project has a roughly 70% gearing.

On the refinancing front, Australia's Ichthys LNG warrants inclusion in this line-up. The project debt refi kicked off late 2019, when the greenfield project was signed off for financial completion – effectively de-risking it.

However, it was heftily impacted by the Covid-19 pandemic and an oil price crash, heaping pressure on the project sponsors – led by Inpex and Total – to conclude the refi before the existing debt's mid-June pricing step-up. Advisers explored their options for the $8.3 billion debt package – which ranged from the US private placements market to increasing the share of uncovered loans. Lack of certainty put them off the USPP route, but fortunately liquidity found in more traditional routes bringing in 28 commercial banks and 7 ECAs. Interest rates were slashed almost in half, down to 180bp above 6-month Libor on the uncovered commercial debt.

At the time of writing, the *IJGlobal* data team was putting final touches to the Q2 2020 league tables and they have noted a considerable decrease in the number of submissions they have received – reflecting a diminished deal flow. In the corresponding quarter for last year (Q2 2019), the team received 1,400 submissions, while at the deadline for this Q2 they had only received 1,200, which is really quite impressive.

The league tables have been greatly bolstered by the $10.1 billion acquisition of 49% in ADNOC Gas Pipeline assets with a 6-strong consortium taking the stake off the hands of Abu Dhabi National Oil Company.

The buying team – Global Infrastructure Partners, Brookfield Asset Management, GIC, Ontario Teachers' Pension Plan Board, NH Investment & Securities and Snam – takes over the lease component for a period of 20 years, settled on a volume-based tariff subject to a floor and a cap.

Meanwhile, the figures for North America have been impressively bolstered by the $7.4 billion JFK Terminal 1 in New York which corralled 11 lenders to provide more than $5 billion across 5 debt packages, with the shortest tenor coming in at 2 years and the longest at 7.

Given lockdown conditions, the market has performed curiously well – if at a reduced level – and has set organisations firmly on the route to greater home-working in the future as they look to carve back on office costs as restrictions ease and the market starts to return to normal… if there will ever be a "normal" again.

# The **Arup** Interview

Arup has been voted the *IJGlobal* Technical Adviser of the Year for Europe and Africa as well as winning for North and South America, recognising the role it played on transactions that closed in the 2019 calendar year – and repeating its success from 2018.

Votes were cast early this year by *IJGlobal*'s independent judging teams in London and New York – all established experts in the fields of energy and infrastructure – making them the most stringently peer-reviewed awards to be presented in this space.

Comments from judges included a particularly glowing one: "You know when you bring Arup to the table that you're working with true professionals and that they leverage knowledge and experience that goes far beyond technical and due diligence."

Others noted that Arup brings a "wide discipline of available resources covering financial, technical and economics" and that in 2019 its "roles included advising lenders and equity across regulated and non-regulated sectors".

The compliments kept coming with one singling it out for praise based on Arup's exposure to "private and public sector work" while another lauded it for a "good breadth of projects".

Arup advised on a slew of transactions across the globe over the course of 2019, integrating technical asset knowledge with financial and commercial acumen delivered by specialist deal teams – not just engineers, but experienced corporate finance specialists and economists.

Primary among these deals in Europe, Arup acted for 3i on the €210 million Ionisos acquisition that saw the fund buy the cold sterilisation provider. The firm also worked on Belgrade Waste-to-Energy PPP, advising the lending team on Serbia's landmark €400 million deal; and Electricity North West, acting for the vendors – JP Morgan and First State Investments.

Meanwhile, in the Americas Arup advised Upper Bay Infrastructure Partners and co-investors – with Blackrock, Ullico, Silverfern and another US pension fund – on the acquisition of Tidewater Transportation & Terminals. It also acted for IFM Investors on its $10.3 billion take-private of Buckeye Partners, owner and operator of more than 6,000 miles of midstream energy pipelines across the US.

Also in the Americas, Arup advised CPPIB and OTPP on the acquisition of a 40% stake in Mexican infrastructure concession company IDEAL; while also being commissioned by Abertis and GIC as technical and ESG adviser on the acquisition of Red de Carreteras del Occidente, a major highway operator in Mexico.


*"From an advisory point of view, our USP is that Arup is not just a technical adviser, we integrate this skill with commercial and regulatory expertise."*

Filippo Gaddo, London-based Head of Business & Investor Advisory at Arup, believes the deals Arup worked on in 2019 puts the firm in a good position to tackle the evolving infrastructure and energy market, which is in need of a large capital investment program to deal with the shift to net zero emissions, particularly in the power sector.

He says: "One area we are going to see an uptick in activity is power distribution deals along the lines of Electricity North West in the UK. As we move towards electric vehicles and greater reliance on electricity for heat, pressure on the power grids will drive investment.

"These networks will need to be reinforced, but even more importantly – they will need to change the way they operate. There will be a shift from asset heavy distribution network operators to opex focused distribution system operators, and they will need to adopt more digital technologies and solutions.

"All these networks require a great deal of investment, which will involve refinancing and fresh capital deployment. Electricity North West was a first in the UK with many more to follow, a trend that will be mirrored across Europe and beyond."

Filippo believes Arup is well positioned to support these changes, not just having gained first-mover advantage with the UK deal, but also because it speaks to the firm's strategy to provide a more integrated advisory service that was championed by Craig Forrest, now Canadian country lead for the firm.

"From an advisory point of view, our USP is that Arup is not just a technical adviser, we integrate this skill with commercial and regulatory expertise," says Filippo. "It is not enough these days just to be involved in assessing deals from a technical point of view – and advisers can't focus only on transaction.

"It is now more about understanding how the technical aspects meet commercial drivers. It is a combination of understanding the macroeconomic environment, the regulatory regime, the business models and incentives – combined with the technical aspects."

As to the future, Filippo is gearing up for increased activity in the sustainability and climate change agenda: "We are increasingly involved with our clients on advising them on their sustainability plans and programs, with some of them being asked to report on their methods.

"We are now offering our services for sustainability due diligence and assessing portfolios of assets to see how they contribute to this agenda. Twelve months ago, this was slow… but it is picking up pace now."

Given Arup's strategy over the years to take a broader role across infrastructure and energy advisory, bringing in economic and financial to support technical, it is likely that the firm will continue to gain favour among *IJGlobal* judging panels and – coronavirus aside – 2020 is already shaping up to be a busy year for the firm.

# The **Allen & Overy** Interview

Winner of the *IJGlobal* Law Firm of the Year 2019 for the MENA region, Allen & Overy has an enviable heritage in the this sector – a law firm with infrastructure and energy truly in its DNA

Allen & Overy is a mainstay of the *IJGlobal* Awards agenda across all regions having for decades played a pivotal role in the delivery of infrastructure and energy around the world.

Having been instrumental in the evolution of project finance and the procurement of many billions of dollars of investments, it comes as little surprise to see it feature prominently once again in the IJ Roll of Honour for deals closed in the 2019 calendar year.

A&O advised on a slew of deals that closed last year and was voted *IJGlobal* Legal Adviser of the Year for the MENA region by our team of independent judges who met earlier this year in Dubai.

One of the judges said of the firm: "With A&O you get that level of expertise and all-round professionalism you expect of a seasoned magic circle firm in this sector," adding "they bring a flair and a can-do approach that is what you need at the table".

Another Dubai judge said: "You expect to see A&O on transactions in our region. In truth, if you look around and they're not there, that's a good reason to start asking questions about the deal."

As well as winning MENA law firm of the year, A&O dominated the 2019 *IJGlobal* league tables for infrastructure finance having closed considerably more transactions than any other legal adviser in the region, cornering a 21.5% market share.

Ian Ingram-Johnson (known to most as IJ, which is singularly appropriate for this title) and Tim Scales are key A&O partners who have played pivotal roles in cementing the firm's reputation in the region as part of the largest Projects team globally.

Tim heads the firm's Africa Group and has been working on projects across the continent for more than 20 years; while Ian focuses on the Middle East and is predominantly active across power, petrochemicals, oil and gas, transport and infrastructure.

A&O has an impressive and diverse bench of new talent, evidenced by a number of rising stars on the IJ award-winning deals. They were, of course, delighted to (virtually) accept the MENA award recognising their achievements over the course of 2019, having acted on award winning deals like BAPCO, Hamriyah IPP, DEWA IV, Dumat Al Jandal and Guinea Alumina Project.

Ian Ingram-Johnson

Tim Scales

However, speaking from their homes during the coronavirus lockdown, Tim and IJ are keen to celebrate the future at a firm where the status of infrastructure and energy is underpinned by A&O's global head of the projects practice – Gareth Price – having earlier this year been elevated to managing partner for the entire firm.

As IJ says of this: "We are taking a number of the sector driven initiatives that started under Gareth's stewardship and enhancing them so that clients get the cross geography, cross sector, cross product expertise that they demand including the establishment of a location and product agnostic board of partners to further enhance the transfer of knowledge to clients across the globe."

A&O has pursued a strategy of ensuring it has the knowledge set on the ground in the geographies it works in, making it clients' first choice on transactions – whatever style of infra/energy deal that may be.

Tim is of the same mind: "Projects are evolving as a product line and we are now deploying the specialised sector knowledge that we develop through greenfield project development and financing to later stages of the asset lifecycle.  This knowledge is key to our offering in the M&A market, as we see assets in the infra and energy space being traded."

As they say, clients nowadays seek a broader scope of experience than a profile littered with, say, greenfield PPP or IPP financings. They need a honed skillset built on broad foundations.

"Many of our clients are looking at different levels of advisory in terms of basic project development, project contract skillset, construction knowledge, complex greenfield project financings and – increasingly – a huge seam of developers and sponsors trading assets," says IJ.

"That underlying asset and country knowledge is absolutely critical. It's not about the greenfield piece, it's about the entire value chain."

Interestingly, Covid-19 has brought the firm closer together – enabling greater collaboration and cross-pollination among teams.

"We have been forced to get to grips with collaboration platforms in a way we have never in the past," says Tim. "For a global network like ours, that creates extraordinary opportunities to embrace the multiplier effect of having specialists deployed across the globe. This is a real opportunity to take the collaboration for which we are renowned on to a whole new level in a market that is constantly evolving."

Given the continual evolution of infra/energy asset classes around the globe, this is a clear indicator that A&O has a mandate to position itself in a dominant role for legal advisory across the sector in its many guises.

ALLEN & OVERY

# Allen & Overy are pleased to have worked with our clients on these award winning deals:

**European Ports deal of the year** – Gdansk Port
**European Renewables Acquisition** – Kisielice onshore
**European Transport deal of the year** – Silvertown tunnel
**European Utility deal of the year** – Elenia Heat
**African Mining deal of the year** – Guinea Alumina Project
**African Power deal of the year** – Bridge Power

**MENA Oil & Gas deal of the year** – BAPCO Refinery Modernisation
**MENA Power deal of the year** – Hamriyah IPP (Sharjah)
**MENA Solar deal of the year** – DEWA IV
**MENA Refinancing deal of the year** – Ma’aden debt-to-equity conversion
**MENA Wind deal of the year** – Dumat Al Jandal

**Asia Pacific Refinancing deal of the year** – Mong Duong 2 refinancing
**Asia Pacific Waste deal of the year** – East Rockingham EfW
**North American Airport Deal of the Year** – Newark ConRACV

**MENA Legal Adviser of the Year**

# The **Societe Generale** Interview

Societe Generale enjoyed great success in the 2019 calendar year, landing it the coveted role of Global MLA of the Year for infrastructure, energy and mining deals closed – voted on by independent judging teams in London, New York, Singapore and Dubai.

These judging sessions were hosted by *IJGlobal* early this year (pre-coronavirus), inviting leading infra experts to vote on organisations' performance.

This scoring is added up from across the 4 teams to give a truly independent and international view of the winner's standing in the community.

In these sessions (as can be seen later in this magazine), judges consistently singled out Societe Generale for its involvement in "pioneering activity", recognising its "broad sector coverage".

One judge described Societe Generale as the "international leader in the lending community", another congratulating it on "a very strong field" of deals closed, having demonstrated "great innovation" and "wide sector coverage… including a pioneering sector like EV charging".

It is on the crest of this wave of compliments that *IJGlobal* speaks to Federico Turegano – Societe Generale's global head of natural resources, energy and infrastructure – who first took the opportunity to salute his colleagues for their performance over the 2019 calendar year.

Federico says: "What I found fascinating over the course of 2019 was how we crystallised the evolution of our businesses from the efforts invested in the last decade. What we were doing in 2009 and 2010 is fundamentally different to what we're doing now… and I'm convinced that 10 years from now, this division will again be fundamentally different to what it is today.

"We are constantly throwing around synergies – which play into the energy transition and climate change – which are obviously critical, given the context of where the planet is right now.

"But what truly happened in 2019, from an internal perspective, is that the four businesses that comprise my Natural Resources & Infrastructure division that – historically – have their own sector worlds in which to focus, started to come together as never before."

Federico points to the interaction that now exists between traditionally diverse teams like oil and gas, power, mining, renewable energy and infrastructure that are now a combined force within the Societe Generale stable.

**Federico Turegano**

*"What I found fascinating over the course of 2019 was how we crystallised the evolution of our businesses from the efforts invested in the last decade."*

"Today, the intersections between these business lines have exploded because energy transition is such a complicated subject that situations rarely fall into a single bucket," says Federico. "Particularly in the last few years, we have evolved our focus toward climate change and energy transition, as well as sustainable and positive-impact financing.

"Yes, we are accompanying our clients, because they are the ones who make our efforts possible, but the teams themselves feel they are building something that has a legacy and you can feel their involvement and participation."

Federico points to renewable energy as the ideal indicator for this shift. In the late 1990s, Societe Generale was involved with projects in four countries, while now that's up to in excess of 20 – ranging from onshore and offshore wind through to hydro, geothermal, solar, floating solar, and floating offshore wind in the near future.

The revolution – evolution, if you prefer – that is driving change at Societe Generale sees the French bank altering its focus to cater for a changing world.

"Sub-sectors like fibre optic have become mainstream and this is essential," says Federico. "There is no energy transition without a fully-operating broadband system around the world and 5G technology. It is necessary for managing smart meters, autonomous vehicles, electric mobility – everything.

"We are now a major player in financing the deployment of fibre optic broadband around the world, which is not unrelated to one of the projects we closed in Europe – Allego – for electric vehicle charging."

This is one of the projects that won Societe Generale high praise from the London judging team and speaks to the evolution of the bank's team over the years to tackle challenging sectors at the leading edge of technology deployment.

"This all plays to our strategy for meeting the needs of the future by evolving these teams into one cohesive unit, providing skilled and knowledgeable professionals who not only understand these sectors but are passionate about them and their implications for our planet," adds Federico.

"The mining team's shift towards lithium and cobalt was part of this move to make them relevant to the energy transition… and 2019 was the year that crystallised this transition – shifting the business to make sure that all the teams are focused on what matters to our clients and the challenges we all face."

With this commitment to meeting the needs of a swiftly-evolving infrastructure and energy market, Societe Generale is positioning itself wisely for the future where it will play a leading role in the delivery of digital infrastructure, while maintaining a dominant position in more traditional sectors.

To read more about Societe Generale's deal activity in 2019 and the transactions that underpin its success in winning the *IJGlobal* award for MLA of the Year, turn to the Companies Section in the awards pages.

# The **Citi** Interview

Having scooped the *IJGlobal* award for Bond Arranger of the Year in 2019 in North and South America, Citigroup graciously acknowledges a salute from the industry…

When it comes to bond financing of infrastructure and energy across the Americas, the *IJGlobal* judging team voted emphatically that none did it better in 2019 than Citigroup, giving it a clean sweep of the board for both regions.

*IJGlobal*'s independent team of judges – all of them industry peers – met early this year in New York to analyse submissions in the bond finance category for North America and Latin America, and found in Citi's favour for having been "consistently impressive" across the 2019 calendar year.

One judge said of Citi's 2019 transactions: "The sheer size of deals Citi closed last year was impressive alone… when you factor in ground-breaking transactions and challenging markets to work in – that's what wins awards."

During the judging session, there was particular comment on Cameron LNG in Louisiana which was deemed an "excellent transaction" and Quito Airport in Ecuador that "overcame considerable challenges" to achieve financial close.

Citi's infra teams are led by two established Americas MDs – Nasser Malik who leads Citi's Structured Debt business globally and Stuart Murray who heads the Project and Infrastructure Finance team for the Americas.

When it comes to 2019, they are spoilt for choice. However, key among the deals to have closed are the likes of Braskem Idesa, MV24 and Quito Airport in Latin America; and for North America – Cameron LNG and EPIC Olefins Ethylene Pipeline.

On Braskem Idesa, Citi acted as financial adviser and joint bookrunner to achieve first stage refinancing of the largest petrochemical complex in LatAm. This is the first step in its transition towards a corporate-like capital structure through an innovative vehicle in which bondholders benefit from structural enhancements, transitioning to a fully-corporate structure once the current bank financing is repaid.

Stuart says: "The sheer size of Braskem for a single project – a non-investment grade, BB transaction in Mexico – was impressive. As the only large ethylene plant in the country, it is a strategic asset and considered essential infrastructure in the petrochemicals space in Mexico.

Stuart Murray

*"If you look at the spectrum of challenging sovereign risks, Ecuador is at one end of the spectrum."*

"That is evidenced by the fact it has a competitive feedstock contract with Pemex, the Mexican government's oil and gas champion, which provides ethane to the plant which then is transformed into ethylene."

Nasser adds: "Even though, from the standpoint of the sector, it was rated BB and given the quantum of leverage, you can look at this as a high-yield bond or a Mexican infrastructure play. The market viewed it as a Mexican infra play."

The refi of the MV24 floating production storage and offloading (FPSO) unit through a 144A / RegS project bond allowed efficient capital allocation and diversified access to capital, while also streaming around $150 million in dividends for investment in new projects. At $1.1 billion, it was the largest Brazilian debut issuance and infrastructure issuance in more than 5 years, and the largest LatAm infra bond since 2017.

Stuart says of MV24: "The really is the institutionalisation of FPSOs as an asset class – the first time that an institutional investor took credit exposure via a 144a bond in this space viewing it as such. This deal created that benchmark in the market."

Ecuador's Quito Airport – AKA Mariscal Sucre International Airport – is the largest in the country and the only one to serve the capital. Quiport entered into a 35-year concession maturing in January 2041 with the Municipality of Quito.

Leveraging the airport's strong business and contractual positioning, Citi helped Quiport take to market a $400 million 144A / RegS offering in March 2019 to refinance construction loans from development banks and fund a release of retained earnings back to the sponsors. This landmark issuance was the first non-government Ecuadorian issuance in more than 20 years and was a rare example of an issuer rated above sovereign.

"If you look at the spectrum of challenging sovereign risks, Ecuador is at one end of the spectrum," says Stuart. "Historically, it is a country where the market has been dominated by sovereign and the occasional sub-sovereign. It is very unusual to have anything in the private sector tap the markets.

"Quito, obviously, is a critical infrastructure asset for the country and – as with Braskem – it benefits from this standing. It was the first private sector bond out of Ecuador in the last two decades which gives you a sense of the limitation in the market for Ecuador, but balanced against the critical nature of the asset."

And then there was the $3.02 billion of 144A / Reg S senior secure notes was to refinance and replace uncovered commercial loan facilities on Cameron LNG in Hackberry, Louisiana. Its refi is unique due to its scale, pricing, structure, level of investor demand, and distribution strategy.

Cameron priced a $3.02 billion bond offering in 4 tranches, 1 of which was an amortizer. Due to the level of investor demand – 5x oversubscribed – the bookrunners were able to noticeably bring in pricing from initial thoughts, that ranged from 2.902% on the 11.5-year to 3.701% on the 19-year.

Nasser says: "If you look at non-recourse single-asset infrastructure financing institutionally, in North America as distinct to Latin America, the bulk of the execution tends to be privately placed debt. What you typically don't see is execution in the 144A traded bond markets. You could count on 1 or 2 hands the number of such trades that have been done in the last 5 or 6 years.

"Cameron was unusual for that aspect by way of the size and traction from the sponsors who got very good execution. The demand for that transaction and the levels at which it was executed were optimal from the sponsor's perspective."

He adds: "It is unusual to have an infrastructure transaction done as a 144A these days in North America, unlike Latin America where you see quite the reverse."

Stuart agrees: "What was interesting about Cameron was how good the execution was. It was a $3 billion deal and we had a $15 billion book which we achieved by having both bullets and amortizers.

"We then ran a dual-marketing process where the amortizers were targeted towards private placement, and we built momentum with those. Then we publicly launched the bullets to the 144A market – building momentum from both to drive an enormous book. It was quite extraordinary and built a pricing war."

At the end of October 2019, Citi closed the $171.1 million 4(a)(2) private placement to finance the construction and operation of EPIC Olefins Ethylene Pipeline – a bi-directional ethylene pipeline servicing the world's largest ethane cracker: Gulf Coast Growth Ventures.

This Texan deal stands out for numerous reasons from achieving 90% debt-to-capitalization via long-term, fully-amortizing debt; a minimum DSCR of 1.15x reflecting the unique offtake agreement; delayed draws over 9 months to minimize negative carry to the sponsor; and achieving margins of 225bp.

Stuart says: "This project was a sign of the times in terms of the type of energy infrastructure assets being built in the US as the shale fracking revolution continues. But what was interesting about it was that – against the strength of the contract with the plant – we achieved over 90% leverage to finance construction. That's something I have rarely seen over the years."

Given its level of activity in 2019, Citi will definitely be entering the *IJGlobal* awards for the 2020 calendar year.

Nasser Malik

*"It is unusual to have an infrastructure transaction done as a 144A these days in North America, unlike Latin America where you see quite the reverse."*

# The **ACWA Power** Interview

Having played a dominant role across the GCC region, ACWA Power was justly rewarded for its level of activity across the 2019 calendar year by scooping 3 key *IJGlobal* Awards for the region.

ACWA Power won the regional Solar Deal of the Year with DEWA IV in Dubai; Export Finance Deal of the Year for Al Dur 2 IWPP in Bahrain; and MENA Water Deal of the Year for Taweelah IWP in Abu Dhabi.

Each of these projects excel in their own rights as challenging transactions, drawing in first tier equity investors, lenders and advisers active in the region.

The 950MW DEWA IV – also known as Mohammed bin Rashid Al Maktoum CSP and Solar PV Plant Phase IV – saw ACWA Power marshal forces to deliver the world's largest solar thermal IPP with the largest molten salt storage facility (15 hours) to dispatch throughout the day, with a very long PPA, bringing Chinese investors to the table.

In Bahrain the ACWA Power-led consortium reached financial close at the end of June on the $1.5 billion, 1.5GW power and 227,300m3 per day water desalination facility Al Dur 2 IWPP, with participation from a number of international and Saudi lenders including a Euler Hermes covered facility and a Saudi Fund for Development facility.

While in Abu Dhabi, the $1.2 billion Taweelah IWP will deliver the world's largest independent water producer (IWP) achieving an international record for the cheapest tariff on desalinated water.

ACWA Power's reach is impressive, operating as a developer, investor and operator of a portfolio of power generation and desalinated water production plants with a presence in 12 countries, including the Middle East and North Africa, Southern Africa and South East Asia.

Employing more than 3,500 people – about 60% of whom are local – ACWA's portfolio has an investment value in excess of $48 billion, can generate 34GW of power and produces 5.9 million cubic metres per day of desalinated water.

During 2018-19, ACWA Power constructed 12 projects with a combined project cost of $6 billion, delivering aggregate capacity of 5.3GW and 55MIGD (desalinated water). This includes 3 projects in Oman, 1 in Saudi Arabia, 4 projects in Morocco, 2 in Jordan, 4 in Morocco and 1 in Egypt and Vietnam.

ACWA Power is at the forefront of the renewable energy agenda having pioneered in the GCC with numerous first-of-a-kind projects in solar photovoltaic:

- first solar PV project in GCC – Shuaa Energy 1 (260MW)
- first solar PV project in Morocco – Noor PV1 Program (170MW)
- first solar PV project in Saudi Arabia – Sakaka (300MW)
- first solar PV project under the renewable energy programme of Oman – Ibri (500MW)

Rajit Nanda

*"2019 witnessed a resurgence of privatization activities in Saudi Arabia with the kingdom seeing strong interest from developers and financing institutions."*

ACWA Power has also led the field for concentrated solar power:

- first CSP project with storage in North Africa – Noor 1 (160MW+3h storage)
- first CSP to achieve more than 160 hours of continuous dispatch in Africa – Bokpoort CSP (50MW+9h storage)
- first CSP tower project in MENA region – Noor III (150MW+7.5h storage)
- first integrated solar hybrid project in the GCC – DEWA Phase IV (600MW CSP parabolic trough+ 100MW CSP tower + 250MW Solar PV + 15hours storage)

ACWA Power also led the field in the regional wind sector having been the driving force behind the first truly project financed wind farm with captive industrial PPAs – the 120MW Khalladi in Morocco.

Renewable energy assets now represent 23% of the ACWA Power portfolio.

Rajit Nanda, chief investment officer of ACWA Power, says: “2019 witnessed a resurgence of privatization activities in Saudi Arabia with the kingdom seeing strong interest from developers and financing institutions in the REPDO renewable energy programme and the IWP and ISTP programmes.

“These programmes fit the road map for reduced dependence on oil and gas, diversification of the economy, participation of the private sector and sustainable development outlined in the country’s Vision 2030 programme.”

ACWA Power punched its weight and more during these processes to cement its leading position in the market, which it plans to build on in coming years.

Rajit adds: “Our institutional view on our sectors is that procurements in the GCC, and other jurisdictions we operate in, shall continue and projects will be tendered albeit – at least in the near term – at a slower pace.

"The potential slowdown in procurement of greenfield developments will be counterbalanced somewhat through re-initiation of privatizations in several countries, including Saudi Arabia.

“The imminent privatization of Ras al Khair IWPP by SWCC is a case in point. We are also hopeful that some M&A opportunities will also present themselves.”

As to new business opportunities, Rajit is upbeat: “The evolution of green hydrogen as a sustainable source of energy is something we are keen to focus on. This is, of course, predicated on the sharp decline on the LCoEs of renewable energy across the region and elsewhere which has made GW-scale electrolysers commercially viable.”

And if the future is positive, it’s also international. Rajit says: “In terms of new markets for us – West Africa, South East Asia and CIS are our new focus markets and we believe they will throw up interesting opportunities, as will countries such as Bangladesh, in addition to our current core markets.”

Given the success ACWA Power has enjoyed in the *IJGlobal* awards for MENA, it looks fairly certain it will crop up in future awards announcements in other regions before long.

# The **SMBC** Interview

SMBC celebrated an impressive calendar year 2019, successfully shepherding to financial close numerous award-winning deals across Latin America.

SMBC enjoyed an impressive 2019 calendar year, ranking first in the IJGlobal international league tables for project finance lending having cornered 5.8% of global market share.

In Latin America the Japanese bank caught the attention of our independent judging team which met early this year in New York, with many singling it out for praise as a dominant player across the region.

One judge noted of SMBC's LatAm lending strategy in 2019 that it "ticked all the boxes for activity across the sectors" while another pointed out that it is "never put off by challenging deals".

Speaking to two SMBC project finance-focused managing directors – Luis Fernando Perdigon, Latin America Project Finance, and Juan (JC) Kreutz, North America Project Finance, – they are understandably proud of what they have achieved with their teams.

One such transaction that gives them cause for self-congratulation is a road concession project in Colombia, the Autopista al Mar 1, which is their landmark infrastructure project finance deal.

SMBC took the decision some 5 years ago that it would take a bold step and focus its efforts on this market as a key driver for business.

Luis Fernando says; "We have been by far the most active international bank in Colombia's 4G transport programme," says Luis Fernando. "It has been the largest project finance programme in the country by far and really changed the business for us."

SMBC launched this drive by investing equity in FDN, Colombia's development

Luis Fernando Perdigon

*"We have been by far the most active international bank in Colombia's 4G transport programme."*

Juan (JC) Kreutz

*"We are seeing a lot of work in digital infrastructure – fibre, broadband, data storage. The Covid situation has focused attention towards this sector."*

bank, which played a key role in the financing of the 4G programme.

"We have financed a number of projects – complex dual-currency financings – with different sources of revenue, catch-up payments from the government and a host of complexities to build into these deals," says Luis Fernando.

"Probably the most complex transaction of them all was Mar 2 highway, which closed last year, because it had a Chinese sponsor that was new to the Colombian market. "

Overall, looking at all the deals that SMBC was awarded, JC added that "the breath and diversity of the deals shows the strength of the SMBC platform with awards in renewables, distributed generation, rail, roads, LNG, data centres, and mining."

As with most bankers, while it is joyful to look back on past glories, it's the future and emerging infra sectors that whet the appetite.

JC says: "We are seeing a lot of work in digital infrastructure – fibre, broadband, data storage, etc. The Covid situation has focused attention towards this sector because it is resilient. In this space, we are seeing financing and M&A activity in North America and LatAm.

"This sector is poised to continually grow, and private equity is flowing this way. Infra funds and corporate players are getting in on the act and this is going to be a growing area for us.

"We have created a digital infrastructure team that comprises a range of experts within the firm including project finance, corporate finance, real estate and leasing – because these deals can be looked at from so many different angles.

"These deals can be project finance, corporate finance, hybrid and middle market… and by having this digital infrastructure team in place, we are able to look at deals with different characteristics to hopefully be able to be part of the financing or advisory.

"We have a dedicated team to tackle this that is not pigeon-holed but is expert around the product to be able to meet the demands of our clients and what they are doing in the market."

Given the direction the market is heading and the bold strategies that SMBC is willing to adopt, this places the bank in a stellar position to capitalise on evolving market across the Americas – a move the will be matched by the institution on a global level.

# Celebrating Team SMBC and Its Achievements

### Braskem Idesa

USD 900,000,000
Senior Secured Notes

Active Joint Bookrunner

November 2019, Mexico

### Ferrocarril Central

USD 858,068,678
USD Term Loan and UI Term Loan

Structuring Bank, Mandated Co-Lead Arranger, Bookrunner, Hedge Coordinator, and Provider

October 2019, Uruguay

### Hurontario LRT

CAD 751,000,000
Term Loan

Mandated Lead Arranger, Joint Bookrunner, Lender, and Hedge Provider

October 2019, Canada

### Corner Brook Hospital

CAD 901,734,862
Term Loan and Senior Bonds

Mandated Lead Arranger and Hedge Provider

August 2019, Canada

### Calcasieu Pass LNG

USD 5,800,000,000
Term Loan and Working Capital Facility

Initial Coordinating Lead Arranger, Co-Documentation Bank, and Hedge Provider

August 2019, U.S.

### Ergon Peru

USD 222,000,000
U.S. Private Placement and LC Facility

Sole Placement Agent, Bookrunner, LC Issuing Bank, Intercreditor Agent, and Administrative Agent

July 2019, Peru

### El Dorado Airport

USD 415,000,000
Senior Secured Notes

Joint Lead Placement Agent

July 2019, Colombia

### TAG Pipeline Acquisition

USD 2,450,000,000
BRL 14,000,000,000
USD Term Loan and BRL Term Loan

Initial MLA and Intercreditor Agent

June 2019, Brazil

### ESAP Modernization Project

CAD 560,769,798
Term Loan

Mandated Lead Arranger and Hedge Provider

May 2019, Canada

### Autopista al Mar 1

USD 750,000,000
USD Term Loan and COP Term Loan

Financial Advisor, Structuring Bank, MLA, Hedge Coordinator, Administrative Agent, and Intercreditor Agent

March 2019, Colombia

### Midship Pipeline

USD 680,250,000
Term Loan, Revolver, and LC Facility

Joint Lead Arranger and Depositary Bank

February 2019, U.S.

IJGlobal Awards 2019

# IJGlobal Awards 2019

It's that time of year again. *IJGlobal* is delighted to announce the winning deals and winning companies for the *IJGlobal* Awards 2019.

Gala award ceremonies had been scheduled for London, New York, Singapore and Dubai to celebrate this year's winners - but had to be cancelled due the coronavirus pandemic. However, what follows is the culmination of a six-month process to identify the outstanding transactions and companies from 2019.

Each of the winning transactions and companies, across all regions and every sector category, are proled in the following pages.

## Congratulations to all the winners!

IJGlobal Awards 2019

# Winning companies

## Global

**MLA**
Societe Generale

**Legal Adviser**
Norton Rose Fulbright

**Financial Adviser**
SMBC Group

**Sponsor**
Macquarie Capital

## Europe & Africa

**Technical Adviser**
Arup

**Model Auditor**
Mazars

**Corporate Trust Provider**
Deutsche Bank

**Legal Adviser**
Clifford Chance

**Bond Arranger**
Credit Agricole

**Financial Adviser**
Rothschild & Co

**Sponsor**
Macquarie Capital

**MLA**
Societe Generale

## North America

**MLA**
MUFG

**Bond Arranger**
Citigroup

**Financial Adviser**
CIBC

**Sponsor**
AES Corporation

**Legal Adviser**
Norton Rose Fulbright

**Corporate Trust**
Deutsche Bank

**Technical Adviser**
Arup

**Model Auditor**
Mazars

## Latin America

**MLA**
Natixis

**Bond Arranger**
Citigroup

**Sponsor**
Engie

**Financial Adviser**
Astris Finance

**Legal Adviser**
(International)
Milbank

**Legal Adviser** (Local)
Pinheiro Neto Advogados

**Technical Adviser**
Arup

**Corporate Trust**
BNY Mellon

## Asia Pacific

**DFI**
Asian Development Bank

**Bond Arranger**
HSBC

**MLA**
DBS Bank

**Financial Adviser**
HSBC

**Sponsor**
wpd

**Legal Adviser**
Norton Rose Fulbright

## Middle East & North Africa

**MLA**
Natixis

**Financial Adviser**
SMBC

**Sponsor**
ACWA Power

**Legal Adviser**
Allen & Overy

**Model Auditor**
BDO

## Global MLA of the year **Societe Generale**

Societe Generale was singled out as the global leader for international infrastructure lending activity across the 2019 calendar year by *IJGlobal*'s independent judging panels that met early in 2020 to judge submissions.

At these sessions in London, New York, Singapore and Dubai, judges consistently identified the French bank as having been involved in "pioneering activity" with "broad sector coverage" across the global infrastructure and energy space.

One judge was kind enough to describe Societe Generale as the "international leader in the lending community" another congratulating it on "a very strong field" of deals closed, having demonstrated "great innovation" and "wide sector coverage including a pioneering sector like EV charging". Over the course of the last calendar year, Societe Generale closed 46 project finance transactions and securing a global market share of 5% – according to the *IJGlobal* database.

The deals it closed span all the sectors that fall into the infrastructure and energy asset classes from the ground-breaking underwrite of Saint-Nazaire Offshore Wind Farm in France through to Altiplano 200 solar park in Argentina.

Energy, of course, was not the only sector in which the bank was active, but – reflecting global financing activity across 2019 – it did play a significant role.

For many of the judging teams, the mantra "big is beautiful" stands true. However, votes will always be swung by a combined belief that "challenging in cuter".

On the big end of the scale SG worked on 2 stand-out offshore wind transactions in 2019 – Yunlin Offshore Wind Project in Taiwan and the Saint-Nazaire Offshore Wind Farm, France.

On the 640MW Yunlin, SG worked as MLA and hedge provider securing NT$94 billion in project finance debt for sponsors wpd and Sojitz. This is a key deal for the French bank as the Taiwanese power sector will undergo a significant transformation over the next decade as the country seeks to diversify from coal and nuclear power.

However, SG has already cut its teeth on offshore wind having played a key role in the delivery of the European agenda and in 2019 was again central on the 480MW Saint-Nazaire France's ground-breaker. This was the first offshore project financing to be underwritten to speed up the timeline and simplify execution process.

In a more traditional infrastructure space, judges celebrated SG's role as anchor bank on Cross River Rail, a transport network that is critical to south east Queensland. It acted as MLA, underwriter, bookrunner and hedge counterparty for the A$2.3 billion project financing to deliver tunnels and stations through the Brisbane's CBD.

Meanwhile, on Argentina's Altiplano 200 solar project, SG acted as original lender, facility agent and Bpifrance Assurance Export (BPIAE) agent on the financing for a challenging deal that was one of the first solar power plants in the world to qualify for the benefit of this buyer credit guaranteed mechanism, and the first with BPIAE.

The transactions SG led across the world were varied, ranging from refinancing Tours-Bordeaux High Speed Rail through to the primary financing of Autopista al Mar 1 toll road in Colombia; the project finance of Hamriyah IPP in the emirate of Sharjah, UAE; and Saudi Arabia's first wind farm (then largest in the Middle East) – Dumat Al Jandal.

## Global legal adviser of the year **Norton Rose Fulbright**

Norton Rose Fulbright is the worthy recipient of the *IJGlobal* Legal Adviser of the Year Award for deals closed across the 2019 calendar year, having impressed all 4 independent judging teams with the law firm's performance.

Judges in London, New York, Singapore and Dubai singled out NRF for "stellar" performance having closed more project finance deals than any other law firm – according to the *IJGlobal* database – cornering a global market share of 4.5%, by value. Among comments from the judges, the APAC team was particularly keen to single NRF out for "really unusual new infra-style deals" while others tipped their hats to the firm for a "diversified" spread of transactions, some of which were in "very challenging countries".

One judge went as far as to say that the firm "demonstrates capabilities beyond your expectations and leverages experienced teams with specialist skills to get results and win deals".

NRF was far from alone in submitting the refinance of Scotland's Beatrice Offshore Wind Farm as a key deal it had acted on. In truth, any law firm that had exposure to offshore wind submitted them, to the point that such an exciting sector became a tad humdrum for the judges! Much like for the previous year's awards, judges refused to take into account projects' scale, rather preferring to identify how the firm had brought value to the deal, going beyond the scope of normal work.

The £4.1 billion refi of Beatrice definitely ticked this box as NRF acted for the consortium of lenders – 29 commercial and institutional lenders and 24 hedging banks. This was one of the first instances where the lender selection process was managed using full form documentation rather than a term sheet, which increased the complexity of managing such a large lender group.

Another such project was the Tina River Hydro Development in the Solomon Islands where K-water is building a power generation dam near Honiara with a capacity of 7 million cubic metres of water and a hydroelectric power plant with a capacity of 20MW.

NRF teams in Australia (EPC) and Singapore (PPA and implementation) had their work cut out given this was the first large-scale infrastructure project to be developed as a PPP in the Solomon Islands. They also negotiated and drafted the shareholder agreement and on-lending agreement.

Then you have Kacific 1 that was handled by the NRF Singapore office and involved the financing of a next-generation geostationary satellite operating in the Ka-band frequency spectrum. This satellite is streaming low-cost, high-speed, reliable and stable satellite broadband via 56 powerful spot beams.

As one judge said: "That's a long way from being a run-of-the mill project." Its high-speed broadband payload and wide-reaching coverage will deliver broadband services to the Pacific Islands and other remote communities such as Bhutan and Nepal.

The above are just 3 of the law firm's greatest achievements in 2019, but the diverse nature of their exposure to infrastructure and energy saw the firm act on all sorts of deals that ranged from battery storage in Kauai, Hawaii – at the time the largest solar and storage system in the world – to Sabine Pass LNG, Train 6.

Energy played a key – though not exclusive – part in NRF's submissions with the firm having acted on the challenging 378MW Acajutla gas-fired power plant and LNG terminal in El Salvador, and the 270MWAC Potrero solar farm in Jalisco, Mexico, sponsored by Fotowatio Renewable Ventures.

## Global financial adviser of the year **SMBC**

Financial advisory is always a hotly-contested section in the *IJGlobal* Awards, and the judges were faced with the annual challenge of selecting winners for each region based on submissions from banking teams, advisory houses and specialist boutiques.

Against so much competition, it is all the more impressive that the culmination of judging from teams in London, New York, Singapore and Dubai identified SMBC as the winner of the *IJGlobal* Financial Adviser of the Year for deals closed in calendar year 2019.

Judging scores from each region are totted up and the highest placed firm that has been active across most regions is singled out for honours.

Judges saluted SMBC's "impressive international presence" and the "leading role it plays in the international market" with one saying it "seems to target challenging deals where it can demonstrate its excellence".

One transaction that elicited great comment from the APAC judges was the 640MW Yunlin Offshore Wind Project in Taiwan – the largest offshore wind transaction financed in Asia Pacific and the first large, multi-MW offshore wind project in the country. Having reached financial close within 13 months, this transaction received an extra salute.

