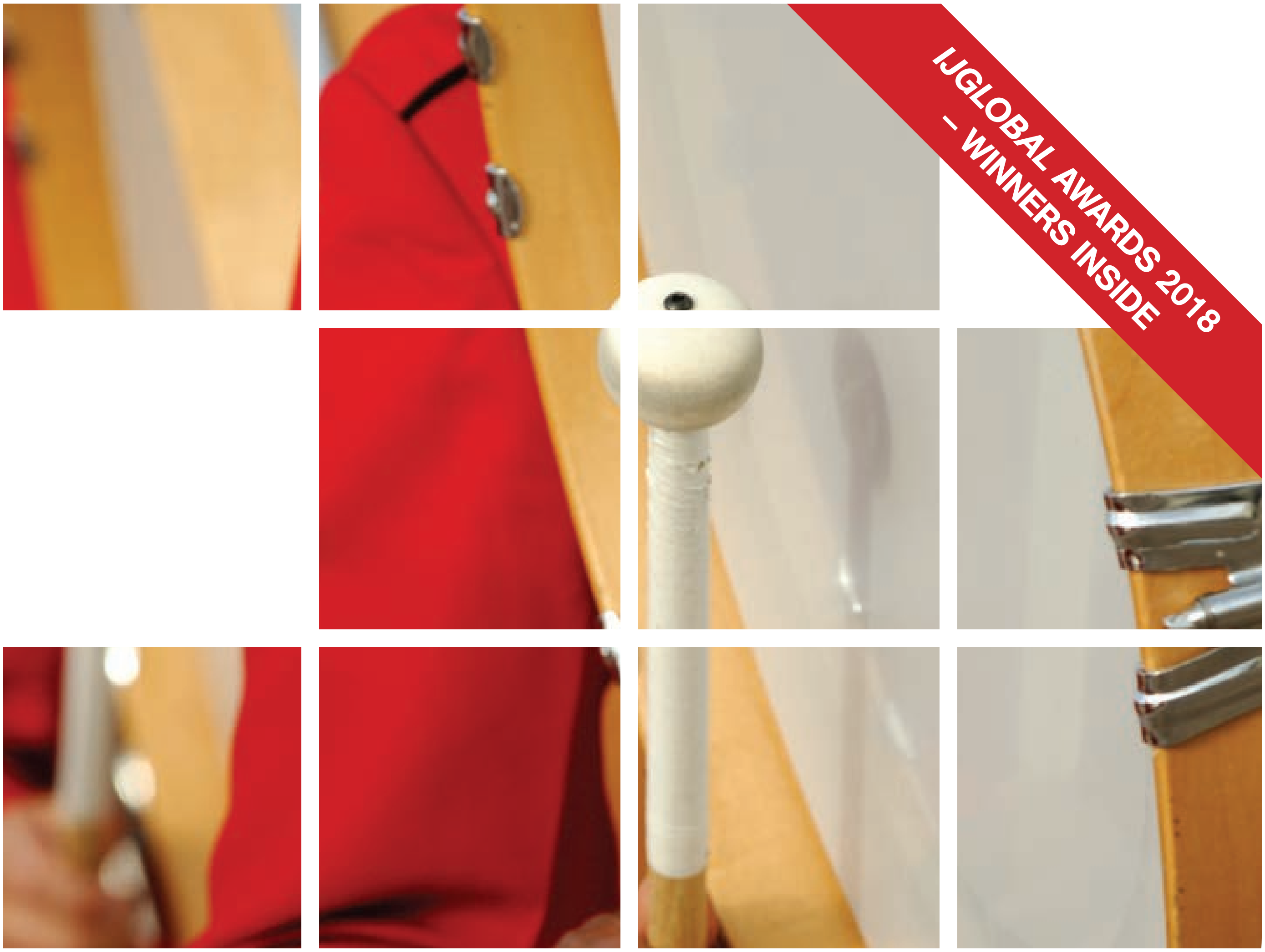
Issue 374
Spring 2019

IJGlobal

Project Finance & Infrastructure Journal



Marching towards merchant

European renewables march to the beat of a new drum

Contents

Contents

Editorial Director
Angus Leslie Melville
+44 20 7779 8034
angus.lm@ijglobal.com

Editor
Jon Whiteaker
+44 20 7779 8554
jon.whiteaker@ijglobal.com

Assistant Editor
Eleonor Lundblad
+44 20 7779 8040
eleonor.lundblad@ijglobal.com

Funds Editor
Viola Caon
+44 20 7779 8324
viola.caon@ijglobal.com

Americas Editor
Ila Patel
+44 02 7779 8629
ila.patel@ijglobal.com

Senior Reporter, Americas
Juliana Ennes
+1 212 224 3430
juliana.ennes@ijglobal.com

Senior Reporter, Asia Pacific
Mia Tahara-Stubbs
+65 8117 8240
mia.taharastubbs@ijglobal.com

Senior Reporter, M&A
Alexandra Dockreay
+44 20 7779 8406
alexandra.dockreay@ijglobal.com

Reporter, Energy
Elliot Hayes
+44 02 7779 8404
elliot.hayes@ijglobal.com

Reporter, Funds and M&A
Arran Brown
+44 20 7779 8441
arran.brown@ijglobal.com

Reporter, MEA
James Hebert
+44 20 7779 8181
james.hebert@ijglobal.com

Reporter, Asia Pacific
David Doré
+852 2912 8052
dave.dore@ijglobal.com

Reporter, Europe
Eliza Punshi
+44 20 7779 8648
eliza.punshi@ijglobal.com

Senior Marketing Manager
Andrew Rolland
+44 20 7779 8364
andrew.rolland@ijglobal.com

Data Manager
Nikola Yankulov
+359 2 492 5750
nikola.yankulov@ijglobal.com

Data Analysts:
Sophia Radeva, Lyudmila Zlateva, Daniela Todorova, Katerina Ilieva, Miroslav Hadzhiyski, Aleksandar Arsov

Business Development Manager, EMEA
Doug Roberts
+44 207 779 8546
doug.roberts@ijglobal.com

Business Development Manager, Americas
Alexander Siegel
+1 212 224 3465
alexander.siegel@ijglobal.com

Business Development Manager, Americas
Nicolas Cano
+1 212 224 3426
nicolas.cano@ijglobal.com

Senior Business Development Manager
Tim Willmott
+44 20 7779 7216
twillmott@ijglobal.com

Head of Sales, Americas
Susan Feigenbaum
+1 212 224 3431
susan.feigenbaum@ijglobal.com

Head of Subscription Sales
Nicholas Davies
+44 20 7779 8284
nicholas.davies@ijglobal.com

Production Manager
Steve Ashenden

Managing Director
Stuart Allen
+44 20 7779 8312
stuart.allen@ijglobal.com

CEO, Specialist Information Division
Jeffrey Davies

IJGlobal
Euromoney Institutional Investor PLC
8 Bouverie Street
London, UK EC4Y 8AX
+44 20 7779 8870

ISSN 2055-4842

Directors
David Pritchard (Chairman), Andrew Rashbass (CEO), Wendy Pallot (CFO), Sir Patrick Sergeant, Andrew Ballingal, Tristan Hillgarth, Imogen Joss, Tim Collier, Kevin Beatty, Lorna Tilbian, Jan Babiak

Despite the challenges facing European renewables, there is a willingness among market participants to be part of the solution.

A formidable challenge

Athletes are keen on the tired sporting cliché of "taking one game at a time". As unedifying and uninspiring as this comment is when spouted post-game by a player seemingly incapable of original thought, you should grudgingly acknowledge that there is logic behind it.

We know from our own experience that it helps to stay focused on the task at hand. To not be deterred by a longer series of tasks which subsequently need to be completed. Anyone attempting a long-distance run knows that thinking too much about the total distance can make your heart sink and your legs heavy. Better to concentrate on one mile at a time.

This strategy for not being overwhelmed by a terrifyingly daunting target came to my mind during *IJGlobal*'s recent European renewable energy conference. Nestled in the picturesque English countryside, delegates were fed a sobering state of play.

Some research, including that of the Global Carbon Project initiative launched at the UN climate summit in Katowice, suggests carbon emissions are rising not falling globally. This despite tremendous investments in renewables energy over the last decade.

Various doom-inspiring statistics were bandied around at the event. One panellist claimed the required capital investment for keeping global average temperatures rising less than 2%, the target of the Paris climate agreement, was the equivalent of financing the $6 billion Hornsea II offshore wind project every day of the year.

Despite renewable energy capacity growing at an exponential rate, power generated from renewables, even in developed countries, is still less than thermal power.

And political risks are rising. Dieter Helm, a professor at Oxford University who has written research papers for the UK government, told conference attendees that no renewables are ever fully subsidy free.

He argued that if power prices climb higher while the costs of renewables development continue to fall, power supply will become an even more political issue. Once renewables take the energy market to zero marginal costs, it will be left to government to decide who shoulders the remaining system costs connected to power supply.

There is no easy answer to that. He notes that none of the populist leaders to emerge around the work in recent years support investment in renewables.

Meanwhile the demand for electricity is only set to rise, as emergent technologies such as electric vehicles and AI, as well as a move away from fossil fuel generated heat systems, will massively increase the demand for electricity.

The countries with the highest carbon emission levels also tend to be the fastest growing economically, with all the implication for energy demand that implies. A number of delegates acknowledged that the impact of policies and projects in Europe is relatively small. What happens in China, India and Sub-Saharan Africa will ultimately decide global temperatures.

Clearly there are enough bad headlines there to tempt someone to lose hope but instead I came away from the conference inspired.

No matter what challenge there is facing the fast-changing European renewables market, there were several delegates on hand to suggest varying solutions.

The investors, fund managers and developers in the room were well-aware of the formidable challenge at hand, but like a long-distance runner they know that you have to stay focused on the next mile.

The UK government may not be ready or willing to implement the type of wholesale change Helm recommends. But a representative from the Department of Business, Energy and Industrial Strategy convincingly reassured delegates that it is listening, and that a whitepaper due in July will contain details on how it plans to address issues around managing the grid and delivering new generation capacity.

Most agree that its CfD auctions have been a success and should continue.

There was a consensus view on the inevitability of a growing number of renewables assets in Europe needed to be funded on a merchant basis. The structures needed to make this happen are still up for debate but there is no shortage of innovative structures being suggested.

Asset optimisation, through repowering or life extension, is a growing challenge for the market, but assets owners seem willing to accept that more carrot and less stick may be needed with O&M providers when assessing how best to share these risks.

What struck me most from attendees was a widespread willingness to be flexible to find solutions to problems.

The ultimate destination seems very far away right now but that is not stopping those involved in renewables investment making sure we get through the next few miles. ■

Jon Whiteaker
Editor

8point3 Solar CEI, LLC
8point3 Solar InvestCo 1 & 2, LLC

USD 1.16 Billion (Solar CEI)

USD 1.29 Billion (InvestCo 1 & 2)

Bridge financing for the Sponsor's acquisition of 8point3 Energy Partners LP and two private placement permanent financings.

Sole Lead Arranger and Sole Underwriter for the Bridge Financing, Lead Arranger and Sole Placement Agent for the Permanent Financing

June 2018, USA

Western Renewables Partners LLC

USD 500 Million Term Loan

USD 48.6 Million Delayed Draw Term Loan

USD 34.3 Million LC Facility

USD 400 Million Margin Loan

Acquisition of a portfolio of 11 operating wind and solar projects.

Coordinating Lead Arranger, Joint Bookrunner, Administrative Agent, Collateral Agent

August 2018, USA

Sepia MV30 FPSO Project

USD 423 Million Term Loan

USD 247 Million Commercial NEXI Covered Facility

USD 248 Million Commercial Uncovered Facility

Financing of a floating, production, storage, and offloading (FPSO) unit by MODEC, Mitsui, MOL, Marubeni, and Mitsui E&S.

Mandated Lead Arranger

March 2018, Brazil

Caitan SpA

USD 472.1 Million Term Loan

USD 46.1 Million LC Facility

Financing of Minera Spence desalination plant.

Financial Advisor, Coordinating Lead Arranger, Mandated Lead Arranger, Hedge Coordinator

June 2018, Chile

Helix Ironwood, LLC
Ocean State Power, LLC

USD 400 Million
USD 260 Million

Refinancing of the Project to optimize capital structure under the new contracted profile.

Joint Lead Arranger

August 2018, USA

Rhode Island State Energy Center, L.P.

USD 315 Million Term Loan

USD 45 Million Revolver

Refinancing of a 594 MW combined cycle natural gas-fired power generating facility.

Coordinating Lead Arranger, Collateral Agent, Depositary Bank

July 2018, USA

LAX Integrated Express Solutions, LLC

USD 270 Million Construction Facility

USD 1.2 Million PABs

Design, build, finance, operation, and maintenance of a 2.25 mile elevated APM at LAX.

Financial Advisor

June 2018, USA

CED Wind Holdings, LLC

USD 140 Million Private Placement

USD 31.6 Million LC Facilities

Portfolio of five wind farms with an aggregate capacity of 180MW in South Dakota and Montana.

Joint Placement Agent, LCF Admin Agent

September 2018, USA

Pinal Central Energy Center, LLC

USD 42.1 Million Term Loan

Financing of a solar and storage energy center.

Mandated Lead Arranger, Joint Bookrunner

May 2018, USA

Briefings

FUNDS

BlackRock prepares new fund

BlackRock is in a pre-marketing phase for its latest fund.

IJGlobal has learnt that BlackRock is in pre-marketing for its third global renewable power fund which will target assets in the US, Europe, Asia Pacific and Latin America.

The new fund will have a target of $2.65 billion and the investment primary term will be for 12 years. The fund is targeting a return of 12%. It should have a 65:35 split between greenfield assets and operational assets.

The diversified fund will target 80% traditional renewable energy assets, while the remaining 20% will be dedicated to renewable infrastructure such as battery storage and EV charging.

Prime Capital maiden fund plans Q3 first close

The maiden infrastructure fund of German alternative asset manager Prime Capital plans to reach a first close in Q3, according to a source.

Prime Green Energy Infrastructure Fund aims to have raised €300 million ($336 million) at its first close in September, with commitments from between three and five investors.

Thereafter, a second close could come in March 2020, with a final close between June and September 2020. Investors are being offered a return of between 8% and 10%.

The €500 million fund expects to make seven to 12 investments in total. It has secured exclusivity over its seed portfolio comprising two Norwegian projects and one Swedish.

Ardian reaches final close for Fund V

French fund manager Ardian has held a final close at €6.1 billion ($6.92 billion) for Ardian Infrastructure Fund V, which is the largest Europe-focused infrastructure fund raised to date.

The fundraise attracted commitments from 125 investors, from Europe, North America, Asia and the Middle East. Former investors re-upping their commitment accounted for 70% of LPs, while 30% of the LPs are new clients of Ardian.

Fund V will have a split investment mandate of 80% allocated to equity in operational assets and the remainder allocated to equity in greenfield development. The fund will be especially interested in energy (gas, electricity, renewables) and transportation opportunities, as well as investing in other public infrastructure assets including health and environmental.

EQT IV fund holds €9bn final close

EQT has reached final close on its fourth infrastructure vehicle at the €9 billion ($10.1 billion) hard cap, making it the largest infrastructure fund so far.

The unlisted vehicle has a mandate to invest in a number of geographies, but will focus on operational assets in Europe and North America – though investment opportunities in Asia Pacific will also be considered – across energy, environmental and social infrastructure, logistics, telecoms and transport.

Ticket size will be between €100 million and €600 million, but has the flexibility to consider larger opportunities should they arise. Meanwhile, EQT is planning an expansion in continental Europe with the opening of two new offices in France and Italy. EQT received enough interest to have exceeded its hard cap, but ultimately chose not to raise the fund size in favour of raising a fund consistent with what it sees as deal-availability in the market.

Meridiam's reopened Africa fund closes at €546m

Paris-headquartered investment firm Meridiam has closed its Africa fund at €546 million ($614 million), having reopened the vehicle in November (2018). The reopened Meridiam Infrastructure Africa Fund (MIAF) exceeded the €510 million target, dwarfing its €207 million final close in 2016.

MIAF's initial commitment was fully invested two years before the end of its investment period, prompting Meridiam to reopen the fund to allow MIAF to pursue follow-on investment opportunities, further diversify the portfolio, gain exposure to larger assets, and benefit from economies of scale on fixed costs.

MIAF held first close in May 2015 with €150 million in commitments, and reached a €207 million final close in July 2016. MAIF is now €350 million invested with funds anticipated to be committed in 2021.

First close for Marubeni-Mizuho-AM One fund

The specialist equity investment fund set up by Marubeni, Mizuho Bank and Asset Management One in Japan has reached first close.