Meanwhile, in New York the judges singled out the Autopista al-Mar project in Colombia where SMBC acted as financial adviser on the country's largest non-recourse financing. It also stands out as the first project financing in Colombia involving development banks, local and international; international commercial banks; and debt funds in multiple currency funding (Colombia Peso, US Dollars, UVRs and Euros).

Sticking with the NY judging panel and again focused on Latin America, Peru's Lima Airport was another key project that singled SMBC out for accolade. It was one of the largest financings in the region that involved development banks as well as local and international commercial lenders, providing an innovative structure in the project finance spectrum.

SMBC also played a significant role the Middle East with key roles on 2 key Saudi Arabian transactions – Dumat Al Jandal onshore wind IPP and Shuqaiq 3 independent water and power plant.

Dumat Al Jandal was the first large-scale onshore wind IPP in the kingdom and indeed the GCC. It is a key component in Round 1 of the Saudi National Renewable Energy Programme under the supervision of the Ministry of Energy and the Renewable Energy Project Development Office.

Like all such projects at financial close, Dumat Al Jandal led the region for lowest levelized cost of electricity. It was structured as a standalone IPP on a build-own-operate basis with the sponsor – EDF Energies Nouvelles and Masdar – signed up to a 20-year PPA.

Shuqaiq 3 was procured by Saudi Water & Electricity Company (now Saudi Water Partnership Company, SWPC) – SMBC's client – to deliver a 450,000 m3/day seawater reverse osmosis desalination plant primarily to serve the city on the Red Sea coast.

The project achieved financial close barely a year from the issue of RFP in March 2018 and set a benchmark for SWPC and its advisers in demonstrating their combined ability to deliver on the schedules planned.


IJGlobal Awards 2019
Global Financial Adviser of the Year
WINNER
IJGlobal Awards 2019
MENA Financial Adviser of the Year
WINNER

## Global sponsor of the year **Macquarie Capital**

MACQUARIE

Macquarie Capital scooped the coveted *IJGlobal* award for Sponsor of the Year for a second year on the trot having enjoyed an impressive flow of transactions across the full 2019 calendar year, closing deals in all corners of the world.

The value of this award is all the greater for it having been judged – as all IJ company awards are – by independent peers within the infrastructure community of many years standing, across the 4 teams that met in London, New York, Singapore and Dubai.

These teams – working in isolation from each other – vote on each category and the combined results lead to the ultimate award of the global prize. And they salute Macquarie's acumen.

As one judge said of Macquarie: "This is an organisation that splits the audience. However, you cannot help but admire the success they have enjoyed – and 2019 was a hugely successful year for them."

Macquarie was lauded by judges for having won "against serious competition" and on one of its deals, in particular, for being "genuinely innovative and ground-breaking". A word that crops up repeatedly is "challenging"… not always referring to the deals they worked on!

This award winner has been active across the whole gamut of infra and energy sectors from transport and social infra projects through to offshore wind and other renewables projects. It has also innovated, in recent times building out capacity in the digital infrastructure space – data centres, fibre optics and broadband.

In Europe, London's Silvertown Tunnel elicited comment from one (now retired) judge who had been involved in the deal with a rival bid. He said: "This was a challenging project beset by delays in the procurement. Macquarie rolled out an innovative financing package and well done to them for winning it against serious competition."

The RiverLinx consortium – Macquarie Capital, Cintra, Aberdeen Standard Investments, BAM PPP PGGM, and SK E&C – reached financial close with Transport for London, allowing work to start on the largest UK road PPP for the last decade.

Meanwhile, at the other end of the planet, Taiwan's Formosa 2 offshore wind farm was jointly bid by Macquarie's Green Investment Group and Swancor Renewable Energy, fielding a consortium of 20 international and local institutions to complete the project financing. The financing consortium comprised 6 local Taiwanese financial institutions and 14 international banks, supported by 4 ECAs, with local players providing around 30% of the project financing.

Back to Europe where Macquarie Capital led the acquisition of a fibre-to-the-home network from MasMovil, Spain's fourth largest telco, to create the nation's first independent wholesale-only FTTH network. This deal was described by one judge as "genuinely innovative and ground-breaking", celebrating the hybrid structure as "challenging".

Macquarie Capital and its advisers had to draft all project agreements from scratch, develop and diligence a business plan and put in place a complex project finance structure.

Heading back to APAC, Macquarie's GIG completed the installation of Gray Whale Floating LiDARs in South Korea, the first such project marking the launch of the 1.4GW Ulsan offshore wind.

Overall, Macquarie was toasted by all 4 judging teams as a "first-class performer" with an "enviable track record of deals closed" in 2019… and, given they won this award last year as well, it seems only fair to salute its year-on-year success.

## European and African technical adviser of the year
## **Arup**

Arup's technical knowledge amalgamated with its financial and commercial understanding of the deals it supported has expanded its presence to over 13 countries across Europe and Africa. With experts ranging from engineering to corporate finance specialist and economics, Arup has taken the lead in 2019 to win *IJGlobal*'s Europe and Africa top technical adviser for its second year in a row.

Arup works heavily in the private and public space in the UK, working on projects such as the nuclear newbuild project Hinkley Point C and advising BEIS on its proposed RAB funding structure for SZC. By using the knowledge it attained domestically, Arup has also worked to unlock new investment in African markets and unrealised infrastructure assets.

One of the most notable deals that Arup advised on in 2019 was 3i's €210 million investment in Ionis – the third largest cold sterilisation provider in the world. Ionis has 11 facilities across Europe and was viewed as both an industrial pharmaceutical asset and an infrastructure asset.

With its long-term stable cash flows and high barriers to entry, Arup provided extensive regulatory reviews to market the asset as an infrastructure asset.

Another remarkable deal Arup aided the process of was the €400 million 25-year PPP waste management project in Belgrade, Serbia. Advising the lenders, Arup played a key role in planning the construction of the plant to close the first large-scale, bankable, waste-management sector in emerging markets.

Belgrade is a 340,000 tonnes per annum energy from waste facility generating 56MW of heat and 25MW of electricity for the City of Belgrade. The new plant will have a new EU-compliant sanitary landfill with plans to close the existing one – which was notoriously one of largest uncontrolled landfills in Europe.

In the transmission markets, Arup's work on Electricity North West was also noteworthy in 2019. Providing vendor-side technical due diligence, Arup advised JP Morgan and First State Investments on the sale of Electricity North West in two separate auctions.

ENW serves 5 million customers vis 57,000 cables network which was acquired by a Kansai-led consortium including Equitix and CNIC corporation in two parts – the first 50% sold in July 2019 with the remaining half sold to the same buyers in December 2019.

## European and African model auditor of the year
## **Mazars**

Mazars launched its model audit service in 2007 and since then has undertaken 1,200 model audits across the globe. With an impressive focus and integrated approach working internationally and sector specifically, Mazars has won mandates on a number of significant deals to earn this win in *IJGlobal*'s model audit category for Europe and Africa.

In the renewable energy market in 2019, Mazars helped to erect the largest wind project to ever be constructed on a lake. Mazars advised Dutch wind farm developer Ventolines on the development of the 383MW Fryslan nearshore wind project in the Netherlands. The project has 89 turbines located on Lake Ijsselmeer in the north east of the country. The project had a 15-year PPA with Eneco and is due to be operational in 2021.

Another notable renewable energy deal earning Mazars this award was its work on FCC Environment's acquisition of a 40% stake in Copenhagen Infrastructure Partners' 60MW Lostock energy from waste plant. The waste project in Northwich, Cheshire, north west England. Once operational, the plant will be one of the largest energy from waste plants in the UK and Europe, with FCC Environment supplying and delivering 600,000 tonnes of waste that Lostock will process annually.

In the rail leasing sector, Mazars was also instrumental in the refinancing of Beacon Rail leasing. JP Morgan – after acquiring Beacon Rail from private equity group Pamplona in 2017 – refinanced the asset in a €1.5 billion deal. The refinancing involved a combination of private placement and debt financing provided by 15 banks. The refinancing was intended to term out the capital structure of the firm and was issued off a multi-creditor platform.

Beacon Rail Leasing provides rolling stock for rail franchises in several European countries and the US. The refinancing was remarkable in 2019 due to its innovative debt platform reflecting the market's increasing appreciation of core rolling stock as an infrastructure asset class.

## European and African corporate trust provider of the year
## **Deutsche Bank**

Deutsche Bank Corporate Trust supported more than 45 transactions in 2019, aiding a total $20 billion of debt globally invested across energy and infrastructure. The bank was mandated on deals in the form of project, corporate, portfolio and acquisition financing for more than 8GW of power generation, keeping it at the top of the *IJGlobal* ranking for corporate trust adviser.

A key deal Deutsche Bank Corporate Trust supported in 2019 was Luxcara and Munich RE's MEAG hybrid project bond which was issued finance to the construction of the 76MW Skinansfjellet & Gravdal Onshore Wind farm in southern Norway.

The financing was privately placed with investors of MEAG, UNIQA and another insurance group and backed by a long-term PPA with Facebook. Deutsche Bank was mandated as financing and security agent to both the borrower and institutional investors to manage the ongoing finances of the firm.

In Spain, Deutsche Bank provided support to Israeli developer Ellomay Capital on its acquisition of a 300MW solar PV plant in Talayan. The project has a capex of €228 million, of which €131 million was debt finance provided by banks and the EIB. Deutsche Bank created a structured transaction that allowed bank investors and the EIB to comfortably lend on the project by monitoring deliverables, reviewing reports and providing cash management to the debt and payments.

*Deutsche Bank Corporate Trust supported more than 45 transactions in 2019.*

In the rail space, Deutsche Bank advised Rock Rail and Japan Infrastructure Initiative on the £400 million financing of a new fleet of Hitachi trains for the East Midlands franchise. The debt was provided by institutional investors Aberdeen Standard, Aviva, Scottish Widows and Sun Life with Deutsche Bank structuring the transaction around the timely delivery of trains against time sensitive agendas.

Jose Sicilia, Head of Trust and Agency Services at Deutsche Bank: "To receive this award for the seventh year in a row underlines the expertise and dedication that Deutsche Bank brings to this product and specifically to its clients. In particular, the accolade demonstrates our focus and commitment to delivering tailored solutions to support our clients in an increasingly dynamic market environment."

## European and African legal adviser of the year
### Clifford Chance

Clifford Chance has had a strong 2019 having advised on complex and impactful projects in Europe and Africa.

The firm continues to be the regional market leader in infrastructure and has topped the charts in project finance for global deal count in *IJGlobal*'s full-year league tables. Most notably CC advised the sponsor Lekela on the West Bakr Wind project in the Gulf of Suez.

Financing for the 252MW onshore wind farm was sourced exclusively from a DFI/MDB syndicate and comprised a term loan from EBRD, IFC's direct lending and B-loan programmes and OPIC's COPs funding programme.

CC's Energy and Infrastructure Group partnering with local counsel Matouk Bassiouny advised Lekela on negotiations with the state-owned offtaker EETC and the Egyptian government.

This deal was only the second ever IPP wind farm in Egypt and reached financial close in three months after drafting term sheet on a fully limited-recourse project financing.

The project will increase Egypt's electricity generation from wind by 14% once completed and was a pivotal step towards the country's aim of generating 20% of its electricity from renewable sources by 2022.

CC has once again highlighted its expertise in sustainable power and fuel assets in emerging markets through their involvement in the Bridge Power deal in Ghana. This project was conceived in response to power shortages in 2016, and the project plays a significant role in Ghana's power development and economic growth strategies.

The sponsors for this project deployed an innovative limited recourse Vendor Finance solution which enabled construction works to start in full before debt was utilised.

Closer to home Clifford Chance advised a club of 25 lenders on the financing and development of EDF Renewable's $2.4 billion, 450MW Neart na Gaoithe (NnG) offshore wind farm in Scotland.

The scale and scope of this project marks the progress of the offshore wind sector. The project presents a sustainable zero carbon solution to the UK's power network. It creates thousands of jobs within the local economy and increases Scotland's GDP.

This is a classic project financing solution on a large scale and within a complex asset class, will serve to further incentivise broader and greater investment into the offshore wind asset class.

## European and African bond arranger of the year
### Crédit Agricole

Highly experienced in the project bond space, Crédit Agricole acted as sole placement agent or joint bookrunner on 10 transactions in 2019, exceeding €3.25 billion of successful placements. Judges were impressed by the innovative and sustainable credentials of the deals, the diversity of projects, and multiple jurisdictions in which they occurred.

Transport and fibre-to-the-home (FTTH) deals figured particularly strongly in 2019.

One such transport deal was the €1.3 billion refinancing of Akiem, the Paris-based rolling stock company owned by DWS and SNCF.

As part of this transaction, Crédit Agricole acted as sole placement agent in the placement of senior notes in two tranches (€150 million and €210 million) to US and European investors.

The debt is notable in its having attracted green certification: proceeds of the raise were earmarked for electrical locomotives, and thus qualified as eligible green assets under the Green Finance Framework (and reviewed by Sustainalytics). The debt was certified under the Climate Bonds Certification by the Climate bond Initiative.

Another key deal for the arranger in the transport sector was the significantly oversubscribed Brussels Airport Company bond, which was consequently upsized from €300 million to €500 million. The oversubscription allowed for competitive pricing.

Proceeds are to be used to prefund the company's July 2020 maturing Eurobond, and general corporate purposes.

In utilities, Crédit Agricole was engaged to tap the US private placement market for £175 million in 12-year and 23-year bonds for South East Water, the largest water-only company in the UK.

Issued at operational company and hold company levels, the issue was four times oversubscribed allowing the issuer to tighten spreads. The transaction also featured a delayed draw, thus a premium was built into the pricing.

Crédit Agricole said: "We are proud to support our clients' projects, thanks to the combined approach of our financing and advisory and infrastructure capital markets teams with strong global structuring and distribution capabilities. This allows us to structure tailor-made bond and private placement solutions across various sectors – infrastructure, transportation, power, telecoms."

## European and African financial adviser of the year
### Rothschild & Co

Its third consecutive win as financial adviser of the year in this category, Rothschild & Co had a stellar year in 2019 with a broad range of advisory covering equity and debt buy-side and sell-side in the private and public sector.

The company's integrated M&A, debt, and strategic insights saw it mandated on some of the year's blockbuster transactions, demonstrating a compelling mix of projects and asset classes across more than 50 deals.

In digital infra, the firm provided M&A and strategic advice to KCOM Group, the Yorkshire-based telecoms network owner with monopolistic characteristics. Following an unsolicited bid from USS, and a subsequent one from Macquarie, Rothschild set up an auction; MIRA's accepted £563 million price was over 11% premium to USS' original offer, and 52% to the month's average share price prior to the first bid by USS.

Debt and derivatives advice was given to First State Investments on its €1 billion onshore wind farm portfolio refinancing – the largest such refinancing in Europe. An LMA 'Green Loan'-certified common terms platform was negotiated to raise the €800m debt, which allows for an unusually high degree of flexibility to expand through debt-financed acquisitions into other renewables technologies and ancillary businesses across a wide range of geographies.

Another significant transaction was providing M&A and strategic advice on the Equitix- and Kansai-led consortium's acquisition of 50% of Electricity North West, which Rothchild negotiated following the failure of a 100% stake auction earlier in 2019. Other significant deals included Condor Ferries , CityFibre's implementing a £1.12 billion capex financing package, and Athens Airport on financing its concession extension.

Rothschild & Co said: "[Last year] was another good year for the transport and infrastructure sector with significant dry powder and attractive financing markets fuelling plenty of activity. The strength and depth of the team at Rothschild & Co – which includes infra focused bankers in each of our European offices – coupled with our integrated business model allowed us to take advantage of the M&A and debt activity which occurred across a wide range of sub-sectors and geographies.

"The stability of our platform and our relationship-driven approach has kept us close to our clients in the current crisis and allowed us to support them in navigating recovery for their portfolio companies as well as assessing new opportunities going forward."

## European and African sponsor of the year **Macquarie Capital**

Macquarie Capital's large team of specialists spread throughout Europe – in all major sectors – served it well in the variety and innovation of the projects brought across the finish line in 2019. This outstanding breadth in infrastructure and energy were critical in the company being awarded European and African Sponsor of the Year.

Its sponsor roles for the year have varied from transport and social projects, to offshore wind and other renewables projects. It has also continued to build out its capabilities in the digital infrastructure space.

A key deal for Macquarie Capital in 2019 was its reaching financial close on the Silvertown Tunnel project. Macquarie and its consortium partners, aka the Riverlinx Consortium, won the project in the face of stiff competition from fellow infra and construction heavyweights such as Skanska, Meridiam, and John Laing.

Working alongside Transport for London, Macquarie Capital crafted an innovative and competitive debt solution raising more than £1 billion of competitive project finance debt from a diverse group of 15 international lenders including two Korean export credit agencies (the first instance of this happening on a major European PPP) and a combination of Asian banks, European commercial banks, and private placement lenders.

Showcasing its green credentials, Macquarie's Green Investment Group (GIG) acquired a 40% stake in offshore wind farm East Anglia ONE in August 2019. The purchase of the stake in the 714MW farm, which is being built off the UK's Suffolk coast, was the largest European offshore wind and renewable energy acquisition for the year.

Project financing was underwritten by leading renewable lenders, and includes an off-balance sheet FinCo structure not previously used in renewables financings.

In digital infrastructure, Macquarie drew praise for the acquisition of MasMovil's fibre to the home (FTTH) network thereby creating Spain's first independent, wholesale-only offering in this sector.

The result of lengthy bilateral discussions, Macquarie and its advisers drafted all project agreements from scratch, and put in place a complex project finance structure.

## European and African MLA of the year **Societe Generale**

Societe Generale has had a strong 2019 having been involved in a variety of innovative deals across a broad spectrum.

The bank's portfolio last year included offshore and onshore windfarms, solar farms, broadband networks, rail, lighting, utilities, and mining.

Most notably, SocGen was involved in the Tours-Bordeaux High Speed Rail Link on behalf of the sponsor LISEA concession.

It was one of the largest infrastructure deals executed last year and the largest contingent swap ever traded.

The bank acted as the bookrunner and sole contingent hedge provider of the long-term swaps and complementary forward swap for refinancing of the €2.2 billion ($2.4bn), 340km rail line.

It underwrote the entirety of the 35-year tenor fixed rate tranche and 50% of the floating rate tranche with a 27-year tenor.

SocGen was also the underwriter of 50% of facilities and hedge provider for the Dutch electric vehicle charge point operator Allego.

Allego, the fourth largest charging network operator in Europe was acquired by Meridiam last year and SocGen was mandated to structure the financing of a general-purpose facility in order to fund its development and geographic expansion through the continent.

The deal was valued at €150 million ($162.5m) and heralds the bank's entry into the EV charging infrastructure market.

Another prominent project the bank worked on was the Saint-Nazaire offshore wind farm project located off France's western shore.

SocGen was the global bookrunner, IMLA, hedge provider, facility agent and security agent for the project.

The 480-MW wind farm will be delivered by the JV for Saint-Nazaire offshore wind farm and will generate the equivalent of 20% of the Loire-Atlantique's electricity consumption needs.

This project highlights the bank's innovative side given Saint-Nazaire is the first offshore wind financing in France, opening the way for the first such project to be built in the country.

It is also the first ever offshore wind project to be underwritten through project finance in order to speed up the timeline and simplify the execution process.

## North American MLA of the year **MUFG**

MUFG has been building up a solid reputation in the North American infrastructure market over the past decade. Having consistently ranked high on the league tables in that time, this year was no different. The bank closed 61 deals in the region in 2019 thus achieving North America MLA of the year.

Aside from the staggering amount of deals closed in one region, MUFG has closed on a variety of deals ranging from social infrastructure straight the way to anything from LNG deals to onshore wind farms.

The bank acted as joint MLA on the $757 million term loan and $158 million construction loan to Meade Pipeline Investments a JV between NextEra Energy Partners and BlackRock for its acquisition of a 32.9% stake in the Central Penn Pipeline. Pricing was tight with term loan coming in at Libor +162.5bp, while the loan for the expansion project was priced at +200bp, stepping down to +162.5bp during the operations phase.

MUFG also led the financing on a unique transaction for the $500 million Newark Consolidated Rent-a-Car facility. The financing for the project was provided by debt and equity partners to be then repaid solely out of proceeds received from the Customer Facility Charge (CFC) applied only on the rental car transactions in the facility. The facility once completed will connect to the new Terminal One on a 35-year lease and will feature 2,925 public parking spots and 3,380 spots for rental cars.

Lastly, Freeport LNG and MUFG have had a long-lasting relationship with the bank taking on key roles in all FLNG's project financings.

In 2019 the bank participated on the loan for the construction and operation of Train 2 of a natural gas liquefaction facility located in Freeport which compromises three individual trains with a combined liquefaction capacity of 15 million tonnes per annum.

The financing structure was made up of a $1.035 billion term loan, $180 million in letter of credit facilities and a $50 million working capital facility.

## North American bond arranger of the year **Citigroup**

Citigroup pushed the boundaries of bond arranging in 2019 using new and untested methods that pushed the frontier of the market forward by optimal execution through structuring and market expertise.

In early December Citi led the pricing of Cameron LNG; a $3.02 billion refinancing unique for its scale, pricing, structure, level of investor demand and distribution strategy. The bond was 5x oversubscribed and had to be divided into four tranches; one of which was an amortiser. The structure of 3 bullets and 1 amortiser wove 4(a) (2) style investors and debt into the 144A format with demand anchored at $1 billion of indications from traditional 4(a)(2) investors.

*The bond was 5x over-subscribed and had to be divided into four tranches; one of which was an amortiser.*

Citi's recurring dialogue with institutional investors and sound credit approach enabled it to close unrated transactions that other arrangers would not touch. EPIC Olefins and Mobile Alabama both (unrated transactions) demonstrated the bank's ability to navigate the investor landscape and show its ability to structure transactions without elements that are viewed as critical in the project financing world.

Lastly the bank worked on a number of multi-level financings. The AES Southland HoldCo transaction saw the bank deliver a multi-level solution for AES at the OpCo and HoldCo, addressing different financing needs at different points of the asset's lifecycle alongside Citi's ability to identify and work with investor relationships able to look beyond adverse market conditions. Citi served as Joint Placement Agent and Coordinating Lead Arranger, leading AES Southland OpCo in successfully securing $2.3 billion of financing consisting of long-term private placement notes, a term loan, and a LC facility. The OpCo financing was well-received by the market for its complex bank-and-bond structure which optimized AES' ability to customize drawdowns, minimize refinancing risk by matching the PPA's tenors, and targeted two broad markets of execution.

Despite challenging conditions in California and market sentiments regarding the main offtaker, the private placement was well-received, oversubscribed and upsized with strong demand.

## North American financial adviser of the year **CIBC**

CIBC managed to close 20 deals in 2019 with a total value of around $25 billion over a broad spectrum of asset classes, transaction structures and clients. Transactions included unique JV arrangements in the cases of Brookfield's investment into TransAlta and unique asset classes such as the sale of OnRoute by Kilmer and HMSHost.

CIBC also advised on a traditional transit P3 project with Kiewit called the Ottawa LRT and advised on the sale of several portfolios of renewables assets in North America by OTPP, RES, and EDPR.

The bank advised Williams on a JV with CPPOB involving midstream assets in the North East, Semgroup on its JV with KKR involving Meritage Midstream and Axium on Coachella Transmission and Student Housing in Iowa.

When it came to transport the team did not shy away, in addition to Ottawa LRT and OnRoute it advised on the acquisition of the Central Maine and Quebec Railway by Canadian Pacific. CIBC also advised SNC on the sale of a 10% stake in 407 ETR Highway.

Kilmer Infrastructure and HMS Host both sold their interests in ONroute Service Centres with financial advice from CIBC. ONroute is the exclusive contractual provider of fuel and services at 23 locations along Ontario's highways 400 and 401. The business operates under a 50-year concession with Ontario. Arjun Infra Partners and Fengate bought the stakes in the business.

When it came to advising Brookfield on its investment into TransAlta, CIBC's main job was to help the firm transition its coal fleet to gas without issuing common shares at an undervalued share pricing.

TransAlta negotiated a deal with Brookfield for a CAD$750 million strategic investment, a joint hydro operating committee, a near doubling of equity ownership in TransAlta through future market purchases and two Brookfield board appointments.

CIBC also led for advising on the financing of a Korean based consortiums purchase of a 50% interest in Utopia Pipeline. The 268-mile pipeline transports ethane from Marceulls region to Sarnia in Ontario with a long term take or pay minimum volume commitment.

The Consortium financed its purchase price with a combination of a 5-year $280 million bank facility, 9-year $110 million of mezzanine debt and the balance with equity.

# Providing strength and stability to our clients, one deal at a time

Mitsubishi UFJ Financial Group is pleased to have been awarded the North America Power Deal of the Year, the North America Airports Deal of the Year, and the Latin America M&A Deal of the Year from the 2019 IJ Global Awards. We thank our clients for these awards and for making us three "Deals of the Year" strong.

Contributing to our success are our strong financial resources and extensive global reach. We offer the continuity of a 30-year track record of putting our clients' interests first. In collaboration with our clients, we create innovative and customized financing solutions.

MUFG continues to gather success stories ranging from power projects to energy and infrastructure projects throughout the Americas. However, our biggest success story is the loyalty of our clients and their trust in us to manage their most critical and complex transactions.

Our sincere gratitude to each and every one of you.

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CONRAC SOLUTIONS
RELATED
FENGATE

**EWR CONRAC, LLC**

**USD 343.9 Million**

**Financing to support the development of a Consolidated Rent-A-Car Facility at Newark Liberty International Airport**
MUFG acted as Joint Lead Arranger, Sole Bookrunner, and Administrative Agent
May 2019, USA

ARES

**Hill Top Energy Center, LLC**

**USD 420.0 Million**

**Construction financing of a 620 MW gas-fired generating facility**
MUFG acted as Co-Placement Agent, Collateral Agent, Depositary Bank, LC Issuing Bank and Working Capital Lender
March 2019, USA

ENGIE CDPQ

**Aliança Transportadora De Gás Participações S.A.**

**USD 2.5 Billion**
**BRL 14.0 Billion**

**Financing the acquisition of Transportadora Associada de Gás S.A. ("TAG")**
MUFG acted as Mandated Lead Arranger and Offshore Collateral Agent
June 2019, Brazil

IJGlobal Awards 2019

**IJGLOBAL 2019 WINNER**

**DEAL OF THE YEAR**

| | |
|---|---|
| **North America Power Deal of the Year** | **Hill Top Energy Center** |
| **North America Airports Deal of the Year** | **Newark ConRAC** |
| **Latin America M&A Deal of the Year** | **TAG Pipeline Acquisition** |

MUFG

## North American sponsor of the year **AES Corporation**

AES hit the ground running in 2019 closing on the sale of a minority stake in the 1.3GW sPower wind and solar portfolio to StepStone and Ullico forming part of a $2 billion divesture as the company sought to fine tune its portfolio.

It did not stop there as the following month it was selected to develop a 100MW four hour duration battery based energy storage system in Arizona under a 20 year contract, a sector the firm has been keen to get involved in.

*AES designed the unique DC-coupled solution, dubbed the PV Peaker Plant.*

Continuing on with battery, the AES Southland transaction closed enabling the firm to expand its battery portfolio by 100MW and increase its combined cycle gas capacity by 1,284MW. The financing consisted of $1,475 million of senior secured notes amortizing through 2040 and a $492 million senior secured term loan amortizing through 2027, with a combined weighted average cost of debt of approximately 4.5%. AES contributed approximately $350 million in equity to finance the balance of the total project cost of $2.3 billion.

The firm has long been active in Hawaii with its 280MW coal-fired power plant that is due to close down by September 2022, and the company has been keen to increase its investments into renewables in the area. AES closed on the project financing of a 20MW solar energy facility and a 100MW battery storage system in Kauai. The new system allows solar to occupy the role that thermal integration played in varying output to meet peak demand.

AES designed the unique DC-coupled solution, dubbed the PV Peaker Plant, to fully integrate PV and storage as a power plant. While many other systems, especially AC-coupled systems, coexist but are not tied together, this PV Peaker Plant solution fully combines and integrates the components into a singular harmonious system at a never-before-seen scale. The system has the ability to supply solar generation to the grid while charging the battery system. Power stored in the battery system will be provided to the grid during peak demand periods. It can also send solar and battery power at the same time to meet any unexpected increases in demand and provide ancillary services to support the grid.

## North American legal adviser of the year **Norton Rose Fulbright**

NORTON ROSE FULBRIGHT

Norton Rose Fulbright closed on 71 transactions valued at more than $25 billion in North America alone. The firm worked towards federal tax credit deadlines and it showed as 75% of the deal were in renewables.

The infrastructure team at the firm has advised from various perspectives through the course of 2019. The firm held big ticket roles for sponsors such as on Golden Pass and lenders like on the New England Portfolio, Carroll Count, Sabine Pass and Corpus Christi.

Highlights from the year also included advising Toshiba on the sale of its US LNG business, Cleco, and advising Macquarie on the $1 billion acquisition of NRG South Central and then GS EPS on its purchase of an interest in the 972MW Linden Cogeneration Complex.

Not shying away from transport either the team worked on the $1.9 billion Ottawa LRT Confederation Line and the $600 million Trillium Line Extension. The firm has also tapped into smart city deals and advised on the DC Smart City P3.

The firm like many other of this year's winners has been focusing on its work surrounding battery storage. Norton Rose Fulbright advised lenders on the 20MW Lawa'i solar and energy storage project in Hawaii for AES Corporation.

The project is the largest operational solar and storage system in the world. The project consists of a 28MW solar plant sitting alongside a 100MWh five hour duration energy storage system.

LNG is a cornerstone of the practice and according to the judges no other firm brings the combination of experience it has in LNG projects financing, project development and commercial agreements.

The firm advised as lender counsel for 30 banks in a syndicate that provided Cheniere Energy Partners $1.5 billion in financing, comprising a $750 million term loan and a $750 million revolving credit facilities for letter of credit and working capital loans.

Borrowings under the facilities will be used to provide a portion of the funds needed to construct Train 6 of the Sabine Pass LNG Liquefaction Export Project in Cameron Parish.

The deal was one of the largest LNG deals to close in 2019.

## North American corporate trust of the Year **Deutsche Bank**

Deutsche Bank Corporate Trust covered all areas of infrastructure and energy throughout the year supporting transactions in excess of $13 billion of debt. The bank was associated with more than 8GW of power generation with one judge indicating that it was one of the most productive years on the table.

The bank took mandates in renewable energy, power, transport, oil & gas, telecoms and water and waste. It supported sectors in the form of project, corporate, portfolio and acquisition financing.

Financing deals spanned a diverse asset class including gas-fired combined-cycle power plants, wind and solar, P3, midstream oil & gas, a consolidated rent-a-car facility, a national football league team financing, battery storage and energy transition transactions.

As of 2019, Brightline, a subsidiary of Virgin Trains USA, was the only privately owned and operated intercity passenger railroad in the United States.

In order to promote economic development and more easily connect Central and South Florida, the Florida Finance Corporation issued $1.75 billion in federal tax-exempt bonds to build out a high-speed rail system connecting four major cities in the state.

In this phase of the project, Deutsche Bank serviced the bonds funding the construction/reconstruction of the rail network connecting WPB and Fort. Lauderdale.

In the years following, issuance of tax-exempt revenue bonds through Florida Development Finance Corporation will be used to finance the next phase of the high-speed rail network.

Deutsche Bank acted as trustee, paying agent, registrar, and tender agent on the notes. It opened over 30 trust accounts to service proceeds and concessions of the project and vendors.

The bank also worked on the Plumsted and Stryker Battery Storage Portfolio owned by Ormat Technologies. Ormat owns two 20MW battery energy storage systems in New Jersey that are used to assist PJM internconnection to balance the grid.

Siemens Financial Services financed the projects and engaged Deutsche Bank Trust & Agency as Collateral Agent and Account Bank, as well as Escrow Agent in support of Ormat purchase of minority stakes of other investors.

Plumsted and Stryker Battery Storage was the bank's first stand-alone battery storage opportunity.

## North American technical adviser of the year **Arup**

Arup has a strong reputation in the sector for advising both the private and public side on infrastructure transaction. With just under 40 deals closed in 2019 out of its three offices in the US the firm provides strong technical advice together with financial and commercial understanding which set it apart this year. The firm has gotten involved with US universities trying to replicate the success of Ohio State energy concession agreement which has seen a huge surge this year and will continue to see so according to one judge.

The firm advised Upper Bay Infrastructure Partners and co-investors on their acquisition of Tidewater Transportation & Terminals. Tidewater owns and operates a multi-commodity transport and terminal assets serving the transportation needs of the pacific Northwest United States. Arup mobilized a broad range of technical and commercial specialists, including naval architects and engineers with experience in vessel maintenance. It developed a bottom-up assessment of the long-term capex requirements for the business, based on analysis of the history, integrity and expected future maintenance activities.

Arup also advised the lenders in the credit facility for up to $75 million towards the capital development of the 1 million metric tonnes per annum ethylene export facility which signed in March 2019. The project was developed by a JV between Navigator Gas and Enterprise Terminals on the Gulf Coast. In close co-ordination with the lenders and the development team, Arup provided assurance and opinion on the development timetable; proposed capital investment and the design aspects of this unique facility.

The adviser also advised IFM investor on its $10.3 billion EV take private acquisition of Buckeye Partners, the owner and operator of more than 6,000 miles of midstream energy pipelines across the US. In a highly-regulated due diligence process, Arup worked closely with the IFM team and Buckeye management in order to diligence a representative sample of the facilities across the United States to confirm the high-quality of operations of the company.

Arup supported the acquisition process with an assessment of long-term capital investment needs for the portfolio; and assessment of natural hazard risks across the portfolio, and commentary on Buckeye's safety and operations management systems: not only against US Federal standards, but against global best practice.

## North American model auditor of the Year **Mazars**

Known as a P3 specialist, Mazars over the last few years has been looking at other sectors for its auditing skills. The firm had almost a 50% share of deals in the *IJGlobal* league tables over the course of 2019 with deals ranging from traditional P3 projects to M&A transactions involving desalination plants and transmission lines.

The firm prides itself on its tailor-made advice to firms in both energy and infrastructure transaction with both commercial and technical informed model audits. The firm audited the Wataynikaneyap Power Transmission Project in Ontario for Fortis (49%), 24 First Nations Communities (51%) and other private investors. The transmission line is expected to be completed by the end of 2023.

It will connect remote First Nation communities to Ontario's power grid. The project will be the largest Indigineous-led infrastructure project in Canada, and the most far-reaching First Nations grid connection in Ontario's history.

Mazars audited the Ottawa Heating & Cooling System DBFOM P3 project which involved the modernization of the district energy system that currently heats and cools over 80 buildings in the National Capital Region, including the Parliament

Buildings. This involved innovative design features for the Cliff Heating and Cooling Plant located along the Ottawa River and bordered by parliamentary buildings. A PCL Investments Canada-led consortium with both Engie and Black & McDonald won the procurement. DB is a joint venture between PCL Constructors Canada and Black & McDonald. Engie will operate the project. The project has a 7-year offtake agreement with the Government of Canada. Lastly the firm audited the Carlsbad Desalination Plant sale for Orion Water Partners. The project was financed essentially with $733 million in tax-exempt bond financing and roughly a $200 million equity investment from its sponsors. The seawater desalination plant, since opening in 2015, delivers almost 50 million gallons of fresh water per day, enough to serve 400,000 people and about a third of all water generated in San Diego County. The project's owners signed a 30-year water purchase agreement with San Diego County Water Authority in 2012.

## Latin American MLA of the Year **Natixis**

Natixis has consistently grown its Latin American business throughout recent years, bringing in an innovative approach to bank financing in the region.

One great example of how the institution proved that it thinks outside the box was the creation of a project finance market for the small-sized portfolios of solar projects in Chile called PMGD.

A regimen created in 2009, the first international non-recourse PF transaction for a PMGD closed in 2019, thanks to Natixis. The bank acted as sole lead arranger in four of these portfolios, underwriting 100% of the deals in all cases. This structure became a benchmark and the bank continued working like this through 2020, with other institutions trying to follow the lead.

In order to win this award, however, Natixis proved also to be flexible and diverse. It has a strong track record of project finance transactions across various countries and sectors, with jurisdictions including Chile, Brazil and Mexico, and sectors varying from renewables to power to telecommunications.

"We are honored to receive this prestigious MLA of the Year award from *IJGlobal*. Our dynamic team takes great pride in having the trust of our clients to continuously deliver tailored and innovative infrastructure transactions across LatAm," said Aitor Alava, head of infrastructure finance for Latin America at Natixis.

A standout deal was the largest ever solar portfolio financing in Latin America with the sale of 80% of Enel Green Power Mexico to CDPQ. The transaction, agreed on in 2018 and closed in 2019, was an important step towards green financing in the region.

Funding for the 1,088MW portfolio totaled $609 million, split into a commercial tranche, a fixed rate tranche and a development bank tranche. Natixis acted as joint bookrunner and joint lead arranger for the financing and was also the hedging bank.

"The 12 deals that we closed in 2019 demonstrate our deep sector knowledge and our commitment to broadening the universe of investors in LatAm infrastructure. Our momentum continues in 2020, supported by Natixis' focus on LatAm as a key region, infrastructure as a strategic sector, and exceptional execution abilities across loans and capital markets offerings alike," said Alava.

## Latin American bond arranger of the Year **Citigroup**

Citigroup's stellar year in Latin American energy and infrastructure bond arranging was marked by highlights such as the introduction of new institutional asset classes, the franchise's entry into new countries and multi-level financings across subsectors including power, renewable energy, transport and petrochemicals.

One notable innovation was the introduction of floating production, storage and offloading (FPSO) to the bond market as a distinct infrastructure asset class, with Citi leading on the debut transaction – MV24 FPSO – as well as a follow-up – Libra FPSO.

These deals positioned FPSO as a core infrastructure asset class within energy, unlocking access to new pools of credit beyond the bank market and export credit agency financing.

The refinancing of MV24 through a 144A / Reg S project bond provided a more efficient and diversified capital stream, bringing in $150 million in dividends for new project investments.

*The $1.1 billion transaction was also the largest Brazilian debut offering in five years.*

The $1.1 billion transaction was also the largest Brazilian debut offering and the largest infrastructure issuance in more than five years, the largest Latin America infrastructure bond since 2017, and the first bond to be issued by a Brazilian borrower with a higher credit rating (BB) than the sovereign (BB-).

Citi's dialogue with institutional investors and sound credit approach also enabled it to optimise execution and structures for unrated transactions, such as Libra.

In that deal, Citi delivered multi-level solutions for sponsor Teekay Offshore Partners at various points of the asset's lifecycle, from greenfield construction lending through operations, advising the client on the right investor or lender base for each objective. Citi also arranged a high yield project bond for Braskem-Idesa to refinance the first stage of the largest petrochemical plant in Latin America, as financial adviser and joint bookrunner.

The unique structure incorporates fall-away provisions so that project finance and covenant security packages are initially maintained – and the bond ranks pari passu with pre-existing project debt – until the project debt is repaid, at which point the bond reverts.

## Latin American sponsor of the year **Engie**

Led by Latin American CEO Frank Demaille, Engie is recognized for its growing presence in power, renewable energy, transmission and midstream gas across the whole region, as well as its deployment of complex financing techniques.

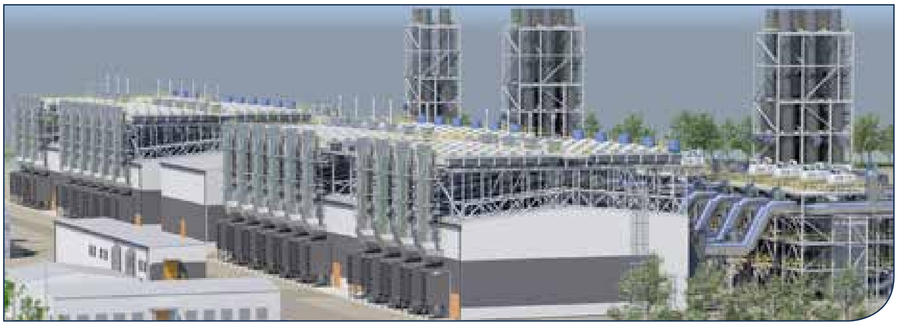
The company's marquee deal in the region last year was its R31.5 billion ($8.6 billion) acquisition, privatization and financing of Petrobras' gas pipeline subsidiary Transportadora Associada de Gás (TAG), alongside co-investor Caisse de dépôt et placement du Québec. The $6 billion debt package, comprising R14 billion in 7-year debentures and a $2.45 billion 8-year syndicated term loan, has been picked as Latin America M&A deal of the year. TAG owns 4,500 km of gas pipelines, 12 compressor stations and 93 city gates, representing 47% of the Brazil's gas infrastructure.

Also in Brazil, Engie acquired transmission concessionaire Novo Estado Energia from Sterlite for R410 million ($88 million), tapped BNDES for R1.26 billion ($312 million) to finance its Umburanas wind complex in Bahia, and raised R$168 million ($40 million) from Banco do Nordeste for the Assu V solar park in Rio Grande do Norte.

In Mexico, Engie and co-sponsor Tokyo Gas closed an $806 million deal for their 721MW Golden Eagle greenfield wind and solar portfolio in November. It was among the first financings of large-scale renewable energy projects with power purchase agreements from CENACE's third power auctions.

In Chile, aside from developing a 1GW greenfield wind and solar portfolio, Engie displayed its power marketing prowess, stricking deals to supply renewable energy to the Antucoya copper mine in May and signing a contract to purchase the output of Atlas Renewable Energy's 230MW Sol Del Desierto solar plant shortly thereafter.

## Latin American financial adviser of the year **Astris Finance**



There is nothing new under the sun. Astris Finance is starting to get familiarized with being chosen as Latin American financial adviser of the year, having won this award before and as recent as last year.

Exclusively focused on raising financing for energy and infrastructure projects and active in the region for two decades, Astris had its best year in 2019. The advisory firm closed approximately $3.5 billion of financing for 15 projects across all sectors, including transportation, power, and renewable energy.

Geographically, deals closed in developed markets such as Chile, Mexico and Brazil, and also in emerging economies such as El Salvador or Argentina and Uruguay.

This international and diverse experience gives Astris creativity in fundraising. Strategies used included local banking financing, international syndication, agency financings, capital markets transactions and landmark private placements.

It is challenging to choose the best standout deals for Astris in 2019. Many had a huge impact on the local markets in which they closed, such as Uruguay's Ferrocaril Central project. The largest PPP ever financed through international PF in the country, the 273km railway cost over $1 billion.

Financing was innovative and complicated, including four tranches of senior debt that comprised A/B loans and a combination of DFIs, commercial banks and local funds.

Challenges faced in the region included capping four years of development work at the large-scale LNG-to-power project in El Salvador, Energia del Pacifico, with a $657 million multi-source limited-recourse financing. With an 18-year tenor, DFIs provided three loans in addition to an ECA-covered debt.

Majority owned by Invenergy along with Quantum Energy, the 378MW Energia del Pacifico project involves the development, construction, and operation of an LNG-to-power plant. It will have a high developmental impact in the country, adding 30% of available installed baseload capacity, which facilitates energy supply reliability and price stability.

## Latin America legal adviser of the year (international) **Milbank**

Milbank had a very busy 2019 in Latin America, topping the *IJGlobal* project finance league table for the region with no fewer than 26 transactions, including several large and innovative financings, as both sponsor and lender counsel, across the full range of infrastructure sectors.

Among the most complex deals was the project financing of Irish developer Mainstream Renewable Power's 571MW Condor renewable energy portfolio in Chile.

Milbank advised the sponsor, sitting across the table from the club of six banks that provided the $580 million 19-year debt package, which reached financial close in November.

Complexity was injected into the deal by a 24-hour clause in the projects' power purchase agreements, which were awarded in a government auction in 2016.

With Milbank's advice, the sponsor created an innovative platform that could fulfill the 24-hour contracts while mitigating market risks.

Also in Chile, Milbank represented the lenders on the $2.5 billion financing of the expansion of the $6 billion Quebrada Blanca Phase 2 (QB2) copper mine in Tarapacá. It was the first project finance loan in 7 years for a major mine project in the country.

In Brazil, Milbank advised on the financing of the 1.3GW first phase of the GNA I Port of Açu LNG-to-power project. For Milbank's clients, BNDES and KfW IPEX-Bank, the deal marked the beginning of a new partnership. The R$4.5 billion ($1.2 billion) debt package closed in August.

Milbank's work in the region in 2019 also included the financing of Celeo Redes' transmission assets in Chile and the refinancing of Braskem Idesa's petrochemical complex in Mexico.

## Latin American legal adviser of the year (local) **Pinheiro Neto Advogados**

The judging panel debated hard over whether to choose a Brazil-based and Brazil-focused law firm as best Latin American legal adviser of the year. However, Pinheiro Neto's work in 2019 stood out, including not only a large number of deals but also the participation in landmark transactions and the development of sophisticated funding structures that accommodated the needs of complex projects.

A very diverse practice, the full-service firm works on financing and capital markets laws and regulatory areas, including electric power, oil & gas and transportation. Working with both lenders and project sponsors, the team advises clients in local and international funding transactions.

Even a deal that at first sight could look traditional, such as a power plant getting a loan with development banks, ended up having innovative structures. There is no better example than the financing for Gás Natural Açu, a joint venture formed by Prumo Logística, BP and Siemens.

Its SPV – UTE GNA I Geração de Energia – raised funds for the development, construction and implementation in Açu Port of a 1.3GW thermal LNG plant, including a regasification terminal. Financing comprised a tranche in local currency of R1.76 billion with the Brazilian development bank BNDES, guaranteed by KfW-IPEX. Additionally, it included a real-linked loan equivalent to $288 million with IFC, closing an innovative structure that is expected to become a benchmark for similar projects in the country.

Another highlight was the use of capital markets to obtain long-term funding for Rumo's investments in the North-South Railway infrastructure. Brazil's logistics traditionally focus on roads, but the current government is trying to prioritize railways and the North-South Railway is at the center of it.

Considered a priority by the Ministry of Infrastructure, the project raised R1.2 billion in infrastructure debentures, one of the largest emissions of the tax-incentivized bonds in the logistics sector in Brazil in 2019.

## Latin America technical adviser of the year **Arup**

Arup was active all across Latin America last year, advising lenders on more than 15 transportation and energy transactions in the region, and it came as no surprise that investors and lenders continued to turn to the firm for advice on their entries into new markets.

Building on its pioneering work on the Colombia's 4G road development projects in previous years, the company was brought in to advise the lenders on the second ever P3 toll road to reach financial close in Uruguay – the Circuito 3 project. The company crunched the capex and opex numbers and helped cement international best practice for CAF, Fondo de Deuda para Infraestructura en Uruguay CAF I and Santander, facilitating a $139 million loan.

Meanwhile, the company demonstrated the strength and depth of its practice particularly clearly in 2019 through its ability to field teams simultaneously to assist with two large, diverse portfolios of concessions in Mexico.

In one of the deals, Arup advised two Canadian pension fund managers – Canada Pension Plan Investment Board and Ontario Teachers' Pension Plan – on their joint acquisition of a 40% stake in IDEAL, which includes greenfield and operational highway projects, logistics terminals and wastewater assets, including the largest wastewater treatment plant in the world – Atotnilco WWTP.

Arup drew on its resources not only in Mexico but also in Bogota, Madrid, New York and San Francisco, bringing its global experience of highway deals into play.

At the same time, the company was assisting Abertis and GIC on their acquisition of a 70% stake in highway operator Red de Carreteras del Occidente for €2.1 billion.

## Latin America corporate trust of the year **BNY Mellon**

Sponsors and lenders gave a tremendous vote of confidence to BNY Mellon as corporate trust provider in 2019, selecting the bank to service 59 project finance transactions globally, including several landmark deals in Latin America.

Staying ahead of the curve in corporate trust requires constant innovation to keep up not only with technological advances in reporting and analytics but also wider investing trends, perhaps the biggest and most important of which in recent years has been the environmental, social and governance (ESG) movement.

It is therefore noteworthy that BNY Mellon was entrusted with the servicing of Latin America's inaugural sovereign green bond issuance, a $2.5 billion offering from Chile that was sold into the US and European bond markets.

The Chilean government has ringfenced the proceeds of the bond for projects in the renewable energy, electrified transportation, water management and energy efficiency sectors.

Meanwhile, on a strictly project finance basis, the firm worked on key deals such as Paraguayan toll road concessionaire Consorcio Corredor Vial Bioceánico's issuance of $732 million in 15-year Euroclearable bonds. BNY Mellon was indenture trustee, registrar, transfer agent, paying agent, offshore collateral agent, calculation agent and securities intermediary on the transaction, which was the first bond issued internationally to finance Paraguayan infrastructure since the introduction of a law in 2013 to facilitate such investments.

Another prominent transaction for BNY Mellon was the refinancing of an expansion of line 1 of the Lima Metro public transport system in Peru with a $273 million project bond issued through a Cayman Islands entity. The owner of the SPV is GYM Ferrovias, a joint venture between Peru's Graña y Montero and Argentina's Ferrovías.

## Asia Pacific DFI of the year
## Asian Development Bank

The range of innovative financings by Asian Development Bank (ADB) during 2019 solidifies its position as a critical actor in the region's project finance market. ADB helped to structure the $37 million debt package of the Da Mi floating PV solar project – the first floating solar power project in Vietnam.

Kacific1 is a communications satellite providing broadband internet to remote areas in 25 nations throughout South East Asia and the Pacific Islands. The $160 million Kacific1 refinancing had an unusual mix of financiers: ADB, Leading Asia's Private Infrastructure Fund, MEAG, Commonwealth Superannuation Corporation and GuarantCo.

In 2020, ADB's private sector operations department (PSOD) is providing short-term emergency loans to support working capital liquidity of existing clients, due to the Covid-19 pandemic. ADB has signed a $20 million loan with China Gas to supply LPG to new hospitals in Wuhan and other cities and deliver natural gas to households and other end users.

"The COVID-19 pandemic has also impacted various transportation projects that are exposed to traffic risk," Jackie Surtani, ADB's PSOD infrastructure finance director for East Asia, Southeast Asia, and the Pacific region, tells *IJGlobal*. "These projects will need re-examination of projections and will require strong developers and financing partners."

Shantanu Chakraborty, infrastructure finance director for South Asia, and Central West Asia, adds: "We are also in active discussions with a number of renewable energy companies in India to assist them with their increased working capital and liquidity needs. Shifting west, we signed in June [2020] a $20 million loan to Afghan Power Plant Co – developer of a 58MW gas-based greenfield power generation project in Afghanistan." Surtani highlights Vietnam as an active market for PSOD, following the signing of TTC Energy's $51.5 million financing package – one of the first international limited recourse transactions in Vietnam's solar financing market – and the closing of Da Mi floating. He also notes Thailand. "We signed in May [2020] our first combined wind and battery storage project in southern Thailand with BCPG," Surtani says.

"Looking beyond 2020, the requirements for infrastructure in Asia and the Pacific region continue to be immense," remarks Chakraborty. "ADB's PSOD remains committed to continue to build on our mandate of supporting highly developmental and bankable projects in our key sectors like energy, water, transport, telecommunications, agriculture, health and education," adds Surtani

## Asia Pacific bond arranger of the year **HSBC**

HSBC had several high-profile transactions around the region during 2019. Among these was the $1.163 billion AES-VCM Mong Duong 2 refinancing – the first-ever project bond from Vietnam. It was also the first deal to combine a project bond and traditional bank loans to refinance an existing project financing in Vietnam.

"The non-recourse [debt service reserve letter of credit] was the most innovative aspect of the transaction," James Meffen, AES director of project finance, tells *IJGlobal*. "I think that was hard for everybody involved to agree on."

*"Given current trends we expect project bond investors to transition to other sectors."*

Other notable transactions with robust investor appetite included Azure Power Restricted Group 2 – with a final order book standing at about 1.6 billion, or 4.5x oversubscribed – and GMR Hyderabad International Airport – a deal to expand one of the strategic airports in eastern Indian.

"Given current trends we expect project bond investors to transition [from conventional power] to other sectors such as renewables and transportation," Remi Degelcke, HSBC director for infrastructure finance, says. "We are already seeing this in India where HSBC led five issuances in 2019, both for refinancing and expansion capex."

ReNew Power – India's largest renewable power producer – in January 2020 priced a $450 million senior secured 144A/RegS green bond. At some 7 years door-to-door, this is the longest tenor holding company bond by any Indian company, notes Degelcke. With a 40% amortization at the end of about 3 years, this is the first time any company in Asia has issued a bond with such a single-step amortization.

"Moving forward, I'm most bullish on renewable energy and land transportation projects over the short to medium term and most bearish on coal-fired power plants and carbon intensive sectors over the short term, and in the future," confides the HSBC director. "We expect the renewable sector in India to continue to attract bond investors in 2020."

Degelcke adds: "India will remain an attractive pipeline in 2021. Thailand, Indonesia, Philippines and Vietnam will be incredibly important as these countries recover post the Covid-19 crisis, as they develop into stronger and more sustainable economies. We feel these could all offer some very attractive investable opportunities."

## Asia Pacific MLA of the year
## DBS Bank

DBS' APAC team was hailed by judges as "one of the most flexible banks around". As a strong contender also in the financial adviser and bond arranger categories, judges remarked the bank is "punching above its weight".

DBS' project finance team is small but nimble and well-versed in structuring around the risk on deals, according to Subash Narayanan, deputy head of project finance. He points out that in 2019, with a team size of just under 20, they lent on more than 20 deals, in addition to advisories. The team grew in 2019, with an oil & gas specialist in Singapore and three additions in China.

"We are working with Chinese sponsors on structuring limited recourse financings," Narayanan says.

Judges were impressed with DBS' ability to support its client on Gimi floating LNG, to be deployed in West Africa outside the team's region. Judges noted too that on JTB Gas Processing many lenders dropped out, but DBS took a lead hedging role and held as the financing structure was renegotiated.

Global banks are jostling for a foothold in Asia's nascent offshore wind sector, led by Taiwan. DBS drew on its structuring experience in APAC renewables, such as on Taiwan's largest solar corporate PPA, to win a leading role as technical bank on Formosa 2 in 2019, and then CFXD in 2020.

"For these kind of roles there has to be confidence in us that we will be able to find solutions to any risk outcomes from the due diligence," Narayan says. The bank is now keen to win financial advisory mandates in offshore wind.

Looking ahead, Narayanan says the project finance team's strategy includes facilitating the energy transition from thermal energy to renewables, including a shift from long-term PPAs to corporate PPAs and the progress of distributed generation.

Another related impact of energy transition is grid disruption and managing intermittency. LNG/gas-to-power are crucial in this, and DBS has related mandates in Vietnam and Myanmar.

A third theme is supporting base metals mining, especially to provide raw materials for the energy transition. The bank has a mandate on a nickel-cobalt smelter in Indonesia, along this theme.

Finally, with the rise of sustainable cities, Narayanan expects greater focus on financing waste-to-energy and urban transport.

## Asia Pacific financial adviser of the year **HSBC**

HSBC won acclaim from the Asia Pacific judging panel for advising on a mega greenfield transport PPP in the Philippines, a deal that was "a very long time in gestation", and for its leading role on the debut power project bond in Vietnam.

For the Ps55 billion Cavite Laguna Expressway PPP, delivering a new 47km, four-lane toll road under a build-operate-transfer concession, the demand risk lies with the concessionaire. The procurement process was competitive and had to be re-bid after the rules changed. For the sponsor, Metro Pacific, HSBC was further able to maintain competitive tension between the local bank financiers over a long period of time, as the government's land acquisition was significantly delayed.

For the refinancing of the AES-controlled 1.2GW Mong Duong 2 coal power plant in Vietnam, HSBC structured both the first project bond and the first IPP refinancing in the country. The deal also featured the first non-recourse debt service reserve letter of credit in an Asian project financing, used instead of a conventional cash-funded debt service reserve account. "HSBC is a leading bank across relevant financing products and has long-standing relationships across the whole spectrum of funding providers, including commercial debt, multiplayers, ECA, public or private debt capital markets. This ensures we're acting as a truly independent advisor, with no bias towards particular funding types," says James Dynon, head of infrastructure, export and asset finance, Asia Pacific.

Looking ahead, the advisory team has a number of transport, renewables and energy transition mandates. "These include a large offshore wind greenfield project in Taiwan, featuring a unique contractual structure, as well as high speed rail projects in South-East Asia and a satellite PPP in Indonesia," says Dynon. The bank also has ongoing assignments in Vietnam and India.

According to Dynon, HSBC's strategy focuses on three main components: assisting clients in funding the large infrastructure backlog in Asia, accompanying clients on the transition to a low-carbon economy, and helping them recycle the capital they have invested.

"From a financial advisory perspective, this translates into selectively focusing, for instance, on large complex greenfield projects where we can add value by ensuring contractual discipline, thorough due diligence, and relevant choice of partner down the supply chain, to deliver optimum financing structures," he adds.

## Asia Pacific legal adviser of the year **Norton Rose Fulbright**

NORTON ROSE FULBRIGHT

For global law firm Norton Rose Fulbright, judges were impressed by the APAC team's 2019 achievements in working on a particularly "diversified" set of deals, notably in some "very difficult geographies".

Among 2019 financial closes, the firm advised Korean sponsors on a 15MW high dam hydropower project in Solomon Islands, a remote Pacific islands nation totally reliant on imported diesel, with one of the highest energy costs globally. This is also the Solomon Islands' first PPP.

NRF has put a big focus in recent years on the importance of Korean clients, according to Nick Merritt, APAC head of infrastructure, mining and commodities, with this mandate among successes.

Meanwhile, in 2019 Merritt's team and the firm's technology industry group collaborated on innovative digital infrastructure mandates.

With a critical role as sponsor's legal adviser on the Kacific1 satellite, serving from Pacific islands across to northwest Asia, NRF has positioned itself as an expert in a niche subsector.

The firm continually wins work with rapidly growing APAC data centre developer AirTrunk, and was adviser on its S$450 million financing for Singapore's largest neural data centre at 60MW. The APAC team is set to maintain that diversified portfolio of work in the next couple of years. Merritt points to continued work in Asian conventional power, resources and petrochemicals. Transport mandates includes the immense, albeit delayed, Kuala Lumpur-Singapore HSR.

"We're seeing the renewables wave in offshore wind moving south from Japan and Taiwan and we'll look to keep focus on this sector as it moves to south and southeast Asia," says Merritt. Meanwhile the Australian team has been advising on energy storage, as developers integrate batteries into wind and solar projects, and on aggregated corporate renewables PPAs.

The firm is also increasingly winning work with a new type of client. "Our Australian colleagues have significant government advisory experience, but also in the last 18 months we have started to do government advisory in Asia. We have mandates with IFC and ADB on waste-to-energy and water PPPs in Indonesia."

"The high volume of project finance deals speaks to the coverage that we have," Merritt said, also highlighting the team's diversity: "At least half of our infra and energy leadership team in APAC is female."

## Asia Pacific sponsor of the year **wpd**

German developer wpd closed several transactions around the world during 2019, including two offshore wind behemoths: the €2.36 billion ($2.61 billion) Saint Nazaire off the coast of France and the NT$94 billion ($2.98 billion) Yunlin in the Taiwan Strait – the largest offshore wind project financing in the region to date. The renewables energy company in 2H 2020 anticipates commissioning the Yunlin turbines.

"We have a strong focus in Asia," CFO Björn Nullmeyer tells *IJGlobal*. "We intend to close the financing of the Guanyin offshore wind project in Q4 2020," he adds. Meanwhile, the Bremen-based company is developing, with a local partner, five onshore wind farms in South Korea with a combined capacity of 160MW. Expansion into the Philippines and Japan is also part of wpd's growth strategy in Asia.

The CFO expects to get all approvals and sign the Guanyin PPA during the summer. On the debt financing, Yunlin banks are returning for the 350MW Guanyin. He confides: "We are happy to see more ECAs and potential lenders interested." On the equity financing, the CFO confirms that wpd is seeking to sell a minority stake in Guanyin aligned with reaching financial close. "Based on the good experiences with the Yunlin financing, there is a good level of investor interest in an attractive project like Guanyin," says Nullmeyer.

While the Taiwan Government has yet to announce the date for the 10GW third round offshore wind auction, the CFO shares that "wpd is pleased to be developing an offshore project with such an experienced partner as Taiwan Green Power, a member of the LeaLea Group". They expect to bid an up to 600MW project at Site No. 28 in the auction. Nullmeyer adds, "Thanks to the corresponding preparatory work by our partners and the expertise of wpd regarding the local content strategy, our cooperation is ideally positioned."

Beyond Taiwan, wpd is excited about opportunities in France. "In Europe, we see the development of the French wind energy market as very positive," says the wpd CFO. "Coming after the 497MW Fécamp will be the French Courseulles project in which wpd has a 15% shareholding. We are also closely monitoring the onshore markets in Asia and South America, where promising prospects are emerging."

## MENA MLA of the year **Natixis**

Natixis participated on an impressive eight deals in MENA over the course of 2019 that also demonstrated their regional omniscience due to the bank's role in the biggest transactions from Algeria to the UAE.

Perhaps most notable of all of these was the 909,200 m3pd Taweelah IWP in Abu Dhabi, which was closed on 16 October 2019 by Saudi developer ACWA Power. The sponsors of Taweelah were able to achieve the cheapest water tariff in the world after conditions precedent resulted in a lower offtake price – not to mention it being the largest IWP in the world.

Natixis also took part in another ACWA Power project – the fourth phase of DEWA's Mohammed bin Rashid Al Maktoum Solar Park (MBR), or DEWA IV CSP-PV. This project was prominently supported by Chinese investors, but Natixis and two other lenders provided a $828 million commercial bank tranche – a soft mini-perm, starting at 200bp.

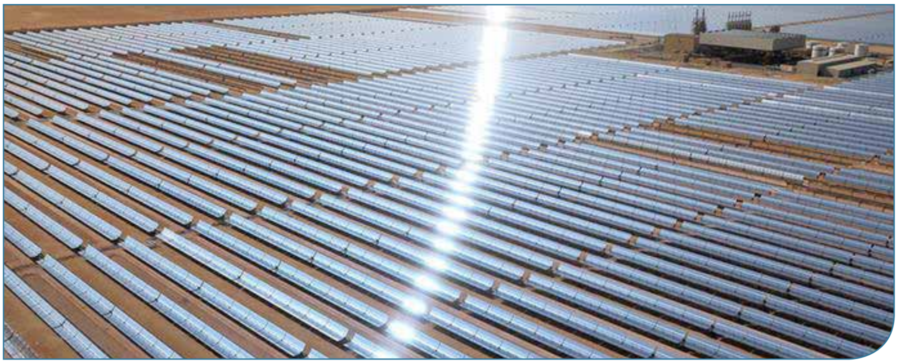
DEWA IV is the first addition to the MBR to include CSP, part of which will shoot up into the air on what will be the tallest solar tower on the planet at 260 metres.

Elsewhere in the renewables sphere, Natixis also lent on Saudi Arabia's first ever utility-scale wind farm – the 400MW Dumat al Jandal – part of the country's REPDO.

Adel Elsohl, the head of infrastructure finance for MENA at Natixis said: "We are greatly honored to be presented with this prestigious award for the first time in the region and are proud to be among the *IJGlobal* annual award winners, one of the most respected publications dedicated to the infrastructure space. This award recognizes the bank's historical dedication to the region and the tremendous work of our infrastructure finance team with an expertise closely aligned with the needs of our clients operating here in MENA.

"This recognition also reflects our strong commitment as an industry leader across numerous sectors, and combined with Natixis' efforts to place green and sustainable projects at the forefront of our strategy going forward, confirmed through the implementation of the Green Weighting Factor in all our internal analyses since its implementation in September 2019."

## MENA financial adviser of the year **SMBC**



SMBC was a financial adviser for both developer consortia and implementing authorities alike for deals both newly mandated and closed in 2019.

The Japanese bank was particularly successful in Saudi Arabia as it continues to advise government authorities on the buildout of the renewables and water sectors in the desert kingdom. SMBC is advising Saudi Arabia's Renewable Energy Project Development Office (REPDO) which concluded its first round in 2019, while launching rounds two and three.

A consortium led by EDF and Masdar reached financial close on the 400MW Dumat al Jandal on 9 July 2019 which completed REPDO's first round, following the close of the 300MW Sakaka solar PV in 2018. Both projects are pioneers in the Saudi market and proved valuable enough experience for REPDO to retain SMBC as its financial adviser for subsequent rounds – the authority prequalified 60 firms for the 1.4GW round 2 in June 2019 and launched its 1.2GW round 3 just before the end of the year.

Such is the Saudi trust in SMBC that the rechristened Saudi Water Partnership Company (formerly WEC) appointed the bank as its financial adviser on 28 May 2019 for the second batch of independent sewage treatment plants (ISTP) – all 615,000 cubic metres per day (m3pd) of effluence to be built out through Buraydah 2, Tabuk 2, and Madinah 3. Moreover, Saudi Aramco picked SMBC for its 940MW Tanajib co-gen power plant, the RFP for which was launched on 9 March 2019. SMBC advised the sponsors on the successful financial close of $1.4 billion, 1.8GW combined-cycle Hamriyah power plant in the Emirate of Sharjah. The deal was concluded in May 2019, including SMBC and five other lenders on a NEXI-covered commercial bank tranche of $516 million, which priced at 135bp over Libor. SMBC et al. also provided a $58 million uncovered tranche priced at 200bp.

Back in Saudi Arabia, SMBC again advised and lent to the sponsor Saudi Aramco Total Refining And Petrochemical (SATORP) for the $2.245 billion refinancing of its 400,000 barrels per day oil refinery in Jubail. SMBC led 22 other lenders on the deal in December 2019.

## MENA sponsor of the year **ACWA Power**

Two on the trot for ACWA Power after another dominant year which saw a high number of projects signed off in a bumper year for the Saudi water and power developer.

Over the course of 2019, ACWA Power closed on a slew of water sector projects with a combined desalination capacity of around 2,200,000 cubic metres per day (m3pd) across Bahrain, Saudi Arabia, and the United Arab Emirates. The year also saw the financial close of the 950MW DEWA IV CSP-PV in Dubai.

This was the first project of the year that ACWA Power closed – the fourth phase of Mohammed bin Rashid Al Maktoum Solar Park, on a spine of Chinese debt; a $2.19 billion facility with five lenders including the Silk Road Fund which became a 49% shareholder in ACWA Power in mid-2019.

ACWA Power ended 2018 by signing for the 600,000 m3pd Rabigh-3 IWP and then put it to financial close on 28 February 2019 with the use of the ever popular soft mini-perm format – a seven-year structure starting at 125bp over Libor.

In Bahrain, the company led the consortium that closed on the 1.5GW Al Dur 2 IWPP with a 227,000 m3pd desalination component on 28 June 2019. The financing includes a 14-year $225 million international tranche covered by Germany's ECA Euler Hermes and debt pricing as low as 105bp.

ACWA Power then reached financial close on the world's largest IWP and also the world's cheapest tariff for desalinated water in the 909,200 m3pd Taweelah facility in Abu Dhabi. The project financing was closed on 16 October 2019 on the back of a seven-year soft mini-perm with debt pricing as low as 90bp. The interest rate swaps that took place as part of the conditions precedent resulted in the lowering of the tariff paid for produced water down to $2.12389 per 1,000 gallons.

*IJGlobal*'s MENA sponsor of the year was not finished yet – the 682,000 m3pd Umm al Quwain is another UAE project but this time the debt was signed on a long tenor of 24.5 years but with a relatively low average debt pricing of 200bp.

## MENA legal adviser of the year **Allen & Overy**

ALLEN & OVERY

Allen & Overy had a well-rounded year with "success across the board" in MENA as one judge put it – chiefly by advising the lender teams of three major transactions in Bahrain, Saudi Arabia, and the UAE.

*IJGlobal*'s 2019 MENA Legal Adviser of Year was mandated for the ECAs on Bahrain Petroleum Company's (BAPCO) $6.6 billion Sitra refinery expansion on the island kingdom, the largest expansion of an oil refinery project ever to be attempted in the region. The project to expand Sitra's capacity from 267,000 to 360,000 barrels per day reached financial close in May 2019 with a complex financing package involving six ECA facilities.

The deal closed on 9 May 2019 and amassed just over $4 billion in debt, with ECAs covering over $2 billion, carrying a 12.5-year tenor. Two of these – KEXIM and UKEF – also provided a direct loan tranche of $357 million. A total of eight international and 11 regional commercial banks also took part in the debt financing. Allen & Overy advised the lenders on EDF and Masdar's 400MW Dumat al Jandal project – Saudi Arabia's first ever utility-scale wind farm and part of the country's first round of renewables procurement. The $270 million debt package attracted six lenders for 20-year soft mini-perm with pricing starting in the low 100bp over Libor and rising in step-ups to the high 200s.

Elsewhere in the renewables sector, the law firm also advised the lenders for ACWA Power's $4.4 billion, 950MW DEWA IV CSP-PV which constitutes the fourth phase of DEWA's Mohammed bin Rashid Al Maktoum Solar Park (MBR) in Dubai. The project financing was majority financed by five Chinese lenders through a $2.19 billion tranche, but also includes one local and two European commercial banks that provided an $828 million commercial bank tranche. The debt was provided on a soft mini-perm basis, starting at 200bp, before ramping upwards to 330bp.

Up to 100MW of DEWA IV's CSP will be built out on a 260-metre-tall solar tower – which is yet higher than the next tallest CSP tower in the world at Ashalim power station in Israel's Negev desert.

## MENA model auditor of the year **BDO**

Our MENA awards judges told *IJGlobal* that BDO's "strong volume across the region" in 2019 puts it in a "dominant position" not only globally but also regionally in MENA.

BDO was the model auditor for Lekela Power's 250MW West Bakr wind farm in Egypt which achieved a lower capex and lower tariff than a similar wind project that the sponsor failed to win when the tender concluded in April 2015. Three DFIs – the IFC, OPIC, and the EBRD – lent on a $250 million debt package priced at just over Libor+400bp.

It was also the model auditor for the Emirate of Sharjah's first ever IPP – a Sumitomo-led consortium put the $1.4 billion, 1.8GW combined-cycle Hamriyah power plant to financial close in May 2019. The deal involved six lenders on a NEXI-covered commercial bank tranche of $516 million, which priced at 135bp over Libor and an uncovered $58 million tranche priced at 200bp.

BDO worked with both the sponsors and investors in the UAE and Japan, providing logistical challenges to ensure key milestones were met, but nonetheless BDO was able to provide expertise around specific aspects of the project. BDO advised on another project put to financial close by a Japanese developer consortium – this time led by Marubeni Corporation. This was the $600 million Shuqaiq-3 IWP located on the Red Sea coast of Saudi Arabia. Six commercial banks signed on for the $450 million debt-side.

Staying in Saudi Arabia, BDO also took part in the ground-breaking DEWA IV CSP-PV project. This was the $4.4 billion, 950MW fourth phase of DEWA's Mohammed bin Rashid Al Maktoum Solar Park (MBR) in Dubai. In Qatar, BDO was the model auditor for Kahramaa's $486 million expansion of the Facility D IWPP which was closed in November 2019 and entails the addition of 280,000 cubic metres per day of water capacity. The new financing retains as many features as possible from the April 2016 financing, but through separate teams. BDO was required to reassure the expansion lenders, in addition to reassuring the existing lenders that the existing debt repayments will not be impacted by the expansion.

IJGlobal Awards 2019

# Europe & Africa

It is with great pleasure – but sadly not in the splendour of London's Natural History Museum – that we announce *IJGlobal*'s winners for European and African awards for company activity and transactions closed over calendar year 2019.

Sadly, due to the coronavirus pandemic, we were forced to cancel the March dinner and ceremony in the spiritual home of *IJGlobal* Award Nights, under the watchful gaze of dinosaurs from the industry and pre-history alike.

Winners in the institutional category were voted on by senior figures from across the regional infrastructure and energy community – none allowed to vote in their own business areas – in what is widely regarded to be the most independently-judged awards in this sector.

**Winners in the European transaction category are:**

- Battery Storage – **Yorkshire Solar and Battery Hybrid**
- Oil & Gas – **Kellas Refinancing**
- Innovation – **Allego**
- Ports – **Gdansk Port**
- Refinancing – **Beatrice offshore wind**
- Waste – **Belgrade Energy from Waste**
- Portfolio Refinancing – **Project Keane Refinancing**
- Utility – **Elenia Heat**
- Power – **Neart Na Gaoithe**
- ESG Finance Innovation – **Soma 4 Project**
- Renewables Acquisition – **Kisielice onshore**
- Social Infrastructure – **Irish Social Housing Bundle 1**
- Telecoms – **EllaLink Subsea Cable**
- Transport – **Silvertown Tunnel**
- Restructuring – **Irish Schools Bundle 5**

**Winners in the African transaction category are:**

- Mining – **Guinea Alumina Project**
- Oil & Gas – **Gimi Floating LNG**
- Transport – **New Owendo International Port PPP**
- Refinancing - **Societe Ivorienne de Raffinage**
- Power – **Bridge Power**
- Renewables – **Kahone and Toube Solar**

## European Battery Storage
### Yorkshire Solar and Battery Hybrid

The Hybrid solar farms in Yorkshire and Hull are the first of their kind in the UK, built without any reliance on subsidies which are the life blood for most clean energy projects around the world.

The solar farm in York uses 90,000 Suntech bifacial panels which facilitate energy production from both sides of the panel to generate 34.7MWp using a 27MW battery, in what is being called a "pioneering" model for the commercial production of solar energy in the country.

Bifacial technology uses light bounce, also known as Albedo, to produce energy from the underside of the solar panel, maximising energy production without increasing costs.

The Hull project is modelled around the same technology and financing and enabling the local Warrington Borough Council to be the first in the UK to produce all its own electricity from green sources.

Sustainable energy technology developer, Gridserve, and Warrington Council closed the project financing on both the farms with a combined capacity of 62MW, supported by the 27MW storage facility.

Gridserve prides itself on building "intelligent energy storage" which allows it to shift energy to a time when it is more valuable and providing grid services around the clock.

*It is wonderful to be recognised for being a part of a project that is the first of its kind in the UK.*

The batteries are being provided by the Chinese technology company Sungrow which is a subsidiary of Samsung. Gridserve has said that procuring finance for the first farm in York was challenging as banks were hesitant to invest in new technology but its efficiency and profitability made funding the farm in Hull infinitely easier.

Following the successful implementation of the two projects, Gridserve claims it has a "grand pipeline" of projects within the UK including a 100MW farm across four sites.

Chief investment officer of Gridserve, Mark Henderson, said: "It is wonderful to be recognised for being a part of a project that is the first of its kind in the UK. The model we used has the potential to be the road map for other solar energy farms as we proved that such projects can be executed without reliance on public grants."

## European Oil & Gas
### Kellas Midstream Refinancing

In the months leading up to Antin Infrastructure Partners' sale of the Kellas midstream assets, the sponsors hired Natixis as mandated lead arranger and bookrunner to refinance the assets of strategic geopolitical importance.

Kellas Midstream business consists of the Central Area Transmission System (CATS), Esmond Transportation System (ETS) and the greenfield construction project Humber Gathering System – which transport gas from the North Sea to the UK.

The refinancing only impacted CATS and ETS with the Humber Gathering System sitting outside the financing.

The financing structure was underpinned by the pipeline's over-performing past, its connection to large gas fields and its exploitation by key oil majors and integrated utilities.

In the refinancing, Natixis was supported by five other lenders on the £670 million ($852 million) underwrite: RBC Capital Markets, Lloyds Banking Group, ABN Amro, Scotiabank, Santander.

Then an additional 10 banks joined the syndication process: AIB, Banca IMI, Barclays, BBVA, BMO, BNP Paribas, CBA, CIC, Crédit Agricole, NatWest.

The tenor of the new debt is five years, and the pricing was rumoured to start at Libor +150bp, rising to 165bp, 175bp, 200bp and 245bp.

The transaction included a £40 million revolver and a £250 million uncommitted accordion facility.

The successful refinancing saw banks compete to lend on the refinancing of debt on Kellas' operational assets, later leading to a competitive auction process which saw Singapore sovereign-wealth fund GIC and Blackrock acquire the asset for around £1.5 billion a year later.

The CATS pipeline is a 404km subsea pipeline connecting 34 producing fields from a fixed offshore riser platform in the central North Sea to an onshore gas processing terminal in Teeside, on the north east coast of England. ETS is a 165km long subsea pipeline in the Southern North Sea connecting producing fields to the Bacton gas terminal.

## European Innovation
### Allego

In May 2018, Meridiam announced the acquisition – fully funded with equity – of 100% shares in EV charging provider Allego from Alliander through the Meridiam Transition Fund. Meridiam mandated Societe Generale to structure the financing of a general-purpose facility to fund its development and geographic expansion in Europe.

Allego rolls out, operates and provides services linked to EV charging stations and associated digital solutions. It has more than 10,000 charge points installed in Europe (enjoying market leading positions in the Netherlands and Germany).

With electric vehicle uptake expected to increase exponentially in the next decade – in 2030, one in three car sales is expected to be EV-based according to one estimate – Allego will need to invest heavily in R&D and IT expenses. The amount to be financed in the next five years is roughly €230 million.

Lenders Kommunalkredit and Societe Generale proposed a tailor-made structure suited to Allego's needs, with strong covenants to monitor the sustainable growth of the company. It provided a €150 million debt facility (including a €30 million accordion), with a seven-year maturity and an availability period of five years, cash sweeps, and a bullet repayment profile.

The debt is a senior financing of Allego, without recourse to Meridiam and includes an extensive security package and strong covenants to monitor the growth of the borrower, its profitability, and debt sizing.

A joint syndication targeting both investors and banks attracted experienced players including Edmond de Rothschild via its BRIDGE platform, La Banque Postale Asset Management and SCOR Investment Partners.

The arrangement marks the first-of-a-kind financing in an infrastructure asset class of the future with a borrower whose strategy allows it to strongly mitigate the ramp-up risk related to the transition to EV mass market.

The 2026 horizon for debt maturity should give enough comfort regarding the EV market take-off and Allego's strengthened position to envisage refinancing the amount outstanding.

## European ports
## Gdansk Deep Sea Container Terminal

Gdansk Deep Sea Container Terminal (DCT) is one of the terminals within the Port of Gdansk and is located on the southern coast of the Baltic Sea. It is the country's only deep-water container terminal able to receive ultra large container vessels and handled volumes of 1.9 million TEUs in 2018.

The company – located strategically to serve as a major gateway into Poland and Central-Eastern European markets – was at the end of May last year (2019) acquired by a consortium of IFM Investors, Singapore-based port operator PSA International and the state-owned Polish Development Fund (PFR).

They acquired 100% of the container terminal from Macquarie, which sold its 64% stake from Macquarie Infrastructure and Real Assets' Global Infrastructure Fund II, and Australian superannuation funds Motor Trades Association of Australia Super (18%), Australian Super (9%), and Statewide Super (9%).

PSA International now owns a 40% stake in the asset, while IFM Investors and Polish Development Fund own 30% each.

For the transaction, the enterprise valuation for the asset was €1.3 billion and EBITDA multiple was 17.6x.

The new owners intend to further strengthen DCT Gdansk's position and to look into additional expansion needs as and when relevant.

A group of eight lenders and lead arrangers including BNP Paribas, BGK, Bank Pekao, CIBC, EBRD, PKO, PZU, and Societe Generale provided acquisition financing for the asset. The banks provided a debt package of €382.5 million which comprised a €300 million acquisition term loan to refinance existing debt and finance the acquisition, a €70 million expansion capex facility, and a €12.5 million revolving credit facility. All the loans have a five-year tenor.

UBS acted as the financial adviser to the buyers, while advisers to Macquarie were Goldman Sachs, Clifford Chance, EY, Moffatt & Nichol and Environmental Resources Management. White & Case advised the lenders on the transaction.

## European refinancing – **Beatrice Offshore Wind**

With a strike price at £140 per MWh over a 15-year contract, the 588MW Beatrice Offshore Wind Farm proved a highly attractive project for lenders, allowing its sponsors to slash debt pricing via a refinancing and release £500 million ($627 million) in equity.

Financial close on the £1.96 billion ($2.21 billion) refi, which was heavily oversubscribed, occurred on 9 July 2019.

Pricing on the new debt starts at 130bp above libor, with a step up to 145bp after the first five years and then one final step up to 160bp after 10 years. The SSE-led sponsor group was originally aiming for 125bp, and sources in the market had predicted it could be as low as 120bp in the run up to close.