The fund, MM Capital Infrastructure Fund I, raised ¥20 billion ($180 million)

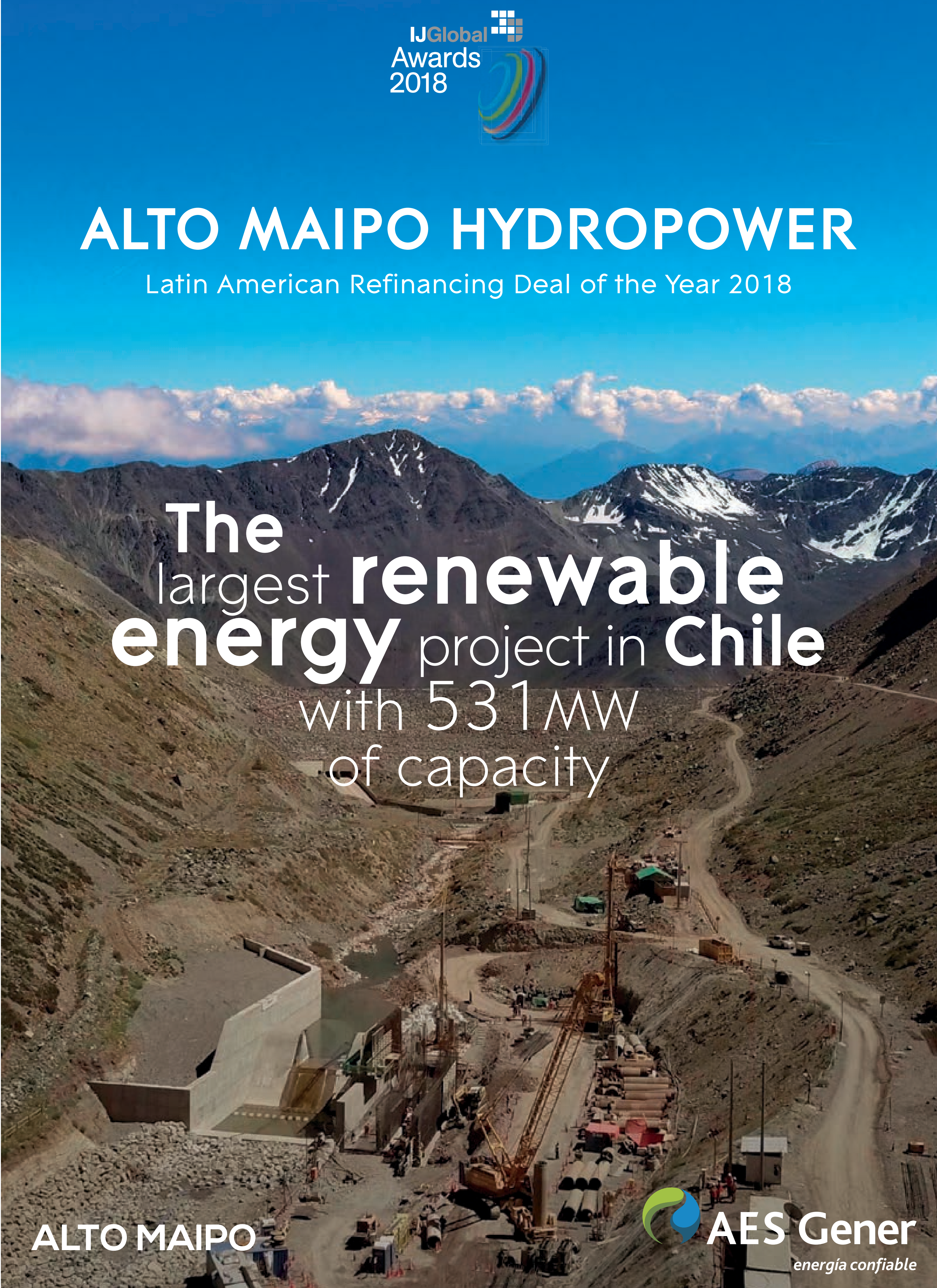
Mizuho said it plans to reach out to a number of investors over the next year to take it to final close.

MM Capital Infrastructure Fund I is targeting ¥50 billion, for equity investments in operational assets in the transportation and energy sectors.

The assets will be generating steady cash flows abroad, particularly in OECD countries.

The fund is managed by MM Capital Partners Company which is owned by Marubeni (90%), Mizuho (5%) and Asset Management One (5%).

More funds news at ijglobal.com


IJGlobal
Awards
2018
ALTO MAIPO HYDROPOWER
Latin American Refinancing Deal of the Year 2018
The largest renewable energy project in Chile with 531MW of capacity
ALTO MAIPO
AES Gener
energía confiable

Briefings

M&A

Latest German offshore wind sale launches

Norway's Equinor is looking to sell its 50% interest in the 385MW Arkona offshore wind farm in the German Baltic Sea.

E.ON is the other shareholder in the asset. The project entered commercial operations in October 2018 and benefits from a four-year PPA with ENGIE which will buy the electricity on the German day-ahead and intra-day market. Located 35km north east of Rugen Island, the wind farm features 60x Siemens Gamesa 6.45MW turbines.

The Arkona sale process will be one in a string of recent M&A transactions for German offshore wind.

Highland Group and Copenhagen Infrastructure Partners sold 80% of Veja Mate in February (2019) to Commerz Real, Ingka Group, Wpd Invest and KGAL Group for around €600 million ($676 million). Meanwhile, the sale process for Bard 1 has launched, GIP is in the process of selling its 50% stake in Gode 1 and the shareholders of Merkur Offshore Wind are also seeking to sell their interests.

LS Power launches US CCGT sell-off

LS Power has hired Barclays and Goldman Sachs to run the auction of a pair of operational, contracted combined-cycle gas turbine (CCGT) plants in the US.

A teaser for the sale of the 516MW Carville Energy Center near Baton Rouge, Louisiana, and 1,127MW Oneta Energy Center near Tulsa, Oklahoma, was issued to market in March 2018.

The assets could be sold separately, a source has said, as the plants were individually project financed. Both CCGT plants entered operations in 2003 and feature General Electric 7FA turbines.

Carville has multiple offtakers, including a utility and a steam customer, under PPAs expiring in 2032. Most of Carville's output is contracted with Entergy under a 485MW agreement signed in 2011. Oneta's offtakers, meanwhile, include a utility, a municipality and two electric co-operatives with contracts expiring in 2042.

IFM, PSA and Polish state fund sign DCT Gdansk purchase

A consortium of IFM Investors, Singapore-based port operator PSA International and state-owned Polish Development Fund (PFR) signed a contract in March (2019) to buy 100% of DCT Gdansk in Poland. The sellers are Macquarie (64%) and three Australian superannuation funds (36%).

The buyers valued DCT Gdansk at between Z5 billion ($1.31 billion) and Z6 billion. The 2018 EBITDA for DCT Gdansk was €73.7 million ($83.3 million), implying a multiple of between 16x and 19x EBITDA. The new owners are due to refinance the company's €130 million debt as part of the acquisition.

DCT Gdansk' sale process launched in Q3 2018, drawing interest from bidders also including DP World, Infracapital and QIC.

Japanese consortium invests in Taiwan offshore wind

German developer Wpd has selected a Japanese consortium as preferred bidder in the auction of a minority shareholding in its Yunlin offshore wind farm in Taiwan.

The consortium will buy a collective 27% shareholding, after Wpd put up to 49% on sale. The buyers, led by Sojitz Corporation, are Chugoku Electric Power Company, Chudenko Corporation, Shikoku Electric Power Company and JXTG Nippon Oil & Energy Corporation.

Other bidders in the auction included Japanese trading house Itochu Corporation and Canadian pension fund CDPQ.

The sponsor is close to finalising the debt package for Yunlin, having run the debt and equity processes concurrently. A local and international bank club is in place, with close to 20 lenders providing around NT$80 billion ($2.6 billion) debt.

Ardian exits Indigo Group as it breaks into China

French fund manager Ardian has exited its 49.2% shareholding in car parking and mobility company Indigo Group, having invested alongside Predica in May 2014.

The buyers are another French fund manager Mirova, through the Core Infrastructure Fund II, and German insurance asset manager MEAG.

Ardian and Predica expanded Indigo's business into the Americas, and then in March (2019) agreed to set up a €30 million ($33.9 million) joint venture platform with Chinese parking management company Sunsea Parking, after a competitive process to find a local partner.

Ardian and Predica ran an auction back in 2017 to both exit Indigo, though after finding a Chinese buyer Shougang the deal collapsed.

Marubeni exits Saudi power and water plant

ACWA Power has acquired Marubeni's shareholding in the captive power and water plant that services the Rabigh refinery and petrochemicals facility in Saudi Arabia.

Marubeni has sold its 30% stake in Rabigh Arabian Water & Electricity Company (RAWEC), which owns the plant, and its 34% stake in the O&M company Rabigh Power Company (RPC). ACWA Power now has a roughly 74% stake in RAWEC, and an 85% stake in RPC through its subsidiary NOMAC.

Additional shareholder JGC Corp retains a 25% stake in RAWEC and a 15% in RPC.

The deal closed on 13 March (2019), after ACWA Power exercised pre-emption rights in May 2018. ■

More M&A news at ijglobal.com

Briefings

CAPITAL MARKETS

Vinci issues Gatwick bond

Vinci has issued an £800 million ($1.04 billion) bond on behalf of Vinci Airports to fund the purchase of a 50.01% shareholding in London Gatwick Airport it acquired at the end of last year.

The bond is arranged in two £400 million tranches, one maturing in March 2027 at an annual coupon of 2.25% and one maturing in September 2034 at an annual coupon of 2.75%.

The issue was 3x oversubscribed. BNP Paribas, HSBC, NatWest Markets and RBC Capital Markets were joint bookrunners.

Vinci Airports acquired the majority stake at the end of December 2018 in a deal valued at £2.9 billion.

KKR's Altice telecoms towers debt syndicated

Four underwriter banks – BNP Paribas, Crédit Agricole CIB, DNB Bank and Natixis – completed the syndication of the €770 million ($872 million) senior credit facilities backing KKR's acquisition of a stake in Altice's French telecoms towers business.

The syndication was oversubscribed with the following MLAs joining the deal: Allied Irish Banks, Deutsche Bank, E.SUN Commercial Bank, Edmond de Rothschild AM's BRIDGE funds, Generali Global Infrastructure, Lloyds Bank, MUFG Bank, Raiffeisen Bank International and Schroders.

The debt facilities comprise a €470 million acquisition facility to fund part of the deal along with a €300 million revolving credit facility to fund new telecoms business Hivory's growth.

KKR and Altice formed Hivory in December 2018. It is the largest independent telecoms tower company in France, and third largest in France, with a portfolio of over 10,000 of Altice's French towers.

Altice agreed a sale of 49.99% of SFR TowerCo, the holding company for Altice's French telecoms tower portfolio, to KKR in June 2018. The deal had a value of roughly €1.8 billion, which represented 18x the 2017 EBITDA.

GHIAL prices bond for Hyderabad airport expansion

GMR Hyderabad International Airport (GHIAL) has priced a five-year senior secured issuance of $300 million in the international bond market at a coupon of 5.375%, to finance the expansion of the airport in Hyderabad.

The pricing took place on 3 April (2019), after the bond launched the week before.

GHIAL is a special purpose vehicle for the design, financing, construction, operation and maintenance of the Rajiv Gandhi International Airport (RGIA).

The company will use the proceeds toward capital expenditure on the master plan for expanding RGIA. The expansion will increase the airport's capacity to 34 million passengers per year.

Mexico agrees to partially repay NAIM investors

The Mexico City Airport Group (GACM) and bondholders have reached an agreement to liquidate bonds previously issued to finance the Nuevo Aeropuerto Internacional de México (NAIM).

Under the agreement, GACM will pay around Ps34 billion ($1.77 billion).

The payment does not cover the entire debt of the project. The airport, which was cancelled after construction reached around 30%, had a total estimated cost of $13.3 billion. The project had issued $6 billion in bonds to finance the construction.

According to the minister of communications and transport, Javier Jimenez Espriu, the government will repay $200 million yearly from the remaining debt of $4.2 billion.

It is understood that this agreement was reached so that GACM and the Mexican government save pension fund investments which provided a large part of the bond financing for the airport.

Kenya to reissue mobile-based infra bond

Kenya's National Treasury was due to reissue the mobile-based infrastructure bond M-Akiba in March (2019), after the bond failed to meet its Sh1 billion ($10 million) target in 2017.

The new bond target is now pegged at Sh250 million. The maturity is three years with a fixed 10% interest rate. Proceeds from the sale will support infrastructure projects in the East African state.

Kenya's government had looked to raise Sh5 billion through M-Akiba, but underperformed after first issue in June 2017 – Sh247.47 million – fell 75% short of its target.

Airport Authority Hong Kong prices bonds for 3RS

Airport Authority Hong Kong (AAHK) has priced an offering of bonds due 2029 at 78bp above 10-year US Treasuries, with proceeds going towards the HK$141.5 billion ($18 billion) Three-Runway System (3RS) project and general corporate matters.

The $500 million, 3.45% bond sale ended a hiatus of more than 15 years from the dollar bond market for government-backed AAHK – operator of Hong Kong International Airport (HKIA).

Advisers to AAHK on the issue included HSBC and Citigroup as joint lead managers, and Linklaters.

HSBC and Citigroup guided the Reg S bond at 105bp. However, strong demand allowed them to settle on a price of 78bp.

The $3.6 billion final order book had more than 160 accounts split among investors from Asia (around 91%) and Europe, Middle East and Africa. ■

More capital markets news at ijglobal.com

Briefings

POLICY & REGULATION

Trump signs executive orders for energy infra

US president Donald Trump has signed two executive orders speeding up the process for energy infrastructure deals in the US and making it harder for states to block projects due to environmental concerns.

US secretary of energy Rick Perry said that Trump took "sweeping action" to ensure the US reaches it's full "energy potential and has the ability to deliver our historic energy supply both around the nation and the world."

According to the president, the executive orders will: "implement a comprehensive whole-of-government approach to streamline the development of necessary energy infrastructure projects, and reduce existing barriers to achieving that goal."

The Department of Energy will be required to submit a report to the president on the impact of limiting the export of coal, oil, natural gas, and other domestic energy resources through the west coast of the US.

The second executive order calls for streamlining the process for cross-border international energy infrastructure projects.

Trump recently expressed his support for TransCanada's Keystone XL pipeline project by issuing a new Presidential Permit at the end of March (2019). The project was halted in November 2018 after a US judge in Montana blocked the project on the grounds that a full environmental analysis had not been completed.

Estonia halts offshore wind project

The Estonian government has decided not to proceed with an application for a 600MW offshore wind farm, citing a potential threat to national security.

A government spokesperson said that the building permit filed by developer Saare Wind Energy was refused on the basis that, should it be granted, the applicant may pose a risk to public order, social and national security. The Ministry of Justice is leading the challenge for the administration.

Saare Wind Energy has been working on a plan to build an offshore wind farm of 100x 6MW turbines off the island of Saaremaa since 2015. Capex on the wind farm is €1.7 billion ($1.91 billion).

The developer last sent a request to the government at the end of 2017 for the latter to make a decision regarding the initiation of a building permit procedure.

The plan was for the wind farm to have an annual output capacity of 2,800GWh, around 30.9% of Estonia's total electricity output in 2015.

Colombia rethinks power auctions

The Colombian government has been studying the possibility of making participation in the long-term power auction mandatory for the demand side.

The country's first long-term renewable power procurement process ended earlier this year in February (2019) and did not go to plan. No projects were awarded, though it did attract interest from international and local players.

The main problem according to sources was a lack of interest from the demand side. The government is currently planning a new auction for either Q2 or Q3 2019, with adjusted rules.

Among lessons learned from the failed auction was the need for a mechanism to create enough incentive for the demand side to participate more actively, or to including mandatory participation in the auction.

Mandatory participation would reduce the exposure of the demand side to price volatility on the free market.

The Colombian government is also looking over the possibility of creating a guarantee scheme for the contracts and launching an agenda for two power auctions per year over the next two years.

Finland supports onshore wind

In late March, the Finnish Energy Authority awarded subsidies to support seven projects in its first technology-neutral tender.

A total of 26 bids were received by the authority – all for onshore wind – but 19 were rejected.

Average price for successful bids was €2.49 ($2.81) per MWh. The lowest accepted bid was for €1.27 per MWh while the highest was €3.97 per MWh. The price of accepted bids weighted according to the yearly production of the capacity on offer, was €2.58 per MWh

Meanwhile, the average price of the declined bids was €8.52 per MWh. The auction was open to projects generating electricity from wind, solar, wave power, biomass and biogas. The maximum annual electricity generation for tenders was 1.4TWh. The combined annual production of the accepted projects was 1.36TWh.

All awarded projects will receive a premium based on its respective tender. A full premium is paid when the average of the three-month market price of electricity is equal to or lower that the reference price of €30 per MWh. If the market exceeds the reference price, a sliding scale will be used. No aid will be paid if the market price is higher than the sum of the reference price and the approved premium.

The subsidy will be paid for a period of 12 years. This period will begin no later than three years from the date on which the approval decision was given. The maximum annual cost incurred by the state from the premium scheme total €3.5 million. This is less than 5% of the costs incurred to the state from the FiT system for the same annual electricity production. ■

More policy & regulation news at ijglobal.com

UPCOMING EVENTS IN LATIN AMERICA

May 8th 2019

IJCHILE19
An **IJGlobal** Event

W Hotel Santiago

June 13th 2019

IJMEXICO19
An **IJGlobal** Event

The St. Regis Mexico City

Book your pass at **ijglobal.com/events** and use discount code **IJEVENT50** to **save 50%**

Briefings

PEOPLE

Banks

Former Natixis managing director **Ranjan Moulik** has started a new role as MD and head of financing at energy M&A specialist **IKAV**. He started this new role in March and will continue to be based out of Paris, but will now focus his efforts on equity opportunities in the renewable energy space. Moulik stepped down from his position as global head of power and renewables at Natixis in late February, having led the project finance business for nearly six years in Paris.