Total debt on the project was increased to £2.45 billion during negotiations, allowing the sponsor consortium to change the gearing from 81.6:18.4 in the primary financing to around 94.2:5.8 in the refinancing, releasing around £500 million in equity to the owners.

Ticket sizes varied between lenders, with some commitments scaled back. There were 29 lenders in total on the deal and 24 hedging banks. Most of the debt came from commercial banks though there was also an institutional investor tranche. Lenders on the refi included AIB, Bank of China, BNP Paribas, CaixaBank, Credit Agricole, HSBC, ICBC, LBBW, KDB, KEB Hana Bank, Lloyds, Mizuho, MUFG, Norinchukin Bank, SMBC, Santander, SMTB, Societe Generale, Siemens Bank.

Pricing on the original debt came in at 200bp-210bp, stepping up as soon as construction completed (May 2019). The tenor of the debt, which signed in 2016, was 15 years. The primary financing reached financial close on 20 May 2016.

Located 13km off the Caithness coast in Scotland the project is the fourth largest offshore wind farm in the country. The development site covers an area of around 131.5 square kilometres.

## European waste
### Belgrade Energy from waste project

In October last year (2019), Suez, Itochu and Marguerite brought a landmark waste-to-energy (WtE) PPP project to financial close in Serbia's capital city.

Beo Cista Energija (BCE), the project SPV, is responsible for shutting down one of Europe's largest open dumpsites still active and replacing it with EU-compliant sanitary landfill and waste disposal facilities which will process about 700,000 tons of municipal solid waste, construction and demolition waste annually.

As one of the first large-scale WtE projects financed privately in the Balkans, the Belgrade WtE project serves as a pathfinder for other cities in the region that are faced with similar waste challenges.

The project featured innovative risk allocation to deal with the challenges of implementing a complex project in an emerging market and involved non-recourse

debt financing alongside guarantees from the Multilateral Investment Guarantee Agency (MIGA) to make the project bankable.

The sponsors used an equity bridge loan of about €90 million provided by Raiffeisen Bank International and UniCredit.

MIGA provided guarantees of €97.3 million for up to 20 years against non-commercial risks. The guarantees cover up to 90% of investor equity in the project company.

A non-recourse financing of €290 million included an A-loan of €72.25 million with an 18-year tenor from EBRD and IFC each, a B-loan amounting to €70 million with a 15-year tenor from UniCredit and Erste Bank, and a €35 million loan from Oesterreichische Entwicklungsbank (OeEB).

The debt also comprised concessional funding of €21 million from Taiwan International Cooperation Development Fund (ICDF) and €20 million from Canada-IFC Blended Climate Finance Program.

The IFC was the lead adviser to the City of Belgrade, and was in turn advised by Hogan Lovells, Karanovic & Partners and Fichtner on the project. Advisers to sponsors included UniCredit, Baker McKenzie, Wolf Theiss, KPMG, and Herbert Smith Freehills. Meanwhile, the lenders were advised by Clifford Chance, BDK Advokati, Arup, PwC and White & Case.

## European portfolio Refinancing
## **Project Keane Refinancing**

New York Stock Exchange-listed Brookfield Renewable Partners' refinancing of its Irish onshore wind portfolio, completed in June 2019, and was the winning entry for the European Renewables Portfolio Financing category.

Brookfield undertook the complex refinancing of 18 operational windfarms – with a combined output of 361MW, all in the Republic of Ireland – in advance of an asset disposal which commenced in the latter part of 2019.

The farms, divided between three financing portfolios, were rationalised into one consolidated financing portfolio with five lenders, who collectively provided €325 million.

The existing portfolios consisted of; seven wind farms financed in 2008 with eight lenders, nine wind farms financed in 2014 with four lenders and two wind farms financed in 2017 with three lenders.

Mandated lead arrangers on the debt package were Canadian Imperial Bank of Commerce (CIBC), Allied Irish Bank (AIB), Export Development Canada (EDC), Natixis and Sabadell.

The debt, including associated swaps, bears a fixed interest rate of 3.18% and matures in December 2032.

The key challenges faced in the process were integrating older merchant assets (up to 11 years old) with newer REFIT projects (less than one year old), determining the appropriate technical asset life of a wind farm, and managing the new market risks in the Irish market (ISEM process) as wind became balance responsible for the first time.

To realise the target debt level and preferred financing terms lenders and their advisers needed to understand and accept a number of new approaches to the challenges faced as the onshore wind industry evolves to a subsidy-free investment world.

## European Utility
## **Elenia Heat**

The sale of a Nordic district heating firm always attracts a competitive number of infrastructure funds, resulting in Finnish firm Elenia Heat changing hands at a 21x EBITDA multiple.

Given the attractive nature of the asset, the Elenia Heat auction led to a bidding environment which was so intense it may put off potential buyers for future deals as they fear a repeat of the Elenia divestment process that would price the asset beyond its reach.

Elenia Group launched a strategic review on announcing plans to divest the district heating division – Elenia Lämpö Oy – allowing it to focus on the core business of electricity distribution, Elenia Networks.

The first round of bidders attracted a DIF consortium, AXA IM with Adven, Vauban and Arjun Infrastructure Partners entering the fray for the deadline for final bids.

On 1 July 2019, the consortium of DIF Infrastructure V, SL Capital Infrastructure II – each holding 37.5% – and Local Pensions Partnership Investments holding the remaining 25% was selected as the winner to acquire 100% of the Finnish asset.

The enterprise value of the asset at the time of the sale was around €525 million ($585.7 million) and was funded through 60% equity and 40% debt.

SEB acted as lead bank in arranging the €280 million debt package as well as serving as facility and security agent. The entire banking team included BNP Paribas, CIBC, DNB, National Australia Bank, OP Financial Group and SEB.


Each bank lent €46.7 million towards the acquisition and the debt packages comprised a €210 million acquisition term loan, a €15 million working capital facility and a €55 million revolving credit facility.

The debt has a five-year tenor and was lent at margins of Euribor +175-250bp.

## European power
## **Neart Na Gaoithe**

Neart Na Gaoithe (NNG) offshore wind farm saw a decade pass between development rights being awarded in 2009 and reaching financial close in 2019 where final sponsors EDF raised construction debt while selling down equity simultaneously.

Mainstream was first awarded exclusivity rights to develop the project in 2009. The UK's Department of Energy and Climate Change awarded the project a contract for difference subsidy in December 2013, which was taken away and given back twice before finally being awarded in March 2017.

In the meantime, the wind farm also lost its planning permission after Scottish courts ruled the project presented a risk to wildlife – a decision that was also appealed and overturned in July 2017. After it concluded all legal battles, Mainstream sold the windfarm to EDF Renewables in May 2018, and it quickly reopened the project to fresh investors in October.

*EDF entered negotiations with Irish utility ESB to take a 50% stake.*

EDF Renewables sought out new debt to leverage its stake in NNG in January 2019 while finding a bidder to take a stake in the project.

EDF entered negotiations with Irish utility ESB to take a 50% stake and signed the £1.6 billion ($2.1 billion) project finance debt with a club of 25 lenders on 26 November (2019).

Equity investment of around £400 million is supported by the primary senior debt facility and an EKF-covered tranche. 24 commercial banks also participated on the transaction: Bank of China, Barclays, BNP Paribas, CaixaBank, CIC, Credit Agricole, Commerzbank, DZ Bank, Helaba, ING, KfW IPEX-Bank, LBBW, Lloyds, Mizuho, MUFG Bank, NatWest, Norinchukin, OCBC, Santander, SEB, Shinsei, Siemens Bank, SMBC, Societe Generale.

Pricing on the senior debt starts at 130bp above Libor, stepping up to 140bp. It has a tenor of 15 years plus construction, and the debt package has a debt cover service ratio (DSCR) of 1.4x.

ESB acquired its 50% stake with equity provided by the Government of Ireland. The deal has yet to close but it is understood that ESB paid a high premium – around half the price of the entire project costs.

Offshore construction will start in June 2020 and full commissioning will be completed in 2023.

## European ESG Finance Innovation
## Soma 4 Project

Garanti BBVA signed up to lend $44 million in the form of a "gender equality loan" to Polat Energy to construct a 48MW extension to the operational 240.1MW Soma wind farm in Turkey.

The loan consists of two portions – $21.5 million cash tranche with an eight-year tenor and a $22.6 million non-cash tranche with an 11.5-year tenor.

The gender equality loan adds several contingencies requiring Polat Enegry to annually assess its performance in gender equality across its value chain. Criteria include in the assessment are postnatal return-to-work programs, equality in new recruitment, equal pay and policies to prevent harassment.

Improvements will translate into better terms on the loan. With better gender equality KPIs achieved the interest rate for the cash portion will be lowered, while the commission for the non-cash portion will be reduced.

Located across the Soma district of Manisa Province in west Turkey, the existing Soma wind complex consists of three phases; the 79.2MW Soma 1, the 60.9MW Soma 2 and the 100MW Soma 3.

Soma 1 consists of 89x Enercon E44/900 turbines with a combined estimated annual production of 200GWh. This initial phase reached financial close in December 2008.

Soma 2 features 30x Enercon E70/2000 turbines and has an estimated annual production of 150GWh. This second phase reached financial close in 2011.

Soma 3 comprises 50x Enercon turbines, each with a capacity of 2MW, and reached financial close in 2014.

Garanti BBVA has provided debt for all four phases of the wind complex.

Women in Turkey face significant disparities in employment and in some regions, this is also reflected in the realms of education. The participation of Turkish women in the labor force is less than half of that of the European Union average.

**Gender Equality Loan:** $44 million

**MLA:** BBVA

**Tranches:** $21.5 million cash tranche and $22.6 million non-cash tranche

**Tenor:** eight-year tenor for cash tranche and 11.5-year tenor for non-cash tranche

**Size of extension:** 48MW

## European renewables Acquisition
## Kisielice onshore

Green Investment Group (GIG) acquired the 42MW Kisielice Polish wind farm in August 2019 from Impax Asset Management's renewable energy fund Impax New Energy Investors II – marking the Macquarie owned investment firm's first investment in Poland.

The project has been fully operational since 2014 and consists of 21x Enercon E82 turbines. It is located in Warmiab, Masurian Voivodeship. GIG bought the Kisielice onshore wind farm using equity with no debt raised to support the acquisition and refinanced the project finance debt on the asset to close the deal.

*Onshore wind is Poland's largest renewable energy source.*

GIG also had to put in place a new contractual off-take framework by the closing date with a new power purchase agreement (PPA), green certificates purchase agreements and the agreement for the sale of guarantees of origin.

Shortly following the signing of the acquisition, Signify signed to offtake the energy from the wind farm through a 10-year virtual power purchase agreement (VPPA) – making Kiselice one of the first wind farms in a Central Eastern European country to have a long-term VPPA.

GIG also chose Wpd Windmanager to provide O&M services to the wind farm.

The acquisition also led to GIG's second investment in Poland in November (2019), after it aquired the Zajaczkowo wind farm from J-Power and Mitsui.

Extensive W&I insurance was taken out by GIG to acquire the shares of the wind farm. Allen & Overy acted as legal adviser to Macquarie and K2 Management handled technical advisory on the acquisition.

Poland is heavily dependent on an aging fleet of coal and lignite plants and has launched onshore wind auctions to meet 2.5GW of its electricity needs from renewables. Onshore wind is Poland's largest renewable energy source with 5.7GW of installed capacity.

**Advisers:** Allen & Overy, K2 Management

**VPPA length:** 10 years

**Offtaker:** Signify

**Size of farm:** 42MW

## European Social Infrastructure
## Irish Social Housing Bundle 1

Bundle one of Ireland's first social housing PPP project came at a time of mounting pressure on the housing market, with a shortage of housing supply, increased demand for home ownership and cases of half-built properties dotted across the country.

The project – part of a €300 million ($337 million) three-part programme which in its entirety aims to develop 1,500 new homes and upgrade around 700 existing properties across the country – also marks a significant milestone for Irish infrastructure procurement as it opens up a new important avenue for delivering social housing schemes.

Comhar Housing, comprising equity provider Macquarie Capital, contractor John Sisk & Son, and FM company Choice Housing and tenancy management company Oaklee Housing, will design, build, finance, operate and maintain six social housing sites across the Louth, Dublin, Kildare and Wicklow counties.

The consortium reached financial close on the project on 19 March (2019), signing on €120 million in debt financing from the European Investment Bank (EIB) and two commercial lenders.

EIB provided half of the debt financing, having voiced its support for the scheme back in March 2017.

Bank of Ireland provided a debt of €36 million and Korea Development Bank provided €26 million. The tenor of the debt is 25 years, matching the length of the concession. Meanwhile, Macquarie provided 10-15% of the overall funding to the project in equity.

Apart from Macquarie Capital as the consortium's financial adviser, McCann Fitzgerald and Arcadis provided legal and technical advice to Comhar consortium. Ashurst acted as legal adviser to the lenders.

Advisers to the Irish government were NDFA, Eversheds Sutherland, Willis Risk Services, HRA Planning, Simon J Kelly Architects, Hayes Higgins Partnership, Matt O'Mahony & Associates, ORS and Currie & Brown.

## European telecoms
## EllaLink Subsea Cable

The EllaLink Europe-Latin America submarine cable project was first conceived in 2012 by pan-European and Latin American e-infrastructure research and education networks GÉANT and RedCLARA. Their joint initiative BELLA, joining up their continents' research and education communities, committed to the project as one of the anchor tenants.

Two founders Alfonso Gajate and Ross Mullins and later CEO Philippe Dumont steered forward a €150 million ($172.9 million) project finance infrastructure development, for this first direct fibre pair from Europe to Latin America.

*In 2017 Alcatel Submarine Networks won the job of EPC contractor.*

The 9,300km four fibre pair cable, with up to 72Tbps capacity, will connect not just the education and research sectors as well as key financial centres, populations and data centres across the Atlantic. Carriers, operators and internet content providers can use the independent low-latency, carrier-neutral EllaLink. It runs undersea from Fortaleza and São Paolo in Brazil to Lisbon, Madrid, Bilbao and Marseille in Portugal, Spain and France.

With no detour required via North America, the round-trip time (RTT) is around 50% faster. The project also involved development of a terrestrial network to improve onward connection to Asia and the rest of the world.

In 2017 Alcatel Submarine Networks won the job of EPC contractor year. Manufacturing started in 2019 and the cable should be ready for service later in 2020.

Marguerite Fund invested early development capital eight months ahead of the project even reaching final investment decision, propelling the project to financial close on 9 January 2019 with €70 million equity. The EU and state banks-owned equity fund is EllaLink's single major investor. Gajate and Mullins and some other individuals hold collectively 13% shares, alongside Marguerite's 87%.

JP Morgan's €20 million nine-year mezzanine loan to Marguerite's holding company assists on its equity commitment.

Anchor tenants Emacom, BELLA and Cabo Verde Telecom are providing capacity pre-payments, toward funding remaining project costs.

## European transport
## Silvertown Tunnel

UK's Silvertown Tunnel is the first major transport investment in East London in the last 30 years. The tunnel will serve as a river crossing between Silvertown to the north of the Thames River and Greenwich peninsula, in the south, easing congestion in the 122-year-old Blackwall Tunnel.

This project will also be the UK's first road tunnel to have dedicated bus lanes and is slated for operations in 2025.

The project had numerous hurdles in its away, environmental objections, planning delays, scrapping of the PF2 to name a few, but at the end of 2019 it finally made it over the finish line.

The RiverLinx consortium consists of Macquarie Capital, Cintra, Aberdeen Standard Investments, BAM PPP PGGM, and South Korean contractor SK E&C as sponsors and equity providers.

A total of 14 lenders, including banks, institutional investors and an ECA, provided debt for the £1.2 billion project.

The multi-tranche debt included £450 million senior debt provided by Credit Agricole, Instituto de Credito Oficial, Korea Development Bank, KEB Hana, Norinchukin, and Shinsei Bank, and a direct loan of £100 million from KEXIM. Both loans have a 29-year tenor and priced at Libor +150-170bp.

A private placement of £100 million was provided by Aviva and Samsung Life over a tenor of 29 years and at a pricing of +150-170bp over Gilts. A debt facility of £375 million was provided by Credit Agricole, KfW IPEX and Norinchukin. It was wrapped by K-Sure and priced at 80-100bp and was arranged over 18 years. Royal Bank of Canada provided interest rate swaps.

A £100 million equity bridge loan – priced at Libor +110bp – came from Credit Agricole, DZ Bank, SMBC, and Woori Bank.

RiverLinx and lenders were advised by Allen & Overy, Hogan Lovells, Arcadis, Arup and Cowi. Meanwhile, TfL was advised by KPMG, Ashurst, Pinsent Masons, and Atkins.

## European restructuring
## Irish Schools Bundle 5

When Carillion collapsed, the Irish Schools Bundle 5 PPP, in which the defunct contractor was an equity investor and principal contractor, came to a standstill.

The social infrastructure PPP, which closed in 2016, was in dire straits, with six education buildings unfinished months before hundreds of pupils were due to arrive for the 2018 academic year.


The €100 million project had to undergo restructuring in order to ensure the delivery of all the planned schools. Carillion had to be structured out of the deal and new contracts were agreed with replacement contractor Woodvale, as well as with new facilities management and management services providers.

Woodvale was tasked with the completion of the three most advanced schools by August 2018 and undertake survey and preliminary work for the other three buildings in the bundle. The last of the six schools became operational in October last year (2019).

The two shareholders of the project SPV – Inspiredspaces Bundle 5 (Ireland) Limited – DIF Infra 4 Limited and Carillion – were previously to invest £9 million of equity in the project, divided equally between them.

After Carillion's collapse, the remaining shareholder took over the 25-year concession as 100% equity provider and brought the restructuring to a close on 1 October 2019.

The two original lenders – MUFG and Helaba – stayed on as senior debt and equity bridge loan providers. At the time of original financing, each bank provided 50% of the €90 million debt for a 26-year term loan priced in a range of 130-150bp over Euribor. The tenor is understood to have been extended by a year during the restructuring.

Advisers involved on the restructuring were William Fry, advising DIF on local law, Clifford Chance, acting for the lenders, and Phillip Lee, advising NDFA.

## African mining
### Guinea Alumina Project

Project financing for the Guinea Alumina Corporation (GAC) project to the tune of $750 million is one of the largest greenfield investments in the African nation and its largest ever project financing for a greenfield mining project.

The GAC project entailed the development of a 12Mtpa greenfield bauxite mine and associated infrastructure, including the upgrade of a 134km long multi-user rail system and a new port terminal. Bauxite exports began in August 2019.

Societe Generale (through SG CIB and Societe Generale de Banques en Guinée) acted as financial adviser, original initial lender and onshore security agent in the $750m project financing for the development.

*The GAC project entailed the development of a 12Mtpa greenfield bauxite mine and associated infrastructure.*

With overall project costs of $1.4bn, the debt package was provided by development finance institutions, export credit agencies, and international commercial banks, including the IFC ($330m), the ADB ($100m), EDC ($150m), with additional funds provided by two European development finance institutions, one of which is the Emerging Africa Infrastructure Fund.

Commercial banks participating include Societe Generale, ING Bank, Natixis, First Abu Dhabi Bank, Emirates NBD, and Mashreq Bank.

Such collaboration marks the first time multilaterals and international commercial banks have participated together on a greenfield mining project in Guinea.

The Multilateral Investment Guarantee Agency extended up to $129m of political risk insurance cover to commercial banks participating in the loan.

The project is being developed by Guinea Alumina Corporation, a wholly-owned subsidiary of Emirates Global Aluminium – the world's largest 'premium aluminium' producer and largest industrial company in the United Arab Emirates outside oil and gas.

It is the first phase of GAC's investment in the country, with the construction of an alumina refinery envisaged in a later second phase.

Estimates put the GDP impact of the project at $700 million annually, or 5.5% of Guinea's GDP.

## African oil & gas
### Gimi Floating LNG

A joint venture between Golar LNG and First LNG Holdings – an indirectly wholly owned subsidiary of Keppel Corporation – is currently converting an LNG carrier into the $1.3 billion Gimi FLNG vessel in Singapore for deployment to the Tortue West Field offshore Mauritania and Senegal.

The deal represents the first commercially syndicated project financing of an FLNG vessel in the international bank market. Financial close took place on 12 November 2019 with $600 million in equity and $700 million in debt, giving a debt/equity ratio of 54:46.

The debt package includes a 4+7-year amortising term loan with a 12-year underlying repayment profile post-COD, which is currently scheduled to take place in Q4 2022. Natixis, Clifford Capital, ING Bank, ABN Amro Bank each acted as underwriters, bookrunners and initial MLAs. DBS, SCB, Intesa and OCBC acted as the initial MLAs, while DBJ, CUB, CIC and Morgan Stanley acted as initial arrangers.

The donor vessel is the LNG Carrier Gimi previously owned by Golar and the conversion works are taking place at Keppel Shipyard in Singapore. Keppel engaged Black & Veatch to design, procure and commission the topsides, and liquefaction process via the use of its liquefaction technology which offers more flexibility and cost-efficiency in the liquefaction process. Gimi FLNG will be modelled on the Hilli Episeyo FLNG.

BP will charter the FLNG for a 20-year period, which will begin following the four-year conversion process – upon completion it will be delivered to and installed at Tortue West field off the coast of West Africa, where the vessel will liquify gas from the BP-owned offshore block. The Gimi FLNG vessel will produce at least 2.5 million tonnes a year of LNG in the first phase of BP's Greater Tortue Ahmeyim project.

Shearman & Sterling advised Golar LNG. The lenders were advised by Clifford Chance.

## African transport
### New Owendo International Port

The old port at Owendo, Gabon, had reached its max capacity of 4 million tonnes of general cargo, but in June 2018 an international consortium finished construction of a new port executed as a PPP, which then reached financial close the following year on 26 July 2019.

A joint venture – GSEZ JV – consisting of Olam International, Gabonese Caisse des Depots et Consignations (CDC) and the Africa Finance Corporation (AFC), signed off on the financing of the €305 million ($339.7 million) New Owendo International Port PPP (NOIP), which is being operated through the Gabon Special Economic Zone Ports (GSEZ Ports) project company. CDC is owned by the government of Gabon, while the AFC is one of the region's most prominent DFIs.

The deal was geared heavily towards the equity side, but nonetheless, including the AFC, the deal attracted three Africa-focused DFIs – two of those for the debt financing. PIDG member Emerging Africa Infrastructure Fund (EAIF) led the lender team which otherwise included the African Development Fund (AfDB) in an equally split €80 million debt package on a 15-year tenor.

French joint stock company and investment fund STOA acquired a 10% equity stake in GSEZ Ports in November 2019, just over four months after the financial close date. This shareholding arrangement left the GSEZ JV with 90% of the remaining shares.

The new port adds an additional 4 million tonnes of capacity to Gabon's coast, which is an important trade and logistics corridor for the Central African region. GSEZ Ports has a 30-year concession agreement from the government of Gabon to operate NOIP which is located 27km south of the capital city of Libreville.

The sponsors were advised by Linklaters, AECOM, and Royal Haskoning. Meanwhile, the lenders were advised by Clifford Chance, Project Lawyers, WSP, Marsh, Ernst & Young, Mazars and KPMG.

## African refinancing
### Societe Ivorienne de Raffinage

The refinancing of Société Ivoirienne de Raffinage's (SIR) historical debt by the Africa Finance Corporation is the *IJGlobal* African refinancing of the year.

This deal attracted a panel of African-based and international lenders proving that, if structured well, there is broad appetite for African debt.

SIR has an installed capacity of 3.8 million tonnes refining capacity per annum; it is currently the largest and most sophisticated operational refinery in West Africa, enjoying the largest revenues in Cote d'Ivoire.

An unfortunate mix of domestic and market challenges caused SIR to accumulate significant arrears, in particular for crude oil feedstock, thereby threatening the refinery's solvency and profitability.

The Africa Finance Corporate (AFC) stepped in as sole mandated lead arranger for a facility to repay these historical obligations, provide a long tenured facility, and reduce the interest rate of SIR's debt.

*This deal attracted a panel of African-based and international lenders.*

As a multilateral, AFC was able to offer longer term debt than most commercial banks, and ultimately successfully raised a €577 million structured debt financing for SIR. AFC's participation was for €192 million.

The facility comprises two Euro tranches with a 9-year maturity lent by Deutsche Bank, ICBC Standard Bank and LEAP. One tranche is a fixed-rate tranche with prepayment restrictions in line with expectations of institutional investors; the other is a floating rate tranche with tenor-reduction structures. West African CFA franc tranche with a 7-year maturity was lent by UBA, Bridge Bank and NSIA. The multi-currency facility was designed to appeal to a broad base of investors.

The long-term funding solution to refinance historical accrued debts will free up resources to enable SIR to make much needed investments in its current operations and upgrade its facility and production processes to align with current environmental emissions standards and expand its business.

An insurance guarantee programme underpinned by ATI (providing €255 million) with Texel acting as insurance broker enabled some investors to participate in the transaction that had not traditionally invested in Africa.

## African power
### Bridge Power

An Endeavour Energy-led consortium refinanced the $701 million first phase of its 424MW Bridge Power combined cycle project in Tema, Ghana – potentially mitigating risk for the second phase of the utility-scale project in a difficult market.

The Early Power consortium – consisting of Endeavour Energy, General Electric (GE) and Sage – signed a 20-year power purchase agreement in October 2016 with the Electricity Corporation of Ghana, with payments backed by a sovereign guarantee.

The first phase of the project was funded by $422 million in vendor financing from Mytilineos and GE on 18 December 2018, with the view to refinancing through senior debt facilities signed by commercial banks in the new year. GuarantCo signed a $50 million guarantee for the debt provided by the EPC contractors, which in turn began construction of phase one.

The requisite refinancing signed almost a year later on 14 December 2019 on a debt package totalling $510 million. The lenders were led by Standard Chartered Bank and include Absa Bank, Emerging Africa Infrastructure Fund, CDC Group, Hungarian Export-Import Bank, Societe Generale, and the Development Bank of Southern Africa. USAID joined the returning GuarantCo for debt guarantees on the deal.

The project has an overall cost of $953 million. Phase two will add 200MW of installed power capacity and when complete the power plant will provide at least 17% of Ghana's baseload energy supply. SCB is once again the MLA for phase 2.

The sponsors are being advised by Clifford Chance, Senet Corporate Solicitors, Allen & Overy and Marsh. The lenders are being advised by Norton Rose Fulbright, ENSAfrica, Indecs, HIS Markit, MOT MacDonald and BDO. Mytillineos is being advised by DLA Piper.

## African renewables
### Kahone and Toube Solar

The International Finance Corporation's (IFC) Scaling Solar programme in Senegal featured the 35MW Kahone and 25MW Toube solar projects, each with tariffs well below the West Africa average – $0.038 and $0.039/kWh respectively.

A sponsor consortium of Engie and Meridiam won out with its low bids out of 12 bids in total for the two projects, all of which were below $0.06/kWh. Senegal's ESRC chose the lowest bids on offer, but any one of the alternatives were well below the region average of $0.25/kWh, according to World Bank data.

The IFC has an overarching role as the transaction advisers to the government and the debt arranger, as per its responsibilities under the Scaling Solar Programme. The World Bank Group member signed on two separate debt packages for Kahone and Toube, with the other two lenders being Proparco and EIB. The debt on the smaller Toube site is marginally cheaper, but otherwise the €38 million ($41.3 million) loans carry a 19-year tenor.

Senelec is the offtaker of both the 25-year take-or-pay PPAs. MIGA provided political risk guarantees of €7.2 million for a 15-year period.

Engie and Meridiam took equal 40% stakes, while the government of Senegal – through sovereign fund FONSIS – retained a 20% stake in both projects.

The IFC's Scaling Solar Programme has shown the validity of photovoltaic as a cheap source of energy in Sub-Saharan Africa – the government has signed up for a total of 200MW, but only 60MW has been procured so far. As has been taking place in Zambia, a second round of projects may be forthcoming.

The sponsors were advised by Hogan Lovells. The government was advised by the IFC, Linklaters and JLT. The lenders were advised by Herbert Smith Freehills, Everoze, Marsh, and ERM.

IJGlobal Awards 2019

# The Americas

Had it not been for the coronavirus pandemic, *IJGlobal* would have hosted its Awards Night for The Americas in March at an impressively more swell venue than previous years.

However, *IJGlobal* took the decision early on to cancel the awards night – as well as the 3-day Miami conference immediately prior to it – in the interests of the safety and well-being of our partners.

The *IJGlobal* Awards Night 2019 was to have been staged in The Pierre, New York, pulling in the great and the good of the infrastructure and energy finance community from across North and South America.

Before naming the winners, we at IJ are always keen to drive home the impartiality of our judging process which is famed for being the most equitably-judged in the infra community, relying on a team of independent, senior players active across the Americas.

Lacking the fanfare – and the all-important music quiz that keeps many guests rooted to their seats until the final minute – we are now delighted to announce the winners.

**Winners in the North American transaction category are:**

- Battery Storage – **Lawa'i Solar and Battery Energy Storage System**
- Power – **Hill Top Energy Center**
- Transmission – **Wataynikaneyap Power Transmission Project**
- Utility – **ESAP Modernization Project**
- Refinancing – **Gridflex Generation**
- Solar – **Recurrent Energy Module Safe Harbour Loan**
- Renewables portfolio – **Cypress Creek portfolio financing**
- Wind - Clearway – **Repowering Partnership Holdco**
- Mining – **Nevada Copper's Pumpkin Hollow**
- LNG – **Venture Global Calcasieu Pass**
- Midstream Oil & Gas – **Midship Project**
- Rail – **Hurontario LRT**
- Social Infrastructure – **Corner Brook Acute Care Hospital**
- Roads – **North Tarrant Express Segment 3C**
- Airports – **Newark Consolidated Rent-a-Car Facility**

**Winners in the Latin American transaction category are:**

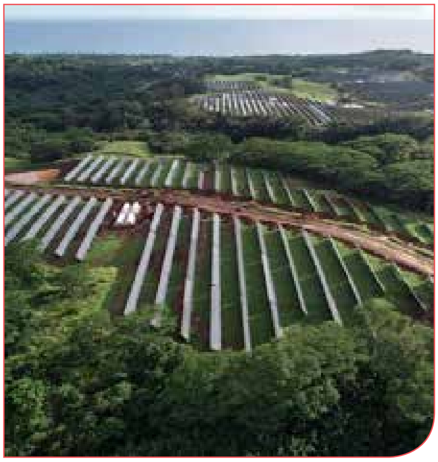
- Power – **Norte II CCGT**
- Export Finance – **GNA 1 Port of Acu**
- Midstream Oil & Gas – **Logum Logistica**
- M&A – **TAG Pipeline Acquisition**
- Upstream Oil & Gas – **Trident Acquisition Finance**
- Petrochemicals – **Braskem Idesa Refinancing**
- Transmission – **CRC Transmission Line**
- Refinancing – **El Dorado Airport**
- Renewables – **Pirapora II Solar PV**
- Distributed Power – **Ergon Private Placement**
- Telecoms – **Internet Para Todos**
- Rail – **Ferrocarril Central**
- Roads – **Autopista Al Mar 1**
- Water – **BRK Ambiental**

## North American battery storage

### Lawa'i Solar and Energy Storage

AES Distributed Energy's Lawa'i Solar and Energy Storage Project in Hawaii, the largest operational solar and storage system in the world, reached financial close on 1 July, 2019.

The project consists of a 28MW solar photovoltaic array and a 100MW five-hour battery storage system on the island of Kaua'i.



The plant was already online at the time of the financing, having been commissioned in January 2019. It operates as a peaker and provides 11% of the island's power.

The project sells its output to the member-owned Kaua'i Island Utility Cooperative under a 25-year power purchase agreement priced at $0.11/kWh.

Societe Generale provided the $40.6 million term loan financing for the project.

Silicon Valley Bank is also a lender.

Republic Services, the second-largest provider of non-hazardous solid waste collection, transfer, disposal, recycling and energy services in the US, was the tax equity investor. The company has invested in several solar energy projects owned by AES DE and its parent company, AES Corporation.

**Advisers on the deal included:**

- Akin Gump (borrower counsel)
- Norton Rose Fulbright (lenders' counsel).
- Mayer Brown (tax equity counsel).

As the cost of combined solar and battery storage continues to fall, the Lawa'i project will not remain the largest of its kind for long. In Hawaii alone, AES DE has a 30MW/120MWh and a 60MW/240MWh project under development in the state, with PPAs priced at $0.08/kWh.

## North American power

### Hill Top energy centre

Ares Management closed the $420 million project bond financing for its Hill Top Energy Center in March 2019. It was the first pure project bond financing of a quasi-merchant CCGT in PJM Interconnection.

Hill Top was already the talk of the town as far back as May 2018, when it was the only combined-cycle gas-fired project to clear a higher-than-expected capacity auction in PJM.

By August 2018, banks had been pitching to finance the CCGT with a term loan A, but the sponsor had different ideas, securing a fashionable gas netback and hitting the bond market instead.

In fall 2018, Ares was in talks to extend the project's gas netback from 6.5 years to between eight and 10 years, eventually landing an 8.75-year deal.

The $375 million 10-year notes were priced and sold into the US private placement market in March 2019, producing an all-in coupon below 5.5%.

The debt was sized to achieve minimum DSCRs of 1.50x, amortizing to a roughly $200/kW balloon payment at maturity.

Kroll Bond Rating Agency gave the notes a BBB- rating, which is considered the sweet spot for private placement investors.

The financing also included a $45 million revolving credit facility.

Morgan Stanley was the placement agent on the bonds.

EQT Energy was the hedge provider.

Following the debt financing, Ares sold a 42% stake in the project to French fund manager Ardian Infrastructure Partners and a 16% stake to Israeli insurance company Menora Mivtachim Insurance.

PJ Solomon acted as financial adviser on the equity raise.

The plant's total project cost is around $725 million, putting the leverage ratio at around 57%.

The project is expected to be online in April 2021.

Kiewit is the engineering, procurement and construction contractor.

General Electric is the turbine supplier.

## North American transmission

### Wataynikaneyap Power Transmission project

Wataynikaneyap Power and Fortis reached financial close on a C$1.9 billion ($1.4 billion) transmission project in northwestern Ontario in October 2019, in a deal lauded for being the first such project to be developed through majority ownership by First Nations, the largest Indigenous-led infrastructure project in Canada, and the most far-reaching First Nations grid connection in Ontario's history.

Wataynikaneyap Power is a licensed transmission company regulated by the Ontario Energy Board and majority-owned by 24 First Nations communities in northwestern Ontario, in partnership with Fortis and other private investors.

**The debt comprises:**

- A loan of up to C$1.34 billion ($1 billion) from the Government of Ontario, and
- A C$680 million ($514 million) loan from a syndicate of five Canadian banks.

The complex and extensive commercial, regulatory and strategic issues garnered the collaboration of numerous Canadian law firms, including:

- Fasken (for the Province of Ontario)
- Torys (for the sponsor)
- Stikeman Elliott
- Davies
- Osler Hoskin & Harcourt
- McCarthy Tétrault
- Blaney McMurtry
- McMillan

The financing needed to be synchronized on many fronts.

Besides the dual-tranche debt, there was a complex equity financing involving a C$220 million loan from two Canadian life insurance companies, supported by a guarantee provided by the Ontario Ministry of Finance under the Aboriginal Loan Guarantee Program.

The 1,118 mile (1,800 km) transmission line is expected to be completed by 2023.

Valard, a subsidiary of Quanta Services, is the EPC contractor.

The project will supply energy to more than 14,000 First Nations people or residents across the region helping to eliminate reliance on costly and environmentally unsustainable diesel.

The project was originally developed by Renewable Energy Systems Canada. Fortis acquired its 49% stake in 2016.

## North American utility
### ESAP Modernisation Project

Ottawa's project to modernise, maintain and operate the district energy system that heats 80 buildings and cools 67 buildings in Canada's capital region reached financial close on 29 May (2019). The Government of Canada placed restrictions on the use of long-term private capital which required the winning consortium, Innovate Energy led by PCL Investments, to structure the project in a way not done before in the Canadian PPP market.

*The financing comprised an all bank revolver with six banks providing C$500 million ($349.3 million) in debt.*

The project forms part of the government's Energy Services Acquisition Program (ESAP) and was structured as a DBF(OM). The O&M obligations continue after construction completion, which is typically not the case when there is no long term capital involved in the financing of the project.

Innovate Energy was selected as preferred bidder in March (2019) beating Rideau Energy Partners in a two horse race. The winning team is made up of PCL Investments Canada, ENGIE, Black & McDonald Capital, Black & McDonald, PCL Constructors Canada and WSP Canada.

The financing comprised an all bank revolver with six banks providing C$500 million ($349.3 million) in debt. They were ATB Financial, Bank of Nova Scotia, Desjardins, HSBC, SMBC and TD Bank. The banks provided two interim payments and a substantial completion payment. There was nominal equity of C$100 million given there is no long-term debt.

Equity was provided by PCL Investments Canada (C$45 million), ENGIE (C$45 million), Black & McDonald Capital (C$10 million). Construction started in 2019 and the concessionaires plan to be finished come 2025. Once complete Innovate Energy will operate and maintain the new system for 35 years until 2055.

Part of the project includes making the existing heating system safer and consume more energy efficient by converting it from steam to low temperature hot water. Building and decommissioning plants, upgrading existing facilities in Ottawa and Gatineau, includes the Cliff plant near the parliament and switching from steam to electric chillers.

## North American refinancing
### Gridflex Generation

It's not every day a 1.5 GW portfolio of 20-year-old merchant peakers gets 11-year, fixed-rate financing, but Rockland Capital was able to secure just that with its GridFlex Generation deal last September.

Rockland assembled the three-plant GridFlex portfolio in 2017 and 2018. It acquired the 676 MW Lee gas-fired unit in Lee County, Illinois, from Dynegy for $180 million in 2017 and later snapped up a larger portfolio from AES Corporation subsidiary Dayton Power and Light for $241 million. This portfolio included the 586 MW Tait dual-fuel project in Dayton, Ohio, and the 236 MW Montpelier gas-fired facility in Poneto, Indiana.

The three peakers—Lee, Tait and Montpelier—are located in the ComEd and RTO regions of PJM Interconnection.

The acquisitions were financed with project debt. Lee had a $220 million, seven-year term loan package, while the portfolio housing Tait and Montpelier – known as Kimura Power – was financed with a $190 million, seven-year term debt package.

Following a higher-than-expected PJM capacity auction in 2018, Rockland saw an opportunity to optimize the capital stack.

The resultant transaction was a $377 million 4(a)(2) private placement with an 11.3-year maturity and a 7.4-year weighted average life.

Cantor Fitzgerald and Crédit Agricole were the placement agents.

The notes were marketed to 35 investors and priced at 325 basis points over Treasurys in July, producing a 5.21% all-in coupon. It was around two times oversubscribed.

The deal structure included a capacity reserve account, providing protection to investors in low capacity price scenarios.

Kroll Bond Rating Agency rated the issuance BBB-.

Credit Agricole also chipped in with ancillary facilities totaling $46 million.

## North American Solar
### Recurrent Energy Module Safe Harbour loan

Recurrent Energy signed a $182 million dual-tranche solar safe harbour loan on 10 June, 2019. It was among the first of its kind, paving the way for a wave of deals that peaked toward the end of the year.

The driver behind the deals was the step down of the US investment tax credit for solar from 30% to 26% at the end of 2019.

Safe harbor loans are bespoke financing products that come in a range of shapes and sizes.

The Recurrent deal's two tranches reflected the different yield and risk appetites of the lenders.

*Features include carefully crafted cash sweeps that kick in in various circumstances, including the sale or deployment of the panels, and a backstop.*

NordLB and Rabobank were coordinating lead arrangers on the $124 million senior tranche, while Nomura led and underwrote the $57 million junior tranche. The senior loan closed on 5 September and the junior loan followed on 18 September.

The deal was structured to give lenders certainty of cash flow without their needing to know the exact list of projects in which the modules would be deployed.

Features include carefully crafted cash sweeps that kick in in various circumstances, including the sale or deployment of the panels, and a backstop provided by a back-ended fixed amortization schedule.

The structure ensures the full repayment of debt and strong collateral coverage while mitigating the risk of delays in the deployment schedule and ITC eligibility.

The transaction also provides Recurrent with the flexibility to optimize and adjust its development pipeline as it bids for new solar projects over time.

Recurrent will use the proceeds of the loans to buy modules totalling 400 MW from its parent company Canadian Solar and 100 MW from Risen Energy Co.

Recurrent expects the modules to safe harbor projects with a combined capacity of 1,544 MW (DC).

The debt will be repaid when the modules are assigned to individual project SPVs.

## North American renewables portfolio
### Cypress Creek portfolio financing

Cubico Sustainable Investments reached financial close on 29 December, 2018, 14 June, 2019, and 19 August, 2019 on a complex tax equity and back levered debt financing, totalling $406 million, for a portfolio of three US solar projects in the US collectively known as Project Thor.

*As foreign investors clamor to get into the US renewables market, London based Cubico broke through in 2018*

As foreign investors clamor to get into the US renewables market, London based Cubico broke through in 2018, lining up the acquisitions of its first three projects in the country from Cypress Creek Renewables.

The portfolio comprises the 162 MW Wagyu project in Texas, the 106 MW Palmetto project in South Carolina and the 98MW Huntley project also in South Carolina.

The Wagyu project is particularly notable as one of the growing number of Texas solar projects to be contracted under a hedge rather than, or in addition to, a power purchase agreement.

Merchant risk was mitigated by cross-collateralizing the back levered debt across the three projects and by including a tracking account to help meet balancing obligations under the energy hedge. Since the hedge provider did not provide a tracking account, this feature had to be provided by the lenders, a very innovative step.

The other offtake contracts were either corporate PPAs or busbar utility PPAs. The lenders of the $118 million back levered debt were HSBC, NordLB and Rabobank.

The tax equity investments were structured as inverted leases. US Bank was the tax equity investor.

**Advisers included:**
- CCA (financial)
- Novogradac (financial)
- Winston & Strawn (equity counsel)
- Milbank (lender counsel)
- Nixon Peabody (tax equity counsel)
- Enertis (independent engineer)
- WSP (technical adviser)

Renewable Energy Systems was EPC alongside the developer, Cypress Creek.

The first of the three projects to close, Palmetto, came online in August 2019.

## North American wind
### Clearway Repowering

Clearway Energy closed the $352 million refinancing of its Wildorado and Elbow Creek wind repowering projects in Texas on 14 June, 2019.

As the first generation of US wind projects, built in the early 2000s, grows old, developers are seeking ways to extend their economic useful lives while also renewing hard-won federal tax incentives which have since expired.

But a wind repowering is much more complicated than just a major repair job. In order to qualify for the US wind production tax credit, wind repowerings must meet the 80:20 rule, whereby old components must make up no more than 20% of the fair market value of the repowered project.

Seasoned lenders and tax equity investors are scrutinizing independent engineers' reports for wind repowerings like never before.

The standout financing of the Wildorado and Elbow Creek was further complicated by preferred equity brought in at the holding company level from Southern Power and a partnership with Clearway Energy's sponsor company, Clearway Energy Group, which provided the safe harbored turbines.

The 161MW Wildorado project is located in Oldham County and has a power purchase agreement with Southwestern Public Service Co. through 2027.

The 238MW Elbow Creek project, in Howard County has a hedge with an investment grade counterparty through 2029.

The lead arrangers were SMBC and Santander.

The tax equity was provided by MidAmerican Energy. The tax equity was funded in two chunks when Elbow Creek and Wildorado came online, in November 2019 and February 2020, respectively.

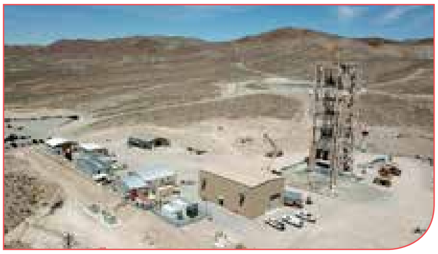
Clearway has invested about $111 million in equity in the projects.

Such repowering deals are likely to become a template for many more that will proliferate over the next few years.

## North American mining
### Nevada Copper's Pumpkin Hollow

With the demand for copper due to soar in the upcoming years driven the by the maturing electric vehicle market on account of the metal's conductivity. Nevada Copper Corporation closed on its $115 million project financing for its Pumpkin Hollow Copper Project in Yerington Nevada.

In May 2019 the company achieved financial close on the $115 million project financing provided entirely by KfW IPEX-Bank, supported by a UKEF untied guarantee.



The facility reduces senior debt interest margins from the broader financing agreement, saving the company $5 million calculated over the tenor.

The debt package has a nine year tenor maturing in 2028. The terms of the loan allow free excess cash flow to be utilised on the Open Pit development, exploration and payment of dividend.

In addition to the KfW project finance facility, Nevada Copper also entered into a $35 million working capital facility with Concord Resources and offtake agreements with Aurubis and Concord Resources. Finally, these facilities were layered onto a $70 million stream financing in September 2018 which Nevada Copper had entered into with Triple Flag. Investment into the mine to date has been over $350 million.

Nevada Copper corporation also entered into a $26.4 million cost overrun facility that will be drawn out of the $30 million equity offering that was raised two weeks prior to closing the project financing.

The mine started commercial operation in December 2019. Milbank advised KfW and Shearman & Sterling advised Nevada Copper.

The project, a unique example of a single asset company tapping into ECA-financed projects, has two permits, including an underground mine and a large scale open pit project that is advancing toward feasibility status which is due in 2021.

The underground mine has a total proven and probable ore reserve of 574 million tonnes, containing 5.22 billion pounds of copper, 990,000 ounces of gold, and 33,000 ounces of silver.

## North American LNG
### Venture Global Calcasieu Pass

Venture Global LNG reached financial close to construct and commission the Calcasieu Pass LNG facility and the associated TransCameron pipeline in Cameron Parish, Louisiana on 20 August 2019, raising project costs from 13 banks and a number of institutional investors and financial institutions.

The financial close has been four years in the making, with the sponsor raising $5.8 billion to finance construction. Stonepeak Infrastructure Partners provided $1.3 billion in equity with Venture Global LNG to provide around $719.50 million.

The coordinating lead arrangers on the bank debt are Banco Santander, Bank of America, Bank of Nova Scotia, Goldman Sachs Bank USA, ICBC, ING Capital, JP Morgan Chase Bank, Mizuho Bank, Morgan Stanley Senior Funding, Natixis, Nomura Securities International, RBC, SMBC.

*The project has 20-year LNG sale and purchase agreements with Shell, BP, Edison, Galp, Repsol and PGNiG.*

The proceeds of the debt and equity financing will fully fund the balance of the construction and commissioning of Calcasieu Pass. Funding will also see the development of the 10 MPTA Calcasieu Pass and the continued development of Venture Global's 20 MTPA Plaquemines LNG and 20 MTPA Delta LNG facilities.

Kiewit is the EPC contractor on the Calcasieu Pass facility. All necessary permits have been secured for Calcasieu Pass, including FERC authorisation and non-FTA export authorisation from the US Department of Energy.

Morgan Stanley in November 2018 provided Venture Global with a $220 million bridge facility for the construction of the facility. Morgan Stanley and Goldman Sachs had already previously raised $635 million in equity for the Calcasieu Pass LNG.

Construction began in February (2019) and the project is expected to reach its commercial operations date in 2022.

The project has 20-year LNG sale and purchase agreements with Shell, BP, Edison, Galp, Repsol and PGNiG.

Morgan Stanley acted as financial adviser to Venture Global LNG with Latham & Watkins providing legal counsel. Simpson Thacher acted as legal counsel to Stonepeak and Skadden provided legal counsel to the lenders.

## North American midstream oil & gas
### Midship project

Cheniere Energy, a significant LNG producer, and EIG Global Energy Partners, energy industry capital financier, are cosponsors of the Midship Pipeline Company, a project company aiming to create new transportation capacity from developing gas production regions STACK and SCOOP.

*It will have a capacity of up to 1,440,000 dekatherms per day*

The proposed Project consists of almost 200 miles of 36-inch-diameter new-build pipeline beginning in Kingfisher County, Oklahoma and terminating at interconnects with existing interstate natural gas pipeline near Bennington, Oklahoma, for delivery to Gulf Coast and Southwest destinations. It will have a capacity of up to 1,440,000 dekatherms per day.

The new-build facilities will include a total of three mainline compressor stations, seven receipt meter stations/taps and four delivery meters, in addition to two laterals.

Societe Generale acted as financial adviser, joint lead arranger and administrative agent for the $680m non-recourse financing of the Midship Project. The tenor of the debt is 11.5 years.

The financing provided the sponsors a unique ability to obtain increased leverage at financial investment decision relative to the firm transportation agreements that were executed at the time of closing.

The sponsors intend to expand the pipeline capacity or exectute additional firm transportation agreements in the near term.

Other mandated lead arrangers include Commonwealth Bank of Australia, Credit Agricole Corporate and Investment Bank, ING Capital LLC, The Korea Development Bank, New York Branch, National Australia Bank Limited, Natixis, Bank of China (New York Branch), Sumitomo Mitsui Banking Corporation. Societe Generale recruited these lenders through a clever process: it issued requests for proposals to 20 potential lenders to obtain competitive terms for the project sponsors.

The RFP approach created competitive tension and achieved terms exceeding the sponsors' expectations.

Nine were selected after being asked to receive credit approval for $100 million to provide a buffer, but all were signed off.

A cash sweep mechanism was implemented towards the backend of the repayment profile to mitigate and deleverage the term loan if additional contracts are not obtained.

## North American rail
### Hurontario Light Rail Transit

After a long wait, the Mobilinx Hurontario General Partnership consortium reached financial close on the C$2.1 billion Hurontario Light Rail Transit project in October 2019.

The plan will see 18km of new dedicated rapid transit between Port Credit GO Station in Mississauga to the Gateway Terminal at Steeles Avenue in Brampton. The line will have 19 stops with connections to GO Transit's Milton and Lakeshore West rail lines.

Mobilinx raised C$262.8 million in senior secured bonds and a C$487.29 million short-term senior credit facility to finance the project. Four banks provided the short-term construction bank facility: National Bank of Canada, HSBC Bank Canada, SMBC and Mizuho Bank.

The senior secured bonds were split into two tranches. The first was a C$122.9 million medium-term bonds due in 2039 and a long term bond for C$139.7 million due in 2054. The medium term bond has a coupon of 3.276% and the long term bond has a coupon of 3.642%. The long-term bond was underwritten by National Bank Financial and HSBC Bank Canada. Progress and milestone payments are to be provided by Infrastructure Ontario and Metrolinx.

The debt package was supported by C$56.4 million in equity from Metrolinx and construction period progress payments of C$1.2 billion. John Laing is understood to have invested £13 million for a 35% interest in the concession team.

The short term senior credit will be repaid on substantial completion of construction with proceeds Metrolinx receives from the substantial completion payment and equity which will be backed by letters of credit prior to contribution date. The consortium will receive a completion payment of C$604.89 million.

Following completion, Mobilinx will be responsible for the O&M and rehabilitation of the LRT system and the 28 vehicles for a period of 30 years.

## North American social Infrastructure
### Corner Brook Acute Care Hospital

Just three year after the provincial government of Newfoundland and Labrador approved the project, the winning consortium led by Plenary Group carried the Corner Brook Acute Care Hospital to financial close on 9 August 2019.

The team was selected as preferred bidder in June (2019) with other team members including, Plenary Group (Canada), PCL Constructors Canada, PCL Investments Canada, Marco Services, Parkin Architects and B+H Architects JV, John Hearn Architects, Johnson Controls Canada, Smith and Anderson Consulting Engineering, WSP Canada, RV Anderson Associate, GJ Cahill and Plan Group.

The new Western Memorial Regional Hospital in Corner Brook has a price tag of C$699 million ($528 million). The financing was split into three packages, a long term bond for construction plus 30 years, a medium term bond with over 10 years and a short term bridge loan that will be repaid in 30 months.

TD Securities and BMO were the bond underwriters. The bonds were sold to Canada Post Corporation Registered Pension Plan, Fiera Capital Corporation, Manufacturers Life Insurance Company, Manulife Canadian Private Debt Fund and Phillips, Hager & North Investment Management.

The equity amount was C$29 million with Plenary Group providing C$23.2 million and PCL providing C$5.8 million.

The Plenary-led team beat Atlantic Healthcare Partnership and was shortlisted for the project in June 2018 but failed in the homestretch. The project was first announced in August 2017 with an RFQ issued in January 2018.

The new hospital will include the same services currently provided at the existing Western Memorial Regional Hospital. In addition, it will have an expanded cancer care program which includes radiation services. Construction is expected to take over four years with a 30-year concession to follow thereafter.

## North American roads
### North Tarrant Express

The $2 billion North Tarrant Express (NTE) P3 project reached financial close in 2013, with the combination of the pre development agreement for future expansions built into this original contract resulting in the Texas Department of Transportation realizing the value of options to extend and expand the project cementing its position as a true landmark among US P3 transactions. The $910 billion Segment 3C builds on the model used to close the original project.

The owners led by Cintra financed the project with $659 million in private activity bonds (PABs). The bonds were issued by the Texas Private Activity Bond Surface Transportation Corporation and underwritten by Bank of America Merrill Lynch and Barclays Capital. The trustee was Citibank. The repayment of bonds will begin on 30 June 2047 and will mature on 30 June 2058. Bonds have a coupon of 5.00%.

The equity investment amount is $160 million and the total value of the project is $910 million. PABs were approved in July (2019) though the total amount at that point was $750 million. The PABs were secured by revenues from expressway segments 3A, 3B and 3C.

The project will rebuild 6.7 miles from north of US 81/287 (Heritage Trace Parkway) to Eagle Parkway in Denton County. It will include, reconstructed main highway lanes, expanded frontage roads and two TEXpress managed lanes.

A TIFIA loan was not used for 3C as the developers would likely have had to renegotiate the existing 3A/3B loan as part of the 3C loan process. The consortium NTE Mobility Partners Segments 3 comprises Cintra (53%), APG (28.8%) and Meridiam (17%). The project includes the innovative transfer of the obligations to build a $270m expansion in 2040 from TxDOT to the developer, and incorporated a mechanism for the transport department to accelerate or delay the future expansion at its discretion.

This obligation is also expected to be funded and financed by project cashflow with no funding contribution from TxDOT.

## North American airports
### Newark ConRAC

ashurst

Conrac Solutions Capital turned heads in April 2019 when it reached financial close on the new Consolidated Rent-A-Car (ConRAC) facility at Newark Liberty International Airport using a unique financing structure that could become a national model.

The $500 million project was privately financed with Conrac Solutions leasing the facility for 35 years from the Port Authority of New York and New Jersey (PANYNJ). Equity came from Related Fund Management and Fengate Asset Management. The debt financing package was led by MUFG, CIBC and NBC.

The deal includes a fixed-price, design-build contract for construction with a joint venture of Austin Commercial and VRH Construction. The financing was supplied by the equity partners to be repaid solely out of proceeds received from the Customer Facility Charge (CFC) applied to rental car transactions. PANYNJ's contribution to the financing was reined in at $130 million.

Unlike similar projects at other major US airports, that can put airports at risk for availability payments, this financial structure was made possible by CS Capital and its equity partners, Related and Fengate, with sponsorship from the car rental industry, and the foresight of the Port Authority to embrace an innovative approach.

The project encompasses all elements of a P3 – design, construction, financing, operations, maintenance and lifecycle management throughout construction and the 35-year lease period but is not a P3. The facility is being constructed on a 16.65-acre site, with 2,925 public parking spaces and 3,380 rental car spaces to support 10 rental brands. Construction started in May with completion of the public parking area in 2021 and the ConRAC in 2023.

## Latin American power
## Norte II

This refinancing transaction was special because it marked the first time that a domestic company has had KEXIM guarantee a project bond for overseas infrastructure assets.

KST Electric Power Co. – which is a consortium between KEPCO, Samsung and engineering company Techint – has refinanced the 433MW Norte II combined-cycle gas-turbine power plant in Mexico with a private placement that was partially guaranteed by the Export-Import Bank of Korea.

Operational since May 2013, the plant is located in Chihuahua, Mexico. It was tendered in 2010 by Mexican state-owned utility Comisión Federal de Electricidad (CFE) with a 25-year tenor, under an independent power producer (IPP) contract.

Crédit Agricole acted as the placement agent for the bonds, which refinance debt incurred during the development of the power plant.

The issuance of the bonds was split into two tranches. A $250 million 18-year bond was covered by the KEXIM guarantee, and $151.27 million of 18-year paper was an uncovered bond.

The bonds benefiting from the wrap were priced at 3.30% while the uncovered bonds were priced at 5.7%.

The covered bonds were placed with international investors while the uncovered notes were sold to Korean investors.

Law firm Clifford Chance advised KEXIM and the investors on the transaction.

SMBC, Crédit Agricole and KEXIM provided the original financing for the $420 million project in 2011 in the form of a $325 million three-tranche loan.

The consortium invested the remaining $95 million.

**Shareholding in the consortium breaks down:**

- KEPCO - 56%
- Samsung - 34%
- Techint - 10%

## Latin American export finance
## GNA 1 Port of Açu

This transaction was especially important to Brazil because of the size and design of the asset – an LNG regasification plant feeding several power plants in a port located close to one of the main offshore oil and gas production hubs in the country.

A novel financial structure also makes it a special deal: in a dual-currency transaction, an international development bank backed by an ECA has guaranteed a national development bank.

An SPV comprising Prumo Logistics, BP and Siemens financed the development, construction and operation of an LNG-to-power project located in the Brazilian state of Rio de Janeiro.

The companies created the SPV - UTE GNA I Geração de Energia (commonly called GNA I) - to implement the project, which is part of the largest thermal power complex in Latin America, located at the Porto do Açu region.

The GNA I project is expected to start commercial operation in 2021. It includes an integrated 1.3GW combined cycle gas turbine (CCGT) based-fired power plant, an LNG import marine terminal, a transmission line, and the expansion of an existing substation.

The plant will be linked to Brazil's electrical grid (SIN) and the capacity and energy will be sold under regulated PPAs executed with 36 distribution companies. Financial close was achieved on 5 August 2019.

The last part of the financing was a $288 million, 15-year loan provided by the World Bank Group's IFC, which was disclosed on 3 April and signed on 15 March. This loan was provided in local currency.

GNA I had already signed a R1.76 billion (approximately $475 million, at exchange rates of closing date) with BNDES, which received a guarantee from KfW IPEX-Bank and was supported by German ECA Euler Hermes Aktiengesellschaft.

The guarantee transaction relates to a contract with Siemens, which will provide the turbines for the gas-fired plant, and has a contract for the turnkey construction of the plant, in a consortium with Andrade Gutierrez.

**The SPV split is:**

- Gas Natural Açu (GNA) – 67%
- Siemens Energy and Siemens Financial Services – 33%

**The main shareholder GNA and is owned by:**

- Prumo Logistics – 70%
- BP Global Investments – 30%

## Latin American petrochemicals
## Braskem Idesa refinancing

Petrochemical company Braskem Idesa, a joint venture between Brazil's Braskem and Mexico's Grupo Idesa, burst into the international capital markets in 2019 with a well-received $900 million senior secured offering to refinance the largest petrochemical plant in Latin America.

Citi, Sumitomo Mitsui Banking Corp and Santander were the active bookrunners on the 10 year non call five deal, which was priced with a 7.45% coupon in November.

The deal won over investors despite weaknesses in the global polyethelyne market and rising political risk in Mexico, and was oversubscribed. The transaction also included innovative fall-away provisions so that the debt becomes more like a typical corporate high yield bond as older project finance loans are refinanced.

The proceeds were used to refinance the Etileno XXI petrochemical complex in Nanchital de Lázaro Cadenas, Veracruz, which came online in April 2016.

Braskem owns a 75% stake in the JV, while Grupo Idesa holds the remaining 25%. Braskem is in turn owned by Brazil's Odebrecht.

The sponsors won an ethane supply agreement from PEMEX in 2009 as a result of a process carried out by Goldman Sachs, Hogan Lovells and Enerchem TEK. The plant produces 1 million tons of polyethylene per year.

Construction of the project was originally financed with loans totaling $3.193 billion from 16 financial institutions – including commercial banks and development finance institutions. Brazil's BNDES ($623 million), Export Development Canada ($300 million), the International Finance Corporation ($285 million) and the Inter-American Development Bank ($285 million) provided the largest tickets.

**Total value:** $900 million
**Tenor:** 10 year non call five
**Coupon:** 7.45%
**Ratings at issuance:** BB-/BB
**Active bookrunners:** Citi, Santander, Sumitomo Mitsui Banking Corp
**Passive bookrunners:** Banca IMI, BBVA, Mizuho
**Trustee:** Deutsche Bank Trust Co
**Advisers:** Paul Hastings, White & Case, Milbank, Ritch Mueller.
**Pricing date:** 25 November 2019
**Financial close date:** 2 December 2019


Winner of the
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2019
Braskem Idesa, committed to the petrochemical industry of Mexico with its large-scale project.
Braskem Idesa

## Latin American midstream oil & gas
### Logum Logistica

Logum Logistica – a company controlled by Petrobras, Raízen, Copersucar and Uniduto – signed a R1.8 billion ($337 million) financing with the National Bank for Economic and Social Development (BNDES), to expand its ethanol pipeline and storage infrastructure in January 2019.

The funds will finance about 1,300 km of polyducts for transporting ethanol as well as collection and delivery terminals in Uberaba (Minas Gerais), Ribeirão Preto (São Paulo), and Guarulhos (São Paulo), besides investments in the expansion of the Petrobras RP18 pipeline.

Of the funds, R960 million was used to finally retire a bridge loan originally provided by BNDES in 2011, which had been renewed fourteen times on a short-term basis. The tenor of this portion of the loan is 17 years.

The remaining R850 million will be used for new investments and is to be repaid in 24 years.

The long-term loan brings the amount invested by Logum to R3.3 billion since its formation in 2011.

The deal was impressive not only because of its size but also because of the complex negotiations around the terms and conditions of the termination of the repeatedly extended bridge loan.

Besides corporate guarantees provided by the sponsors, the security package included the fiduciary sale of ethanol by Logum, a pledge of Logum shares, the fiduciary assignment of rights arising out of Logum's services and operational agreements with third parties, and surety letters provided by financial institutions.

**Total value:** R1.8 billion ($337 million)

**Sponsors:** Petrobras, Raízen Energia SA, Raízen Combustíveis SA, Uniduto Logística SA, Copersucar SA

**Borrower:** Logum Logistica

**Lender:** BNDES

**Tenor:** 24 years

**Bridge loan guarantors:** Banco Bradesco, Banco Santander (Brásil), ING Bank (São Paulo branch)

**Advisers:** Mattos Filho

**Financial close date:** 3 January 2019

## Latin American M&A
### TAG Pipeline acquisition

Petrobras' sale of a 90% stake in its gas pipeline subsidiary Transportadora Associada de Gás (TAG) to France's Engie and Canadian pension fund Caisse de dépôt et placement du Québec was the largest asset acquisition, privatization and acquisition financing in Brazilian history when it closed in June 2019 after years of tireless work.

Petrobras launched the privatization process in September 2017, putting 47% of the country's entire gas infrastructure up for sale. The huge portfolio comprises 4,500 km of gas pipelines, 12 compressor stations and 93 city gates in the north and northeast regions of Brazil offered for sale to private investors.

Petrobras selected Engie and CDPQ as preferred bidders in 2018 over rival bids from Mubadala Infrastructure Partners / EIG Global Partners and Macquarie / Itausa, but the PB selection only marked the start of a lengthy regulatory and legal process spanning a year of political uncertainty – including presidential elections.

Engie and CDPQ financed the purchase with more than $6 billion of debt in two currencies, including R14 billion in seven-year local debentures and a $2.45 billion eight-year syndicated term loan.

Since virtually all TAG's revenues are in Brazilian reais, lead arrangers BNP Paribas, Crédit Agricole and Itaú provided an exchange rate hedge for the term loan. The contingent hedge structure is unusual in Brazil as the premium was deferred to deal close rather than being paid up front.

**Mandated lead arrangers (term loan):** BNP Paribas, Crédit Agricole, ING, Mizuho, MUFG, Societe Generale, SMBC

**Coordinating banks (debentures):** Bando do Brasil, Bradesco BBI, Itaú BBA

**Legal advisers:** White & Case, Lobo de Rizzo, Jones Day, Stocche Forbes, Mayer Brown, Tauil & Chequer Advogados, Cescon Barrieu Flesch & Barreto Advogados

**Financial advisers:** Citi, Morgan Stanley, Santander

**Insurance adviser:** Willis Towers Watson

**Total value:** R31.5 billion ($8.6 billion)

**Total debt:** $6 billion

**Total equity:** $2.4 billion

## Upstream oil & gas
### Trident Energy acquisition finance

London-headquartered oil and gas company Trident Energy last year closed the first reserve-based lending transaction in Brazil since new regulations were issued in May 2019.

The borrower used the proceeds of the $665 million loan to finance its acquisition of 10 oil fields in the country from Petrobras, which also marked the company's entrance into a new geographic market.

Although loans backed by oil reserves had theoretically been an option in Brazil before, no such deals were signed until the country's oil and gas regulatory agency, ANP, issued new regulations making the sales and purchase agreements clearer.

Sumitomo Mitsui Banking Corp, Crédit Agricole and ING Bank provided the debt package for Trident, which was signed in July, just two months after the new regulations were issued.

Trident acquired the assets through local subsidiary Trident Energy do Brasil, paying $851 million in two installments – a $53.2 million disbursement on signing the contract and a second $797.8 million payment on the closing date. Under the terms of the deal, Petrobras could receive an additional payment of up to $200 million depending on future oil prices.

The assets comprise 10 oil fields in shallow water clusters in the Campos Basin, off the coast of Rio de Janeiro. The assets are grouped into two clusters called Enchova and Pampo. The sale was part of Petrobras' strategy to sell 70% of its 254 assets in mature and shallow water fields, a plan announced in January 2019. Trident won the assets in a competitive sale process.

**Total value:** $851 million

**Debt value:** $665 million

**Borrower:** Trident Energy

**Private equity sponsor:** Warburg Pincus

**Mandated lead arrangers:** Crédit Agricole, ING Bank, Sumitomo Mitsui Banking Corp

**Advisers:** Herbert Smith Freehills, Walkers, Pinheiro Neto, White & Case, Mattos Filho, Machado Meyer

**Signing date:** 24 July 2019

## Latin American Transmission
## Celeo Redes Chile Transmission

This was a remarkable transaction to fund a transmission line in Chile, the first of its kind in the country. A single asset manager private placement that included construction risk and a delayed-draw of the notes, the transaction was also notable for carrying a 30-year tenor.

Celeo Redes Chile (CRC Transmisión) sponsored the portfolio that included both brownfield and greenfield projects, totaling more than 550km of transmission lines and eight substations.

The sponsor issued a $365 million, 30-year bond, through its subsidiary Casablanca Transmisora de Energía, to Allianz Global Investors, which also acted as structuring agent on the deal. The debt priced at 5.15% and the notes are interest-only for more than 10 years.

Additionally, the financing also included a $22 million VAT facility from Santander.

The finance structure was innovative for both private placement investors and rating agencies. It required a project finance structure with usual covenants, EoDs and security package to maximize leverage while accommodating the brownfield asset and the two large construction projects.

The structure also had to mitigate construction risk, especially because the project had less than 50% of the rights of ways for the transmission lines and substations at closing date.

Another mitigated risk referred to the tariff reset mechanism. The tariff is fixed for 20 years and then becomes subject to a 4-year tariff reset. Revenues are a mix of Chilean pesos and dollars.

Proceeds of the private placement were used to refinance the 52km Diego de Almagro Transmisora de Energía (DATE) project and fund the construction of the CASTE and MATE projects.

CASTE comprises three subprojects. The main element is a 106.84km, 220kV power line stretching between Melipilla and Viña del Mar, located in the regions of Valparaíso and Metropolitana, respectively. The project also contemplates the construction of two substations, Nueva Casablanca and La Pólvora.

The Mataquito-Hualqui (MATE) project – which includes 11 subprojects – is a 360km transmission line.

Spain's Elecnor owns a 51% stake in Celeo Redes, while the Dutch pension fund APG Asset Management controls the remaining 49% through its APG Infrastructure Pool 2012.

## Latin American Refinancing
## El Dorado airport

Sociedad Concesionaria Operadora Aeroportuaria Internacional (OPAIN) holds the concession to operate, expand, modernize and finance the El Dorado International Airport in Bogota, Colombia's capital city.

The two key sponsors of OPAIN are the Latin American conglomerate Grupo Argos (35%) and the airport and toll road concession business owned by Argos, Odinsa (30%).

OPAIN issued 4.09% senior secured notes through a private placement to refinance the El Dorado airport, which is the third busiest in Latin America in terms of traffic. Proceeds were used to repay total outstanding credits abroad, in dollars, and to fund continued investments, although construction phase has been completed in January 2019.

This transaction not only represents the first Colombian issuance in dollars in recent memory, but is also one of the largest project bonds ever issued by a Colombian company.

The 7.5-year US dollar-denominated notes are fixed-interest rate and fully-amortizing. The notes have a six-month debt service reserve account (DSRA) and standard provisions for dividend distribution and the incurrence of additional leverage.

Exposure to foreign exchange risk is seen as limited as approximately 75% of revenues are US dollar-denominated.

The transaction is subordinated with OPAIN, the Fiduciaria Bancolombia as local collateral agent and other material sponsors of the project company.

Final book order had 11 investors, including core infrastructure players in the international markets. The transaction was over subscribed by $278 million.

Financial close was reached on 14 August 2019.

**Debt value:** $415 million

**Full list of sponsors:** OPAIN, Argos, Odinsa

**Lenders:** pool of investors

**Joint lead placement agent:** SMBC, and SMBC Nikko Securities America

**Tenor:** 7.5 years

**Pricing:** 4.09%

**Advisers:** Paul Hastings

## Latin American renewables
## Pirapora II Solar PV

This eye-catching transaction comprised the first subordinated project issuance of debentures in Brazil, which will be repaid by dividend distribution of the SPVs constituting the project.

Originally developed by Canadian Solar, the SPV Pirapora II Solar Holding, now owned by EDF and Omega Energia (50:50), issued debentures to finance, fund future payments or reimburse costs and expenses and/or the repayment of short-term financings related to the implementation and operation of the Pirapora II solar complex.

The project comprises three subsidiaries, Pirapora II, III, and IV, with a total installed capacity of 115MWp.

Located in the Brazilian state of Minas Gerais, the project is fully contracted with a 20-year PPA signed with the electric power chamber of commercialization (CCEE), awarded in a power auction held in 2015.

The non-recourse transaction at the level of the controlling shareholder of the SPVs responsible for the development of the project led Pirapora II to reach financial closure, completing financing obtained one year earlier.

In June 2018, the SPV closed a R354 million 20-year financing with regional development bank Banco do Nordeste do Brasil (BNB), which provided loans at very competitive costs.

This first part of the financing received a guarantee package until financial completion, comprising 24-month letters of credit covering 100% of the financing amount. The LC was provided by BTG Pactual (60%) and BNP Paribas (40%) on a non-recourse basis, based solely on project guarantees.

In September 2019, Pirapora II issued the infrastructure debentures in local currency totaling R118 million. The issuance was seen as a groundbreaking transaction, creating an important precedent for other deals in the Brazilian debt capital markets.

Part of the proceeds from debentures was used to repay an existing shareholder loan.

## Latin American distributed power **Ergon private placement**

With a great social impact, this project is the most ambitious of its kind to date in Peru, designed to benefit over 1 million people living in rural and remote areas of the country.

Italian developer Tozzi Green's SPV, Ergon Peru issued a $222 million green bond to refinance the bank loan for a solar PV distributed generation project that installed solar kits in rural areas across the country. SMBC also provided a letter of credit (LC) totaling $14.5 million. The senior secured bond was issued under a private placement in the US and was acquired by a group of 42 institutional investors.

SMBC and SMBC Nikko Securities structured the emission, which received the highest evaluation score in S&P's green bond scale with the E1 grade.

SMBC also led the original financing, structuring it and acting as a lender besides Peruvian development bank Cofide, with a 13-year term loan totaling $142.3 million. The remaining financing will be used to fund the expansion of the project from the original 19.6MW to a total capacity of 28.4MW.

The new debt has a lower interest rate and longer tenor. The bond is now has the same duration as the tenor of the PPA awarded by the Peruvian Ministry of Energy and Mines – 15 years. After that, the government will own the projects and may seek a new concessionaire.

Ergon receives an availability-based fixed annual compensation indexed to local and US-PPI inflation subject to certain operational and service factors received through a monthly tariff charged to the project's end-users and a cross-subsidy among consumers of the energy system.

This is the first off-grid rural electrification for the Peruvian government to date, which aims to improve the living conditions and overall health and welfare of large and remote communities not connected to the grid. Most of the beneficiaries of this project have either lived without electricity or relied upon fossil fuels.

Peru has a goal of reaching 100% of rural electrification by 2025. Ergon's project aims to reach up to two million people.

**Debt value:** $222 million in bonds + $14.5 million in LC

**Full list of sponsors:** Tozzi Green (90%) and Gardini (10%)

Sole Placement Agent, Bookrunner, LC Issuing Bank, Intercreditor Agent and Administrative Agent: SMBC

**Tenor:** 15 years

**Pricing:** 4.87%

**Advisers:** Baker & McKenzie (international to borrower)

Estudio Echecopar (local to borrower)

Paul Hastings (international to lender)

Garrigues (local to lender)

## Latin American telecoms **Internet para Todos**

This transaction was complex for a number of reasons aspects, not only because of the number of investors and its different profiles but also because of the complexity of the transactional and commercial agreements and the complexity of the local telecom industry.

Internet para Todos (IpT) means Internet for all. This is what Telefónica, Facebook, IDB Invest and the Development Bank of Latin America (CAF) aimed at when they launched this project in Peru.

This telecoms project is considered by many to be social infrastructure. IpT is an open access wholesale rural mobile infrastructure operator which aims to bringing mobile broadband to remote populations where conventional telecom infrastructure deployment is not yet economically feasible.

The project has already connected 2,000 communities located in remote areas in Peru, benefiting around 600,000 people. Approximately 100 million people in Latin America are estimated to live without access to internet.

Financing for this project closed in May 2019, totaling $150 million.

The four participants agreed to finance the project as co-investors, which means that the full amount was disbursed as equity. All four became shareholders of IpT.

The economically-sustainable business model based on open access principles and new technologies was very innovative, especially for the region.

IpT will offer wholesale access to its rural broadband infrastructure through a revenue share model that will enable mobile operators to deliver communication services to individuals, businesses, and other organizations in rural communities.

Economic sustainability will be achieved through partnerships with local communities and by using open technologies that will reduce the cost of deployment in areas where current technologies are cost prohibitive.

IpT will take advantage of cloud architectures, automated network planning, open radio access solutions (Open RAN) and a combination of optimized fiber and microwave networks.

**Total value of the transaction:** $150 million

**Equity Value:** $150 million

**Full list of sponsors:** Telefónica, Facebook, IDB Invest, and CAF

**Advisers:**

Clifford Chance (international legal to development banks)

Garrigues (local legal to CAF)

DLA Piper (local legal to IDB Invest)

Rebaza, Alcázar & de las Casas (local legal to Facebook)

Estudio Echecopar (local legal to Telefónica)

Hogan Lovells (international legal to Facebook)

Baker McKenzie (international legal to Telefónica)

## Latin American rail **Ferrocaril Central**

The largest infrastructure investment in Uruguay's history and the first international railroad PPP in the country, Ferrocarril Central is a railroad that will connect a pulp mill to the Port of Montevideo, facilitating exports.

Awarded in 2018, Grupo Via Central consortium signed the 18-year contract to DBFM the 273km Ferrocarril Central, and the PPP contract has a minimum 7-year extension option. The project comprises maintenance of 273km of the existing railway from the Paso de los Toros to Montevideo, including the reconstruction of 80 km of existing single-track line and the construction of 26 km of two-way lines between Montevideo and Progreso.

*Having a 17-year bank financing, with a 1-year tail, was also a challenge in Uruguay*

Financing closed in October 2019, with dual-currency funding in US dollars and in UI (an inflation-indexed currency unit used in Uruguay for investments). Revenues from the project will be based on availability payments in both currencies. With an innovative structure, financing had four tranches of senior debt, including a combination of a dollar-based fixed-rate loan from IDB Invest, a UI-fixed rate tranche from CAF, and a swap in dollars from commercial lenders. IDB Invest provided a 17-year $538 million A/B loan, supported by Intesa Sanpaolo and SMBC. The local currency tranche linked to inflation (UI) was equivalent to $392 million. An infra debt fund managed by CAF provided the facility that will pay around 6.1% annually.

The financing package was backed by availability payments from the Ministry of Transport and Public Works (MTOP).

Aiming at additional flexibility to leverage the equity, the financing structure included a tranche of mezzanine.

Having a 17-year bank financing, with a 1-year tail, was also a challenge in Uruguay. Although the country has a good credit rating, it also has a narrow market with little dollar-investment opportunities for commercial banks and an economy considered too rich for most DFIs.

Ferrocarril Central will take around 3 years to complete. It is a key component of the transport infrastructure program that Uruguay is developing to strengthen its logistics platform, being complimentary to the truck and port systems.

**Total value of the transaction:** $1.1 billion
**Debt value:** $942 million
**Equity Value:** $155 million
**Full list of sponsors:** NGE Concession, Sacyr Concesiones, Saceem, Berkes
**Lenders:** Development Bank of Latin America (CAF), CAF Asset Management fund, IDB Invest, Intesa Sanpaolo, SMBC
Offshore Collateral, Account Bank, Intercreditor Agent, Administrative and **Paying Agent:** Citi NY
Onshore Collateral Agent and Account **Bank:** Citi Uruguay
**Tenor:** 17 years
**Advisers:** Jiménez de Aréchaga, Viana & Brause (Sponsor Local Legal)
Baker & McKenzie (Sponsor International Legal)
Clifford Chance (Senior Lenders International Legal)
Astris Finance (Financial)
Willis Towers Watson (Insurance Advisor)
Infrata (Technical Advisor)
Infrata & ERM (E&S Advisor)
PwC Uruguay (Tax & Accounting)
KPMG Uruguay (Model Auditor)
TMF (Onshore Trustee)

## Latin American roads **Autopista Al Mar 1**

Colombia's Autopista al Mar 1 project - the largest of the Fourth Generation (4G) road programme - reached financial close in March 2019, securing a multi-tranche transaction featuring domestic and international commercial and development banks, as well as institutional investors.

With a 25-year contract, the 176km Autopista al Mar 1 will connect the city of Medellín to the main highways in the country. The concessionaire Desarrollo Vial al Mar (Devimar) is owned by foreign and local companies.

The build, operate and maintain project comprises the construction of the motorway between Medellín and Santa Fe de Antioquia. Devimar will also build a parallel tunnel of 4.6km at the Túnel de Occidente, improving traffic in and out of Medellín. The concession contract includes the rehabilitation, operation and maintenance of the whole 176km concession road.

Autopista al Mar 1 closed with financing totalling Ps2.23 trillion ($713 million) with loans both in Colombian pesos and dollars in a novel structure in the country.

The 15-year tenor loan included six different tranches, one dollar-denominated tranche totalling $220 million; four peso-denominated tranches amounting to Ps1.34 trillion, and one URV-denominated tranche of around Ps190 billion.

FDN provided senior debt totalling Ps553 billion ($178 million). Additionally, the institution provided credit for multilaterals, international banks and funds through its fund in pesos, essential to get the deal across the finishing line.

Lenders at the dollar tranche comprised SMBC, KfW IPEX-Bank and Societe Generale. On the tranche in pesos, IIC, IDB (with IIC as agent acting on its behalf), FDN, ICO and CAF. And the tranche in URV was provided by BlackRock.

As the majority of the project costs are denominated in pesos, the project will use US dollars/Colombian pesos non-deliverable forward hedges to convert the dollars disbursements through construction into pesos, eliminating the FX risk to the project during construction.

Colombian development bank Financiera de Desarollo Nacional (FDN) played a fundamental role in leading the financing, acting as the major lender and providing local currency to foreign institutions.