National Australia Bank has hired **Barry Dale** at a director-level position in London. Dale most recently served as energy and infrastructure director at Scotiabank. Also joining the swelling ranks at NAB's London office is **Camélia Chenaf**, who comes from SMBC where she has worked since the summer of 2013, rising to vice-president level in the Japanese bank's project and acquisition finance team with a primary focus on transport.

Canada Infrastructure Bank has hired **Sara Alvarado** as head of risk, based in Toronto. Alvarado has over 28 years banking experience, and until last year (2018) was a senior officer, infrastructure new products and special transaction at the EIB. She focused on the investment plan for Europe to catalyse private sector financing in policy priority sectors.

Advisers

Sharlene Hay has joined **BTY Group** as a director in its PPP advisory team in London. Hay has over 10 years' experience as an engineering and infrastructure adviser. She joins from Infrata where she was worked in the role of principal consultant for over four years.

Clifford Chance has appointed **Toby Parkinson** as partner in its infrastructure division in London. Parkinson returns to the magic circle firm from OMERS Infrastructure, where he worked as director of legal for three years and provided legal advice to the transaction teams in London. Parkinson first joined Clifford Chance in 2006, where he worked in the firm's infrastructure and private equity team for 10 years.

Crowell & Moring has appointed **Robin Baillie** as a partner in its energy practice in London. Baillie joins from Squire Patton Boggs, where he headed its infrastructure practice in the UK and Europe for over four years. He has more than 20 years' experience advising on energy and infrastructure projects globally, with a focus on the UK and North America.

Sponsors

Dougie Sutherland has stepped down from **Interserve**'s board of directors following a dispute with the group's shareholders over its rescue plan, which was eventually rejected at another shareholders' meeting, causing Interserve to go under administration. Sutherland remains managing director of Interserve's developments division. He has been with Interserve for over 12 years, having played an important role in the Fit for Growth business transformation programme.

UK fibre-to-the-premises network operator **Gigaclear** has appointed **Gareth Williams** as its chief executive. Williams, who joins Gigaclear from Interoute, replaces Matthew Hare who the company had been trying to replace since last summer following its acquisition by M&G Prudential›s infrastructure investment manager Infracapital, and after struggling to deliver a number of new broadband contracts under Hare's watch.

Asset Managers

Brooks Kaufman has left **IFM Investors** after spending nearly a decade with the firm, most recently as an investment director of infrastructure based in New York. Before joining IFM Investors in 2010, Kaufman served on the board of directors for the Duquesne Light for almost seven years.

Meanwhile, IFM Investors has appointed **Lucie Mixeras** as a director in London. She joins from Crédit Agricole where she was at vice-president level and had worked for almost eight years. In her new role, Mixeras will report into David Cooper on the infra debt team.

Green Investment Group (**GIG**) managing director Bill Rogers has resigned from his role as head of distributed energy and onshore wind, and is understood to be on the verge of joining a Canadian pension fund investor. Meanwhile, **Richard Braakenburg**, who was senior vice-president for distributed energy and onshore renewables at GIG, has also stepped down from his position at the Macquarie-owned platform to take on the role of CFO at **Pivot Power** – an energy storage and electric vehicle charging specialist.

Rogers spent more than six years at GIG, having joined from Hudson Clean Energy where he was managing director. Braakenburg also spent a little more than six years at GIG, having joined from the UK Department of Energy and Climate Change (DECC) where he was a senior banking and finance analyst.

More people news at ijglobal.com

Marching towards merchant

Given the slow growth of the corporate PPA market, some argue banks will have to start accepting merchant risk in order to finance the next generation of European renewables.
By Jon Whiteaker.

"The future of power in Europe is fundamentally going to be merchant". That opinion may have seemed fanciful until fairly recently, but Hari Chandra, managing director and global co-head of power, energy and infrastructure at Cantor Fitzgerald, is confident in his prediction.

Fundamental changes to the European power market mean it is marching in a new direction, though arrival time (and ultimate destination) are far from certain.

Unlike in North America, European project finance banks have not had to get comfortable with full merchant risk for conventional power, largely due to a lack of new-build projects. Meanwhile renewable energy assets the world over have until recently been protected from variable power prices by generous subsidies.

However, with governments withdrawing subsidies for renewables and a huge backlog of wind and solar plants to be developed over the next decade, we are going to see a profound change in how European renewables are funded.

Countless confident market reports and panellists at industry events have been keen to promote corporate PPAs as the solution to financing projects in a post-subsidy world. Scepticism is growing though.

In Chandra's telling, most corporate entities "do not have the incentive to contract power over the long-term, especially when you are in an environment where prices are going to fall."

The corporate PPA market has certainly been growing in Europe, as it has elsewhere, but Chandra is not the only one to note a limit to corporate appetite.

"Clearly there's a requirement for more contracts. There is more demand from generators for quality PPAs than there are contracts available," says Ricardo Piñeiro, partner at Foresight Group.

New forms of state support or regulation could provide extra comfort for lenders and investors though there is little certainty what this support would look like even if it does emerge.

Which is why many now think banks will have to start accepting merchant risk on renewable power transactions in Europe.

Anything but fully merchant

"There is still a big resistance from banks to do fully merchant transactions," according to Alejandro Ciruelos, managing director, project & infrastructure finance at Santander.

He argues that lenders will only accept some merchant risk if there is a level of contracted revenue for the project to anchor a debt financing off.

But will enough offtake agreements emerge to meet demand?

Though the volume of corporate PPAs is still low, some remain confident that these contracts will provide the main solution to the funding challenge.

"There is a lot of appetite from corporates to enter into PPAs, not least because they can use it towards their sustainability goals," said Sophie Dingenham, corporate & projects partner at law firm Bird & Bird.

Ricardo Piñeiro, Foresight Group

Dingenham says that many small and medium sized companies are now looking at longer-term power contracts and she is confident "corporate PPAs can support a large chunk of the renewable energy generation in the coming years".

Research from Bird & Bird shows that corporate PPAs accounted for 7.2GW of power purchased from generators between January and July 2018, across 28 different markets globally. This is up from just 5.4GW for the whole of 2017.

Bird & Bird estimates that 80% of these corporate PPA deals were signed in the US or in Nordic countries, however, with activity in the rest of the world thin on the ground.

Though there is interest on the corporate side, there are no standardised solutions and it is a slow process for counterparties to fully understand their obligations.

As Foresight's Piñeiro says: "By being available to discuss it doesn't mean corporates are prepared to sit down and negotiate a contract". He also notes that there have actually been very few corporate PPAs signed in most European markets.

Though sleeved and private wire corporate PPAs may remain relatively rare, Rob Dornton-Duff, managing director at Riskbridge Associates, sees a growing market for synthetic PPAs – effectively a power hedge without a direct physical offtake.

"There is an emerging market for power hedging and it's possible to hedge UK and some European power out to 5 years in fixed rates, and as far as 10-15 years with caps, in reasonable quantity."

"Clearly it is much better from a bankability perspective to create a synthetic PPA or hedge instead of running merchant risk: merchant power is typically a last resort. If there is any other option people will take it."

Dornton-Duff also thinks governments will have to find a solution if there is not enough contracted power available to support their renewable energy pipelines.


Carlos Candil, Cantor Fitzgerald

Falling project costs have fuelled the march towards zero subsidies. If financing gets more expensive, bidding will become less aggressive.

"It's a bit circular. If your debt pricing goes up because it's merchant, then the subsidy bids will reflect that. You won't have zero bids on subsidies," Dornton-Duff says.

Though this tension may force governments in southern Europe to provide some subsidy support, Piñeiro does not expect to see other state-led solutions emerge: "I don't see any indication that governments wish to regulate or incentivise corporates to enter PPAs directly with generators. This trend will continue to be driven by corporate sustainability targets."

If sponsors must take merchant exposure, some say this will just result in renewables not being project financed.

"Equity capital may be willing to take that merchant risk, with no leverage at the project level," Santander's Ciruelos says.

Banks led by the nose

It is easy to make a case that if the market moves towards merchant power it will be sponsors rather than lenders leading the way.

How quickly offshore wind moved from a risky technology to a safe bet for most PF banks shows lenders have ultimately proved flexible in order to keep doing deals.

Stewart Robinson, managing director of power, energy and infrastructure at Cantor Fitzgerald, says: "There are a growing number of European investors who are looking at deals with a merchant tail, and increasingly pure merchant deals that they recognise will play a part in how the future pipeline gets financed."

Robinson thinks there will still be instances where a corporate PPA is appropriate, and that there will be more of these contracts than we see in the market now, but says there is a price to that certainty.

Renewable energy projects will never again yield the high returns they did under feed-in tariff schemes, which makes it increasingly important to maximise revenues.

"If PPAs were being offered at no discount, everyone would be taking them on. But everyone is either offering them at a discount or significant discount," according to Carlos Candil, MD for power, energy and infrastructure at Cantor Fitzgerald.

Sponsors may need to provide more equity in this environment, but banks will still play a role.

"Gearing will be reduced as a result of the lower level of contracted revenues," Foresight's Piñeiro says. "This will increase equity funding requirements compared to subsidised assets in terms of percentage of total funding."

If the US market acts as a model, sources suggest a Term Loan B market may emerge. Forward purchase agreements, power hedges, cash trapping and cash sweeps could also all become common transaction features.

Piñeiro thinks most lenders are aware of the challenges in the market and are considering solutions: "Most of our relationship banks have showed interest and willingness to engage in financing unsubsidised projects, especially in Spain and Portugal, as those markets are more advanced."

He says banks are analysing power price sensitivity and the minimum price they can accept. They have been looking at power price forecasts anyway but now must take a view.


Rob Dornton-Duff, Riskbridge Associates

Piñeiro can see shorter PPAs matched with shorter-term debt: "I would expect to see more mini-perm type structures, with an element of refinancing risk that the sponsors will need to be comfortable with. We are probably going to see an increase in margins to reflect the merchant nature of the project, and the gearing will decrease".

The Spanish imposition

These types of merchant structure are likely to appear in Spain first.

The country was badly bruised by a generous subsidy scheme that led to an unsustainable government debt pile. The Spanish government announced a moratorium on subsidies in 2012 and retroactively cut feed-in tariffs a year later. Since Spain's renewables market was revived in 2016, over 8GW of new development rights have been awarded.

The projects awarded via auctions benefit from a pricing floor but only receive the market price for power.

Some developers are seeking corporate PPAs but they have been hard to come by to date.

Foresight signed on the first corporate PPA for a solar asset in Spain, a contract with Energya-VM for the 3.9MW Las Torres de Cotillas in Murcia, in December 2017. It is understood they are close to a second corporate PPA in the country but clearly development of this market has been slow.

More recently, Nike signed a PPA with Iberdrola and Caja Rural de Navarra for 40MW of renewable power earlier in February 2019 – the third such deal between the sports company and Iberdrola. The project that will supply the power, Cavar Wind, however has a total capacity of 111MW.

If large international corporates are unwilling to take all the power from a single wind farm, it shows how difficult it is to eliminate all market risk on these projects.

Cantor's Candil says: "Spain is the first market in Europe which has come through with a large enough scheme of assets which is being built. Some utilities will build on balance sheet but others will not."

Cantor Fitzgerald has already advised on one merchant power transaction in Spain, though this was a refinancing of Arclight's operational Bizkaia gas-fired plant located in the Basque region. As much as 66% of the

Alejandro Ciruelos, Santander

three-year debt is due to be repaid through merchant cashflows, and the private placement was made to European, non-Spanish, investors.

If established institutional investors are taking merchant risk on debt for an operational gas-fired power plant in Spain, it doesn't seem a huge stretch for banks to lend to new-build merchant renewables in the country.

"The new-build cost for solar in Spain is now around €600,000 per MW, down from €10 million per MW around 10 years ago," Candil says. "At that price it is very comparable to new gas-fired, particularly when the stated load factors for a modern-day CCGT are much higher than they really are. So the power output starts to be comparable".

Lower project costs mean a lower debt requirement. Banks look set to provide at least some of the debt required for these projects on a merchant risk basis.

The lack of subsidy support in Spain and Portugal is forcing sponsors to try to structure merchant financings. Some expect projects in Eastern European markets to follow suit and others think the UK and German markets could be next if proven structures emerge.

Sources suggest there are active discussions happening on UK merchant solar deals already.

The emergence of a merchant power market in Europe now looks far from fanciful.

IJGlobal Awards 2018

It is that time of year again. *IJGlobal* is delighted to announce the winning deals and winning companies for the *IJGlobal* Awards 2018.

Gala awards ceremonies were held in London, New York, Dubai and Singapore during March to celebrate this year's winners. The ceremonies were the end of a six-month process to identify the outstanding transactions and companies from 2018.

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

Congratulations to all the winners!

IJGlobal Awards 2018

Europe

European Offshore Wind

SeaMade

The 487MW SeaMade offshore wind farm in the North Sea was to an extent an efficient and straightforward project financing deal, with the sponsors bringing the project across the line in less than three months after launching the €1 billion ($1.1 billion) debt financing.

But make no mistake, SeaMade's journey from procurement to financial close was not a simple one; it took a fair share of political wrangling and the merger of two separate projects (and sponsor teams) to finally achieve a deal featuring one of the lowest interest rates in 2018 for offshore wind debt.

SeaMade is the result of the merger of two Belgian offshore wind farms: the Otary consortium's Seastar project, and Otary and Engie Electrabel's Mermaid project.

Seastar and Mermaid were among four offshore wind projects at the financing stage that the Belgian government had threatened to cancel in 2016, deeming the subsidy packages too generous. With the costs of developing offshore wind projects in Europe having fallen dramatically in the previous year, the government was keen to achieve similar price reductions.

However, the Belgian government had limited means and time to renegotiate the subsidies. Under pressure to decommission its two nuclear power plants by 2025 (which account for 60% of the country's generating capacity) and to increase its offshore wind capacity to 2GW by 2020 meet EU emission targets, there was no time to retender to the projects.

Instead, the government negotiated a new tariff of €79 per MWh, allowing the projects to proceed.

The sponsors of Seastar and Mermaid ultimately decided to restructure the projects' ownership structures so the full development could be financed through one transaction.

The European Commission approved the merger of the projects in July 2018, resulting in Dutch utility Eneco joining the equity consortium of the SeaMade project. The new shareholding structure comprised: Otary (70%); Electrabel (17.5%); and Eneco (12.5%).

Otary is a consortium of eight Belgian companies: investors Socofe, Rent-A-Port Energy and SRIW, local authority investment vehicle Z-kracht, dredging company Deme, offshore developer Aspiravi, and renewables developers Elicio and Power at Sea. Each hold a 12.5% stake in the consortium.

The Otary-led sponsor team reached financial close on the €1.3 billion SeaMade project in December 2018, with Eneco signing a 15-year PPA to offtake all of the power from the asset in the same month.

Financing

Debt financing for the project began in March and featured a hedging strategy with contingent hedge implemented prior to financial close. The financing had to be tailored to address SeaMade's twin project configuration: it consists of two sites with two concessions, resulting in two cash flow streams covered by one single contractual set up.

The consortium of Otary, Electrabel and Eneco closed on the €1 billion debt provided by a group of financial institutions including the EIB, Denmark's EKF and a club of 15 banks. This makes the gearing for Seamade the highest yet in any offshore wind jurisdiction, with only €300 million equity being provided by the owners.

EKF covered €100 million of the €804 commercial debt, with the remaining €704 million being uncovered. All 15 banks participating in the project financing provided roughly €50 million equal tickets with pricing coming in at 135bp above Euribor over the 1.5-year construction period, and then 125bp for the remaining 16 years. The EIB provided €250 million via the European Fund for Strategic Investments. All lenders lent on the same terms, including the EIB tranche.

Construction

SeaMade is the last of the Belgian offshore wind farms to be procured with subsidies. It is set to feature 58x 8.0MW-167 DD WTG Siemens Gamesa turbine mode that will have a 167 meter diameter. The turbines were still not certified at the time of financial close but will be erected on monopile foundations.

Construction is due to start later this year, and the sponsors are aiming to have the project connected to the grid by 2020.

Once operational, SeaMade is expected to be the largest offshore wind project and infrastructure project to date to be developed and financed in Belgium. It will have significant impact on Belgium's target of obtaining 13% of its energy from renewable energy sources by 2020. Half of this is due to be sourced from offshore energy, and SeaMade is set to contribute to almost 25% of the required offshore energy production.

Each of the project's twin wind farms will each have its own offshore substation which will collect the electricity produced by the Mermaid and Seastar sites, convert it from 33kV to 220kV and export it to the offshore grid operated by Elia System Operator.

Engie Fabricom, Tractebel, Smulders and Geosea will be responsible for the full EPCI of the substations.

Total value: €1.3 billion
Debt: €1 billion
Equity: €300 million
Sponsors: Otary, Electrabel, Eneco
Lenders: ASN Bank, Bank of China, Belfius Bank, BNP Paribas, Commerzbank, EIB, ING Bank, KBC Bank, KfW IPEX-Bank, MUFG Bank, Rabobank, Santander, Siemens Bank, Société Générale, Sumitomo Mitsui Trust Bank, Triodos
ECA: EKF
Tenor: 17.5 years
Pricing: 135bp above Euribor over the construction period, 125bp for the remaining 16 years
Advisers: Société Générale, Allen & Overy, Loyens & Loeff, Linklaters, Kromann Reumert, Mott MacDonald
Financial close: 3 December 2018

European M&A

Acquisition of John Laing Infrastructure Fund

The acquisition of the John Laing Infrastructure Fund (JLIF) was a seminal deal of 2018, marking a number of milestones, including the first ever take-private of a FTSE 250 listed infrastructure fund with a premium listing on the LSE.

JLIF had 67 investments spread across six countries at the time of the takeover, but its share price had suffered owing to the collapse of UK construction company Carillion and political uncertainty surrounding PFI/PPPs, resulting in a significant discount to NAV.

Dalmore Capital identified John Laing Capital Management-managed JLIF as a potential target in 2017, later identifying Equitix Investment Management as a co-sponsor to help raise the roughly £1.6 billion ($2 billion) required for the acquisition. Initially rejected by the JLIF board, the consortium eventually convinced it of the merits of the deal and a scheme of arrangement was put in place which garnered support from the requisite number of shareholders in September 2018.

Financial close on the deal was reached the following month, concluding a landmark transaction in the listed infrastructure space.

Total value: £1.667 billion
Debt: £1 billion
Equity: £667 million
Buyer: Jura Acquisitions Limited
Seller: John Laing Infrastructure Fund shareholders
Lenders: Lloyds, NatWest
Tenor: 12 months plus 12 months extension
Pricing: floating margins of 1.25% in the first 12 months, 1.75% for the subsequent 12 months, 2.25% thereafter
Advisers: Allen & Overy, Aon, KPMG, Lazard, Macquarie Capital, Stifel, WSP, CMS, JP Morgan Cazenove, Rothschild
Financial close: 12 October 2018

European Telecoms

Open Fibre Broadband

Open Fibre, owned by Italian utility Enel and Cassa Depositi e Prestiti (CDP), succeeded in securing a mammoth debt financing worth €3.47 billion ($3.97 billion) to form part of a €6.5 billion outlay of economy-boosting fibre infrastructure across Italy.

The transaction constitutes the largest project financing of broadband in Europe, which will allow the rollout of broadband grids in developed, highly populated areas, as well as other, less developed, rural ones. The national fiber-to-the-home (FttH) type fibre optic network is expected to cover 18.8 million households across 271 cities and over 7,000 municipalities.

The project represents a strategic move for Italy in order to achieve the targets set out by the 2020 Digital Agenda to reach 85% of the population with at least 100Mbps connection.

The €3.47 billion debt package consisted of a seven-year €2.8 billion term facility, a €370 million guarantee facility and a €300 million revolving credit facility.

The deal was entirely underwritten by BNP Paribas, Société Générale and UniCredit, joined by CDP and the EIB as initial mandated lead arrangers. The debt facilities were syndicated to 10 Italian and international banks: Banca IMI; Banco BPM; MPS Capital Services; UBI Banca; Crédit Agricole; ING; Caixa Bank; MUFG Bank; NatWest; and Banco Santander.

Debt: €3.47 billion
Sponsors: Cassa Depositi e Prestiti (CDP), Enel
Lenders: BNP Paribas, Société Générale, UniCredit, CDP, EIB, Banca IMI, Banco BPM, MPS Capital Services, UBI Banca, Crédit Agricole, ING, Caixa Bank, MUFG Bank, NatWest, Banco Santander
Tenor: 7 years
Advisers: White & Case, Aon, Arthur D. Little, Ashurst, EY, Gianni Origoni Grippo & Partners
Financial close: 15 October 2018

European Transmission & Distribution

Idex Acquisition

This deal saw Antin Infrastructure Partners acquire Idex, one of the largest energy infrastructure and energy services companies in France, from fellow investment firm Cube Infrastructure Managers.

Cube launched a competitive sale process for the asset at the beginning of the year, having bought the company from IK Investment Partners in 2011 through the Cube Infrastructure Fund.

Antin was named successful bidder in May, and is understood to have defeated Mirova and Partners Group in the final round of the action with a valuation of around €1.3 billion ($1.5 billion).

Antin provided equity from its third fund Antin Infrastructure Partners III to finance the deal, while BNP Paribas, Crédit Agricole, HSH Nordbank, Natixis and NatWest Markets were the underwriters on the roughly €673 million of debt facilities. The debt consisted of a €453 million acquisition facility, a seven-year €200 million capital expenditure facility and a €20 million revolving credit facility.

Idex operates numerous French district heating and cooling networks, energy-from-waste facilities and biomass boilers alongside a portfolio of energy services contracts.

A key feature of the deal was selling the business in such a way as to ensure that the separate arms of the business could be run as independently as possible, ensuring greater attractiveness to private equity players in light of a future sale date.

Total value: €1.3 billion
Debt: €673 million
Seller: Cube Infrastructure Fund
Buyer: Antin Infrastructure Partners III
Lenders: BNP Paribas, Crédit Agricole, HSH Nordbank, Natixis, NatWest Markets
Tenor: 7 years
Advisers: Clifford Chance, RBC Capital Markets, Freshfields, Rothschild
Financial close date: 18 July 2018

European Water

SAUR Acquisition

EQT's maiden infrastructure investment in France saw two of its funds successfully acquire and refinance French water utility SAUR Group.

EQT acquired a majority stake in the Saur holdco Holding d'Infrastructures de Metiers de l'Environnement (HIME) via the EQT Infrastructure III and the EQT Infrastructure IV funds, alongside BNP Paribas, SWEN Capital partners and two more co-investors that took a combined 25% of the enterprise. The enterprise valuation was close to €1.6 billion ($1.8 billion).

The sellers, a group of former creditors led by BNP Paribas and Groupe BPCE, took over HIME in 2013 following the holdco's close encounter with bankruptcy.

The business was an attractive one, considering not only SAUR's domestic operations but also its global presence with engineering operations in Poland, Saudi Arabia, Scotland and Spain.

BNP Paribas and Natixis were the underwriters on the €1.04 billion debt package, which consisted of three facilities: a seven-year €786 million term loan with the purpose of refinancing existing debt; a seven year €160 million capital expenditure facility to fund the capex programme and permitted acquisitions; and a seven-year €100 million revolver for financing general purposes and debt service payment.

Total value: €1.6 billion
Total debt: €1.04 billion
Total equity: €560 million
Buyers: EQT Infrastructure with BNP Paribas, SWEN Capital Partners and two more co-investors
Sellers: BNP Paribas, Groupe BPCE and other shareholders
MLAs: BNP Paribas, Natixis
Tenor: 7 years
Pricing: low-200s over Euribor
Advisers: Clifford Chance, DNV GL, McKinsey, Rothschild, BNP Paribas, Freshfields, Morgan Stanley, Natixis

European Ports

Rotterdam World Gateway Refinancing

Rotterdam World Gateway (RWG), a major container terminal opened in 2015 and owned by a consortium of APL, MOL, HMM, CMA CGM and DP World, achieved a significant refinancing in 2018 with Société Générale CIB acting as sole financial adviser and placement agent on €371 million ($415 million) of senior bonds raised in the USPP market.

The deal attracted strong investor interest from Europe and North America. The quality of the asset, its shareholders and its customer offering resulted in an oversubscription by 3.8 times the funding requirement, enabling Société Générale CIB to tighten the pricing prior to allocation to nine major accounts.

The new debt will be used to refinance RWG's existing debt facilities, close out existing swaps and pay other costs, including significant savings in interest costs.

The new financing structure will also provide a flexible platform to facilitate the expansion of the terminal.

RWG can accommodate ultra large container vessels and has an annual capacity of 2.35 million TEU. It has eleven deep-sea cranes, three barge/feeder cranes, two rail cranes and 50 automatic stacking cranes.

Total value: €371 million
Total debt: €371 million
Borrower: Rotterdam World Gateway
Sponsors: DP World, APL, CMA CGM, Hyundai Merchant Marine, Mitsui OSK Lines
Bond arranger: Société Générale
Bond investors: Aegon, Allianz, Aviva, Macquarie, Metlife, Nationwide, Northwestern, Nuveen, Sun Life
Tenor: 17 years and 11 months
Advisers: Allen & Overy, BDO, Clifford Chance, Marsh, Royal Haskoning DHV, Société Générale CIB, WSP, Norton Rose Fulbright
Financial close date: 6 April 2018

European Airports

Belgrade Nikola Tesla Airport

Vinci Airports reached financial close on the concession to finance, operate, maintain, extend and upgrade Serbia's Nikolas Tesla Airport in December, less than one year after it was selected as preferred bidder following a competitive public tender.

Plans to privatise the airport (which is 83.15% owned by the Serbian government, while 16.85% of airport company Aerodrom Nikola Tesla trades on the Belgrade Stock Exchange) first surfaced in late 2015, attracting 27 indicative offers by March 2017.

Vinci Airports was selected as preferred bidder in early January 2018. The company signed the 25-year concession agreement a few months later, agreeing to a €501 million ($563 million) upfront concession fee.

To complete the transaction, Vinci Airports raised roughly €420 million in loans from the IFC, EBRD, Proparco and DEG, and six commercial lenders. The IFC and EBRD each provided a €72 million A loan and a €110 million B loan. Banca IMI, UniCredit, Erste Group, Kommunalkredit, CIC and Société Générale joined the deal on the B loan syndication.

The debt will cover part of the concession fee as well as the extension and upgrade works driving the airport's development.

Total debt: €420 million
Sponsor: Vinci Airports
DFI lenders: DEG, IFC, EBRD, Proparco
Commercial banks: Banca IMI, UniCredit, Erste Group, Kommunalkredit, CIC, Société Générale
Tenor: 17 years (IFC and EBRD loan A), 15 years (DEG, Proparco, and IFC and EBRD loan B)
Advisers: Allen & Overy, Infrata, BDK Advocati, Dentons, Lazard, Orrick, Mott MacDonald
Financial close date: 17 December 2018

European Rail

Wales & Borders

SMBC and Equitix's contract to lease the rolling stock for KeolisAmey's Wales & Borders franchise dealt a fresh blow to traditional rolling stock leasing companies (ROSCOs) who in recent years have seen their dominance in the market challenged by new rolling stock funders.

Unlike ROSCOs, who have large fleets of often amortised trains, these new funders lease rolling stock under a single-fleet financing model.

Contracts to build the trains were awarded to rolling stock manufacturers CAF and Stadler Rail. CAF was awarded a contract worth around £700 million ($918.8 million), while Stadler took three contracts worth roughly £500 million.

Debt to support the rolling stock procurement was structured in bank and institutional investor tranches.

SMBC and Equitix reached financial close on the deal with CAF in December, supported by a £552 million debt package comprising: £68.73 million floating rate term loan due 5 December 2048; £341 million fixed rate private placement tranche with that matures on 30 September 2024; £34.36 million fixed rate term loan due 30 December 2033; and £108 million equity bridge loan due 13 December 2023.

Total value: £700 million
Debt: £552 million
Sponsors: SMBC, Equitix
Train manufacturer: CAF
Lenders: Crédit Agricole, NatWest, SMBC Nikko Securities, CaixaBank
Tenor: £68.73 million (due December 2048), £341 million (due September 2024), £34.36 million (due December 2033), £108 million (due December 2023)
Advisers: Ashurst, Addleshaw Goddard, Clifford Chance, Goldman Sachs, IPEX Consulting, Stephenson Harwood, Quasar Associates
Financial close date: 17 December 2018

European Refinancing

The M25 Refinancing

The largest infrastructure refinancing in the UK since the Intercity Express deal of 2015, this deal saw sponsor consortium Connect Plus greatly improve on the original financing which featured cash sweeps and debt pricing reflecting the drying up of credit in the middle of the financial crisis.

Primary financing for the project reached financial close in May 2009 with £698.58 million ($896 million) senior debt and roughly £390 million of EIB debt.

The pricing margin on the commercial term loan started at 250bp above Libor for years 1-7, stepping up to 300bp for years 8-10 and 350bp for years 11-27.

Debt was due to mature in 2036; but cash sweeps of 50% from years 7-19, and 100% onwards, were clearly an incentive to refinance, though significant swap breakage costs meant replacing the debt package would be challenging.

The sponsors opted to refinance the £698.58 million bank debt through a public bond financing, bringing in HSBC, Lloyds and Barclays to structure the transaction. The £893 million public, A+ rated bond priced on 24 July 2018, revealing the magnitude of the swap breakage costs.

The Connect Plus closed on the deal to deliver the M25 upgrade work in 2009 with Balfour Beatty and Skanska playing lead roles along with Atkins and Egis Projects.

Bond value: £893 million
Maturity: 31 March 2039
Pricing: 115bp above Libor, 2.607% coupon
Sponsors: Dalmore Capital, Equitix, GCM Grosvenor, Balfour Beatty, Egis, DIF
Joint bookrunners: HSBC, Lloyds, Barclays
Known investor: Legal & General Investment Management
Advisers: EY, HSBC, Ashurst, DLA Piper, Linklaters, Arup, Hogan Lovells

European Roads

1915 Canakkale Bridge & Motorway

This deal saw a Turkish-Korean sponsor team assemble a group of over 20 banks and financial institutions to bring one of the most ambitious of Turkey's recent transport projects across the finishing line.

A consortium of Yapi Merkezi, Limak, SK and Daelim was awarded the BOT project in January 2017, outbidding Japan's IHI, China's CRBC, and Turkey's Cengiz and Kolin.

The winning team signed a 16-year concession with Turkey's General Directorate of Highways in March of that year.

The sponsors brought together 23 banks and institutions on the impressive €2.265 billion ($2.54 billion) debt package which featured ECA-covered commercial debt, ECA direct lend, Islamic and uncovered local tranches.

Total value: €3.1 billion
Total debt: €2.265 billion
Sponsors: Yapi Merkezi (25%), Limak (25%), SK (25%), Daelim (25%)
Lenders: Standard Chartered, Natixis, ING, Deutsche Bank, Bank of China, DZ Bank, ICBC, Intesa Sanpaolo, Siemens Bank, ICIEC (Islamic Development Bank), Korea Development Bank, Kuwait Finance House, KEB Hana Bank, Shinhan Bank, EKF, Korea Eximbank, Finansbank, Garanti, Akbank, Isbank, Vakifbank, Yapi ve Kredi Bankasi, Kuveyt Turk
ECAs: KSure, Korea Eximbank
Tenor: 15 years with a 5-year grace period
Pricing: all-in pricing around 2.6-2.7%, around 500bp above Libor (uncovered commercial tranche), around 150bp with a 10-15% ECA premium (covered commercial tranche)
Advisers: Standard Chartered, Shearman & Sterling, Lake Fisher, Clifford Chance, Verdi , Arup , Mott MacDonald , Marsh, Finansbank , Garanti, EY

European Social Infrastructure

Haren Prison PPP

Currently under construction, the Haren Prison PPP north east of Brussels is on track to become Belgium's largest social infrastructure project to date.

The tender to DBFM the new facility under a 25-year concession hit the market in early 2012, attracting six initial proposals. The Cafasso consortium, led by Denys, FCC Construction, Macquarie Capital and Global Via, was selected as preferred bidder for the project by the Belgian Building Agency (BBA) in 2013.

The procurement process several faced delays, however, including strong local opposition to the mega-prison, Belgium's protracted permitting process, and legal challenges from the two unsuccessful bidding teams.

A consortium of Macquarie Capital, Denys and FCC Concessions finally reached financial close on the project in July 2018, raising around €400 million in equity and debt. A landmark project financing for the Belgian PPP market, the deal featured a highly competitive hybrid structure with both fixed-rate loans from institutional lenders and floating-rate loans from commercial banks. A total of nearly €340 million debt was secured from a syndicate of eight lenders which included Korean Development Bank, a newcomer in the Belgian PPP market.

Total value: €400 million
Total debt: €340 million
Equity: €60 million
Sponsors: Macquarie Capital, FCC Concessions, Denys Global
Lenders: AG Insurance, Belfius Bank, CaixaBank, Contassur, Federale Verzekering, KBC Bank, Pensio B, Korean Development Bank
Grantor: Belgian Building Agency (BBA)
Advisers: Macquarie Capital, Liedekerke, Simmons & Simmons, Marsh, KPMG, Currie & Brown, BDO, NautaDutilh, Rebel Group Advisory, Stibbe, ELD Partnership, Procos, Orientes

European Biomass

Greenalia Biomass Power Curtis-Teixeiro

One of the most ambitious biomass projects in Europe, financing for Greenalia's Curtis-Teixeiro power plant was given the highest rating (E1) as a green loan, according to a Standard & Poor's evaluation.

The sponsor was able to leverage a particularly strong contractual line-up to raise around €123 million ($138 million) in senior and junior debt from international and Spanish institutions.