**Total value of the transaction:** $1.061 billion
**Debt value:** $713 million
**Equity Value:** $348 million
**Full list of sponsors:** Sacyr (37.5%), Strabag (37.5%), Concay (25%)
**Lenders:** Societe Generale, SMBC, KfW IPEX-Bank, FDN, ICO, IDB Invest, CAF, and BlackRock
**Tenor:** 15 years
**Advisers:**
Clifford Chance – legal to the lenders (international)
Binder Grösswang Rechtsanwälte – legal to lenders (Austrian)
Philippi Prietocarrizosa Ferrero DU & Uría – legal to BlackRock
Brigard & Urrutia – legal to the lenders (local)
Paul Hastings – legal to sponsors (international)
Katten Muchin Rosenman UK – legal regarding the hedges
Godoy & Hoyos – legal to sponsors (local)
Mott MacDonald (technical)

## Latin American water **BRK Ambiental**

Brazil's BRK Ambiental closed financing for an innovative project comprising both brownfield and greenfield features in the country's largest sanitation PPP project. Sanitation in Brazil has a very specific legislation that limits private investments, which added challenges to the negotiations.

This project comprised the development of the water treatment and sanitation services infrastructure for the city of Recife and its metropolitan region, in the northeast of Brazil.

The project's total cost adds up to R1.7 billion, divided into two phases. The financing includes portions of investments already made and yet to be made on Phase 1 of the project, from 2013 to 2019. Phase 2 comprises investments that are to be made between 2019 and 2023, according to the timeline on the 35-year concession contract signed in 2013 by BRK Ambiental as part of the Cidade Saneada programme, the largest PPP in Brazil.

Phase 2 was co-financed by IDB Invest through a 20-year long-term loan of up to R$342 million, and by a loan closed with Banco do Nordeste do Brasil (BNB) of approximately R$634.5 million for the same term.

This financing adds to a loan obtained in 2013 from Caixa Econômica Federal to the amount of R$235.7 million, and sums from the Fundo de Desenvolvimento do Nordeste to the amount of R$415.6 million. The terms of the latter two loans are 23 years and 20 years, respectively.

One of many challenging points of this project is the sharing of guarantees between IDB and CEF. The loans will fund the expansion and improvement of sanitation projects in 15 municipalities in the metropolitan region of Recife, capital of the Brazilian state of Pernambuco.

The first phase of the project consists of 107km of new wastewater collection networks, 16 pumping stations, nine wastewater treatment stations and the renovation of the existing network.

The second phase, which will run until 2022, includes the construction of five treatment stations and the addition of 79,000 wastewater systems in homes and 440km of new wastewater collection network. It will increase the number of residences connected to the sanitation system in the region from around 40% to up to 90% coverage by 2037, benefiting around four million people. Canadian fund manager Brookfield owns 70% of BRK Ambiental, while the infrastructure investment fund FI-FGTS, managed by Caixa Economica Federal, owns the remaining 30%.

**Total value of the transaction:** R1.7 billion
**Debt value:** R1.256 billion
**Equity Value:** R474 million
**Full list of sponsors:** BRK Ambiental (Brookfield, 70% and Caixa's FI FGTS, 30%)
**Lenders:** Caixa Econômica Federal, Banco do Nordeste do Brasil, IDB Invest
**Advisers:**
Mattos Filho, Veiga Filho, Marrey Jr e Quiroga Advogados (local legal)
Hogan Lovells (international legal to IDB)
Norton Rose Fulbright (international legal to BRK)
Machado, Meyer, Sendacz & Opice Advogados (local legal to BRK)
Willis Towers Watson
PwC

IJGlobal Awards 2019

# Asia Pacific

It is with equal proportions of joy and sadness that *IJGlobal* announces the winners of our awards for company activity and deals closed across the 2019 calendar year in the Asia Pacific region.

The APAC team – led by regional editor Alexandra Dockreay in Sydney and senior journalist Dave Doré in Hong Kong – had been looking forward to hosting a conference in Singapore, followed by an awards night in The Westin.

This was sadly cancelled due to the coronavirus pandemic as *IJGlobal* took the tough decision that so many other organisations did in this challenging time – to cancel events in the interests of the safety and well-being of our partners.

We at IJ are always keen to drive home the impartiality of our judging process which – we believe – is renowned for being the most fairly judged, relying on a team of independent, senior infrastructure and energy players active across the APAC region. We are now delighted to announce the winners.

**Winners in the Asia Pacific transaction category are:**

- Waste – **East Rockingham EfW**
- Metals & Mining – **Greenbushes Hard Rock Lithium Mine**
- Oil & Gas – **Jambaran-Tiung Biru Gas Processings**
- Petrochemicals – **RAPID**
- Telecoms – **Kacific1 Satellite**
- Refinancing – **Mong Duong Finance Holdings BV**
- Innovation – **Da Mi Floating Solar**
- Hydro – **Tina River Rail PPP**
- Rail – **Cross River Rail PPP**
- Road – **Cambodia Expressway**
- Offshore Wind – **Yunlin Offshore Wind**
- Onshore Wind – **Super Six Wind**
- Energy Storage – **Hornsdale Power Reserve**
- ESG Finance Innovation – **Sydney Airport Refinancing**
- Power – **Gulf Pluak Daeng CCGT**
- Solar – **Teknaf Solar**

## Asia Pacific waste
### East Rockingham EfW

East Rockingham Resource Recovery Facility (ERRRF) is only the second utility-scale energy from waste (EfW) project financed in Australia. With ERRRF within 7km of the first at Kwinana, Western Australia and its Perth metropolitan area has become the nucleus of EfW in the country.

Original developer New Energy Corporation brought in major international player Hitachi Zosen INOVA (HZI) to provide its moving grate combustion technology. HZI's EPC partner Acciona from Spain has chosen this project to take an equity position for the first time in its global EfW business.

Another early stage sponsor that joined the 300,000 tonnes of waste, 29MW energy project was Tribe Infrastructure Group drawing on its international network and experience across the Middle East and Asia Pacific. After an international search, John Laing from the UK and Masdar from Abu Dhabi joined for 40% equity each around financial close, with Masdar debuting in Australia.

The Eastern Metropolitan Regional Council (a collective of four councils) and City of Cockburn had each tendered 20-year waste supply contracts for red-bin municipal solid waste on an unusual "waste arising" basis, rather than the typical "take-or-pay". They only offered exclusivity over all the red-bin waste in their areas.

These councils will suffer no financial penalties for initiatives reducing red-bin waste. But it fell to consultants, lenders and investors to pore over forecasts to get comfortable, assessing for example demographic trends and the planned rollout of food and garden organics waste bins.

Australian, Japanese and European lenders were able to provide a A$308 million five-year term loan, while government green bank Clean Energy Finance Corporation is providing a A$57.5 million mezzanine loan that helped in obtaining the A$128 million of total equity.

The addition of technology for collecting and treating bottom ash, which an external company will blend in its construction materials, is hoped to kick-start a new Australian market.

## Asia Pacific metals and mining
### Greenbushes lithium mine expansion & refinancing

Talison Lithium operates the Greenbushes Lithium Mine in Western Australia, the world's largest active lithium mine, capable of producing 1.34 million tonnes of lithium concentrates per year. Talison Lithium is itself one of only five large-scale producers that dominate the global market for lithium, a less transparent commodity that in 2019 featured depressed prices making it difficult for smaller operators.

But the world-leading Greenbushes facility, as it readies to expand further, has its eye on the long-term potential of lithium in energy storage and electric vehicles.

Greenbushes hard rock mine managed to raise funds to refinance the existing mining operation and fund the majority of costs for a major expansion. The project will add a third chemical-grade lithium processing plant, plus a tailings retreatment facility for utilising tailings recovered from historic production targeting tantalum rather than lithium. Some works began in 2019, with construction due to take a few years.

*The revolving loan gives flexibility for the borrower to progress the project at a suitable pace*

Borrower Windfield Holdings is a holding company owning Talison Lithium. Windfield's 50/50 shareholders are Chinese manufacturing company Sichuan Tianqi Lithium Industries Inc. and US-based chemicals company Albemarle Corporation. As both the shareholders and the offtakers for Greenbushes Lithium Mine, unique contractual arrangements were required.

Both shareholders are building downstream processing facilities nearby at Kwinana and Kemerton. These, when commissioned by late 2021, should receive lithium from Greenbushes. In June 2019 Windfields closed a project finance secured just against Greenbushes mining facility. It refinanced a A$370 million four-year revolver raised in 2017 from the same banks, and provided the majority of the capital for the expansion.

The lenders on the 2019 A$770 million four-year revolving credit facility are a group of six international banks from Europe (ING, HSBC, Societe Generale, BNP Paribas) and China (ICBC and Bank of China). The revolving loan gives flexibility for the borrower to progress the project at a suitable pace.

## Asia Pacific oil and gas
### Jambaran-Tiung Biru gas processing

Subsidiaries of Indonesian state-owned oil and gas company Pertamina – Pertamina EP Cepu (PEPC) and Pertamina EP (PEP) – are developing the Jambaran-Tiung Biru (JTB) gas-processing project: one of Indonesia's five national strategic priorities. Sponsors have a production-sharing contract with Migas, the oil and gas regulator. The project's aim is to monetise JTB gas field's 2.5 trillion cubic feet of proven reserves in East Java, Indonesia.

Sponsors have raised a $1.85 billion debt package towards PEPC's project costs. MUFG, as financial adviser, developed the financing under a limited-recourse trustee-borrowing scheme (TBS) – Pertamina's largest TBS financing in two decades. It was the first-ever Pertamina-led, limited-recourse TBS financing with no recourse to Pertamina at the parent level.

The TBS helped the borrower – New York Trustee on PEPC's behalf – cover risks associated with the inability to pledge assets. The TBS also had an innovative hedging solution, allowing local and regional banks that were not compliant with the Dodd-Frank Act to provide interest rate swaps.

The US dollar package, with 12 local, regional and international banks on the syndicate, combined 15-year conventional tranches and 10-year Islamic debt tranches. The deal was Indonesia's largest and longest tenor project financing that did not involve export credit agencies. The inclusion of Islamic debt was groundbreaking. It was Pertamina's first Islamic project financing and the first time for Islamic debt in a TBS.


The revenues, mainly from a long-term gas sales agreement with offtaker Pertamina, are the primary source of debt service. The transaction was the first limited-recourse financing to have a Pertamina subsidiary as anchor sponsor.

Project participants included SMBC (MLA and hedge provider), DBS (MLA and hedge provider), Latham & Watkins (sponsors' legal) and Milbank (lenders' legal).

## Asia Pacific petrochemicals – **RAPID**

Petroliam Nasional Berhad (Petronas) and Saudi Aramco's $15.3 billion Refinery and Petrochemical Integrated Development (RAPID) project was a $9.6 billion mega project financing in Malaysia, for what is understood to be Asia's largest ever petrochemical and refinery project and the largest ever project financing in South and Southeast Asia.

RAPID was many years in the making, with Petronas' final investment decision in 2014 and that after long delays. RAPID will deliver a 300,000 barrels per day refinery and a steam cracker, which provide feedstock to the project's downstream C2/C3 polymers and glycol derivatives petrochemicals complex with 3.6 million metric tons per year production capacity. Already commercial operations at RAPID were starting by late 2019.

This mega project is within Petronas' estimated $27 billion Pengerang Integrated Complex (PIC) in Johor, Petronas' largest project to date. For Malaysia RAPID is a game-changer, due to position the country long-term to capitalise on growing demand for energy and petrochemicals in Asia and globally. State-owned Petronas transitions from a more domestic focus to a major regional player.

When in March 2018 Saudi Aramco signed up to invest in 50% ownership of RAPID's refinery and cracker in its largest investment abroad, it gained a crucial export customer in Southeast Asia as it will supply 50% to 70% of the refinery feedstock.

In the region of 50 commercial banks have participated, with ECAs including from Japan, Korea, Italy, Spain and UK. Commercial lenders came from Malaysia, Singapore, China, Japan, US, Kuwait, Australia, UK, Italy, Spain, France and Germany.

Their 15-year $9.7 billion debt closed 22 November 2019, featuring a $5.63 billion uncovered facility, one of the largest ever in Asia Pacific, priced very low starting at 95bps. There are two special purpose vehicles (SPVs), for the refinery and cracker and then the petrochemicals complex, with the SPVs able to share liabilities and on-loan proceeds.

## Asia Pacific telecoms **Kacific1 satellite**

Kacific Broadband Satellites Group (Kacific) in March 2020 entered commercial service on its asset Kacific1 nearly 35,800km above the equator, following the satellite's launch on a SpaceX Falcon 9 rocket. The $160 million refinancing had closed less than two weeks before the December 2019 launch.

Kacific1 is a shared, geostationary earth orbit, high-throughput satellite. The communications satellite is providing mobile backhaul and broadband internet via 56 powerful spot beams to remote areas in 25 nations throughout South East Asia and the Pacific Islands. Catherine Marsh, Asian Development Bank (ADB) assistant general counsel, said: "By doing a transaction such as this, we hope to demonstrate deals in [the Pacific Islands region] are bankable."

Edwards Investment Cyprus, a UK-based family office, is Kacific's largest investor. Another owner is Oceania Women's Network Satellite (OWNSAT) and its individual members. "We all invested because we wanted to bring high-throughput broadband internet to the Pacific Islands and particularly to the women on those islands," said OWNSAT co-founder Candace Johnson.

Project participants cited the unusual mix of financiers – DFIs, an Australian pension, a European asset manager – as one of the innovative aspects of the deal. ADB, Leading Asia's Private Infrastructure Fund and MEAG participated on the $110 million senior secured debt. Commonwealth Superannuation Corporation, as trustee of the ARIA investment trust, delivered a $50 million mezzanine loan. GuarantCo provided a $50 million partial credit guarantee on MEAG's tranche. Senior debt priced at roughly 400bp over 6-month Libor. The mezzanine has an undisclosed fixed rate. Tenor was seven years across all tranches.

Kacific had to get its financiers comfortable with the credit risk of telcos and internet service providers in frontier markets. "One of the main risks is definitely offtaker risk in our industry," said Kacific's founder and chief executive Christian Patouraux. "Bankers need to balance their credit risk assessment with deeper market analysis. They tend to tip the scales to the former."

## Asia Pacific refinancing **AES-VCM Mong Duong 2**

AES Corp, Posco Energy and China Investment Corp own AES-VCM Mong Duong Power – the project company of the 2x 560MW Mong Duong 2 coal-fired power plant complex, some 220km east of Hanoi in Quang Ninh, Vietnam. AES-VCM Mong Duong in the second half of July 2019 engaged more than 100 investors for a $1.163 billion refinancing package in six cities around the world.

On 25 July Mong Duong Finance Holdings – the offshore refinancing SPV – priced $678.5 million 144a/RegS notes, along with a $402.7 million term loan and $82 million debt service reserve letter of credit (DSR LC) to purchase existing export credit agency loans, raised in 2011 roughly four years before commercial operations date.

Initial price guidance (IPG) was 5.625% on the notes due 2029 – Vietnam's first ever project bond. "Quick conversion of [indications of interest] saw books grow quickly with chunky orders from high quality institutional accounts, and were in excess of $2.25 billion post lunch," said Citi, the joint global coordinator on the bonds with HSBC. Order books of the largest ever sub-investment-grade project bond from South East Asia grew to more than $3.4 billion, following the US open. Final coupon compressed 50bp below IPG to 5.125% – about 112.5bps off the theoretical seven-year Vietnam sovereign bond, given the government-guaranteed coal supply agreement and power purchase agreement.

*"Quick conversion saw books grow quickly with chunky orders from high quality institutional accounts."*

Transaction innovations included a bond and term loan "repack" of the existing ECA-covered loans Korea Exim Bank and K-Sure loans. The new debt has full security over the issuer and the existing loans enabled full security over AES-VCM Mong Duong Power's assets and project agreements, meaning all project finance security was kept in place.

"The non-recourse DSR LC was the most innovative aspect of the transaction," said James Meffen, AES director of project finance. "I think that was hard for everybody involved to agree on." HSBC director of infrastructure finance Remi Degelcke noted, "Certainly in Asia, DSR LC has not been seen in many transactions. It required a lot of structuring and negotiating with the banks."

## Asia Pacific Innovation
### Da Mi floating solar

Project sponsor Da Nhim–Ham Thuan–Da Mi Hydro Power (DHD) – a third-tier subsidiary of Vietnamese monopoly state utility EVN – has developed the 47.5MW Da Mi floating PV solar project on a reservoir of its existing 175MW Da Mi hydropower plant in Binh Thuan. DHD's status as a state-owned enterprise and subsidiary of the monopoly electricity utility EVN, which has a strong relationship with the Asian Development Bank (ADB), helped to smooth the way.

ADB, as DHD's financial adviser, helped structure the $37 million debt package into three US dollar tranches. Structuring involved ADB's ordinary capital resources, a blended concessional co-financing from Canadian Climate Fund for the Private Sector in Asia and its follow-on fund, and a parallel loan from Japan International Cooperation Agency-supported Leading Asia's Private Infrastructure Fund. A source understands ADB's loan to have a 15-year tenor and pricing in line with Vietnam's 10-year sovereign-risk spread.

*"International lenders are not comfortable with the current domestic PPA terms."*

Da Mi is Vietnam's first large-scale floating solar PV project and the largest in Southeast Asia. "The pairing of these two clean energy technologies – hydropower and solar – is a simple but a highly innovative achievement, which can be replicated elsewhere in Vietnam and across Asia and the Pacific," said ADB's deputy director-general of private sector operations Christopher Thieme.

"International lenders are not comfortable with the current domestic PPA terms, and local banks lack experience in financing renewable energy projects," said an ADB source. "The project was financed using a hybrid structure with debt sizing based on project cash flows and an acceptable level of gearing, with additional credit enhancement provided by the revenues from DHD's already operating hydropower assets."

Project participants also pointed to the importance of assuaging EVN's concerns about the management of intermittent power on the grid. "Many grid operators are wary of increasing the levels of renewable energy, particularly solar," said a project insider. "Successful project development helps inform future policy and give EVN the knowledge it seeks to negotiate successfully with developers on future renewable energy expansions."

## Asia Pacific hydro
### Tina River Rail PPP

Solomon Islands in the South Pacific relies almost entirely on imported diesel (97%), with volatility in diesel pricing passing on from utility Solomon Power to consumers. The long-running Tina River Hydro project, first conceived in very early studies in 2007-2008 as the nation's first renewable project, should dramatically reduce consumer energy costs. Capital Honiara's reliance on diesel should fall to around 30%, with the cost per kWh in Solomon Power's 30-year PPA around one-third lower at financial close than the prevailing diesel cost.

*Tina River Hydro should also reduce annual CO2 emissions by equivalent to 49,500 tonnes.*

Tina River Hydro should also reduce annual CO2 emissions by equivalent to 49,500 tonnes.

The government, not long out of civil war, worked closely with World Bank on studies and then the International Finance Corporation as financial adviser. They structured a build, own, operate, transfer contract: the nation's first PPP.

Challenges during early stages were a lack of data on the site, plus identifying and registering tribal land owners. Newly-established Tina Core Land Co (50/50) owned by tribes cooperatives and government) will lease the land. The cooperatives ensure around 4,000 men, women and children will share benefits equally. It is a complex 15MW high dam hydroelectric facility in a high-cost geography.

Only the Korea Water Resources Corporation (K-water) and Hyundai Engineering Co. (HEC) consortium stayed in the procurement to the end.

A pivotal shift happened during 2014-2015's global oil price crash, with Tina River Hydro transitioning from a commercial finance structure using private sector windows of development banks, to a fully concessional finance.

Parts of Asian Development Bank, KEXIM, World Bank, Green Development Fund, Abu Dhabi Fund for Development are providing $157.975 million concessional loans, all with varying tenors and interest, to Solomon Islands Government. Grants totalling $50.955 million also go direct to government. The government ring-fences proceeds and on-lent one single senior, secured 30-year $156 million loan to the project company complemented by a $45 million grant.

## Asia Pacific rail
### Cross River Rail PPP

The A$5.4 billion ($3.76 billion) 10.2km Cross River Rail in Brisbane, Australia is a highly complex feat of engineering to deliver an entirely new heavy rail line. It is Queensland's largest ever PPP procurement. It could support an enormous 7,700 jobs in total over five years of construction.

The tunnels, stations and development (TSD) works package that the Queensland Government procured as an availability-based PPP involves construction of 5.9km twin tunnels under the Brisbane River and central business district, plus four new stations underground and two station upgrades above ground. Construction will take 4.8 years, followed by a 24-year maintenance phase.

Competition in the tender was competitive as ever for a large-scale PPP in Australia, with the PULSE consortium of Australian, Dutch and Italian equity partners Pacific Partnerships, DIF, BAM PPP PGGM Coöperatie and Ghella Investment & Partnerships emerging victorious. Their group contracting arms will undertake the works.

Pulse beat a team led by Plenary with partners from Australia, Spain, Italy, and Korea and another led by Capella Capital with long-term QIC money and Australian and French contractors.

Macquarie Capital was sponsors' financial adviser, collaborating to raise on 1 July 2019 a six-years-and-seven-months A$2.1 billion term debt for construction from 11 international banks from Japan, Spain, France, Italy, Germany, and the UK before syndication. There is also a A$109 million guaranteed facility and A$58 million debt service reserve facility.

Queensland's motivation for the undertaking is to ease congestion on Brisbane's roads by enabling much higher frequency, integrated public transport. The city has only one river crossing built 40 years ago at present, an effective bottleneck on its transport network, and four inner-city stations.

Stakes for the state government are high, with no federal contributions. In February 2020 Queensland's minister for the project announced the delivery authority will report to her directly, while setting up a compliance unit.

## Asia Pacific road

### Phnom Penh-Sihanoukville Expressway

The development of Cambodia's expressway network will facilitate modern industrialization. The Henan Provincial Communications Planning Survey and Design Institute has estimated that Cambodia needs to develop 2,230km of expressway, totalling some $26 billion in project cost, by 2040. The Design Institute survey envisioned an expressway linking Cambodia's two major economic hubs – the capital of Phnom Penh and the port of Sihanoukville.

China Communications Construction's China Road and Bridge Corp (CRBC) is sponsor of Cambodia's first expressway – the $1.87 billion, real-toll Phnom Penh-Sihanoukville Expressway. The project development lasted many years. CRBC in 2007 was toiling away on the road's feasibility study. Fast forward some 12 years, PwC, CRBC's financial adviser, has helped structure a massive loan package, led by China Development Bank and the Export-Import Bank of China. Chinese banks signed the syndicated loan in April 2019 and closed a month later. Sinosure is providing coverage to the EPC companies and banks, according to an inside source. Law firms Hunton & Williams and DFDL advised CRBC to commercial close on the 50-year concession.

Government officials and project participants expect the build-operate-transfer project, as part of China's Belt and Road Initiative, to birth an important economic corridor. The 190km, four-lane highway will connect Cambodia's two major economic hubs: the capital of Phnom Penh and Sihanoukville – site of the South East nation's only deep-sea port. More than 90% of Cambodia's total container traffic passes through Sihanoukville.

Cambodia's Ministry of Public Works and Transport anticipates that project company Cambodian PPSHV Expressway Co will complete the Phnom Penh-Sihanoukville Expressway in Q3 2022, some five months ahead of schedule.

The Shenzhen Urban Planning and Design Institute had created a master plan for Shenzhen, China in the early 1990s. It emerged in 2019 that the Cambodian Government has tasked the institute to reprise that role and design a master plan for Sihanoukville, to transform the port city into the Shenzhen of Cambodia.

## Asia Pacific offshore wind

### Yunlin offshore wind

Soon after German developer wpd won the 640MW Yunlin offshore wind farm, it started looking for equity buyers in Yunneng Wind Power, the project company. Japanese investors – Sojitz, JXTG Energy, Shikoku Electric Power, Chudenko and Chugoku Electric Power – acquired 27% in April 2019. Japan's offshore wind market is a significant growth option for Sojitz. Its strategic roughly 9% stake in Yunlin is its first in an offshore wind farm.

The trading company aims to acquire expertise to develop the domestic industry. Then a subsidiary of Bangkok-listed Electricity Generating Public Co in December 2019 agreed to acquire 25% interest from wpd, dropping the German developer's stake to 48%.

SMBC had the joint mandate on the NT$94 billion ($2.98 billion) project finance package – the largest ever offshore wind, non-recourse deal in Asia. A total of 19 banks – four local and 15 international – lent on the deal.

Pricing and tenor had evolved from Taiwan's first offshore wind financing, Formosa 1, to Yunlin. Yunlin's pricing increased 10bp to 240bp above three-month Taibor, having the same 200bp at COD step-down.

While Yunlin's 18-year tenor certainly contributed to the 10bp premium over Formosa 1's 16-year debt, "the increase in tenor was not the sole factor," said a banker.

"A large contributor is definitely the increase in scale, as Yunlin soaked up a lot of NTD liquidity. When you take that much NTD off the table, you need to pay."

Three European ECAs participated to provide the required coverage for Yunlin's debt. EKF hit its cap to support offshore wind projects, with Atradius and Euler Hermes meeting the gap. Yunlin was Atradius' first offshore wind and first non-recourse Taiwanese deal.

Sponsors needed novel solutions because some of the lenders had access to Taiwan dollars, while others seeking to be involved did not.

The financing structure, therefore, was complex, comprising a mix of local currency and Euro debt, ECA covered tranches and unfunded risk participations.

The transaction also featured an innovative working capital facility, bridging pre-completion revenues. This deal had sizeable currency and interest rate hedging, while Deutsche Bank provided a groundbreaking deal-contingent interest rate swap.

## Asia Pacific onshore wind

### Super Six financing

Pakistan Prime Minister Imran Khan gave his imprimatur to a cohort of 11 wind farms in Jhimpir wind corridor, totalling 560MW in total installed capacity, which reached financial close in November 2019. For six of the wind farms, IFC used a programmatic approach for the first time in the wind sector. Dubbed the Super Six, these wind farms will be able to power 450,000 households.

IFC arranged a $317 million debt package from international DFIs – IFC and DEG – and local financiers – Bank Al Habib, Meezan Bank, Bank Alfalah and Allied Bank – on an 80/20 debt-to-equity basis. Sponsors evenly split the Pakistan rupee and US dollar tranches for each of the six projects. Interest pricing on the local currency was 6% – taking advantage of central bank State Bank of Pakistan's concessional lending on renewables – compared to 425bp over three-month Libor for the foreign debt. The hard currency's 13-year tenors were 30% longer than local currency tranches.

"Bridge Factor worked with IFC to club the projects. We must compliment IFC for very efficiently organising the programme," said Bridge Factor chief executive Akbar Bilgrami, who served as financial adviser to eight of the 11 projects, including the Super Six.

While the six originally had the same financing terms and commercial contracts, each project had a different group of sponsors and lenders. Some projects had only USD debt, others had USD and PRs loans, while still others had USD and local Islamic debt. Participants, therefore, had to design significant optionality in the template documentation.

"Each sponsor likes to get a better deal than their peers, and here we were proposing they would basically get the same deal," remarked the Bridge Factor chief executive. "Once it was all done, however, the sponsors appreciated the programmatic approach to achieve close, as they saved on legal, due diligence and travel costs."

## Asia Pacific Energy storage
### Hornsdale power reserve

Neoen's Hornsdale Power Reserve is a 100MW/129MWh operational lithium-ion battery energy storage (BESS) system in South Australia. The project grabbed world headlines when battery-maker Tesla wagered with the state government in 2017 it could build it within 100 days or else hand it over for free. The battery was operating by November that year.

It retains the status of the world's largest standalone BESS.

Most recently it prevented blackouts in February 2020 storms when South Australia's grid was "islanded". In its first year the BESS saved more than $50 million for energy consumers, by providing ongoing grid stability services and emergency back-up.

In November 2019, Neoen raised the first project financing for a standalone BESS connected to Australia's National Electricity Market (NEM). The special purpose vehicle (SPV) raised project finance for the existing battery and a roughly A$71 million project to add 50MW/64.5MWh capacity and upgrade to Tesla's Virtual Machine Mode.

Once expanded, this will be the first grid-scale battery with software providing digital inertia services to the NEM, which long-term could build up a market for inertia. It could provide around half South Australia's required inertia for grid stability.

Federal green bank Clean Energy Finance Corporation (CEFC) provided a A$50 million 13-year loan. Sponsor Neoen invested A$41 million equity, after having already equity funded the existing 100MW A$100 million BESS. Meanwhile the commonwealth's Australian Renewable Energy Agency gave an A$8 million grant.

With similarities to capacity market payments, South Australia's government will pay A$3 million-a-year for five years for the 50MW extra capacity. Meanwhile other revenues come from trading and arbitrage.

CEFC's loan includes a market tranche featuring revenue sharing between project SPV and CEFC for a percentage of cash flows, and no minimum repayment schedule. The contract-backed tranche achieved a lower debt service coverage ratio than for comparable wind or solar deals, in the absence of production risk.

## Asia Pacific ESG Finance Innovation
### Sydney Airport refinancing

Sydney Airport's operator has been pioneering in its commitment to environmental social and governance (ESG) principles since 2014, when it was the first Australian airport to report on sustainability performance. It has an ambitious target to be carbon neutral by 2025 and in another pro-active initiative, management saw the opportunity to link funding costs with sustainability. ANZ and BNP Paribas, both banks with prior experience in sustainability-linked loans, were mandated as joint sustainability coordinators to collaborate on a major multi-bank refinancing.

*"The interest rate changes are modest but meaningful."*

Precedents have been either outside Asia Pacific, or a small A$50 million single lender sustainability-linked loan for another Australian airport with debt pricing moving only one way: down.

For Sydney Airport, interest rates each year could rise or fall by a binary amount, or stay the same. "Having established the first syndicated sustainability linked loan in Australia, we had to lay the groundwork in creating the right structure and getting the banks comfortable," Sydney Airport group treasurer Michael Momdjian said.

Setting internal ESG targets did not match their ambition, so Sydney Airport selected external assessor Sustainalytics to give an annual score. Sustainalytics scores based on: corporate governance, product governance, human capital, business ethics, community relations, occupational health and safety, and emissions, effluents and waste.

The A$1.4 billion ($965 million) revolving credit facilities raised 23 May 2019 are in three tranches, with bullet maturities after three, four and five years.

There are more than 10 banks, all existing lenders, from Australia, Europe, US, Canada and Asia. "The interest rate changes are modest but meaningful. They are enough to drive a behavioural change, incentivising management to further improve our sustainability performance across the entire ESG spectrum" says Momdjian.

Management has already continued its momentum from 2019. In February 2020 Sydney Airport issued the first sustainability linked US private placement (USPP), and the first sustainability-linked bond issuance globally with two-way pricing movement.

## Asia Pacific power
### Gulf Pluak Daeng CCGT

Gulf Group's subsidiary Gulf Energy Development and Mitsui & Co's Mit-Power Capitals in November 2019 reached financial close on the Bt50 billion ($1.655 billion) Gulf Pluak Daeng (GPD) combined-cycle gas turbine power plant complex in Pluak Daeng, Rayong.

They have a long-term relationship, as their joint venture Independent Power Development Company (IPD) is holding company of both the 4x 662.5MW GPD CCGT complex and the GSRC complex in Sriracha 45km inland.

The project company for the GPD CCGT – Gulf PD Co (GPDC) – structured a more than Bt41 billion dual-currency, 23-year debt package. An international mix of seven lenders, including Japan Bank for International Cooperation, Asian Development Bank (ADB) and Export-Import Bank of Thailand, contributed $527.1 million to the hard currency tranches. Nine local banks, led by Bank of Ayudhya Bangkok Bank, Krung Thai Bank and Siam Commercial Bank, participated in the Bt20 billion local currency tranches, in addition to the Bt6.02 billion contingency facilities. *IJGlobal* understands that GPDC fixed the interest rate at 3.3%. IPD entered a 20-year swap converting the debt's interest rate from floating to fixed rate.

"The project will build the fourth-largest power plant and one of the largest combined cycle gas turbine power plants in Thailand, which will be key in the Eastern Economic Corridor (EEC) development plan, considered as the prime economic growth driver for the country until 2028," said ADB deputy director-general for private sector operations Christopher Thieme.

*"The project will build the fourth-largest power plant in Thailand"*

Project participants commented on the complex financing structure involving a mix of US dollar and Thai baht facilities, ADB's B-loan structure and direct financing from ADB and JBIC. The B loans allowed OCBC and DZ Bank, international banks with limited experience in Thailand, to participate.

The deal also has a back-ended equity structure, meaning Gulf and Mitsui are providing corporate guarantees in favour of lenders to secure their 70/30 equity contributions to IPD. A banker also said that Mitsubishi Hitachi Power Systems' is deploying a new gas turbine generator, with limited operational data.

## Asia Pacific solar **Teknaf financing**

It was July 2017 and a barren, 116-acre remote part of Cox's Bazar, Bangladesh glistened with potential off the waters of nearby Naf River. Some 22 months later, project company Teknaf Solartech Energy (TSEL) closed on the $25 million debt financing for the 28MW Teknaf solar farm – now the first and only operational utility-scale solar project in Bangladesh. Dhaka-based IPP Joules Power (JPL) and a Chinese supplier own TSEL. In turn, three well-respected Bangladeshi business people, including Nuher Latif Khan, own JPL, which has an 80% equity interest in the SPV.

Acting as a quasi-financial adviser, GuarantCo – a member of London-based Private Infrastructure Development Group (PIDG) – approached banks armed not only with technical reports and environmental & social plans but also with a "bankable PPA signed by BPDB", according to GuarantCo South Asia regional director Nishant Kumar. Four banks joined the deal: $15 million in dual currency came from Standard Chartered (SCB) and Tk824 million tranches from local banks One Bank, Sabinco and Shahjalal Islami Bank.

Bangladesh's first 15-year project financing – almost double the typical eight-year maximum tenor for the country's infrastructure projects – saw GuarantCo mitigating payment default and liquidity risks on the Tk3 billion ($35.6 million) Teknaf solar power project. GuarantCo provided SCB with 90% coverage of "unconditional, irrevocable, on-demand guarantee". GuarantCo also provided a liquidity extension guarantee, a novel solution to de-risk challenges around refinancing. It allows SCB to exit the transaction after eight years – the typical maximum tenor– if liquidity constraints arise. GuarantCo soaks up the refinancing risk while the SPV continues to enjoy the entire 15-year tenor.

"Rates are higher with the local bank tranches, which reflects on why GuarantCo coverage adds value as we can avail the 'risk-free' rates from the banks at a longer tenure," Khan said. "SCB's pricing was very efficient as their spread tends to be lower than the local banks."

IJGlobal Awards 2019

# Middle East & North Africa

*IJGlobal* is delighted to announce the winners of our coveted awards for company activity and transactions closed over the calendar year of 2019 across Middle East and North Africa.

We would have been presenting these awards at The Oberoi, Dubai, in March – the *IJGlobal* awards season – but this was sadly cancelled due to the coronavirus pandemic, following close consultation with our partners and clients.

Winners in the institutional category were voted on by senior figures from across the regional infrastructure and energy community – none allowed to vote in their own business areas – in what is widely regarded to be the most independently-judged awards in this sector.

**Winners in the MENA transaction category are:**

- Export Finance – **Al Dur 2 IWPP**
- Mining – **Alba line 6 expansion (ECA facilities)**
- Oil & Gas – **Bapco Modernization Program**
- M&A – **Project Beyond (ADNOC)**
- Refinancing – **Ma'aden Debt-to-Equity Conversion and Capital Increase**
- Wind – **Dumat Al Jandal Wind Farm**
- Water – **Taweelah IWP**
- Power – **Hamriyah IPP**
- Solar – **DEWA IV CSP**

## MENA export finance
### Al Dur 2 IWPP

A sponsor consortium of ACWA Power, Mitsui & Co, and Al Moayyed reached financial close on the first greenfield IWPP in Bahrain since the GFC – the $1.1 billion, 1.5GW Al Dur 2 IWPP with a 227,300 m3pd desalination facility.

Bahrain's Electricity & Water Authority (EWA) will purchase the power and water through a 20-year offtake agreement – BD12.9935/MWh ($34.5572) and BD0.26351/m3 ($0.70) respectively – which is backed by the Ministry of Finance. Gas feedstock will be supplied by the Sitra refinery which is subject to the BAPCO Modernisation Project – another project that reached financial close in 2019.

The ACWA Power-led team put up $281 million in equity and signed two tranches on the debt-side – one covered. Euler Hermes provided cover on a fully-amortizing 14-year plus construction tenor tranche with Standard Chartered Bank and KfW IPEX-Bank – with debt pricing at 105bps over Libor.

The other tranche is uncovered and consists of regional lenders and a Saudi DFI: Apicorp, Banque Saudi Fransi, Riyad Bank, and Saudi Fund for Development. This carries a 19.5-year tenor, starting at 350bps rising to 475bps.

The EPC contractors are SEPCOIII, PowerChina, and Sidem with Siemens providing F-class gas turbines. The O&M contract was awarded to NOMAC. The power component of Al Dur 2 will provide 25% of Bahrain's energy generation when construction finishes in Q2 2022.

The sponsors were advised by Covington & Burling and ASAR. EWA was advised by KPMG, Towers & Hamlins, and WSP. The lenders were advised by Shearman & Sterling, Al Tamimi & Company, and Norton Rose Fulbright, and Index. Deloitte was the model auditor on the deal.

## MENA Mining
### Alba Line 6 expansion

Aluminium Bahrain (Alba) closed on the ECA-backed tranche of its $3 billion Line 6 expansion project at the start of the year in 2019, which is a $238.3 million deal split between two tranches.

This new debt will be used to finance equipment for the Line 6 expansion project, which is expected to boost Alba's yearly production capacity at its aluminium smelters by 540,000 metric tonnes to 1.5 million metric tonnes. The deal represents the second and final tranche of export credit financing for the project.

The first tranche of the new ECA facilities is $136 million and is supported by Export Development Canada (EDC). Citibank is the MLA and facility agent for the EDC-covered facility, which has a 10-year tenor with the principal amount to be repaid over 10 years.

The other tranche comprises €90 million ($101.9 million) and is backed by the Japan Bank for International Cooperation (JBIC) and Nippon Export and Investment Insurance (NEXI). BNP Paribas is the MLA and facility agent for the JBIC/NEXI-supported facilities which involve two contract loans. One loan has a tenor of 10 years and a 10-year principal repayment period, while the other loan has a six-year tenor with the principal to be repaid over a 5.5-year period.

Alba is using the proceeds from the ECA direct and guaranteed loans to finance the acquisition of new equipment. The Bahraini company plans to become the world's largest smelter with the completion of this project.

Alba closed on a $1.5 billion syndicated term-loan facility in October 2016. The previous ECA deal on the project was the $700 million first tranche of ECA financing backed by Euler Hermes and SERV, which was closed in July 2017.

Alba was advised by JP Morgan which also acted as the ECA coordinator on the EDC and JBIC/NEXI deal.

## MENA oil and gas
### BAPCO Modernisation programme

The $6.8 billion BAPCO Modernisation Programme (BMP) was funded by a $4.1 billion debt package, which attracted five ECAs, 11 regional lenders, and a club of eight international banks for a tailor-made hybrid financing structure signed by Bahrain's nogaholding.

BMP is centred on the sole refinery in Bahrain – nogaholding's 100% owned Sitra, which outputs 90% of BAPCO's oil & gas products. The expansion project will boost this output further, from 267,000 barrels of oil per day (bopd) to 380,000 bopd.

Five ECAs provided debt coverage for $2.2 billion, on a 12.5-year tenor – CESCE and SACE both came in with $650 million each, UKEF at $400 million, K-SURE at $367 million and KEXIM at $100 million. The debt pricing has a tight range of 90-150bp and the portion required to be covered by ECAs ended up being a third smaller than expected.

The Islamic tranche has a 16-year tenor and comprises $530 million from the following local and regional lenders: Ahli United Bank, Apicorp, Bank ABC, BBK, Banque Saudi Fransi, Bahrain Islamic Bank, Gulf International Bank, Kuwait Finance Houe, Mashreq Bank, National bank of Bahrain, NCB, and Riyad Bank.

A final tranche of $1 billion has no coverage – on 16-year tenor with debt pricing above 300bp. These lenders are BNP Paribas (co-MLA), HSBC (co-MLA), Credit Agricole, Credit Suisse, Natixis, Santander, Societe Generale, and Standard Chartered.

KEXIM and UKEF are also providing their own direct loans, totalling $357 million.

The EPC contractors are Technip, Technicas Reunidas, and Samsung Engineering.

BAPCO was advised on the deal by BNP Paribas, HSBC, Shearman & Sterling, Linklaters, and Newton Legal. The lenders were advised by Allen & Overy, Haya Al Khalifa, Ernst & Young, Jacobs Consultancy, Nexant, and JLT.

MENA M&A

## Project Beyond (ADNOC pipelines)

In February 2019, KKR Infrastructure and BlackRock Infrastructure acquired a 40% shareholding in special purpose vehicle ADNOC Oil Pipelines for $4 billion, with ADNOC retaining 60%. The deal is notable for being the first time leading institutional investors have partnered with a Middle Eastern national oil company.

ADNOC Oil Pipelines has leased the rights, title and interest in 18 pipelines totalling 750km in Abu Dhabi from ADNOC for a period of 23 years. ADNOC has been granted the right to use, manage, and operate the pipelines for the transportation of stabilised crude oil.

The new entity will, in turn, receive a tariff payable by ADNOC for its share of volume of crude and condensate flowing through the pipelines, backed by minimum volume commitments. The combined capacity of the pipelines amounts to 13 million barrels per day.

The agreements are UAE law-governed, and entailed complex structuring between the three parties. White & Case provided legal advice to ADNOC, while Milbank and Simpson Thacher & Bartlett assisted KKR and BlackRock.

JP Morgan, BAML, and Moelis & Company served as financial advisers.

The deal is notable in that the sale-and-leaseback nature of the deal could appear elsewhere in the region, and in other sectors.

Lenders provided a $3.28 billion senior term loan facility in support of the acquisition, bringing together a consortium of lenders including Bank of China, BNPP, CaixaBank, Credit Agricole, Korea Development Bank, MetLife, Mizuho Bank, Nomura, Norinchukin Bank, Samba Financial, Santander, SMBC, Sumitomo Mistui Trust. Linklaters advised the lenders.

MENA refinancing

## Ma'aden Debt-to-Equity Conversion and Capital Increase

The Saudi Arabian Mining Company (Ma'aden) restructured its Ma'aden Rolling Company (MRC) subsidiary through a debt-to-equity conversion and capital increase after simultaneous negotiations including Alcoa Corporation, the Saudi Industrial Development Fund (SIDF), and the Public Investment Fund (PIF).

Ultimately the conversion led to a capital increase in Ma'aden via the debt-to-equity conversion for the amount of SR2.9 billion ($796.4 million) through the issuance of new shares to the PIF. The objective was to improve Ma'aden's liquidity and credit position while aiding its ability to reach its growth targets.

*"This transaction will provide additional flexibility for Ma'aden to manage the rolling business going forward."*

The multi-layered transaction results in the recapitalisation and associated restructuring of MRC – Ma'aden benefits from the deal by allowing an overall deleveraging of MRC and for a capital increase in its own accounts. The Saudi mining firm transferred the MRC's SR2.9 billion loan from the PIF in exchange for an equivalent loan from PIF to Ma'aden, which enabled the recapitalisation of MRC and the restructuring of its remaining commercial bank and SIDF debt.

At the same time, Alcoa Corporation's 25.1% shareholding in MRC was transferred to Ma'aden without any cash compensation in exchange for the release of Alcoa from future MRC lenders obligations. Alcoa will nonetheless retain its 25.1% interest in the Ma'aden Aluminium Company (MAC), which operates the Aluminium smelter, and in Ma'aden Bauxite and Alumina Company (MBAC), which operates the bauxite mine in Al Ba'itha and the alumina refinery both in Ras Al Khair Industrial City.

"This transaction will provide additional flexibility for Ma'aden to manage the rolling business going forward, while we will continue our long and successful relationship with Alcoa in our mining, refining and smelting joint ventures," said Ma'aden's president and chief executive officer Darren Davis at the time of closing in June 2019.

Ma'aden was advised on the 18-month long debt-to-equity conversion by White & Case.

MENA Wind

## Dumat al Jandal wind farm

EDF and Masdar shrugged off disappointment elsewhere in Saudi Arabia's first round of renewables procurement by delivering the country's first ever utility-scale wind farm to financial close – the 400MW Dumat al Jandal project.

The French-Emirati consortium had put in a world record price for a solar energy on REPDO's Sakaka solar project but was controversially omitted when RFPs were evaluated in January 2018. The other project in the round was the 400MW wind farm at Dumat al Jandal, for which EDF and Masdar had again put in the lowest of four bids.

The Dumat al Jandal RFPs were evaluated in January 2019 and turned up EDF/Masdar as the winner with the offered tariff of $0.0213/kWh. This tariff was then lowered to $0.0199/kWh after interest rate swaps took place ahead of financial close, signed by Commercial Bank of Dubai. Saudi Power Procurement Company (SPPC) will offtake energy over a renewable 20-year term which is subject to an indexation mechanism to adjust the tariff in the event that the Saudi riyal is unpegged from the US dollar.

A club of six banks signed on the USD-denominated $270 million soft mini-perm debt on 30 June 2019 – the debt from KDB, Natixis, NCB, Norinchukin, SMBC, and Societe Generale carries a 20-year tenor matching the PPA. Pricing starts in the low 100bps and rising in step ups to the high 200s. These step ups will start after three years of operation, and construction is expected to take 2.5 years in total.

## MENA water
# Taweelah IWP

The world's largest desalination facility and the world's cheapest water price – ACWA Power's $1.2 billion Taweelah independent water producer (IWP) project also fits the mould for an industry standard.

The reasons for picking out this gargantuan 909,200 m3pd desalination facility are many: the project was brought to financial close in just two years after the feasibility study was conducted, its low tariff broke the world record, and it demonstrated the strength of the soft mini-perm structure pursued by the developer ACWA Power.

The 30-year PPA was signed with EWEC in May 2019 at the agreed tariff that won ACWA Power the tender in the first place – Dh8.26 per thousand gallons (ptg) – but after interest swaps ahead of financial close, this tariff was lowered to Dh7.80 ptg ($2.1239), thereby setting a world record. Abu Dhabi's Department of Energy (DoE) will supply power to the site but daytime electricity needs will be supplied by a 40MW solar PV captive power unit.

The $775 million debt package is characterised by step-ups rising from a floor of 90bp over Libor up to 210bp in year seven, and then up to 240bp in year 13 over the course of the theoretical 15-year tenor. Six international banks signed on 3 October 2019 ahead of financial close 13 days thereafter – Boubyan Bank, Emirates NBC, Mizuho Bank, Natixis, Norinchukin Bank, and Siemens Bank.

ACWA Power was advised by Hogan Lovells on the deal. The DoE retains a 60% stake in the project and was advised by Alderbrook, White & Case, and ILF Consulting Engineers. Taweelah IWP is expected to begin commercial operations in October 2022.

## MENA power
# Hamriyah IPP

A Sumitomo-led consortium led the first ever independent power producer (IPP) project in the Sharjah emirate to financial close on 15 May 2019 – 1.8GW Hamriyah combined-cycle gas turbine (CCGT) power plant.

The sponsors – Sumitomo, General Electric Financial Services, Sharjah Asset Management Holding, and Shikoku Electric Power – signed with Sharjah Electricity and Water Authority (SEWA) the 25-year PPA in January 2019, thus confirming that the emirate would be able to reduce power imports from Abu Dhabi. Currently, Sharjah imports around 50% of its power needs and the rest is generated from aging low-efficiency power stations.

The size of the debt comes to just over $1 billion, with a debt/equity ratio of 80:20. The Japan Bank for International Cooperation (JBIC) is providing the largest tranche with a direct loan of $555 million. The JBIC intervention is part of the government of Japan's initiative launched in 2018 to support infrastructure development projects that are expected to contribute to global environmental protection.

The rest of the debt is sourced from a total of six banks on the NEXI-covered commercial bank tranche of $516 million, which priced at 135bp over Libor – they are SMBC (MLA), KfW IPEX, Norinchukin Bank, SMTB, Standard Chartered Bank, Societe Generale. NEXI is providing 100% political risk cover and 90% credit risk insurance.

The closing of Hamriyah IPP "demonstrates that good planning and clear allocation of risk aligned to regional PPP norms continues to enable successful project financing for critical infrastructure projects on a large scale," a source close to the deal said.

The first of the three combined-cycle units is expected to start putting out power in May 2021, with full operation scheduled for 2023. SEWA was advised by PwC and Clifford Chance. The sponsors were advised by Alderbrook Finance, SMBC, Allen & Overy, and Tribe Infrastructure Group.

## MENA Solar
# DEWA IV CSP

ACWA Power surfed a wave of Chinese debt and equity to deliver the 950MW DEWA IV CSP-Solar to financial close – which will have the largest thermal solar generation in the world on a 260 metre tall tower.

The fourth phase of the Mohammed bin Rashid Al Maktoum solar park is the first to feature CSP technology. Soaring 260 metres into the air, the CSP tower will be the tallest in the world.

The PPA signed with Dubai Electricity and Water Authority (DEWA) has a hefty term-length of 35 years. This is also a dual-tariff PPA – $0.074/kWh for the CSP and $0.025/kWh for the solar PV. The addition of the 250MW solar component was late and only comprises 5% of the project income for the sponsors yet will ensure DEWA IV has a 24-hour power generation capability.

The bulk of the project financing was arranged by ICBC through a $2.19 billion facility which featured four other Chinese banks: Agricultural Bank of China, Bank of China, China Minsheng Bank, and the Silk Road Fund. The latter acquired a 49% stake in ACWA Power's renewables subsidiary – RenewCo – in June 2019.

The debt financing was completed by a smaller but still significant international tranche of $828 featuring Natixis, Standard Chartered Bank, and Union National Bank. The debt package is structured as a soft mini-perm starting at 200bp over Libor, rising sharply to 330bp after nine years.

DEWA was advised by KPMG, Ashurst, and Mott MacDonald. ACWA Power was advised by Covington & Burling, and the lenders were advised by Allen & Overy.

# Europe

## Tenders launched


## Closed deal values by sector

| Sector | Transaction count | Value ($m) |
|---|---|---|
| Mining | 2 | $10,640 |
| Oil & Gas | 5 | $5,957 |
| Power | 3 | $728 |
| Renewables | 39 | $8,156 |
| Social & Defence | 10 | $5,986 |
| Telecoms | 6 | $5,929 |
| Transport | 8 | $8,416 |
| Water | 1 | $22 |

## Projects with recent tender updates

| | |
|---|---|
| 1 | B247 Muhlhausen - Bad Langensalza Section (24.2KM) PPP |
| 2 | Acquisition of Vivacom |
| 3 | Averijhaven Energy Port |
| 4 | Fehmarnbelt Fixed Link (18KM) |
| 5 | Codling Offshore Wind Farm (1100MW) |
| 6 | UK High Speed 2 Rail (HS2) Phase I |
| 7 | West Slope Student Campus and Accommodation PPP |
| 8 | Kaskasi Offshore Wind Farm (342MW) |
| 9 | Brunnen Battery Storage (20MW) |

## Projects with recent tender updates

| | Transaction Country | Value ($m) | Count |
|---|---|---|---|
| 1 | **Austria** | N/A | 1 |
| 2 | **Finland** | 109 | 3 |
| 3 | **Finland, Norway, Sweden** | 270 | 1 |
| 4 | **Finland, Sweden** | 76 | 1 |
| 5 | **France** | 3,141 | 8 |
| 6 | **Germany** | 7,332 | 8 |
| 7 | **Germany, Netherlands** | N/A | 1 |
| 8 | **Greece** | 62 | 1 |
| 9 | **Hungary** | N/A | 1 |
| 10 | **Ireland** | 269 | 4 |
| 11 | **Italy** | 116 | 3 |
| 12 | **Latvia** | N/A | 1 |
| 13 | **Netherlands** | 643 | 4 |
| 14 | **Norway** | 2,176 | 5 |
| 15 | **Portugal** | 9,011 | 3 |
| 16 | **Romania** | 22 | 1 |
| 17 | **Russia** | 665 | 1 |
| 18 | **Serbia** | 414 | 1 |
| 19 | **Spain** | 1,536 | 8 |
| 20 | **Sweden** | 1,130 | 3 |
| 21 | **Switzerland** | 10,286 | 2 |
| 22 | **United Kingdom** | 9,801 | 15 |

## Transactions that reached financial close

- 17 April — Posadas Solar PV Plant (50MW)
- 20 April — Skaftasen Wind Farm (231MW)
- 28 April — Acquisition of 81.2% in Brisa
- 30 April — Tysvaer Wind Farm (47MW)
- 6 May — Paris-Saclay Hospital
- 15 May — Acquisition of IQ Student Accommodation
- 20 May — Glencore Refinancing 2020
- 25 May — Belgrade Municipal Waste Management Plant PPP

# Fécamp Offshore Wind Farm

## France

Since financial close on Saint-Nazaire – the first offshore wind farm to make it over the line in France – the process to start construction and finance projects off the French coast has sped up considerably. By **Sophie Mellor**.

The consortium of EDF and Orsted was first awarded 3 projects in France's 2GW offshore wind round in 2012 – Saint-Nazaire, Courseulles-sur-Mer and Fécamp.

The first round of offshore wind farms saw 6 projects receive state support and seabed leasing:

- Courseulles-sur-Mer – 450MW
- Fécamp – 497MW
- Saint-Nazaire – 480MW
- Iles d'Yeu / Noirmoutier – 496MW
- Dieppe / Le Tréport – 496MW
- Saint-Brieuc – 496MW

Since being awarded the 3 projects in 2012, little progress was made by the sponsor beyond Orsted – then DONG Energy – selling its 50% stake in EMF to Enbridge in 2016.

The projects saw environmental roadblocks, which in June 2017 the French courts rejected, noting the appeals made against the 3 projects owned by Orsted and Enbridge did not pose a risk to marine, fauna, birds and fishing channels.

Another appeal was made from environmental group Prosimar and GRSB, but this was again turned down by France’s supreme administrative court, Le Conseil d’Etat, in June 2019.

In another headache deterring the project from financial close, the French government also dramatically cut subsidies and feed-in-tariffs from €200/MWh to €150/MWh in a bid to save €15 billion.

Despite these upsets, Saint-Nazaire reached financial close in October 2019, with market rumours circulating that Fécamp was confident to close shortly after.

Despite a major international pandemic, Fécamp offshore wind farm was able to close just 8 months after Saint-Nazaire – only 2 months behind schedule – with the same debt package as original wind farm.

### Ownership change

Before the wind farm reached financial close, CPPIB entered the shareholding in May (2020) acquiring 49% of Enbridge's stake in the JV – Éolien Maritime France (EMF).

EMF is the EDF and Enbridge JV developing the Saint-Nazaire, Courseulles-sur-Mer, and Fécamp offshore wind farms. CPPIB paid €200 million towards the development capital spent by Enbridge since it first acquired a 50% stake in Éolien Maritime from EDF in 2016 and any follow-on investment through construction and future development capital.

The effective shareholding split of Fécamp Offshore Wind Farm at the time of financial close was:

- EDF Renewables – 35%
- wpd – 30%
- Enbridge – 17.9%
- Canada Pension Plan Investment Board (CPPIB) – 17.1%

Fécamp closed shortly after the CPPIB acquisition.

### The Project

The total project capital cost is understood to be €2 billion ($2.2 billion), financed at a 65:35 debt-to-equity ratio.

The debt package is €1.3 billion with the term loan for non-recourse, project-level debt provided by:

- BNP Paribas
- Crédit Agricole
- Societe Generale

All 3 lenders acted as underwriters and bookrunners for the debt facilities.

The European Investment Bank also gave a line of credit for €450 million guaranteed under the European Fund for Strategic Investments – the Juncker Plan.

The debt financing mirrored that of Saint-Nazaire with key roles repeated for BNP Paribas as financial adviser, alongside Linklaters as legal counsel to the lenders.

During negotiations, *IJGlobal* understood Fécamp's tenor and pricing would match Saint Nazaire's 20-year loan, lent at a margin of Euribor +140-160bp. The Fécamp financing was due to close in April, 6 months after Saint-Nazaire but, due to the coronavirus pandemic, financial close was pushed back to June.

The 497MW Fécamp wind project is located 13-22km off the coast of north west France. Project commissioning is scheduled in 2023.

Revenues are underpinned by a 20-year feed-in-tariff power purchase agreement (PPA) granted by the French government in June 2018.

It will have 71x 7MW Siemens Gamesa SWT-7.0-154 turbines, which Siemens Gamesa Renewable Energy signed to supply in April 2019. The power will generate enough electricity to meet power needs for 770,000 people.

French transmission system operator RTE started onshore construction works in June (2020).

The concrete, gravity-based foundations are being built by a joint venture between Bouygues Construction, Saipem and Boskalis under a €552 million contract. The offshore substations are being built by Chantiers de l'Atlantique, GE Grid Solutions and SDI.

With Saint-Nazaire, Fécamp reaching financial close and Saint Brieuc taking a final investment decision, the remaining 3 French wind farms left to finance and begin construction are:

- Courseulles-sur-Mer
- Dieppe / Le Tréport
- Iles d'Yeu / Noirmoutier

### Advisers

Advisers on the Fécamp deal include:

- BNP Paribas – financial to sponsors
- Ashurst – legal to sponsors
- Linklaters – legal to lenders
- Mott MacDonald – technical to lenders

# Espoo Schools PPP Finland

Espoo Schools PPP which reached financial close on 9 June 2020 has changed the procurement of social infrastructure in the country by prompting a change in tax law to allow for a wider range of publicly procured projects. By **Maya Chavvakula**.

The Espoo Schools PPP project has broken new territory for Finland, concluding the procurement on the nation's first social infrastructure transaction with an innovative financing structure involving a re-draft of its tax legislation and – potentially – serving as a pathfinder for a pipeline of similar deals.

The city of Espoo was seeking a new model for it to deliver smaller, more localised projects and, after considering the "lifecycle model", preliminary market surveys identified PPP as the most advantageous for its needs.

Historically, Finnish tax law only allowed for transport projects – rail and road – to be delivered through PPP, and to benefit from tax exemption clauses.

The campaign to change tax laws to allow wider use of the PPP model started in the autumn of 2016 with the support of Espoo alongside the cities of Helsinki, Oulu, Turku, and Tampere, and backed by the Association of Finnish Municipalities, real estate body Rakli and construction association RT.

This eventually led to a change in tax law that took effect in early 2018, allowing the PPP model to be applied to a wider range of sectors. Espoo Schools is the first project to be deliver at the municipal level and has the full support of residents, particularly because they would have met the cost of the upgrades through municipal taxes under the previous system.

## Procurement

The project was conceived in 2018 when the City of Espoo – Finland's second largest municipality – appointed financial, legal and technical consultants to assess the viability of the project.

Its goal is to improve the learning environment by providing safe and healthy spaces for students and school staff, while also improving air quality in the vicinity.

The largely brownfield programme involves renovations and upgrades to 8 existing educational facilities in Espoo.

**The schools are:**

- Perkka school and Perkäka kindergarten and residential park
- Laughter School and Nauriskasken / Nöykkiönniity kindergarten
- Kilo school and kindergarten
- the secondary school element of the Kuitinmäki school (formerly Tähtiniity School) and kindergarten
- possible replacement of the existing North Tapiola school and Sepo school property with a new unified North Tapiola school

The Perkka school will replace existing facilities at Perkkaanpuisto, while the Laughter School will replace the Latokasken primary school.

The overall programme is a part of Finland's Schools in Shape initiative, and the tender was launched in December 2018 with bidders shortlisted in February 2019.

**Three consortia were competing for the project:**

- Lehto Group
- SRV Construction and Areim's Infranode I fund
- YIT Suomi and Meridiam Investments II

The project was awarded, on 15 October 2019, to a JV between Meridiam and

Finnish construction company YIT through SPV: Kumppanuuskoulut Oy.

The 2 companies have a previously worked together and on this project the equity is split 80:20 to majority player Meridiam with YIT the minority partner. YIT and Meridiam previously partnered on the E-18 I & II road projects in Finland, with the manager holding the asset in Meiridiam Infrastructure Europe II.

## Financing

The schools project has a 20-year concession plus a 2-year construction phase and it made it to financial close on 9 June 2020.

**The Espoo Schools PPP debt package was arranged by 3 lenders:**

- EIB (through European Fund for Strategic Investments) – €60 million
- Nordic Investment Bank – up to €75 million
- OP Corporate Bank – up to €35 million

The term loan amounts to a maximum of €170 million ($184.2m) with a tenor of 21-and-a-half years, pricing at Euribor +120-130bp.

The margin was agreed in April-May in the teeth of the coronavirus pandemic. OP Corporate Bank acted as the sole commercial lender and the global agent in the transaction.

Both Nordic Investment Bank and OP Corporate Bank have opted to go for a debt cap rather than a fixed amount “to allow them some flexibility in financing”.

Given this project is primarily brownfield, the exact cost of works may vary and it was decided that putting a ceiling on the loans gave the sponsors greatest flexibility in delivering the facilities within the projected capex.

The batch of schools is being treated as a single entity with regards to financing, not allocating individual budgets to each facility.

Hannu Soikkeli, director of lifecycle projects at YIT, says: "Operations based on a long-value chain, enabled by the lifecycle approach, are deeply embedded in YIT's strategy. We want to take on a broad responsibility so that the customer can focus on their own business rather than worrying about maintenance.”

Paolo Gentiloni, European Commissioner for the Economy, adds: “This project can really be a game changer for Finland. It's an excellent example of how the public sector can use financing under the Investment Plan for Europe to get private investors on board for the public good.”

## Advisers

**Advisers to City of Espoo:**

- Capex Advisors – financial
- Ramboll – technical
- Hannes Snellman – legal

The Hannes Snellman team included – Rabbe Sittnikow, Jussi Ekonen, Janna Pihanurmi, Janne Veneranta, Roosa Väre, Markus Bremer, Maria Landtman, Samuli Pirinen, Heikki Vesikansa, Harri Vehviläinen, Piia Ahonen and Joakim Lavér.

**Advisers to the sponsors:**

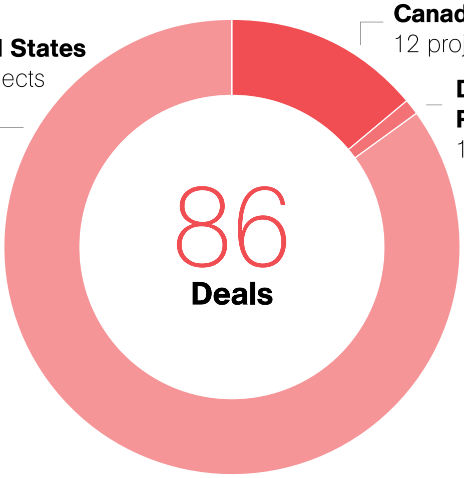
- PwC Finland – financial
- Operis – model audit
- Asianajotoimisto Merilampi Oy – legal (local)
- Bryan Cave Leighton Paisner – legal (international)

**Advisers to SRV Construction/Infranode I team:**

- Deloitte – legal

# North America

## Tenders launched




## Projects with recent tender updates

| | |
|---|---|
| 1 | Acquisition of 90% Plenary Americas |
| 2 | JFK International Airport New Terminal One PPP |
| 3 | NorQuest College Teaching and Research Centre PPP |
| 4 | Prairie Solar PV Plant (200MW) |
| 5 | Park City Offshore Wind Farm (804MW) |
| 6 | I-285/I-20 East Interchange PPP |
| 7 | Privatisation of Punta Catalina Coal-Fired Power Plant (674.78MW) |
| 8 | Acquisition of Hummel CCGT Power Plant (1124MW) |
| 9 | Brunnen Battery Storage (20MW) |

## Closed deal values by sector

**Oil & Gas**
Transaction count 4
$191 ($m)

**Power**
Transaction count 14
$7,728 ($m)

**Renewables**
Transaction count 14
$1,692 ($m)

**Renewables, Power**
Transaction count 3
$2,200 ($m)

**Social & Defence**
Transaction count 1
$N/A ($m)

**Telecoms**
Transaction count 4
$470 ($m)

**Transport**
Transaction count 3
$943 ($m)

**Water**
Transaction count 1
$N/A ($m)

## Projects with recent tender updates

| | Transaction Country | Value ($m) | Count |
|---|---|---|---|
| 1 | **Canada** | 2,916 | 8 |
| 2 | **United States** | 10,308 | 36 |

## Transactions that reached financial close

- 1 April – Acquisition of Buckthorn Wind Farm (100.5MW)
- 6 April – Acquisition of 50% in Royal Jubilee Hospital PPP
- 22April – Acquisition of a Majority Stake in Multifuels Midstream Group
- 27April – Acquisition of Marubeni's Stake in US Gas-Fired Portfolio (1041MW)
- 1 May – Sidney A Murray Jr Hydroelectric Power Plant (192MW) Refinancing 2020
- 7 May – Nova Scotia Highway 104 Expansion PPP
- 15 May – Topaz Gas-Fired Power Plant
- 20 May – ConnectGen US Solar PV Portfolio (278MW)

# University of Iowa Utility System US

The latest PPP-style transaction to close in the US university space creating a valuable foundation for a slew of deals to follow. By **Elliot Hayes**

Since financial close of the University of Iowa's Utility System, the US P3 market has seen an aggressive uptick in colleges seeking private partners to upgrade and operate cleaner, more efficient systems. Investors, meanwhile, see these transactions as both straightforward and lucrative.

One of the early projects to make it through procurement was the $1.165 billion lease concession for the Ohio State University's (OSU) utility and energy systems which reached financial close in July 2017, backed by Engie North America and Axium Infrastructure.

At the time, this type of utility P3 transaction was novel but it was built on strong experience in P3s from the both university which had already tendered off the first-of-its-kind $483 million parking concession, and the private consortium that was well versed in the process. While parking lease concessions proved less popular among US colleges, the utility system was copied by the University of Iowa that managed to close its utility P3 deal in little over one year with the private consortium replicating the Ohio State utility deal. Since then, the US market has seen a further four universities announce P3s for utility systems.

Most recently in May (2020) *IJGlobal* reported that The University of Idaho (UI) was preparing to issue procurement documents for redeveloping some of its campuses' utility assets via P3 contracts.

In late April 2020 the University of Maryland, College Park (UMD) issued an RFQ to build, operate and maintain – with possible financing – of its NextGen Energy Program utility systems.

At around the same time California State University (CSU) at Fresno said it was expecting bids to be submitted this summer (2020) for its Central Utility Plant Replacement Project. Meanwhile, in March (2020) the University of Washington (UW) issued an RFI for the renewal of its campus energy systems.

## Procurement

A little over one year ago (February 2019) it emerged that The University of Iowa (UI) was mulling a potential P3 contract to redevelop its aging utility system. Fast forward to March 2020 and the winning consortium – Engie and Meridiam – had reached financial close on the DBFOM.

In the early days, the university's board was in discussions over a potential public-private partnership between the university and a private concessionaire, using the Ohio State University's utility P3 contact as a model to emulate.

In April that year it issued an RFQ seeking private partners for a 50-year concession giving bidders till 14 June to submit bids.

**A total of four teams submitted bids:**
- Engie and Meridiam – offering $1,165 billion upfront
- Axium and Veolia – offering $950 million upfront
- Penary, Sacyr and Kiewit – offering $882.8 million
- Harrison Street, Ever-Green Energy, City Water – offering $881.7 million

The RFP was not issued immediately but meetings were scheduled, a draft of the lease and concession agreement was seen by bid participants and site viewings were scheduled.

Binding bids were to be submitted for October 2019 with the intention of selecting a partner before Christmas.

Meridiam and Engie – under the joint venture Hawkeye Energy Collaborative – were awarded the concession on 11 December 2019 and swiftly carried the project to financial close exactly three months later on 11 March.

## Financing
The $1.319 billion project is being financed with $423 million in equity and $896.51 million in debt on a 68:32 gearing.

**The debt breakdown is:**
- commercial bond – $614.74 million
- capex loan – $271.77 million from:
  – KeyBank
  – KfW IPEX Bank
  – Santander
- working capital – $10 million from:
  – KeyBank
  – KfW IPEX Bank
  – Santander

## Acquisition
The week after the consortium reached financial close on the project, it was announced that Hannon Armstrong had made a $115 million cash investment to join Engie and Meridiam on the project.

The straight equity investment had been in the pipeline since before Hawkeye was selected as preferred bidder for the project.

## Terms of the contract
Under the contract, Engie and Meridiam will make a $1.165 billion upfront payment that the university will then place into an endowment over the 50-year contract.

**The University will then pay the consortium a yearly fee, which will equate to fixed amounts of:**
- $35 million in years 1-5
- increasing by 1.5% each year after

The university will also pay for O&M employees and capital, and it will use

around $166 million of the upfront payment to pay off existing utility bond holders and $13 million in consulting fees.

The net proceeds of the endowment will provide the university with $15 million annually to support strategic land implementation and to subsidise utility expenses to remain within historic trends.

Meridiam, Engie and Hannon Armstrong hold equal stakes in the special purpose vehicle to deliver the requirements under the concession agreement.

Engie will operate, maintain, optimize and improve the utility system. The scope includes providing heating, cooling and power to the campus through a dedicated network while also managing sanitary-water and storm-sewer services.

**An example of the first full financial year: FY22 concessionaire payment:**
- fixed fee: $35 million
- O&M fee: $21.4 million
- capital expenditure: $3.8 million

**This amounts to a total of $60.2 million FY22 university utility system costs:**
- fuel/electricity: $33 million
- sewer/fire/refuse: $5.47 million
- energy control center/environmental compliance: $4.56 million
- insurance/audit costs: $2.01 million

This amounts to $45.04 million.

**FY22 university summary:**
- campus billing (revenue) $99.5 million - concessionaire costs $60.3 million - university utility costs $45.9 million = subsidy need from endowment $6.7 million
- subsidy from endowment $6.7 million + strategic initiatives $15 million = FY22 funding from endowment of $21.7 million

**Engie and Meridiam are responsible for the O&M of:**
- electrical systems, steam, domestic water, chilled water, sanitary and storm sewer, high-quality water, utility network maintenance, energy control centre, environmental compliance, and related distribution systems serving the main and Oakdale campuses
- procurement of the utility systems' required fuel/energy needs to optimise plant operation, ensure reliability and meet campus demand
- The university will maintain ownership of its utility system while receiving an upfront payment to be placed into an endowment.
- It is anticipated that through the P3, the university can commit to:
- operating the plant without burning coal until 1 January 2025
- the new plant operator will continue to explore new sources of bio-fuels creating sustainable, lower-cost fuel options
- all facilities will be maintained by the new operator in similar or better condition
- campus-wide sustainability efforts will be continued

## Advisers on UI Utility System P3

**Advisers to the university include:**
- Jones Day – legal
- Wells Fargo – financial
- Jacobs – technical

**Advisers to the concessionaires were:**
- Allen & Overy – legal
- Shearman & Sterling – legal
- Barclays – financial

# Solar securitizers dance around disruption US

When the Covid-19 pandemic hit the US, the securitization market slammed shut, prompting Vivint Solar to pivot away from a deal that was "on the cusp of closing" to alternative sources of liquidity. But as Vivint put the finishing touches to its Plan B, a window opened up for ABS issuance and other solar securitizers began piling in. By **Taryana Odayar**.

Since its inception in the early 2010s, new issue volumes in the US solar securitization market have grown to roughly $6 billion a year, as rooftop solar installations become more popular and investors acquire a taste for the asset class.

And despite the sun setting on the investment tax credit for residential solar in 2021, the growth of this so-called esoteric ABS asset class remains on an upward trajectory, thanks to state-level mandates, PACE (Property Assessed Clean Energy) programs and the increasing competitiveness of solar panels.

The cost of capital was steadily falling and solar ABS issuance had become almost routine when the onset of the Covid-19 pandemic threw a wrench in the works in late March (2020), not just for Vivint's deal but for offerings of various sizes, both in 144a and private placement format.

In the investment grade bond market more broadly, the pandemic-related uncertainty actually led to record issuance in April and May, as corporations bolstered their cash reserves. But for issuers of asset-backed securities – whether in established asset classes like residential and commercial mortgages or more esoteric areas including solar leases, power purchase agreements and loans – the market suddenly closed.

"Everything ground to a halt in March," says a senior finance official at a solar finance company. "Not necessarily due to fundamental economic conditions, but because the world changed pretty much overnight."

### Vivint's plan B

Faced with a market shutdown of indeterminate length, Vivint decided not to wait out the storm but instead to pursue an alternative source of funding late in the first quarter.

"We didn't wait for the market to open, because given where BB- paper was trading in the secondary market, we didn't think we'd get terribly good execution in the public ABS market," says Thomas Plagemann, chief commercial officer and head of capital markets at Vivint Solar. "It was largely a question around timing and wanting incremental liquidity at the company."

The abandoned ABS deal would have refinanced assets held under Vivint's warehouse facility, freeing up capacity there, and injected cash to Vivint's balance sheet. So the company set about trying to achieve the same goals through other means, allowing it to operate without significant liquidity constraints for the next 12 months.

"It will be a little more expensive than what we would have been doing with an ABS, but still a good capital structure for us," said the company's CFO, Dana Russell, during an earnings call on 7 May, by which time the company was close to clinching its alternative non-recourse transaction.

"Sometimes you want your capital now and may not really care about the cost of the funds," says Ron Borod, managing director at Ram Island Strategies, a structured finance advisory firm. "So you may get a higher rate in one-off deals, but get other benefits like fewer covenants or raising more proceeds."

By the end of May, Vivint had obtained the sought-after liquidity through 2 separate transactions – a holding company loan from Brookfield Asset Management's Infrastructure Debt Fund and an expansion of its existing warehouse facility, provided by commercial banks. The 2 deals added $545 million to Vivint's total debt capacity.

The first of the 2 transactions – the brand new $300 million holdco loan from Brookfield – closed on 27 May. The initial $200 million of the loan was funded 2 days later.

The 3-year loan bears interest at 8% and allows for additional borrowings on future contracted cash flows of up to $100 million.

The final structure of the deal was determined in part by the nature of the market recovery after the initial shock caused by the coronavirus pandemic.

"When we got shut out of the ABS market, we weren't sure how long the disruption would last, and particularly the sub-investment grade portions of the ABS market were impacted most severely," explains Plagemann. "The investment-grade tranches have recovered nicely since mid-March, so instead of taking a vertical slice of assets for a term transaction, we pivoted and did a horizontal holdco structure over multiple senior debt facilities."

From Brookfield's point of view, Vivint's sudden lack of access to the capital markets provided a unique opportunity to lend against assets underpinned by

a strong customer value proposition, long contracted cash flows and strong underwriting requirements, including high FICO scores.

"We're always looking for good investment opportunities like Vivint, and because they could not tap the securitization market, they considered the private credit market," says Hadley Peer Marshall, Brookfield's managing director and head of infrastructure credit for the Americas. "From our lens, this is a way to support them through providing liquidity above and beyond what they need today in order to continue to grow their business."

Brookfield's prior exposure to residential solar portfolios meant that the firm had in-house knowledge, putting it at an advantage from a timing perspective.

All diligence and documentation was carried out remotely by the Vivint and Brookfield teams, and the deal was done in about 2 months. "Our due diligence is very thorough and they were able to provide detailed information and knew the kinds of questions lenders would have," says Marshall.

"The fact we got it done as smoothly as we did is testament to our ability to access multiple markets, the level of confidence investors have in our assets, and the level of sophistication of the investors we're dealing with," adds Plagemann.

**The parties involved in the deal included:**

- BofA Securities – sole structurer and arranger (holdco loan)
- Latham & Watkins – borrower counsel
- Mayer Brown – counsel to Brookfield

In the second of the 2 transactions, Vivint topped up its existing multi-lender warehouse facility by $245 million, bringing the total commitments under this line of credit to $570 million. The amendment was signed on 29 May.

The 4-year loan was originally priced at Libor +237.5bp and signed in 2019. With the additional flexibility comes an increase in cost, as the margin has risen to 310bp. The maturity date, advance rate and other commercial terms remain as before.

Despite having been forced to resort to alternative sources of liquidity, Vivint noted that the 2 deals implied an all-in interest rate of about 4.4% on new assets originated, which it says is still about 70bp inside what it paid on its first securitization of 2018.

The $466 million offering in 2018 comprised a $400 million Class A tranche and a $66 million Class B tranche, priced with coupons of 4.73% and 7.37%, respectively.

Vivint's financing strategy has been slightly different to some of its competitors in the residential solar space, in that it has taken less upfront cash. "We haven't fully leveraged all of our assets and that's how we raised the new debt," says Plagemann.

*"Cost of funds may be a little bit higher right now, so if someone has the ability to wait for things to settle down, it's worth waiting."*

Vivint also recently expanded an existing tax equity partnership by an additional $50 million to fund investments in leases and power purchase agreements.

## Choices, choices...

Vivint's deal with Brookfield is emblematic of the wide range of financing options that has become available to residential solar companies in recent years, such that bilateral transactions in the private credit market are sometimes favored over new issuances in the public market, particularly at moments of market volatility.

"There's always a choice between one-off deals and ABS execution, and a lot of times there's something in between which is the private 4(a)(2) market," says Borod. "It's really a function of how does your timeline converge with market forces at the time you want your money."

The more "vanilla" route of issuing solar ABS in the 144a market requires engagement with about 100 investors, going through price discovery and building a book. But residential solar companies have taken to streamlining the time-consuming process by finding the most likely investor and dealing with them 1-on-1.

In turbulent markets, established borrowers with strong lender relationships will have the most financing options, especially given the impact of lock-down measures and travel restrictions on networking face-to-face.

## Open window

But as the market recovers, more traditional structures are making a come-back. Several other residential solar companies – Sunnova, Mosaic and Loanpal – sat out the storm in the ABS market, and over the past few weeks have launched a spate of securitizations in the 144a market as confidence returns, boosted by a rally in the stock market.

Although the economic shutdown and rise in unemployment still weigh on investors' minds – particularly for assets with direct exposure to consumers like residential solar – and pricing is wider than it was before the crisis, deal watchers point out that issuing into imperfect conditions is better than not being able to access the markets at all. "You take it as you find it, and there is a do-it-now mentality," says the official at the solar finance company.

"Cost of funds may be a little bit higher right now, so if someone has the ability to wait for things to settle down, it's worth waiting," adds Borod. "But there is another psychology which is that before things get better, they could get a lot worse – like if there is a second spike in Covid-19. So we could be in a very attractive window right now for someone to go into the ABS market or debt market and get a deal done rather than wait."

Sunnova – which kicked off the solar securitization market for 2020 with a $313.5 million dual-tranche offering in February – is back with a $158.5 million offering led by Credit Suisse.

Meanwhile, Goldman Sachs is lead structuring agent for Loanpal's $161.6 million triple-tranche Mill City Solar Loan 2020-21 transaction.

And Deutsche Bank is leading on a $271.3 million quadruple-tranche deal for Mosaic.

Pricing on the double-B tranche of Mosaic's offering is between 735bp and 750bp over swaps, says a deal watcher, who notes that this is not dissimilar to the cost of capital Vivint secured for its alternative financing with Brookfield.

## Hardship plans

On the buy-side, investors are paying more attention than usual to the credit fundamentals of residential solar customers, and Kroll Bond Rating Agency has increased its base case default assumptions for pools of residential solar assets as a result of rising unemployment.

"Solar loan issuers and servicers have begun to offer borrowers temporary financial hardship plans, such as modifications, extensions, or deferrals to their loan payments," the rating agency noted in a report on 12 May.

And while the percentage of borrowers taking advantage of these plans so far is low, Kroll expects the figure to rise.

On the other hand, because of the sheer size and diversity of residential solar portfolios, and the fact that FICO scores of borrowers in residential solar ABS are in the mid-600s and higher, Borod expects the asset class to be protected from wider market risks: "People for the most part will continue to pay their utility bills."