Banco Santander acted as agent and coordinator, lending on a €100 million debt package along with the European Investment Bank (EIB) and Instituto de Crédito Oficial (ICO). Banco Santander and the ICO lent €25 million each, while the EIB's €50 million contribution represents its first financing for a biomass project under the Investment Plan for Europe framework. A portion of the senior debt package is covered by a guarantee from Finnish ECA Finnvera.

A €23 million mezzanine loan from Marguerite Fund rounded off the total debt.

Greenalia has brought in experienced renewable energy developers Acciona and IMASA were brought in as EPC contractor and Q&M contractor, respectively. Greenalia Forest will supply around 500,000 tonnes of forest biomass per year under a long-term contract.

Total value: €135 million
Total debt: €123 million (€100 million senior bank debt, €23 million mezzanine loan)
Equity: €12 million
Sponsor: Greenalia
Lenders: Banco Santander (MLA and agent), EIB, ICO, Marguerite Fund
ECA: Finnvera
Tenor: 16.5 years (1.5-year construction plus 15 years)
Advisers: Pérez-Llorca. Arup, Pöyry, KPMG, AtZ Financial Advisors, Watson Farley & Williams, G-Advisory, Aon
Financial close date: 29 August 2018

European Hydro Power

Acquisition of Menzelet and Kilavuzlu HEPPs

One of the largest acquisition financings in the Turkish electricity market to date, this deal saw Entek Elektrik acquire two operational assets in the south east of the country from the Privatisation Administration of Turkey (PA) following a competitive tender.

Entek Elektrik won the privatisation of the 124MW Menzelet and 54MW Kılavuzlu hydropower plants in Kahramanmaras province in 2017 and set up a SPV, Menzelet Kılavuzlu Elektrik, to own and operate the assets for 49 years.

The buyer opted to pay 35% of the roughly TL1.539 billion ($375 million) purchase price upfront, and the remaining amount in four equal annual instalments.

The financing process, which started in December 2017, took roughly three months to be finalised and saw seven banks lend on the deal. Garanti, Is, Akbank, Yapı Kredi, EBRD, Unicredit and ICBC provided a TL1.078 billion cash facility, provided partly in Turkish lira (TL646 million) and US dollars ($106 million).

Meanwhile, Garanti, Is, Yapı Kredi and Akbank lent on a TL1.057 million non-cash loan which will be gradually replaced with cash facilities at each PA instalment.

The financing has a tenor of 13 years with a one-year grace period. Cash sweep will be available for a certain period within the loan life. There is also a 20% balloon payment.

Acquisition value: TL1.539 billion
Buyer: Entek Elektrik
Seller: Privatisation Administration of Turkey (PA)
Lenders: EBRD, Garanti Bank, Is Bank, Yapı Kredi Bank, UniCredit, Akbank, ICBC Turkey Bank
Tenor: 13 years with 1 year grace period. Cash sweep available for a certain period within the loan life
Legal advisers: BASEAK, Dentons, Clifford Chance, Yegin Ciftci
Financial close date: 2 March 2018

European Solar

RTR Portfolio Acquisition and Refinancing

UK-based Terra Firma turned heads in October 2018 when it sold Italian solar company RTR Rete Rinnovable to F2i's third infrastructure fund a €1.3 billion ($1.5 billion) valuation. The the deal saw F2i become Europe's third largest solar PV power producer, and featured a particularly innovative financing structure.

The roughly €1 billion debt package raised for the transaction acted as both an acquisition facility and a refinancing of RTR's existing debt – all within the same deal. The refinancing component of the deal proved to be crucial to F2i's success in the auction for RTR, as it was the only bidder to lock in terms that maximised equity value for the seller.

The debt itself was sourced from nine European banks, who each took equal tickets, however the complexity of the refinancing of the existing debt involved around 25 counterparties. As a result, F2i did not need to ask Terra Firma for waivers on the change of control provisions for the existing financing, which proved to be another critical success factor.

RTR's 334MWp solar portfolio is split across 124 PV assets owned by 16 SPVs in Italy.

Total value: €1.3 billion
Debt: €995 million
Bridge-to-equity facility: €300 million
Buyer: Fondi Italiani per le Infrastrutture III
Seller: Terra Firma
Lenders: Banca IMI, Banco BPM, BBVA, BNP Paribas, Cassa Depositi e Prestiti (CDP), Crédit Agricole, ING Bank, Société Générale, UBS
Tenor: 13 years
Advisers: Cantor Fitzgerald, Jefferies, JP Morgan, UniCredit, Gianni Origoni Cappelli & Partners, Moroni & Partners, Barclays, Intesa Sanpaolo, Société Générale, Legance, Deloitte, Willis Towers Watson, EOS Consulting, Ashurst

European Waste

Cory Riverside

A Dalmore Capital-led consortium in June 2018 acquired Cory Riverside Energy, a company that owns and operates the 66MW Riverside Resource Recovery Facility – the UK's largest energy-from-waste plant.

The buyers completed the acquisition on 28 June at a roughly £1.6 billion ($1.85 billion) enterprise value. They then launched a refinancing for the roughly £511 million of assumed debt, taking BNP Paribas up on its offer to underwrite a long-term refi in full.

The new debt comprised a £337 million amortising institutional term facility, a £167 million amortising term facility and a £50 million revolving capital expenditure facility.

The term loans have a five-year amortising holiday initially. There are no step-ups in pricing. A hedge is in place to fix the interest in the 12-year commercial bank term facility. There is £70 million of 20-year RPI revenue swap.

Acquisition value: £1.6 billion
Equity: £1.1 billion
Assumed debt: £511 million
Refinanced debt: £554 million
Buyers/sponsors: Dalmore Capital Fund 3 (53%), Semperian PPP Investment Partners (23%), EagleCrest Infrastructure Canada (13%), Swiss Life Funds (LUX) Global Infrastructure Opportunities II (11%)
Sellers: SVP, Commerzbank, EQT Credit II and other shareholders
Commercial lenders: BNP Paribas, Crédit Agricole, HSBC, Santander, Siemens Bank, Nomura
Institutional investors: Aviva Investors, Samsung Life, Sun Life
Tenor: 20 years (institutional), 12 years (commercial)
Pricing: around 180bp (institutional), around 140bp (commercial)
Advisers: Macquarie Capital, Rothschild, Ashurst, Mott MacDonald, Credit Suisse, JP Morgan, Linklaters, Deloitte, Rothschild, Ashurst, Herbert Smith Freehills, EY, BDO

European Onshore Wind

Tesla Wind: Dolovo Wind Farm

Due to be completed this year, Tesla Wind's Dolovo wind farm is expected to be the largest wind farm yet in Serbia and Western Balkans. As financing for €300 million ($338 million) Dolovo – also known as Cibuk 1 – was structured around Serbian law, significant efforts were required from all stakeholders to deliver and apply international project finance mechanics and security under local legal requirements.

Vetroelektrane Balkana (WEBG), the project company behind Dolovo, is wholly-owned by Tesla Wind, a joint venture between Masdar, Taaleri Aurinkotuuli and DEG.

The 12-year amortising project finance deal was structured under the IFC and EBRD A/B loan structure with five commercial lenders participating in the syndicated B-loan tranche.

The roughly €215 million debt package comprised: €53 million direct loan from the IFC; €37 million mobilised from IFC's Managed Co-lending Portfolio Program; €18 million from the IFC in syndicated B loans from Intesa Sanpaolo and UniCredit; €53 million direct loan from the EBRD; and €55 million from the EBRD in syndicated B loans from Erste Bank, Green for Growth Fund, UniCredit and Intesa Sanpaolo.

Total value: €300 million
Total debt: €215 million
Total equity: €85 million
Project company: Vetroelektrane Balkana (WEBG)
Sponsors: Masdar (60%), Taaleri Aurinkotuuli (30%), DEG (10%)
Lenders: EBRD, IFC, Erste Bank, Green for Growth Fund, UniCredit, Intesa Sanpaolo
Tenor: 12 years
Pricing: 375bp above Euribor
EPC contractor: GE
Advisers: Shearman & Sterling, Norton Rose Fulbright, Kinstellar, Karanović & Nikolić, Mott MacDonald, CMS, Willis

European Midstream Oil & Gas

Gas to the West

Northern Ireland Authority for Utility Regulation awarded Mutual Energy and Scotia Gas Networks licenses to deliver a gas transmission and distribution network to area housing substantial numbers of fuel poor residence.

The network will service 40,000 domestic and business customers in the Northern Ireland towns of Coalisland, Cookstown, Derrylin, Dungannon, Enniskillen, Magherafelt, Omagh and Strabane.

The sponsors have 100% debt financed the project via a long-term institutional debt facility to achieve a low cost of capital and keep the cost to end users low.

Legal & General Investment Management (LGIM) provided all of the £200 million ($261 million) in debt, via a 35-year facility.

The project is still in construction and yet achieved an A1 rating thanks to an innovative project structure, which saw SGN (the EPC contractor) shoulder much of the construction risk.

The project also benefits from a government grant of roughly the same size as the LGIM debt piece.

The success of the financing saw the project extended to include works on an unconnected extension of the gas network in the east of Northern Ireland.

Debt: £200 million
Issuer: West Transmission Financing Limited (wholly-owned subsidiary of Mutual Energy)
JV partner: Scotia Gas Networks
Bond arrangers: Barclays, BNP Paribas
Investor: Legal & General Investment Management (LGIM)
Tenor: 35 years
Advisers: Centrus Advisors, Pinsent Masons, Linklaters
Procurement agency: Northern Ireland Authority for Utility Regulation
Financial close date: 26 July 2018

European Upstream Oil & Gas

Neptune Energy

This deal saw the largest ever new money reserve-based lending facility raised for an acquisition in EMEA.

Investment vehicle Neptune Energy was the borrower of the debt and acquirer of ENGIE E&P International, a portfolio of upstream assets located across the world that had an average production of 154,000 net barrels of oil equivalent per day.

Carlyle Group and CVC Capital Partners jointly own 51% in Neptune Energy, with China Investment Corporation (CIC) owning the remaining 49%.

ENGIE had held 70% in the acquired business, with CIC owning 30%. CIC retained this separate stake following the acquisition.

Along with the acquisition value of $3.9 billion, the deal also sees the new owners assume decommissioning liabilities of €1.1 billion ($1.2 billion) and €90 million in deferred payments linked to operational milestones.

Neptune Energy was established in 2015 with a target to deploy $5 billion.

Total value: $3.9 billion acquisition
Debt: $2 billion reserve based landing facility
Buyers: Neptune Energy (Carlyle Energy Fund, CVC Capital Partners, and China Investment Corporation)
Seller: ENGIE
MLAs: BNP Paribas, Citibank, HSBC, ING, Natixis, Société Générale
Lenders: ABN AMRO, ANZ, Bank of China, BMO, BNP Paribas, CBA, Citigroup, Deutsche Bank, DNB, Goldman Sachs, HSBC, ING Bank, JP Morgan, Lloyds, Morgan Stanley, Natixis, RBC, RBS, Scotiabank, SMBC, Société Générale
Tenor: 6 years and 2 months
Legal advisers: Freshfields, Bracewell, Herbert Smith Freehills
Other advisers: Zaoui & Co, BNP Paribas
Financial close date: 15 February 2018

European Power

Bizkaia Energia

Bizkaia Energia owns and operates the 786MW natural gas-fired combined-cycle power plant located in Amorebieta, in the Basque region of Spain.

The plant was developed following the liberalisation of the Spanish power market in 1997. Construction began in 2003 and the plant began operations in August 2005.

The original sponsors of the project were ESB of Ireland and Osaka Gas of Japan. A few months after the plant began operations, the sponsors closed on a refinancing of roughly $500 million.

ESB and Osaka sold 100% of the equity in Bizkaia in 2014 to US investor ArcLight Capital Partners for an undisclosed sum. The sale was prompted by the Irish government requesting that ESB raise a €400 million ($449 million) special dividend through the sale of non-strategic assets.

Since it took over, ArcLight has been focused on physically optimising the plant. In October 2018 the sponsor closed on a €65 million private placement debt facility to facilitate a dividend recap.

The transaction is significant as it is the first subordinated debt transaction in Europe for a power project exposed to merchant risk. The project has a PPA which expires in 2020 and will operate on a fully merchant basis thereafter, with the repayment of this facility substantially dependent on post-PPA cash flows.

Sequoia Economic Infrastructure Income Fund lent roughly €40 million and Edmond de Rothschild €25 million.

Cantor Fitzgerald structured the transaction.

Debt: €65 million
Sponsor: Arclight Capital
Private placement investors: Sequoia, Edmond de Rothschild
Tenor: Roughly 3 years (maturity 2021)
Transaction adviser: Cantor Fitzgerald
Legal advisers: Freshfields, White & Case
Financial close date: 14 October 2018

IJGlobal

Awards 2018

Africa

African Power

Nachtigal Hydro

Originally planned as a captive power project for a Rio Tinto smelter, the Nachtigal hydropower plant has come a long way to become the largest hydropower IPP in Africa once constructed. Now a cornerstone of Cameroon's electricity sector development plan, the 420MW project is expected to cover 30% of the country's electricity demand, amounting to an annual output of nearly 3TWh.

Nachtigal, which reached financial close towards the end of 2018, is not just notable for its size, however. A unique financing structure facilitated a sizable chunk of local currency debt, despite the limitations of domestic lenders.

The €1.2 billion ($1.35 billion) dam has been more than a decade in the making, and yet new shareholders were brought into the project company a mere few weeks before the financing was finalised.

A large and changeable list of project participants only added to the deal's complexity, and make its completion even more of an achievement.

Financing

The project finally reached financial close following a flurry of activity in late 2018, including debt packages, equity injections and the start of EPC work.

Financing for Nachtigal comprises around €916 million debt and €289 million equity, giving the project a total capex of roughly €1.2 billion and a debt-to-equity ratio of 76:24.

IFC was the global coordinator and lead arranger on the debt financing which signed on 9 November 2018, comprising two tranches of DFIs and local lenders, respectively.

The €745 million DFI tranche has a tenor of 18 years and covers approximately 61% of project costs. The debt was provided by the African Development Bank (ADB), African Finance Corporation (AFC), CDC Group, DEG, Emerging Africa Infrastructure Fund (EAIF), European Investment Bank (EIB), FMO, French Development Agency, IFC, OPEC Fund for International Development and Proparco.

Proparco acted as an additional lead arranger for AFD, DEG and FMO.

Meanwhile, the local tranche was sourced from four commercial banks with Société Générale Cameroun and Standard Chartered Cameroon as co-arrangers.

Together with Attijariwafa SCD Cameroon and Banque Internationale du Cameroun (BICEC) these lenders provided a MIGA-backed €171 million debt denominated in CFA franc, which pays special attention to local lending conditions in Cameroon.

The 21-year facility has five years of drawdown followed by 16 years of repayment. However, the commercial lenders have the options in years 7 and 14 to sell their loans to the government.

In that event, the government of Cameroon is obliged to buy the loans and its obligation is supported by an IBRD political risk guarantee. The refinancing risk of the local tranche is therefore borne by the government, backstopped by the IBRD.

The political risk guarantee will only cover years 7 and 14, however, as the local lending market will not go beyond seven years, at least not at this point in time.

Nonetheless, the structure enabled the project's special purpose vehicle – Nachtigal Hydro Power Company (NHPC) – raise a considerable amount of local currency-denominated debt while limiting lender exposure.

The power purchase agreement was agreed with Energy of Cameroon (Eneo) in July 2015 but did not sign until October 2018 – at a levelised tariff understood to be €0.061 per kWh over a 35-year period. Eneo's offtake is guaranteed by the government, which in turn is backstopped by an IBRD-guaranteed €85 million letter of credit to protect the company against non-payment.

In total, the guarantees on the deal are provided IBRD (€257 million) and MIGA (€164.5 million). MIGA signed guarantees for the sponsor side, providing 15-year cover to both the lead developer EDF and equity investor STOA.

STOA and infrastructure investment platform Africa50 joined the project shortly before financial close, acquiring their stakes in Nachtigal via equity sell-downs by the government of Cameroon and IFC.

Africa50 took a 15% stake from the government, leaving the state with a 15% interest in the hydroelectric dam. STOA, meanwhile, purchased a 10% shareholding from IFC InfraVentures which retains a 20% stake.

Total value: €1.2 billion
Total debt: €916 million (€745 million DFI tranche, €171 million CAF franc-denominated bank commercial debt tranche)
Total equity: €289 million
Project company: Nachtigal Hydro Power Company
Sponsors: EDF (40%), IFC (20%), government of Cameroon (15%), Africa50 (15%), STOA (10%)
DFIs: AfDB, ADB, CDC Group, DEG, Emerging Africa Infrastructure Fund (EAIF), EIB, FMO, French Development Agency, IFC, OPEC Fund for International Development and Proparco
Commercial lenders: Attijariwafa SCD Cameroon, Banque Internationale du Cameroun, Société Générale Cameroun, Standard Chartered Cameroon
Guarantors: IBRD, MIGA
Tenor: 18 years (DFI tranche), 21 years (commercial debt tranche)
Offtaker: Eneo
Contractors: NGE Contracting, Société Générale des Travaux du Maroc and BESIX (civil works); GE and Elecnor (electromechanical); Bouygues Energie Services (transmission line); EDF (O&M)
Advisers: Eversheds, ALSF, Nodalis, Herbert Smith Freehills, Société Générale, Clifford Chance, Mott MacDonald, EY, JLT, Allen & Overy

African Refinancing

Bujagali Hydro

This landmark transaction saw Bujagali Energy Limited (BEL) refinance $682 million of senior and subordinated loans, increasing the tenor of the debt while reducing the company's annual debt servicing – enabling it to accept a lower tariff price.

The 250MW Bujagali hydropower plant on the River Nile was commissioned in 2012, having reached financial close in 2007. In 2016, the dam produced 44% of Uganda's electricity, so its high $0.1152 per kWh tariff had become a concern to the country's government.

The International Finance Corporation (IFC) and African Development Bank (AfDB) worked closely with BEL and the government to structure a refinancing which combined a corporate income tax waiver for BEL and raising new debt with a 15-year tenor.

IFC and AfDB arranged $403 million of new debt provided by a combination of DFIs and commercial banks. The refinancing saw existing lenders exit the project and new lenders join. Absa Bank and NedBank, meanwhile, continued as lenders under the International Development Association (IDA) covered commercial tranche, though with no increase in tenor.

IFC and Absa Bank provided interest rate hedges while the Multilateral Investment Guarantee Agency (MIGA) provided political risk insurance to the sponsors. The guarantees from IDA and MIGA were renegotiated to fit the new debt structure.

Financial close on the refinancing was reached in July 2018.

In addition to its significant impact on the retail tariffs and Uganda's industrialisation ambitions, the refinancing also paved the way for Sithe Global – BEL's majority shareholder at the time – to sell-down its equity stake in the project.

SN Power announced back in April 2016 that it planned to acquire Sithe Global's 65% shareholding in BEL. Uganda's government blocked the deal, however, due to its concerns over the project's high tariffs.

Satisfied with the reduction of Bujagali's tariff following the refi, the government stepped aside allowing SN Power to complete the purchase Sithe Global's shares in BEL in August 2018.

Total value: $403 million
Project company: Bujagali Energy Limited (BEL)
Sponsors: Sithe Global (65%), CDC Group (65%), Aga Khan Fund for Economic Development (5.84%), Industrial Promotion Services (5.83%), Jubilee Insurance Company (5.83%)
Lenders: AfDB, Absa Bank, CDC Group, DEG, FMO, IFC, IFC MCPP, NedBank, Proparco
Guarantors: MIGA, IDA
Advisers: Clifford Chance, Sebalu & Lule, AF Consult, Willis Towers Watson, Covington & Burling, Reeman Consulting

African Wind

Taiba N'Diaye

Not only is Taiba N'Diaye is the largest wind farm in the West Africa region to date to break ground, but with an installed capacity of 158.7MW it also represents Senegal's first utility-scale wind power project.

Located 75km north east of Dakar, Taiba N'Diaye has a long and complex development history, changing hands and financing structures multiple times.

The project's original sponsor, French renewables developer Sarréole, first sought financing for the then-€230 million ($259 million), 150MW wind farm in early 2012, courting several DFIs – including EKF, Proparco, EIB, Frontier Markets, FMO and AfDB.

After several delays relating to regulatory issues and disagreements over the structure of the power purchase agreement, Sarréole finally agreed a 20-year offtake agreement with Senegalese state utility Senelec at the end of 2013.

Sarréole sold its equity stake and co-developer rights to pan-African renewables platform Lekela Power, a JV between Actis and Mainstream Renewable Power, in 2016.

OPIC and Denmark's export credit agency EKF had already been brought on board as lenders on the deal – the former as Taiba N'Diaye had been selected to be part of the US government's Power Africa programme – and the existing financing structure remained in place under Lekela Power.

OPIC was mandated as lead arranger of the project's debt as of 2015, while EKF was lending on the deal in support of Vestas as the wind farm's EPC and O&M contractor.

Lekela Power finally reached financial close on Taiba N'Diaye in mid-2018, signing on $280.1 million debt from OPIC and EKF along with $90 million in equity contributions from shareholders Actis and Mainstream. Additionally, OPIC is providing a $126.3 million guarantee.

Taiba N'Diaye is expected to be fully operational by July 2020, and will consist of 46x V-126 3.3MW turbines across a single site.

The wind farm will help the government of Senegal meet its clean energy commitments.

Total value: $370.1 million
Total debt: $280.1 million ($164.1 million export loan from EKF, $116 million direct loan from OPIC)
Total equity: $90 million ($54 million from Actis Energy 3 fund, $36 million from Mainstream)
Sponsors: Actis (60%), Mainstream Renewable Power (40%)
Lenders: OPIC, EKF
Guarantor: OPIC
Developer: Lekela Power
Offtaker: Senelec
Advisers: Norton Rose Fulbright, Trianon Partners, Clifford Chance, MIGA

African Biomass

Ngodwana Energy Biomass

The first biomass project to reach financial close under South Africa's renewable energy independent power producer programme (REIPPP), Ngodwana's road to the finish line was initially an uncertain one.

Sponsors Sappi and Fusion Energy were awarded the 25MW biomass project in April 2015 under the fourth round of REIPPP, but a PPA for the project was not signed with Eskom until April 2018 after years of delays and false starts.

The South African state utility announced in 2016 that it would not sign any more PPAs, citing surplus generating capacity and concerns over costs. Eskom argued that being compelled by the government to buy electricity from IPPs at prices it did not negotiate would lead to suffering revenue streams.

After over two years of deadlock and several false starts, Energy Minister Jeff Radebe declared the utility in fit enough financial health to proceed with the signings, announcing that PPAs would be signed on 13 March 2018.

A successful interdiction by the National Union of Metalworkers of South Africa (NUMSA) and Transform RSA put the proceedings on hold yet again, however, arguing that the switch from coal-fired power to renewables would be detrimental to the country and lead to job losses.

South Africa's High Court dismissed the case in late March 2018, clearing the path for 27 delayed REIPPP projects to finally sign 20-year PPAs with Eskom.

Sappi and Fusion Energy wasted no time to launch the roughly R1.2 billion ($99.5 million) debt financing for the project, and reached financial close on a debt package provided by Nedbank and Absa Bank in April 2018 – just a few weeks after inking an offtake agreement with Eskom.

Majority of the term loan is fixed rate, an innovative approach which meant that the project did not need to take out interest rate hedges. The financing also includes a debt service reserve facility that removes the necessity for cash to be trapped in an account with negative carry.

Located at Sappi's Ngodwana mill in Mpumalanga province, the biomass plant will be fuelled on waste from Sappi's plantations and its mill.

Total debt: Around R1.2 billion
Project company: Ngodwana Energy
Shareholders: Sappi (30%), KC Africa (30%), Fusion Energy (30%), Ngodwana Energy Employees Trust (5%), Ngodwana Energy Community Trust (5%)
Lenders: Nedbank, Absa Bank
Contractors: EBL Engineering Services (EPC services), KC Cottrell (O&M)
Offtaker: Eskom
Advisers: Baker McKenzie, Norton Rose Fulbright, WSP
Financial close date: 13 April 2018

African Solar

Akuo Kita

Mali is still a frontier market when it comes to the size, range and capital available to private sector investors.

This, alongside a lack of local bank appetite to provide long-term debt for private infrastructure projects, meant that the sponsor had to look to DFIs to secure funding for the 50MW Kita solar PV project in southern Mali.

French renewable energy developer Akuo Energy is developing the IPP under a BOOT contract, which will see the solar PV asset returned to the government of Mali at the end of a 30-year concession period.

Akuo Energy will sell the project's power to national energy company Energie du Mali under a 30-year take-or-pay power purchase agreement signed in October 2015.

Private Infrastructure Development Group companies Emerging Africa Investment Fund (EAIF), FMO and Green Africa Power joined African DFIs West African Development Bank (BOAD) and National Agricultural Development Bank of Mali (BNDA) to provide financing for the project in late 2017.

EAIF, managed by Investec Asset Management, was mandated lead arranger on the senior debt financing, marking its first MLA role in a French-speaking African country and PIDG's second energy project in Mali.

BNDA was co-arranger on the deal which comprised a $55.6 million debt package with a 15-year tenor provided by EAIF ($17.8 million), FMO ($17.8 million), BOAD ($16.8 million) and BNDA ($3.2 million).

An additional €8 million mezzanine debt package with a tenor of 20 years, originally arranged by Green Africa Power, had been taken over by EAIF by the time that the transaction had reached financial close in October 2018.

Meanwhile, PIDG company GuarantCo provided a €2.3 million debt service reserve account guarantee.

The deal also included a €6.4 million budget for grid connection works which will take power from the plant via a nearby sub-station to a 225kv high-voltage line that supplies the region.

Once operational, the Kita solar PV is expected to be the largest solar farm in West Africa.

Total value: €78 million
Total debt: €63.6 million (€55.6 million senior debt, €8 million mezzanine debt)
Lenders: Emerging Africa Infrastructure Fund, FMO, West African Development Bank (BOAD), National Agricultural Development Bank of Mali (BNDA)
Tenor: 15 years (senior debt), 20 years (mezzanine debt)
Guarantor: GuarantCo
Advisers: Norton Rose Fulbright, Jurifis, Sgurr Energy, Marsh, BDO

African M&A

AIIM Acquisition of SEGAP Stake

This deal saw African Infrastructure Investment Managers (AIIM) acquire a 50% shareholding in a portfolio of airport concession equity interests across West and Central Africa from Egis Group.

AIIM obtained access to the portfolio by purchasing a 50% equity stake in holding company Société d'Exploitation et de Gestion Aéroportuaires (SEGAP), through the Africa Infrastructure Investment Fund 3 (AIIF3).

France's Egis Group, controlled by the Caisse des Dépôts Group, retains a 50% equity share in SEGAP which holds interests in three concession companies operating five airports.

The airports in SEGAP's portfolio comprise: Abidjan Airport in Cote D'Ivoire (operated by AERIA); Libreville Airport in Gabon (operated by ADL); Brazzaville Airport in Republic of Congo (operated by AERCO); Ollombo Airport in Republic of Congo (operated by AERCO); and Pointe Noire Airport in Republic of Congo (operated by AERCO).

SEGAP's shareholdings in the three concession companies are: 51% stake in ADL (concession runs 1988-2018); 31.7% stake in AERIA (concession runs 1996-2029); and 27.1% stake in AERCO (concession runs 2011-2036).

The transaction marks AIIM's entry into Cote D'Ivorie, Gabon and the Republic of Congo, and is also the fund manager's first airport investment since the divestment of Kilimanjaro Airport Development Company in 2009.

Target: Société d'Exploitation et de Gestion Aéroportuaires (SEGAP)
Buyer: African Infrastructure Investment Fund 3
Seller: Egis Group
Advisers: Clifford Chance, KSK Advocats, Alevina Partners, Cabinet Gomes, Consilium Aviation, Ibis Consulting, KPMG, Aon

African Fundraising

Emerging Africa Infrastructure Fund

Investec Asset Management raised around $387 million in debt financing for the Emerging Africa Infrastructure Fund (EAIF), bringing on board Allianz Group as the strategy's first commercial institutional investor.

Allianz Global Investors arranged the financing which consisted of senior debt tranches of €75 million ($84 million) and $12 million, both over 12 years.

Other lenders in the latest round of fundraising included: Dutch development bank FMO with $50 million over 10 years; KfW with €75 million and $50 million over 12 years; Standard Chartered Bank with $50 million; and the African Development Bank (AfDB) with $75 million over 10 years.

EAIF is part of the Private Infrastructure Development Group (PIDG), the donor-backed organisation which blends public and private finance to reduce investment risk, promote economic development and combat poverty in fragile states.

Allianz's investment in EAIF marks the start of PIDG's drive to attract greater levels of funding from institutional and commercial sources. As the first large commercial lender to commit long-term financing to an African infrastructure fund, Allianz participation is expected to encourage other institutional invests to consider funding what is generally considered risky African projects.

Total commitments: $385 million
Investors: Allianz Global Investors, AfDB, KfW, FMO, Standard Chartered, Standard Bank of South Africa
Tenors: 12 years (Allianz), 12 years (KfW), 10 years (FMO), 10 years (AfDB)
Fund manager: Investec Asset Management
Legal advisers: Clifford Chance, Norton Rose Fulbright

African Mining & Metals

Pangaea metal purchase with Lonmin

This transaction is hugely significant for platinum producer Lonmin, which took a double hit of rising costs and falling platinum prices in recent times. Lonmin needed a waiver from lenders last year after breaching covenants on a $150 million loan.

This metal purchase deal was essential to keep a planned acquisition of the business by South African gold miner Sibanye-Stillwater on track.

Under the terms of the deal, Lonmin has raised $200 million through a metal-for-loan agreement with Pangaea Investment Management, a subsidiary of China's largest copper producer Jiangxi Copper Company. The deal is seen as part of China's Belt and Road international investment initiative.

The facility replaces existing debt which was proving so burdensome for Lonmin and helps strengthen its balance sheet.

At the turn of 2019, the acquisition of Lonmin by Sibanye-Stillwater seemed to have been agreed with the South African Competition Tribunal's decision to approve the deal on 21 November 2018. Though as *IJGlobal* went to press the deal was still being challenged in the courts by the Association of Mineworkers & Construction Union.

Even if the acquisition is not completed, this refinancing was essential for the survival of Lonmin.

Debt: $200 million
Borrower: Lonmin Group
Lender: Pangaea Investment Management
Tenor: 3 years
Legal advisers: Cliffe Dekker Hofmeyr, Herbert Smith Freehills, Norton Rose Fulbright

IJGlobal Awards 2018

North America

North American PPP

LAX Automated People Mover

As a mass-transit solution, California's $2.5 billion Los Angeles Automated People Mover (APM) breaks new ground for financing in the US, delivering a 2.25 mile elevated electric train system, connecting parking facilities to the international airport.

This is the first time that a DBFOM PPP model has been used for a transport system of this nature at a US airport, making Los Angeles International Airport (LAX) a P3 pathfinder with a challenging bank/bond hybrid model.

The APM will provide a free service to transport 30 million passengers per year between the central terminal area of LAX and off-airport intermodal transport facilities and a consolidated rental car service – currently under tender as a P3 with four bidders in place: Consolidated Rent-A-Car (ConRAC).

Financing

The project has an all-in, design/build capex of a shade more than $2 billion and the project is designed to reduce travel times and congestion, while hugely enhancing user experience.

The LINXS consortium closed financing on the $2.23 billion project with $103 million equity, $1.29 billion private activity bonds (PABs), $269 million short-term bank loan, and $1.032 billion in landmark payments (the last of which is used to retire the construction loan).

The $103 million equity tranche was provided by the primary players in the LINXS consortium:

- Balfour Beatty Investments (27%)
- Fluor Enterprises (27%)
- ACS Infrastructure Development (18%)
- Hochtief PPP Solutions (18%)
- Bombardier (10%)

The California Municipal Finance Authority issued $1.29 billion in 29-year senior lien revenue bonds on behalf of the sponsor consortium. They were rated BBB+ by Fitch Ratings.

The bonds were arranged by Citigroup, Bank of America Merrill Lynch and local player Ramirez & Co, split across two liens: 2018A and 2018B notes. They priced on 5 June at an all-in cost of 4.1%.

The 5.5-year construction loan of $269 million was provided by a club of five MLAs:

- CIBC
- Korea Development Bank
- Mizuho (administration agent)
- SMBC
- TD Bank

Bank debt priced at 380bp all-in – a margin of 80bp above Libor – flat for the duration of the loan. KDB is not able to offer swaps, so that was distributed across four other MLAs.

There is a debt service cover ratio minimum of 1.15, averaging out at 1.18 DSCR over the loan life.

The bank facility does not draw until construction is well advanced – three to four years – as the SPV receives six milestone payments from the airport authority that average out at $172 million, awarded on completion of design/construct work stages.

The bond was deployed immediately, followed by the six milestone payments which amount to $1.032 billion (taking the financing up to the $2.23 billion total, avoiding double-counting). The bank debt is drawn towards the end of construction, and is repaid by the final milestone payments. At financial close, the banks were essentially charging a commitment fee.

LAX will cover availability payments to the concessionaire from rental car customer facility charges and other airport operating revenues.

Non-equity member of the LINXS consortium include:

- Flatiron West (contractor)
- Dragados (contractor)
- HDR Engineering (designer)
- HNTB Corporation (designer)
- White & Case (legal adviser)
- Ramirez & Co (financial adviser)

Construction of the guideway – the elevated track along which the APM will run – starts late summer, and building work will start on the six stations towards the end of 2019.

The first of the 44, fully-electric cars will be delivered in late 2020. To boost green credentials, the vehicles generate a portion of their own power through regenerative breaking, and they are 98% recyclable.

As a further nod to California's green agenda, the command centre/maintenance facility generates half its power from solar energy and it is designed to be LEED Gold Certified, offsetting the carbon equivalent of 12 million vehicle miles.

The APM will have nine trains with four cars – each of which will carry up to 50 passengers with luggage. There is a maximum ridership of 200 people per train which will arrive at stations every two minutes, with an end-to-end travel time of 10 minutes.