*(A version of this story first appeared on Power Finance & Risk)*

# Latin America

## Tenders launched


## Closed deal values by sector

**Mining**
Transaction count **2**
$3 ($m)

**Oil & Gas**
Transaction count **1**
$N/A ($m)

**Power**
Transaction count **3**
$4,021 ($m)

**Renewables**
Transaction count **9**
$675 ($m)

**Transport**
Transaction count **4**
$2,044 ($m)

**Water**
Transaction count **1**
$N/A ($m)

## Projects with recent tender updates

| | |
|---|---|
| 1 | Acquisition of 50% in Rodovias do Tiete Toll Road (415KM) PPP |
| 2 | La Pimienta Solar PV Plant (444MW) |
| 3 | Salamanca CCGT Power Plant (860MW) |
| 4 | EF-170 Railway (1142KM) PPP |
| 5 | Huemul Wind Portfolio (525MW) |
| 6 | Privatisation of Petrobras` Thermoelectric Power Plants (578MW) |
| 7 | Novo Estado Transmission Line (1800MW) and Sub-stations |
| 8 | Piracicaba – Panorama Toll Road Expansion (1273KM) PPP |
| 9 | Brunnen Battery Storage (20MW) |

## Projects with recent tender updates

| | Transaction Country | Value ($m) | Count |
|---|---|---|---|
| 1 | **Brazil** | 1,123 | 10 |
| 2 | **Chile** | 1,736 | 5 |
| 3 | **Mexico** | 294 | 2 |
| 4 | **Panama** | N/A | 1 |
| 5 | **Peru** | 3,590 | 2 |

## Transactions that reached financial close

- 9 April – La Cruz Solar PV Plant and Battery Storage (90MW)
- 14 April – Acquisition of Jaguar Nickel Sulphide Mine
- 15 April – Acquisition of 30% in Seival Sul Mineracao
- 4 May – Acquisition of 25% in FPSO Marlim Unit 2
- 13 May – Acquisition of 75% in Penonome I Wind Farm (55MW)
- 14 May – Acquisition of Salvador Atacama Solar PV Plant (68MW)
- 20 May – Chacalluta International Airport Expansion PPP
- 21 May – Gralha Azul Transmission Line (1000KM)

# Pamplona-Cúcuta Highway
## Colombia

Spanish construction company Sacyr finally reached financial close on its $520 million Pamplona-Cúcuta highway – one of Colombia's 4G projects located in the north of the country – in mid-April. By **Juliana Ennes**.

The Colombian government is working closely with project sponsors and local banks to make sure that all projects awarded under the Fourth Generation (4G) roads programme reach financial close, so it can move forward with the modernised contracts of the 5G programme.

The publicly-announced financial close date for Pamplona-Cúcuta, as previously reported by *IJGlobal*, was 18 March 2020. However, the the loan contracts were actually not fully signed until 16 April.

During the month between verbally agreeing the deal and signing the loan agreement, additional institutions joined the pool of lenders.

Colombia's outstanding 4G projects face many challenges but the sponsors of Pamplona-Cúcuta had the additional complication of concluding its financing during the Covid-19 pandemic.

The March 'close date' was a demand by Financiera de Desarollo Nacional (FDN), according to a person close to the transaction. The local development bank insisted that its tranche, which had been approved since December 2019, was signed first.

FDN has had a protagonist role in driving 4G projects towards financial close. ANI aimed at reactivating all 4G roads that were stalled in H1 2020, which may now prove difficult due to Covid-19. Out of 29 highways awarded under the fourth generation of contracts, at least six still need a financing solution.

### The project

The Pamplona-Cúcuta road passes through the northeast region of Colombia and on to the border with Venezuela. It is intended to reduce travel times and operating costs for users, thereby guaranteeing a quicker and safer road corridor.

Concessionaire Unión Vial Río Pamplonita, which is fully owned by Sacyr, is in charge of the final studies and designs, financing, the environmental, property tax and social management, construction, improvement, rehabilitation, operation, maintenance and turnaround of the Pamplona-Cúcuta corridor. One of the last 4G roads to reach financial close, the project's construction has only advanced 14% so far, three years after the contract was signed.

Colombia's national infrastructure agency (ANI) awarded Sacyr the concession in April 2017. Competing against the Spanish firm were CCA Civil Colombia and a consortium comprising Cintra and Shikun.

But this was an improved contract. ANI tried to award Pamplona-Cúcuta highway project in 2016 and received no proposals for the project in an initial tender process. It then relaunched the tender redesigning the concession contract to make it more attractive.

The road spans approximately 62.5km, located in the department of North Santander. The project includes the construction of 50km of new road, 25 viaducts, 2 tunnels totaling 2.45km and the improvement and rehabilitation of the existing road.

**Awarded in the third round of the 4G roads programme, the project entails:**

- a total of 62.2km of highway, from origin to destination
- 50.2km of new road construction
- 72.2km of rehabilitation of existing road (between Pamplona and a section of Betania, Los Patios)
- Two tunnels: 1.4km and 1.1km-long
- 25 new viaducts, 4 pedestrian passageways, and rehabilitation of 23 existing bridges

### The financing

Financing for the Pamplona-Cúcuta highway featured tranches in US dollars and in Colombian pesos, with lenders coming from China, France, Germany, Spain, Emirates, USA and Colombia.

JPMorgan Chase Bank and Deutsche Bank acted as joint lead arrangers of a syndicate of 10 financial institutions.

Financing was provided by a mix of international and national financial institutions, including commercial banks, development banks, institutional investors and ECAs. This was the last of four 4G projects in Colombia for Sacyr, which have a total cost of more than $2 billion.

For Pamplona-Cúcuta, Sacyr raised $450 million in foreign currency and Ps245 billion ($60.7 million).

**Lenders in the transaction under NY law were:**

- JPMorgan Chase Bank
- Deutsche Bank AG, NY branch
- Industrial and Commercial Bank of China (ICBC), Dubai branch
- Bank of China, Panama branch
- Instituto de Crédito Oficial de España (ICO)
- MetLife
- MUFG Bank
- Societe Generale
- American Equity Investment Life Insurance Company

**Lenders under Colombian law:**

- Financiera de Desarrollo Nacional (FDN)

Additionally, Citibank acted as administrative agent, foreign guarantees agent, and creditors agent.

**Legal advisers were:**

**To lenders:**

- Milbank – international
- PPU – local

To **administrative** agent:

- Alston & Bird

**To sponsors:**

- Jones Day – international
- Posse Herrera – local

**Technical advisers and service providers were:**

- Infrata – technical and environmental & social to lenders
- Jacobs – traffic adviser to lenders
- Geoconsult – technical services to sponsors

# Termocandelaria Power Limited Colombia

In January 2020 Colombia's Termocandelaria Power Limited (TPL) built on its success in the international bond market with a $186 million tap to finance the conversion of a 20-year old peaker into what it says will be the country's most efficient gas-fired generation project. By **Carmen Arroyo**.

The 324MW Termocandelaria open-cycle project in Cartagena, in the Atlántico department, has navigated energy crises, potential restructurings and temporary state ownership since it came online in 2000.

But after securing a favorable fuel supply deal in 2016, the company has built up a following in the international debt market, allowing it to refinance its legacy debt and efficiently finance the next stage of its development.

Its maiden $410 million bond issuance in 2019 made it the first gas-fired generation company in Colombia to tap the 144a bond market. The debut offering, priced at 7.875%, was well received by investors.

By the time the issuer returned to the market in January 2020 for an additional $186 million, it was able to raise funds at a much more affordable 5.9%. JP Morgan and Scotia were the bookrunners on the January tap. The banks had previously arranged an up to $80 million one-year bridge loan for TPL.

This loan had "eased the company timing constraints", says Ernesto Ritzel, TPL's CFO in Barranquilla. The company had hired Spain's Técnicas Reunidas as the EPC contractor for the upgrade project and needed to pay the advance.

However, TPL ended up only needing to draw $25 million under the bridge loan, which was disbursed to the EPC contractor in December 2019, as the tap was issued successfully the following month.

TPL used part of the proceeds to repay the bridge loan and plowed the rest into the $220 million conversion project.

**Legal advisers on the transactions were:**

- Clifford Chance – international lender counsel
- Philippi Prietocarrizosa Ferrero DU & Uría – local lender counsel
- White & Case – international issuer counsel
- Gómez-Pinzón – local issuer counsel

TPL also owns a 57.38% stake in a second asset, the 918MW Termobarranquilla combined-cycle gas plant, in the same location. Unlike Termocandelaria, Termobarranquilla sells its power in the spot market.

The two projects represent a combined 7.2% of Colombia's total installed capacity, making TPL the largest non-hydro generation company in the country.

## History of crises

The Termocandelaria project has its origins in Colombia's 1992 energy crisis, when droughts caused by El Niño deprived the country of its main source of power – large hydro. The project was developed and financed by KMR Power Corp in 1999 and sold to AES Corp the following year, along with Termobarranquilla.

A year later, however, AES put both assets up for sale. A group of institutional investors acquired them in 2002, setting out to restructure them. Chilean investors SCL Energía Activa and Moneda Asset Management led the group, along with Colombia's Mercantil Colpatria.

The Termocandelaria project benefited from reliability auctions launched by the Colombian government in 2006 and stayed afloat until 2015, when Colombia suffered one of the worst droughts in its history.

Despite scarcity prices being established by Colombia's Energy and Gas Regulation Commission, the plant ran a deficit and Colombian power utility regulator SuperServicios took possession of the facility in November 2015, after TPL requested government intervention. Eight months later, the state returned the project to TPL with an accumulated debt of $130.5 million to multiple creditors.

In the wake of the 2015 crisis, the project benefited from a new development – the construction of the country's first LNG import and regasification terminal, in Cartagena, which came online in 2016.

**TPL's two power plants secured access to up to 72% of the port's regas capacity:**

- 23.5% for Termocandelaria
- 48.4% for Termobarranquilla

The agreement runs until 2026 but can be extended until 2031.

*S&P Global Ratings and Fitch Ratings both assigned BB+ ratings to the senior unsecured notes, pointing to the company's competitive position in Colombia's power market, as well as the risk of TPL's limited diversification.*

The government gave favorable terms to the plants, as the terminal needed customers. Termocandelaria was to be paid a total of $53 million per year for its availability as a result of "the special assignment process carried out in 2015", notes Carlos Andrés Anaya, TPL's director of financial planning in Barranquilla.

Having secured the gas feedstock from the LNG terminal, in June of 2018 TPL mandated Scotiabank and Bank of America to arrange a $410 million debut bond offering to refinance its debt.

S&P Global Ratings and Fitch Ratings both assigned BB+ ratings to the senior unsecured notes, pointing to the company's competitive position in Colombia's power market, as well as the risk of TPL's limited diversification. Both rating agencies noted the strong profile of the merchant, combined-cycle Termobarranquilla plant, which accounted for 80% of TPL's Ebitda.

TPL met with roughly 80 investors to pitch itself as a new issuer, and the effort paid off, with orders coming in for almost the entire offering before the release of official terms on the transaction.

The 10-year deal was launched on 23 January, 2019, and the order book was 2.3x oversubscribed. The bond amortizes by 7.5% a year and has a 40% balloon payment at maturity.

The proceeds were used to pay off all of TPL's existing debt, both at the holdco and project level.

Following its successful participation in the 2019 grid reliability auction, TPL decided to pursue its plans to convert the open-cycle Termocandelaria plant into a combined-cycle unit, increasing the project's capacity to 566MW with the same fuel consumption. When the upgrade is completed, the facility will be able to sell its excess output in the spot market.

"The indenture of the $410 million notes was written considering the possibility of financing the CCGT project of Termocandelaria," explains Ritzel.

The tap was priced on 9 January. The bookrunners had approached the market with initial price thoughts of 109.5 but this was increased to final pricing of 110, translating into a yield of 5.9%.

## The latest crisis

TPL had the funds for the conversion, but soon had to deal with a new crisis – the Covid-19 pandemic and lockdown.

In early May, some sectors – including construction – were expected to be allowed to restart operations gradually. Técnicas Reunidas was granted site access on 4 May, notes Ritzel.

In the meantime, the contractor has ordered the steam turbines and turbofans while it waits to resume activities.

TPL aims to bring the revamped unit online by July 2022, six months before its firm obligations contract kicks in.

"There is an incentive to finish construction early," says Anaya, explaining that once the plant reaches COD, the government starts paying the reliability charge even before the firm obligations start.

# Asia Pacific

## Tenders launched


## Closed deal values by sector

| Sector | Transaction count | Value ($m) |
|---|---|---|
| Mining | 1 | $135 |
| Oil & Gas | 6 | $2,349 |
| Power | 3 | $371 |
| Renewables | 16 | $789 |
| Social & Defence | 1 | $22 |
| Telecoms | 4 | $9,437 |
| Transport | 7 | $2,340 |
| Water | 1 | $40 |

## Projects with recent tender updates

| | |
|---|---|
| 1 | Abadi Onshore LNG Complex |
| 2 | Balakot Hydropower Plant (300MW) |
| 3 | Acquisition of John Laing Group's Australian Wind & Solar Portfolio (500MW) |
| 4 | Bangkok-Nakhon Ratchasima High-Speed Rail (252KM) |
| 5 | Java Island Geothermal Power Plant Phase 2 Portfolio (110MW) |
| 6 | Map Ta Phut LNG Port Terminal Expansion Phase 3 PPP |
| 7 | Western Downs Green Power Hub Solar PV Plant (470MW) |
| 8 | Dawei-Htee Kee Road (156KM) PPP |
| 9 | Acquisition of 40% in Palua Indah CCGT Power Plant (1.2GW) IPP |

## Projects with recent tender updates

| | Transaction Country | Value ($m) | Count |
|---|---|---|---|
| 1 | **Australia** | 5,523 | 11 |
| 2 | **Bangladesh** | 207 | 1 |
| 3 | **Brunei** | 300 | 1 |
| 4 | **Cambodia** | 210 | 2 |
| 5 | **China - Chinese Taipei** | 384 | 4 |
| 6 | **China - Mainland** | 99 | 2 |
| 7 | **Guam** | 200 | 1 |
| 8 | **India** | 7,222 | 3 |
| 9 | **Indonesia** | 530 | 3 |
| 10 | **Japan** | N/A | 2 |
| 11 | **Mongolia** | 115 | 1 |
| 12 | **New Zealand** | 413 | 2 |
| 13 | **Philippines** | 59 | 1 |
| 14 | **Thailand** | 155 | 2 |
| 15 | **Vietnam** | 64 | 3 |

## Transactions that reached financial close

- 15 April – Dhoho Kediri Airport
- 22 April – Summit Gazipur 2 Oil-Fired Power Plant (300MW)
- 22 April – Changhua Lundong East Floating Solar PV Plant (180MW)
- 28 April – Okvau Gold Mine
- 15 May – Acquisition of Ultrafast Fibre (UFF)
- 18 May – Acquisition of 25% in Formosa 2 Offshore Wind Farm (376MW)
- 28 May – Acquisition of 19.2% in Manila Light Rail Transit 1 (31.35KM) Portfolio
- 28 May – Acquisition of ConocoPhillips' Northern Australia Assets

# Japan offshore wind: readying for auction

Japan's first offshore wind General Seas auction launched with a 20MW floating project. Larger bottom-fixed projects tendered next will be hotly contested. By **Alexandra Dockreay**.

The final auction conditions for Japan's first General Sea Areas offshore wind site were revealed with the June 2020 launch of the tender. The public consultation on the draft conditions closed in May. The first auction, for a 20MW floating offshore wind promotion zone, will set some precedents for the upcoming larger bottom-fixed promotion zone auctions.

### Round One

The Marine Renewables Energy Act became effective on 1 April 2019, applying to general territorial waters and bringing about a new system of auctions for "promotion zone" blocks in General Sea Areas.

The first General Sea Areas promotion zone that the Ministry of Economy, Trade and Industry (METI) and the Ministry of Land, Infrastructure, Transport and Tourism (MLIT) have auctioned is offshore Goto City, Nagasaki prefecture.

This relatively small block is, however, unlikely to be contested at auction.

Toda Corporation has already built 2MW floating capacity as an operational pilot project at Goto Islands, so is the prime candidate for undertaking the larger 20MW floating project.

The Japanese general contractor has already been lining up its finances. It issued a five-year, ¥5 billion ($46 million) green bond on 21 December 2018, stating that the proceeds would be used to construct "floating offshore wind power facilities with a maximum capacity of up to 22MW off the coast of Goto City", after a ¥10 billion green bond a year earlier for the same floating offshore wind projects.

But following Goto zone, another three much larger promotion zone tenders have been lined up for the Round 1 General Sea Areas auction:

- Yurihonjo (North and South) site, Akita prefecture
- Noshiro, Mitane and Oga site, Akita prefecture
- Choshi site, Chiba prefecture

The two sites in Akita are due to be designated as promotion zones mid-2020, after which bid conditions would be published, *IJGlobal* understands.

The three sites are expected to be widely contested at auction. A Japanese consortium of Renova, Cosmo Eco Power, JR-East Energy Development Company and Tohoku Electric Power Company intends to bid a proposed 700MW Akita Yurihonjo project. Initial studies of the site started in 2016, and the consortium has already selected MHI Vestas as turbine supplier.

Germany-based RWE and local company Kyuden Mirai Energy have teamed on a feasibility study for a project in Akita prefecture off Yurihonjo City, signing a joint bidding agreement for the auction on 28 May.

Meanwhile, experienced Danish utility and offshore wind developer Ørsted announced in March that it intends to bid a 500MW project in the Choshi zone, in partnership with Tokyo Electric Power Company.

International developers Engie, EDP, Macquarie and Northland Power are said to be looking to participate.

Daniel Mallo, head of energy, infrastructure and metals & mining, Asia Pacific at Societe Generale, says: "Lots of international developers are really trying to break into this market, but you have incumbents that are 600-pound gorillas: such as Marubeni, Mitsubishi Corp, JERA. There is a lot of knowledge and capital domestically… it is an interesting question whether the first round will be dominated by domestic sponsors and the internationals might need to wait for later rounds for an entry point."

### Auction rules

The Goto floating project's auction conditions are being looked at closely, setting some precedents for the upcoming bottom-fixed zone auctions.

There are key differences, such as that Goto's offtake tariff will be set at ¥36 ($0.33) per kWh for 20 years and not subject to auction.

The Goto zone public comment period that closed on 16 May should have drawn many comments, including a response from the Japan Wind Power Association.

A key issue perceived by the industry, based on the draft auction conditions, was the tight deadline to submit a third bid bond, according to Naoaki "Nick" Eguchi, banking and finance partner and co-head of the renewable power group at Baker & McKenzie (Gaikokuho Joint Enterprise).

"METI has proposed that the project proponent would have to submit its third bid bond within one year of the project being awarded at auction. This is okay for the Goto Islands, small 20MW floating auction. However in the proposed Japanese auction system, the government would not provide a full, clear geotechnical survey but only data from one pile for large scale bottom-fixed offshore wind projects. The winner would need to carry out the full geotechnical survey itself, and the one-year time frame is too short, if [this requirement] is 'copy and pasted' to bottom-fixed projects," he says.

"We submitted a proposal for a two to four year time frame for submitting the third bid bond for bottom fixed offshore wind projects," says Eguchi.

The third bid bond for Goto Islands is ¥13,000 per kW (about $120 per kW). If the winner does not submit the bid bond in time, the winner will lose preferred bidder status. If the winner pays the third bid bond but cancels the project later, the third bid bond is forfeited, he explains, which is very expensive.

### Project finance

Previously a developer could make an unsolicited bid for an offshore wind project at the generous 20-year feed-in-tariff of ¥36 per kWh, under the Port Harbour Act legislative framework.

Marubeni Corporation is already in the construction phase for a bottom-fixed project in Akita prefecture with 140MW capacity, having announced financial close in February. Before this, only small demonstration projects had been built in Japan. Therefore the ¥100 billion Akita Port and Noshiro Port project is the first large-scale commercially funded offshore wind farm in the country.

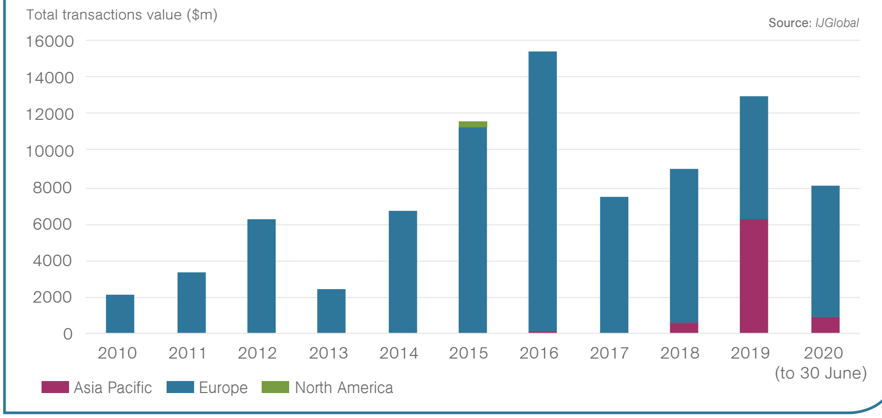
It is underpinned by a 20-year PPA with Tohoku Electric Power Company at ¥36 per kWh, under the former feed-in-tariff system.

Marubeni Corporation has a large number of local equity partners for the project company Akita Offshore Wind Corporation. The lenders on the roughly $760 million uncovered yen-denominated debt, with a roughly 21-year tenor, included:

- MUFG Bank (MLA)
- Mizuho Bank (MLA)
- SMBC (MLA)
- Societe Generale
- Akita Bank
- Sumitomo Mitsui Trust Bank
- Development Bank of Japan

French bank Societe Generale is conspicuous as the only foreign bank, among a club of around a dozen Japanese tier 1 banks, regional banks and life insurance companies.

**Total value of closed offshore wind PF primary financings**




*There is a significant premium to the rock bottom debt pricing in Japan's solar and onshore wind sectors, with solar pricing as low as 50-70bp above TIBOR.*

Mallo explains that Marubeni saw value in bringing aboard an ex-Japan bank with which it has an existing relationship and which has uniquely global experience of offshore wind financings in Western Europe, the US and Taiwan, including on the technical side. Societe Generale has mandates for 2 of Europe's first floating projects, a technology that the topography around Japan is conducive to. Meanwhile, the bank's participation might help pave the way for larger projects, which may require additional liquidity from ECAs and other international capital providers.

Now the French bank has a mandate as financial adviser to a consortium preparing for the government auctions. "We saw a lot of value in having first mover advantage," Mallo adds.

All of the financing documentation on Marubeni's project was in Japanese, which restricted some international lenders who considered the deal early on. Future larger deals, if they require international liquidity, may have English language with Japanese translations.

One international bank source tells *IJGlobal* the pricing margin they saw for this Japanese project was "half the pricing seen in Taiwan offshore wind", with another backing up that pricing on Marubeni's project was in the range of 100-150bp above TIBOR.

On Taiwan's latest deal Changfang and Xidao, closed in February, pricing on the uncovered commercial debt was 240bp above three-month Taibor dropping to a little above 200bp.

There is a significant premium to the rock bottom debt pricing in Japan's solar and onshore wind sectors, with solar pricing as low as 50-70bp above TIBOR.

### Development stage candidates

The many projects in development fall either under the Port Harbour Act or are preparing to participate in General Sea Areas auctions.

Ports and harbour projects have up to around 200MW capacity, *IJGlobal* understands, but the projects will scale up with the auctions.

**Known commercial-scale projects in development include:**

- ¥49 billion 93.6MW Kashima Port South – Ibaraki Prefecture Government awarded July 2017
- Orix's 200MW Choshi project
- Hibiki Wind Energy consortium's 220MW Hibikinada Project – Kitakyushu City awarded February 2017
- Obayashi Corporation's 455MW Northern Akita project
- Ideol and Shizen Energy's floating project off Kyushu
- Chubu Electric and Hokuriku Electric's 200MW Awara project in Fukui prefecture

**In July 2019 METI and MLIT identified 11 potential areas for promotion zone auctions, with the remaining seven being:**

- offshore Aomori in the Japan Sea (North), Aomori prefecture
- offshore Aomori in Japan Sea (South), Aomori prefecture
- Mutsu Bay, Aomori prefecture
- off the town of Happou and city of Noshiro, Akita prefecture
- Katagami, Akita prefecture
- Murakami and Tainai, Niigata prefecture
- Ejima Island, Saikai, Nagasaki prefecture

# Gazipur II power plant

## Bangladesh

Gazipur II – a 300MW heavy fuel oil (HFO) power plant in Kodda and Bangladesh's first IPP financed only by commercial lenders – reached financial close amid a growing debate about the future of the country's power sector. By **Dave Doré**.

On 10 June Minister for Power, Energy and Mineral Resources, Nasrul Hamid, proposed a Tk307 billion ($3.63 billion) ministry budget in the FY2020-21, split between the power division (Tk276 billion) and energy and mineral resources (Tk31 billion).

The proposal lands amid a bubbling debate about the direction of Bangladesh's power sector.

### Debating the future

Three days after Singapore-headquartered Summit Power International announced on 15 May the financial close of a $140 million refinancing of Gazipur II, the Institute for Energy Economics and Financial Analysis (IEEFA) released its Bangladesh Power Review report.

The report says that power capacity utilisation for 2018-19 was just 43%. Before the outbreak of Covid-19, Bangladesh Power Development Board (BPDB) expected capacity payments to idle plants in 2019-20 would be about Tk90 billion – roughly a third of the power division's proposed FY20-21 budget, noted authors Simon Nicholas and Sara Jane Ahmed. Post Covid-19, BPDB's subsidy is likely to be larger.

"Bangladesh will have power capacity to generate 58% more power than needed in 2029-30 if it proceeds with plans to add excessive coal- and LNG-fired power plants," writes Nicholas. "I actually assumed Bangladesh would shut down almost all their oil-fired power generation by 2030, as they have a 25% utilisation rate," Nicholas, an ABN Amro, Macquarie Group and Commonwealth Bank of Australia alumnus, tells IJGlobal. "They keep saying they want to replace the expensive oil-fired power with cheaper generation sources. I had assumed, therefore, that HFO would be virtually gone. If they are still using it by 2030, the overcapacity will be even worse."

James Ooi, partner at Asia Pacific energy strategy and consultancy The Lantau Group, agrees to an extent.

"Even before the downturn caused by the pandemic, we saw an easing of the growth trend. Obviously, that can translate into a potential short-term overcapacity," says Ooi, an adviser on Summit Gazipur II. "Some of the larger LNG projects in Payra, as well as the coal projects, have seen growth decelerate and have rescaled and readjusted their timelines. That was before the pandemic and lockdown."

Ooi, who worked with many stakeholders on the Bangladesh Revisited Power System Master Plan 2016, adds: "The story of HFOs is really tied to Bangladesh's domestic gas position. It is still one of the few power markets in the world that is very significantly reliant on domestic gas production, which peaked at 2,700MMcfd in 2017-18. However, it is declining rapidly."

The 2016 plan was to prepare for LNG importation, with at least 14 LNG regasification projects proposed. The IFC-Excelerate Energy LNG floating storage regasification unit (FSRU) and Summit LNG FSRU were commissioned in 2018 and 2019, respectively.

Afterwards, the government pivoted towards onshore LNG terminals, which spurred the interest of LNG developers to this emerging market, such as Japan's JERA which signed recently to buy a 22% shareholding in Summit Power International.

"LNG terminals are big undertakings in any market and require long lead times for development," continues Ooi. "That's where HFO comes in. HFOs are critical to meet Bangladesh's power needs and provide a bridging fuel until the larger LNG projects can play a bigger role to mitigate the domestic gas decline."

### Financing a first

Summit Gazipur II – wholly owned by Singapore-headquartered Summit Power International – is the project company of the Summit Gazipur II power plant in Kodda, about 30km from the capital city of Dhaka. The power plant has been operational since May 2018.

The joint lead coordinating lenders Clifford Capital and SMBC provided a $140 million 10-year refinancing debt package to the SPV.

Clifford Capital provided more than 50% of the US dollar financing.

Its tranche has a fixed interest rate of slightly more than 3%, with SMBC's floating interest rate roughly comparable. The SPV holds a 15-year PPA with BPDB.

It is Bangladesh's first IPP financed only by commercial banks, marking another step in the Bangladesh power market's evolution.

Bibiyana CCGT closed in June 2015, with all DFI lenders: Asian Development Bank (ADB), IFC and Islamic Development Bank. Then Sirajganj 4 closed in August 2017, with DFIs and commercial lenders: CDC, IFC, JICA, Clifford Capital.

Summit Power International had to abandon the traditional financing sequence of reaching financial close pre-construction, to meet accelerated deadlines for Gazipur II. Summit borrowed short term locally and imported all equipment on letters of credit.

Only nine months passed from the issuance of the letter of intent in August 2017 to commissioning in May 2018.

"That speed is a testament to the strong relationship between Summit and Wärtsilä to achieve such a milestone," says the source.

Reasons why Gazipur II is the first commercial lenders-only deal are multifaceted.

"It may have to do with a lack of familiarity with the market amongst commercial lenders, and the credit standing of Bangladesh," says a market insider.

Both commercial lenders on Gazipur II have experience in this market, including SMBC's support on the Summit LNG Terminal.

Shahwar Nizam, Dhaka-based partner at regional law firm DFDL, SMBC's legal adviser, says: "It was SMBC's first limited recourse project finance deal in Bangladesh – a bold step for the bank. The bankers started talking about Gazipur II at that time, as they were quite comfortable with Summit's sophistication."

Meanwhile, Ted Low, chief operating officer at Clifford Capital says: "Our participation in the financing of the Sirajganj-4 IPP back in 2017, working with Sembcorp, provided insights into the local power market."

Low notes that financing Gazipur II allowed Clifford Capital to support Summit, a Singapore-based infrastructure developer, which ties in with the lender's mandate of providing cross-border financing solutions for Singapore-based companies. In doing so, the company also saw itself leaning in to bring about greater development in the region.

"A key risk for many commercial lenders for these projects is sovereign risk as Bangladesh is sub-investment grade. But BPDB as the procurer and offtaker has worked with multilaterals for a long time now and has an established and bankable IPP regime," says Low.

> *Commercial lenders can take advantage of a healthy private insurance market or work with multilaterals like MIGA to procure political risk insurance.*

"Commercial lenders can take advantage of a healthy private insurance market or work with multilaterals like MIGA to procure political risk insurance to address risks, such as expropriation and government breach of contract."

He adds: "Project-specific risks, such as fuel supply risk, are mitigated within the project agreement structure. Further, since the PPAs in Bangladesh are on an availability basis, there is no demand risk."

### Closing during a lockdown

Covid-19 impacted communication and structuring as the transaction approached the finish line.

Clifford Capital's Low says: "Technology has been a key factor in enabling parties to get this deal closed. We had numerous conference calls via various technology platforms to hash out the issues and eventually got documents signed electronically. Summit was instrumental is marshalling teams in Bangladesh and Singapore to get this transaction across the line."

DFDL's Nizam praises the responsiveness of Bangladesh Bank. "It was a really positive sign that we saw the central bank approve hedging while they were working from home. Approval was through email – the first time ever."

### Advisers

Summit kept its advisory in-house.

**Advisers to the lenders were:**

- Shearman & Sterling – legal (international)
- DFDL – legal (local)
- L&T-Sargent & Lundy – technical
- Environmental Resources Management – environmental and social
- Aon – insurance
- Grant Thornton – model auditor
- The Lantau Group – energy sector adviser to Clifford Capital

### Moving forward

Commercial lenders, such as Standard Chartered and HSBC, have been involved in Bangladesh for decades. Citi has also been quite active among corporate finance lenders, says Nizam. Local clients have preferred commercial loans to non-recourse project finance.

The DFDL partner notes that local sponsors have the impression project finance is expensive with structuring and consulting costs, ultimately relying on short-term finance and large corporate guarantees. Summit is showing the local market the trade-offs of project finance, including a lighter balance sheet and improved treasury operations.

"The project finance market in Bangladesh is still nascent but will grow," comments Clifford Capital's Low. "Local banks have appetite primarily for shorter-term financing, hence there remains a very relevant role for cross-border financing from international lenders."

IEEFA's Ahmed points to modular renewable energy systems as being able to extend electrification to 12% of the population who lack electricity access. "Place supply at the point of demand," she argues.

Optimism for renewables followed Teknaf Solar's financial close in May 2019. However, IJGlobal afterwards had recorded risk alerts for Sutiakhali solar, Inani wind, Kachua wind, Mongla-Gollamari wind, Chuadanga solar and Netrokona solar.

A bright spot is Metito-Jinko Solar-Al Jomaih's Rangunia solar.

ADB's signing of a nearly $20 million financing package with the IPP of a 35MW solar PV park in central Bangladesh may serve to rejuvenate the renewables financing market.

Nicholas concedes that renewables are only a partial solution. Both he and The Lantau Group's Ooi agree that land acquisition is a perennial challenge in the densely populated country, as farming and industry tend to be prioritised in the government's land allocation plans.

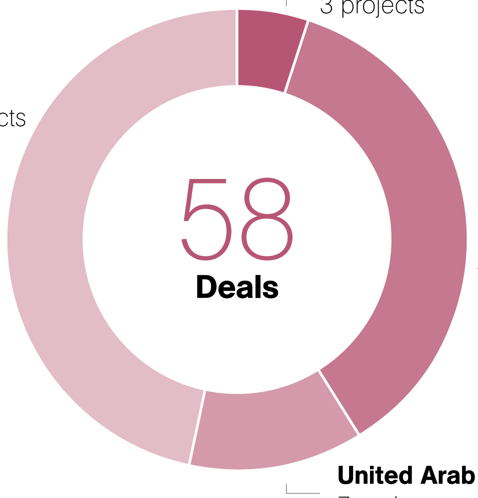
Nicholas sees middle ground in the import of power, in particular from India. "The power plants are already in place," he says. "If this were to move up the government's agenda, Bangladesh's power transmission and distribution network would need to be strengthened. Switching emphasis into renewables and the grid is going to be a better way forward."

The government just might be listening.

State Minister Hamid, as if on cue, proposed that the power division's focus during FY20-21 will be on implementing power transmission and distribution projects. Meanwhile, the energy division's primary task during the next year will be on gas pipeline projects and single-point-mooring-line projects to transport petroleum fuel.

# Middle East & Africa

## Tenders launched




## Projects with recent tender updates

| | |
|---|---|
| 1 | Sahofika Hydroelectric Power Plant (205MW) |
| 2 | Mohammed bin Rashid Al Maktoum Solar PV Plant Phase V (900MW) IPP |
| 3 | Cameroon Rail Network Rehabilitation and Extension PPP |
| 4 | Benga Coal-Fired Power Plant (300MW) |
| 5 | Boikarabelo Coal Mine |
| 6 | Yagoua-Bongor Logone River Bridge |
| 7 | New Alansar Hospital PPP |
| 8 | Olkaria Geothermal Power Plant Phase I (140MW) PPP |
| 9 | Acquisition of 40% in Palua Indah CCGT Power Plant (1.2GW) IPP |

## Closed deal values by sector

**Mining**
Transaction count **1**
$98 ($m)

**Oil & Gas**
Transaction count **1**
$500 ($m)

**Power**
Transaction count **1**
$62 ($m)

**Renewables**
Transaction count **4**
$562 ($m)

**Transport**
Transaction count **2**
$217 ($m)

## Projects with recent tender updates

| | Transaction Country | Value ($m) | Count |
|---|---|---|---|
| 1 | **Ethiopia** | 63 | 1 |
| 2 | **Ghana** | 154.34 | 1 |
| 3 | **Guinea** | 7 | 1 |
| 4 | **Kenya** | 62 | 1 |
| 5 | **Mozambique** | 5.5 | 1 |
| 6 | **Nigeria** | 98 | 1 |
| 7 | **Tanzania** | 1.2 | 1 |
| 8 | **Uganda** | 500 | 1 |
| 9 | **Zambia** | 548 | 1 |

## Transactions that reached financial close

- 1 April – Bolgatanga-Bawku-Polimakom Road (102.55KM)
- 2 April – Addis Ababa Bus Rapid Transit Improvement
- 7 April – Guinean Agency for Rural Electrification Solar Mini-Grids
- 8 April – Acquisition of Iberafrica Diesel-Fired Power Plant (52.5MW) IPP
- 14 April – Mwenga Wind Farm (2.4MW)
- 16 April – Segilola Gold Mine
- 23 April – Acquisition of 33% in Lake Albert Oil Assets & East Africa Crude Oil Pipeline System
- 7 May – Acquisition of a Stake in GridX Africa Solar & Storage Portfolio (2.8MW)

# Another Covid-19 article MENA

As the lockdown measures bite, which MENA projects are nonetheless being targeted for financial close in the near-future? By **James Hebert**.

Low oil prices offset by logistical challenges have been the mainstay of the energy and infra market in the Middle East & North Africa during the Covid-19 pandemic – nonetheless, two projects have reached financial close so far and some sponsors are confident of keeping their assets safe from infection.

Sponsors and implementing authorities have held virtual meetings for the signing of offtake and project agreements, yet scepticism remains over how easily these can replace in-person meetings when it comes to achieving financial close.

In today's low interest rate environment, the cost of financing can belie economic disruption caused by the coronavirus pandemic. Elsewhere, this disruption has led to a shortage of oil storage capacity and numerous feature articles.

If lenders can maintain debt pricing as it was before the start of the pandemic and the torpedoing of oil prices, there are good prospects for engaging the debt finance required for achieving financial close in the midst of possibly the biggest global economic crisis in 90 years.

## Defying the pandemic

Two renewable energy projects made it to financial close early on in the pandemic – the 500MW Ibri II solar PV on 19 March (2020) in Oman and the 189MW Genesis wind farm on 1 April in Israel.

ACWA Power's Ibri II, in particular, has been more notable for the drop out of the Saudi Export Development Authority (SEDA), which had been lining up a $70 million direct loan before the signing of project agreements in May 2019. However, by the time the AIIB approved its $60 million loan in February (2020) progress on the SEDA loan was still being negotiated.

At the time of financial close, a source close to the deal confirmed to *IJGlobal* that SEDA's loan offer was wholly replaced by an upscaled commercial bank tranche and thus the delay was put to an end – perhaps before the pandemic could delay it indeterminably.

Enlight Renewable Energies' Genesis wind project had also been held up by a delay prior to the pandemic. A common issue with the location of wind farms is the potential disruption they cause by appearing as false targets on military radar.

*Ibri II and Genesis not only had the majority of their lenders in place, but the commercial bank tranches were also willing to increase ticket sizes to expedite financial close.*

The cost of the project increased substantially – up to NIS1.2 billion ($333.5 million) – after a solution was agreed with the Israeli Ministry of Defence (MoD) for an improved radar system, paid for by the sponsor Enlight. Genesis reached financial close, but the deal ended up being heavily leveraged on the debt-side with an 87:13 debt/equity ratio. Ibri II and Genesis not only had the majority of their lenders in place, but the commercial bank tranches were also willing to increase ticket sizes to expedite financial close.

## Belying the pandemic

At least 3 projects have seen ambitious financial close targets set by their developers:

- Yanbu-4 IWP – May (2020)
- Jubail 3A IWP – June
- DEWA V solar PV – August

All 3 were awarded earlier this year and project finance lenders have already been lined up for each, however the key financing issue is – like with Ibri II and Genesis – some, if not most, of the lenders attached to each project may have simply been part of the original financial bid predating the start of the pandemic, rather than newly attached in the middle of an economic crisis.

The 450,000 cubic metres per day (m3pd) Yanbu-4 desalination plant is being developed in Saudi Arabia by an Engie-led consortium. The project went out to lenders at the end of February (2020), just over 2 weeks before the World Health Organisation officially announced the pandemic. By 31 March, 5 banks for a $480 million debt package were confirmed by a source close to the deal:

- Standard Chartered Bank (SCB)
- Apicorp
- KDB
- MUFG
- National Commercial Bank (NCB)

A May (2020) target was set for financial close, a date which has now been and gone – however this was set back in February, a full month before WHO's announcement of the pandemic.

Two ACWA Power-led consortia are developing the $675 million, 600,000 m3pd Jubail 3A IWP in Saudi Arabia and the $570 million, 900MW DEWA V solar PV in Dubai. The WPA and the PPA respectively were signed in quick succession – on 29 April (2020) for the desal and 30 April for the power project – thanks to virtual meetings.

One financial adviser expressed to *IJGlobal* some scepticism as to how easily virtual meetings can be adapted for the approval of loans, as well as the provision of e-signatures to sign deals. In the material world, delays caused by longer bank approvals are not uncommon in the MENA region and these "are sometimes mitigated by in-person meetings", the source added.

Nonetheless, the following banks have been lined up for Jubail 3A's $490 million debt package as a source close to the deal previously told *IJGlobal*:

- Al Rajhi Bank
- Mizuho Bank
- Riyad Bank
- Standard Chartered Bank

There is a $450 million debt package being arranged for DEWA V, with the following institutions attached:

- Abu Dhabi Investment Bank
- Apicorp
- Natixis
- Samba Bank
- Standard Chartered

A source on the sponsor-side of these projects confirmed to *IJGlobal* that the August (2020) financial target is still on track. Unlike Yanbu-4, the June and August targets have been marked within the time period of the pandemic.