Total value: $2.5 billion
Total debt: $1.559 billion ($1.29 billion PABs, $269 million short-term construction bank loan)
Equity: $103 million
Milestone payments: $1.032 billion
Sponsors: Balfour Beatty Investments, Fluor Enterprises, ACS Infrastructure Development, Hochtief PPP Solutions, Bombardier
Grantor: Los Angeles World Airports
PABs underwriters: Citigroup, Bank of America Merrill Lynch, Ramirez & Co
Construction loan lenders: CIBC, Korea Development Bank, Mizuho, SMBC, TD Bank
Bank debt pricing: 380bp all-in – a margin of 80bp above Libor – flat for the duration of the loan
PABs pricing: all-in cost of 4.1%.
Advisers: Nossaman, White & Case, Ramirez & Co, EY, MUFG Bank, Citigroup, Bank of America Merrill Lynch, Ashurst, Nixon Peabody, Jones Hall, BTY Group
Financial close date: 8 June 2018

North American Rail

Finch West LRT

The Mosaic Transit Group reached commercial and financial close on the Finch West Light Rail Transit project in Toronto in May 2018 despite delays to the tender.

The project was for the DBFM of an 11km LRT to run along a semi-exclusive lane on Finch Avenue. Plans also included a below-grade terminal stop at Humber College, 16 surface stops and a station at Keele Street.

The project was financed using a combination of C$611 million ($458 million) short-term bank debt and long-term bonds. The bonds were split between C$60.65 million in Series A notes with a 4.111% coupon, which mature on 28 February 2038, and C$121.1 million in Series B notes with a 4.470% coupon, which mature on 28 February 2053.

Infrastructure Ontario and Metrolinx originally issued an RFQ for the concession in September 2015, but the tender was delayed due to problems with the procurement of fleet vehicles. An RFP was issued two years later (December 2017) to three shortlisted groups.

Total value: C$2.5 billion (C$1.2 billion in construction costs)
Total debt: C$792.75 million
Federal funding: C$333 million
Equity: C$25 million
Sponsors: Aecon, ACS Infrastructure Canada, CRH Canada Group
Grantor: Infrastructure Ontario
Lenders: Mizuho, TD Bank, Desjardins, ATB Financial and RBC Capital Markets on the short-term bank debt; and HSBC and RBC Capital Markets on the long-term bonds
Tenor: 20 years (Series A notes), 35 years (Series B notes), 7 years (bank debt)
Pricing: Around 100bp above Libor (bank debt)
Advisers: RBC Capital Markets, McCarthy Tétrault, McMillan, Infrata, Deloitte, Norton Rose Fulbright, AECOM, P1 Consulting, Aon
Financial close date: 7 May 2018

North American Roads

Gordie Howe International Bridge

The Gordie Howe International Bridge P3 is one of the largest ever infrastructure projects in North America, taking 18 years from completion of its cross-border traffic study in 2000 to financial close.

The new $5.7 billion six-lane bridge across the Detroit River between Windsor, Ontario, and Detroit, Michigan, will comprise a new end-to-end transport system that will include associated border inspection plazas and connections to the freeway systems in Ontario and Michigan.

The deal closed through a combination of PABs and a senior construction loan. The lead underwriters of the C$446.4 million ($349.3 million) bonds were HSBC and RBC. Bonds were split as a medium-term tranche of C$157.1 million with a pricing coupon of 4.023% due 31 May 2038 and a long-term tranche of C$289.3 million with a pricing coupon of 4.341% due 31 August 2053.

Desjardin, HSBC, Mizuho, RBC and TD Securities lent on the C$587.14 million short-term senior construction loan facility on equal footing.

Total value: $5.7 billion
Total debt: C$1.033 billion
Progress payments: C$2.74 billion
Capital payments: C$37.5 million from the WBDA
Equity: C$93.04 million
Sponsors: ACS Infrastructure, Fluor Canada, Aecon Concessions, AECOM
Grantor: Government of Canada, the state of Michigan
Lenders: Desjardin, HSBC, Mizuho, RBC, TD Securities
Tenor: 20 years (medium-term tranche), 35 years (long-term tranche)
Pricing: 4.023% coupon on medium-term tranche, 4.341% coupon on long-term tranche
Advisers: McCarthy Tétrault, BTY, INTECH, Deloitte, Fasken, Warner Norcross & Judd, Parsons
Financial close date: 28 September 2018

North American Social Infrastructure

Royal Inland Hospital Patient Care Tower

EllisDon's consortium reached financial close on the Royal Inland Hospital Patient Care Tower project in British Columbia in November 2018 with the first internationally accredited green bond in the Canadian P3 market.

The project will see the development of a state-of-the-art facility that will improve patient care for the city of Kamloops and the surrounding region.

HSBC was sole underwriter and bookrunner on the C$153 million ($114.6 million) bond financing split between two tranches: C$64 million in Series A bonds with a coupon of 3.930%, which mature on 31 October 2038; and C$89 million in Series B bonds with a coupon of 4.148%, which mature on 30 November 2051.

Meanwhile, the Interior Health Authority is expected to pay 43% of capital costs; amounting to around C$124.5 million in construction milestone payments.

Total value: C$417.2 million
Debt: C$153 million
Equity: C$14.3 million
Milestone payments: C$124.5 million
Sponsor: EllisDon
Grantor: British Columbia's Health Ministry
Lender: HSBC
Tenor: 20 years (Series A bonds), 33 years (Series B bonds)
Pricing: 144.7bp above the Government of Canada benchmark (Series A bonds), 165.1bp above the Government of Canada benchmark (Series B bonds)
Advisers: Boughton Law Corporation, John Singleton QC, PwC, LTA Consultants, Fasken Martineau DuMoulin, IBI Group and subcontractors WSP Group, CWMM Consulting Engineers, GUNN Consulting, RWDI Air and Singleton Urquhart
Financial close date: 14 November 2018

North American Telecoms

Tillman Infrastructure

Tillman Infrastructure received an initial investment of $500 million from La Caisse de dépôt et placement du Québec (CDPQ) and AMP Capital to finance the construction of new telecoms towers across the US.

CDPQ provided $300 million while AMP Capital provided $200 million.

The total investment from CDPQ and AMP Capital could reach $1 billion, though this is dependent on future growth needs.

The funding will enable Tillman to:

- meet current demand for coverage in additional locations
- provide new service opportunities for carriers
- increase overall communications infrastructure across the US

Global TMT investment banking boutique Q Advisors acted as financial adviser to Tillman. Latham & Watkins served as legal counsel to the lenders and Sullivan & Cromwell represented the sponsor.

According to Tillman, mobile service providers plan to spend 15-20% of their revenue on capital expenditure over the next few years. This is to meet growing demand from consumers and cater to ever-increasing mobile data traffic.

Total value: $500 million
Sponsor: Tillman Infrastructure
Lenders: La Caisse de dépôt et placement du Québec (CDPQ), AMP Capital
Advisers: Q Advisors (financial adviser to Tillman Infrastructure), Sullivan & Cromwell (legal adviser to Tillman Infrastructure), Latham & Watkins (legal adviser to the lenders)
Administrative agent: Wilmington Trust
Financial close date: 20 July 2018

North American Transmission & Distribution

LS Power Transmission Portfolio Financing

LS Power financed three US transmission projects with a combination of holding company and operating company debt in September 2018.

The transmission projects are: DesertLink project (opco); Silver Run project and an associated substation in New Castle County (opco); and Republic transmission line (holdco).

MUFG Bank served as coordinating lead arranger, joint lead arranger and joint bookrunner, admin agent, collateral agent and issuing bank.

BNP Paribas and CoBank also served as coordinating lead arrangers, joint lead arrangers and joint bookrunners on all three transactions.

Financing comprised:

- Republic: five-year $180 million term loan with a $14 million revolving facility and $6 million credit facility
- DesertLink: $103 million term loan and $7 million revolving facility with a maturity of construction plus 18 months
- Silver Run: $73 million term loan and $10 million revolving facility with a maturity of construction plus 18 months

The assets are FERC regulated utilities earning a regulated rate of return.

All three term loan transactions were structured with no required amortization. Debt service is interest-only.

Total value: $456 million
Total debt: $393 million
Total equity: $62 million
Grantor: LS Power Associates
Lenders: MUFG Bank, BNP Paribas, CoBank
Tenor: 5 years (Republic), construction plus 18 months (DesertLink and Silver Run)
Advisers: Latham & Watkins, Simpson Thacher & Bartlett
Financial close date: 12 September 2018

North American Energy Storage

Pinal Central Energy Center

NextEra Energy Resources reached financial close on the $62 million Pinal Central Solar Energy Center in Arizona in May 2018, one of the first project finance deals for storage capacity in the US. The deal comprised an integrated solar power plant and battery system.

Mizuho and MUFG Bank provided a $45 million loan with a tenor of 18 years to build the 20MW solar PV generation facility and associated 10MW lithium-ion battery storage system.

The term loan was structured to mitigate solar resource and energy storage risk.

The Salt River Project has a 20-year PPA to buy all the electricity produced by the plant until 2037. The utility will meet 20% of its retail electricity requirements through sustainable resources by 2020.

Tesla supplied a lithium-ion battery that can provide four hours of discharge at 10MW for the Pinal Central project. The single-axis tracker solar panels were supplied by First Solar.

At the time, Pinal Central was Arizona's largest combined solar-and-storage system and was the first of three "grid-scale" battery storage projects that are expected to connect to Salt River Project's grid system.

Total value: $62 million
Debt: $42 million
Equity: $20.5 million
Sponsor: NextEra Energy Resources
Lenders: MUFG Bank, Mizuho
Tenor: 18 years
Advisers: Sullivan & Cromwell, Simpson Thacher & Bartlett, Squire Patton Boggs
Financial close date: 29 May 2018

North American M&A

NextEra Western Renewables Partners

At first glance this deal could seem like a simple transfer of a portfolio of renewable energy assets in the US from one subsidiary of NextEra Energy to another. It is in fact far more complex.

In September 2018, publicly traded NextEra Energy Partners (NEP) and BlackRock Global Energy & Power Infrastructure formed a joint venture to acquire 10 wind farms and one solar project with a combined generating capacity of 1.388GW from NextEra Energy Resources.

BlackRock is funding the acquisition through a combination of equity and proceeds from back-leveraged credit facilities provided by a group of commercial banks led by Citibank.

Under the deal, BlackRock receives limited cash distributions from the portfolio during the initial three years and but then 80% thereafter.

NEP has a call option to buy out BlackRock's equity interest from the fourth year of the JV agreement for a fixed payment of $750 million plus a fixed pre-tax return during years four and five.

Total value: $1.355 billion
Debt: $983 million ($500 million term loan; $48.6 million delayed draw facility; $34.3 million LC facility; $400 million margin loan facility extended to separate BlackRock-owned obligor)
Buyer: BlackRock Global Energy & Power Infrastructure II Advisors
Seller: NextEra Energy Resources
Lenders: Citibank, CoBank, Commerzbank, DnB NOR Bank, Key Bank, Mizuho Bank, MUFG Bank, Wells Fargo, Zions Bancorporation
Tenor: 7 years for all debt, except delayed draw facility which is 3 years
Advisers: MUFG Bank, Citibank, Simpson Thacher & Bartlett, Latham & Watkins
Financial close date: 21 December 2018

North American Oil & Gas

Corpus Christi LNG Train 3

The Corpus Christi LNG export facility in Texas officially began producing liquefied natural gas (LNG) in November 2018, with the first train due to enter commercial service in Q1 2019.

The project's sponsor Cheniere Energy upsized and amended existing debt facilities last year to fund construction of the facility's third train. Cheniere raised roughly $4.5 billion to replace the existing debt facilities and a further $1.8 billion to fund construction of the new train.

Demand from lenders was significant, with sources suggesting that Cheniere only awarded 14% of what each bank had offered to lend. More than 40 banks participated.

The financing increased the project's working capital facility to $1.2 billion, providing funds for revolving working capital loans, letters of credit and bridging loans for ongoing operations and natural gas purchases.

Total debt: $6.137 billion
Sponsor: Cheniere Energy
Lenders: ABN AMRO, Apple Bank For Savings, Banco Sabadell, Bank of America, Bank of China, BBVA, CaixaBank, CIBC, China Merchants Bank, CIC Bank, CIT Group, Citibank, CBA, Crédit Agricole, Credit Suisse, DBS Bank, FirstBank Puerto Rico, Goldman Sachs, HSBC, ICBC, ING Capital, Intesa Sanpaolo, JPMorgan, KEB Hana Bank, KfW IPEX-Bank, Korea Development Bank, LBBW, Lloyds, Mizuho Bank, Morgan Stanley, MUFG Bank, National Australia Bank, Raymond James, RBC Capital Markets, Santander, Scotiabank, Siemens Bank, Société Générale, Standard Chartered Bank, SMBC, Wells Fargo
Tenor: 6 years and 1 month
Pricing: 200bp above Libor
Advisers: Société Générale, Sullivan & Cromwell, Norton Rose Fulbright, Lummus Consultants, Aon
Financial close date: 22 May 2018

North American Solar

Acquisition and Refinancing of 8point3

8point3 Energy Partners became the seventh yieldco to lunch in the US when its IPO was launched in 2015. SunPower Corporation and First Solar sold roughly 35% of its equity to public shareholders.

By the time 100% of 8point3 was sold to Capital Dynamics's Clean Energy Infrastructure Fund V for $1.7 billion in June 2018, the portfolio had grown to 15 solar projects with a total generating capacity of 945MW located in California, Colorado and Maryland.

The deal was financed through a bridge-to-bond structure where a $1.16 billion bridge loan was taken out just three days after the completion of the acquisition by a set of private placement notes totalling $1.3 billion.

The portfolio was split into two separate non-cross collateralised holdcos, with each raising long-term private placement notes.

Acquisition price: $1.7 billion
Initial bridge financing: $1.1 billion bridge loan and $60 million LoC
Long-term financing: $1.29 billion
Equity: $470 million
Buyer/sponsor: Capital Dynamics
Seller: SunPower Corporation (36.5%), First Solar (28%), public shareholders (35.5%)
Bridge loan lenders: MUFG Bank, MassMutual, CBA, Key Bank
Known private placement investor: AllianzGI
Tenor: Long-term debt split between a 17.5-year private placement and a 25.5-year private placement
Pricing: 17.5-year debt pricing starts at 175bp above US Treasuries, 25.5-year debt at 180bp
Advisers: Amis Patel & Brewer, Goldman Sachs, Bank of America Merrill Lynch, Evercore, Baker Botts, Skadden, Richards Layton & Finger PA, Mayer Brown, Milbank
Financial close date: 19 June 2018

North American Wind

CED Wind Portfolio

The CED Wind Portfolio is a grouping of five wind farms across Montana and South Dakota entirely owned by an indirect subsidiary of Consolidated Edison Development with an aggregate capacity of 180MW.

Three of the projects are operational and the other two were due to reach commercial operations in late 2018.

The owner completed a financing of the portfolio on 25 September 2018. The deal was the first broadly syndicated unrated wind power project issued in the US private placement market in over a decade.

The debt was split between a $140 million 10-year private placement, an $18.2 million PPA letter of credit, a $10.5 million DSR letter of credit, and a $2.9 million O&M letter of credit. Proceeds will be used to fund construction and operation of the assets.

Keybanc Capital Markets and MUFG Bank were arrangers of the bonds and provided the letter of credit.

Six investors made offers totalling almost $1 billion with four institutions bidding the cover amount, demonstrating significant demand.

All the assets benefit from 20- to 30-year PPAs with Northwestern Corporation and Basin Electric Power Cooperative. The portfolio also benefits from production tax credit revenues that compensate the projects at the statutory rate.

Total value: $356 million
Debt: $171.6 million
Sponsor: Consolidated Edison Development
Tenor: 10-year private placement
Pricing: 160bp above 5-year US Treasuries
Placement agents: MUFG Bank, Keybanc Capital Markets
Collateral agent: BNY Mellon
Legal advisers: Greenberg Traurig, Shearman & Sterling
Financial close date: 27 September 2018

North American Power

South Field Energy

Advanced Power reached financial close on the 1,182MW South Field CCGT power plant in Ohio, on 23 August 2018.

The transaction was one of the most prominent greenfield deals to close in the PJM Interconnection in 2018 with seven equity investors and a club of 14 lenders signed on the financing.

The financing featured a beneficial ratio and debt sizing methodology that took into consideration contractual capacity payments and multi-year revenue.

PJM, a regional transmission organization (RTO) that coordinates the movement of wholesale electricity across 13 US states and the District of Columbia, was facing questions about power prices – and the possibility of an overbuilt power market – which made it more difficult for greenfield projects to close in 2018. The South Field deal, however, was oversubscribed.

Both equity and debt investors included unusual names for the US market, with heavy participation of Asian investors.

The financing was divided into two tranches: the banking tranche of just under $500 million priced at 325bp above Libor, while the $150 million fixed-rate tranche priced at 6.2%.

Total value: $1.3 billion
Debt: $760 million
Equity: $650 million
Sponsor: Advanced Power
Lenders: Crédit Agricole, CIT Group, GE Capital, NH Investment Securities, ABN AMRO, Atudot Pension Fund, Bank of America, Clal Insurance, Morgan Stanley, Woori Bank, PIA Investment Management, ICBC, National Australia Bank
Tenor: 5 years
Pricing: 350bp (first 3 years) and 375bp (last 2 years)
Advisers: Whitehall & Company, Bracewell
EPC contractor: Bechtel
Financial close date: 23 August 2018

North American Refinancing

Rhode Island State Energy Center

The Carlyle Group closed on the refinancing of its 594MW Rhode Island State Energy Center (RISEC) in July 2018.

The deal consisted of a seven-year $315 million loan A and $45 million revolver. Investec was the sole bookrunner on the transaction which featured a syndicate of over 20 banks.

A three-year tolling agreement with Shell and firm capacity payments from the ISO-NE serve as hedge for the revenues between January 2019 and December 2021. The hedging agreements have shorter tenors than the final maturity of the term loan.

The amortizing term loan was priced at 275bp above Libor, representing a healthy 2% cut in debt margin for the borrower. The previous financing, which was signed 2.5 years ago, comprised a $325 million term loan B priced at 475bp due 2022, and a $50 million revolving facility due 2020.

Carlyle Group acquired RISEC from Entergy in December 2015, for $490 million. The plant has been operational since 2002.

The drop in the interest rates and the large number of banks participating on the syndication showed the large appetite for the transaction. This refinancing is seen as a milestone for partially contracted gas-fired plants, since the banks provided a more favourable pricing and terms than the institutional market.

Total value: $590 million
Debt: $363 million
Sponsor: Carlyle Group
Lenders: Capital One, China Merchants Bank, Crédit Agricole, East West Bank, ICBC, Investec, KEB Hana Bank, MUFG Bank, SMBC
Tenor: 7 years
Pricing: 275bp above Libor
Legal advisers: Skadden, Latham & Watkins
Financial close date: 20 July 2018

IJGlobal
Awards
2018

Latin America

Latin American Refinancing

Alto Maipo Hydropower

The $3 billion Alto Maipo Hydropower refinancing closed in May 2018 despite cost overruns, changes in equity ownership, modifications to the list of original lenders, huge cuts to the debt book, and a technical default.

It will play a key role in transforming Chile's energy matrix, diversifying it towards cleaner sources and reducing its dependence on fossil fuel generation.

The 531MW hydropower project has several attractive features: it is located just 50km south east of Chile's capital, Santiago, thereby reducing transmission costs; its waterways near the turbine rooms are mostly underground, so the risk of flooding is reduced; and it has government-support to supply zero-emission electricity to the country's centre of power.

The civil works agreement included the construction of 73km of tunnels on a lump sum fixed-price contract, which covers both the work that has already been undertaken as well as all future work provided by the contractor. This reduces geological and construction risks associated with the project for AES Gener.

Alto Maipo comprises two run-of-river facilities, the 275MW Alfalfal II in the Colorado River sub-basin and 256MW Las Lajas on the Maipo River, west of Santiago. Even with delays, it has progressed and, to date, reached 65% of completion.

A brief history

This third major negotiation – and second financial restructuring in a little more than a year – had cost overruns of $1 billion.

To fully understand the second restructuring package, it is crucial to understand the history of the project.

The developers originally submitted an environmental impact statement for the plant in 2006, but it was only approved in 2012. A first financing package was signed in 2013 with then-project sponsors AES Gener (60%) and Antofagasta Minerals' Minera Los Pelambres (40%), with a debt-to-equity ratio of 70:30.

Following delays, cost overruns and engineering challenges, Antofagasta (owned by Chilean conglomerate Luksic) dropped out of the Alto Maipo project in January 2017, having already invested $350 million towards construction.

AES Gener assumed Antofagasta's 40% equity stake for a symbolic amount. In return, the cost of electricity produced at Alto Maipo to be sold under a power purchase agreement (PPA) to the Los Pelambres mine was reduced by 15%.

With costs mounting and the exit of a large sponsor, Alto Maipo was restructured for the first time in March 2017.

However, in June of the same year, AES Gener fired its contractor Constructora Nuevo Maipo (CNM), putting the project into technical default.

Chile then saw power prices drop significantly, impacting cash flow projections and making a second refinancing necessary.

At that point, the power plant was 54% complete and faced debt liabilities of $613 million. The sponsors felt at this point that the project should still go ahead, resulting in the successful renegotiations of the second refinancing.

Strabag: From EPC to shareholder and lender

The project had a vastly inflated project cost, rising from an original construction budget of $2 billion to a cost of $3.4 billion.

Strabag entered the project as an EPC contractor but later became a minority equity shareholder, receiving shares as part of its payment for its EPC contract.

The equity holders of Alto Maipo now comprises: AES Gener (93%) and Strabag AG (7%).

Unusually, Strabag also took on a lending role on the project. Its Chilean subsidiary was initially awarded a contract to build part of the hydropower complex in 2012.

The total required equity contribution increased from $800 million to $1.45 billion.

AES Gener said at the time that up to $400 million of equity commitments would be funded with cash from operations, reducing the pressure on sponsors.

The renegotiated the tunnelling contract price to be paid in equity, and introduced a supplier financing loan to cover part of the tunnelling contract price.

Debt

On the debt side, there was a traditional restructuring, but the project also saw the banking line-up change. The International Finance Corporation (IFC) and KfW exited the project by selling their stakes to Deutsche Bank.

The new book of lenders comprised the Inter-American Development Bank (IDB), Overseas Private Investment Corporation (OPIC), Banco Estado, Itaú Corpbanca, DNB Bank ASA, Deutsche Bank and Strabag.

The new debt package is to be repaid in 20 years after completion of the project, which is expected in 2020.

Total value: $3 billion
Debt: $1.245 billion
Project company: Alto Maipo
Sponsors: AES Gener (93%), Strabag (7%)
Lenders: Inter-American Development Bank (IDB), Overseas Private Investment Corporation (OPIC), Banco Credito de Inversiones, Banco del Estado de Chile, Itaú Corpbanca, DNB Bank ASA, Deutsche Bank
Tenor: 20 years after completion
EPC contractor: Strabag
Legal advisers: Norton Rose Fulbright (senior lenders' adviser), Baker Botts (Alto Maipo's adviser), Claro & Cia (AES Gener's adviser), Bofill Mir & Álvarez Jana Abogados (Antofagasta Minerals' adviser), Carey (lenders' Chilean adviser), Chadbourne & Parke (lenders' US adviser), Eyzaguirre (Strabag's Chilean adviser), Pepper Hamilton (Strabag's NY adviser)
Financial close date: 8 May 2018

Latin American Midstream Oil & Gas

El Encino-La Laguna Pipeline Refinancing

Mexican energy developer Fermaca in June 2018 completed a refinancing of the El Encino–La Laguna natural gas pipeline in Mexico. The deal marked Allianz Global Investors' debut investment in infrastructure debt in Latin America.

The roughly $805 million bank and bond facility comprised a $450 million fully amortizing bond with a tenor of 23 years, and a $255 million fully amortizing term loan with a tenor of 14 years.

The financing also included a letter of credit to support project contingent and performance obligations. The size of the guarantee was thought to be in the region of $100 million.

AllianzGI acted as lead investor on the $450 million bond tranche. The bond was listed on the Singapore Stock Exchange on 22 June 2018 with a coupon of 5.465%.

Meanwhile, the $255 million term loan was provided by a group of banks with NordLB acting as coordinating lead arranger.

Joint bookrunners and joint lead arrangers were BNP Paribas, ING, Mizuho and NordLB. Banco Sabadell acted as arranger with Deutsche Bank taking on the roles of administrative agent, settlement agent and collateral agent.

Total value: Around $805 million
Total debt: $805 million ($450 million bond, $255 million bank debt, around $100 million)
Borrower: Fermaca Pipeline El Encinco
Lead bond investor: AllianzGI
Bond tenor: 23 years
Bond pricing: Coupon of 5.465%
Bank lenders: NordLB, BNP Paribas, ING, Mizuho, Banco Sabadell
Administrative agent: Deutsche Bank
Bank debt tenor: 14 years
Advisers: Milbank, Ritch Mueller, Latham & Watkins, Galicia Abogados, Lummus Consultants
Financial close date: 21 June 2018

Latin American Roads

Ruta del Cacao

The Ruta del Cacao concessionaire reached financial close on the Bucaramanga-Barrancabermeja-Yondó 4G highway project in Colombia in October 2018.

It is the 14th project from the 4G programme to reach financial close. Local institutions provided 38% of the total, institutional investors 31%, international institutions 19% and FDN the remaining 12%.

The Ruta del Cacao concessionaire was awarded the 25-year concession for the DBFOM contract in 2015.

Lenders provided a Ps1.6 trillion ($663 million) debt package, comprising Ps1.575 trillion in senior debt and a Ps105 billion liquidity facility. The financial institutions that provided the debt were Bancolombia, BBVA, BlackRock, FDN, Inter-American Development Bank (IDB) and Unión Para la Infraestructura (UPI).

Meanwhile, FDN was responsible for providing 16.73% directly, and 32.3% directly and indirectly. The Colombian development bank provided a total of Ps280.9 billion in senior debt and $105 billion in the liquidity line. With its credit line in local currency, it also participated indirectly with Ps206.9 billion (or 15.5% of the total debt), which was granted by IDB.

Total value: Ps2.1 trillion
Total debt: Ps1.6 trillion (Ps1.575 trillion senior debt, Ps105 billion liquidity facility)
Borrower: Concesionaria Ruta del Cacao
Sponsors: Cintra Infraestructuras Colombia, MC Victorias Tempranas, RM Holding
Lenders: Bancolombia, BBVA, BlackRock, FDN, IDB, UPI
Advisers: BBVA, Garrigues, Holland & Knight, Brigard & Urrutia, Philippi Prietocarrizosa Ferrero, MA Legal, Skadden, DLA Piper, Pérez-Llorca, Durán & Osorio Abogados Asociados, Infrata, Salud Riesgos y Recursos Humanos Consultores

Latin American Transmission & Distribution

Cajamarca Transmission Line Refinancing

Natixis put together an innovative refinancing structure on a previous loan facility for the Cajamarca Transmission Line project in Peru which signed in August 2018.

Natixis acted as sole arranger on a $175 million, 29-year hybrid private placement and fixed-rate loan.

As well as acting as sole arranger, Natixis was sole placement agent, sole rating advisor, bookrunner of the notes and administrative agent of the loan.

The refinancing structure consisted of a $75.3 million fixed/floating-rate senior secured term loan facility and a $99.5 million aggregate principal amount of senior secured notes.

The bank privately placed $100 million to three US insurance companies – American General Life Insurance Company, Pacific Life Insurance Company and Metropolitan Life Insurance Company – with the remainder of the financing sourced by Natixis through a fixed/floating-rate loan.

The dual placement strategy of private placement and fixed rate loan involving institutional investors through Natixis' co-financing partnership allowed the bank to tackle two different pockets of liquidity at attractive terms.

Banco de Crédito acted as local collateral agent and trustee.

The Cajamarca transmission line reached financial close in 2015 with sponsors Bow Power (a subsidiary of ACS Group) and New York-headquartered Global Infrastructure Partners (GIP).

Total value: $175 million
Sponsor: Bow Power
Lender: Natixis
Tenor: 29 years
Advisers: Baker & Mckenzie, Clifford Chance, Rodrigo, Elías & Medrano Abogados, Estudio Saco-Vertiz & Landerer
Financial close: 27 August 2018

Latin American Water

Spence Mine Desalination

A joint venture between Mitsui and Tecnicas de Desalination de Agua (Tedagua) signed in 2017 a 20-year concession with BHP Billiton to build, own, operate and transfer a desalination plant serving the mining company's Minera Spence mine in Chile.

The resulting project financing, which closed in June 2018, featured significant complexity given the project on project risk involved.

The Spence mine desalination project is part of a wider $2.5 billion expansion of the mine that is intended to extend its life by 50 years.

The 17-year senior debt facility attracted a group of 11 lenders, with a mix of experienced banks and institutions that had not previously participated on deals in the region before. Two of the lenders, Santander and BBVA, also provided a peso-denominated VAT facility.

Both Mitsui and Tedagua have signed a hedging guarantee agreement that is intended to make-whole lenders upon the termination of the interest rate hedging on the deal.

Total value: $706 million
Debt: $558 million ($472 million term loan, $46 million in standby facilities, $40 million VAT facility)
Sponsors: Mitsui & Co (50%), Tedagua (50%)
Lenders: BBVA, Crédit Agricole Group, ING Group, Intesa Sanpaolo, Mizuho Bank, MUFG Bank, National Australia Bank, Nippon Life Insurance, Santander, SMBC, Sumitomo Mitsui Trust Bank
Tenor: 17-year term loan, 9-year standby facilities, 7-year VAT facility
Pricing: 237bp above Libor for large tickets, 200bp for small tickets
Advisers: MUFG Bank, Allen & Overy, Garrigues, Barros & Errázuriz Abogados, Mayer Brown, Larrain y Asociados, Mott MacDonald, EY, Wood Mackenzie

Latin American Upstream Oil & Gas

Sepia MV30 FPSO

The Sepia field project entails the development of two oil fields, Sepia and Sepia Leste, both located off the coast of Rio de Janeiro, Brazil.

Both fields lie in the pre-salt layer of the Santos Basin in Block BM-S-24, which is jointly owned by operator Petrobras (80%) and Galp Energia subsidiary Petrogal Brasil (20%).

First oil from the project is expected in 2021.

Petrobras signed a 21-year floating production storage and offloading (FPSO) charter agreement for the project with the Sepia MV30 consortium in October 2017.

The consortium consists of MODEC, Mitsui, Mitsui OSK Lines, Marubeni Corporation and Mitsui Engineering & Shipbuilding.

To finance delivery of the FPSO, the sponsors raised close to $1 billion in debt in March 2018, in what was the first FPSO connected to Petrobras project financed in almost three years.

Japanese ECAs JBIC and NEXI and a group of commercial banks participated in the financing. JBIC provided a direct loan of almost half the total debt, while NEXI wrapped part of the commercial bank debt.

The FPSO will have a processing capacity of 180,000 barrels of crude oil equivalent per day, 212 million cubic feet of gas per day, and 240,000 barrels of water injection per day. It will also have a total storage capacity of 1.4 million barrels of crude oil.

Total debt: $987 million
Sponsors: Mitsui & Co, Marubeni
Bank lenders: ABN AMRO, ING Group, Mizuho, MUFG Bank, OCBC, Société Générale, SMBC
ECAs: JBIC, NEXI
Tenor: 15 years and 5 months
Legal advisers: King & Spalding, Norton Rose Fulbright

Latin American Mining & Metals

Fruta del Norte Phase II

This is the second financing closed by Canadian miner Lundin Gold in as many years for the development of its Fruta del Norte gold project in the Cordillera del Condor region of Ecuador.

Phase 2 of the deal was raised from a syndicate of seven commercial bank lenders, with Finnish export credit agency Finnvera providing export credit cover.

Tranche A is a $250 million senior commercial facility, while tranche B is a $100 million senior covered facility under a raw material guarantee from Finnvera.

The debt has a tenor of eight years with a final maturity of no later than June 2026, based on a schedule amortisation starting at the end of 2020.

Over its 13-year mine life, the mine is forecast to produce 4.4 million ounces of gold and 5.2 million ounces of silver. Fruta del Norte was due to start operations in Q1 2019.

The project benefits from a gold concentration offtake agreement, whereby the company will sell approximately half of its gold concentrate production over the first eight years of operations to Boliden, a high-tech metal company with a network of mines and smelters across Europe.

The financing and offtake agreement are seen as first of a kind for Ecuador.

Total debt: $350 million
Sponsors: Lundin Gold
Bank lenders: Bank of Montreal, Bank of Nova Scotia, Caterpillar Financial Services, ING Capital, KfW IPEX-Bank, Natixis, Société Générale
ECA: Finnvera
Tenor: 8 years
Pricing: 505bp above Libor for uncovered tranche, 250bp for covered tranche
Advisers: Endeavour Financial, Norton Rose Fulbright, Lexim Abogados, Milbank

Latin American Downstream Oil & Gas

Petroperú CESCE-guaranteed credit facility

Peru's state-owned oil company Petróleos del Perú (Petroperú) has been raising debt to fund the $5.4 billion modernisatio of its Talara refinery since 2014. At the beginning of 2018 it finally reached financial close on the project.

In 2014 it signed an EPC contract with Técnicas Reunidas for the works and closed a $500 million corporate debt facility with three commercial banks.

Then it raised $2 billion in its first-ever international bond placement in 2017, in an issuance that was five times oversubscribed.

This latest debt facility features six commercial banks providing $1.3 billion in 10-year debt, with Spanish ECA Compañía Española de Seguros de Crédito a la Exportación (CESCE) providing credit insurance. Spain's Instituto de Crédito Oficial (ICO) also supported the deal with an interest make-up agreement.

Works are due to increase the production capacity of the refinery from 62,000 to 95,000 barrels per stream day. The project also aims to reduce the environmental impact of the refinery via the production of fuels of improved quality, and increase the plant's ability to process heavy crudes to improve operational flexibility.

Petroperú is still leaving open the possibility of raising further debt up to $600 million, if needed, to fund construction. This debt is likely to be in the form of another bond issuance.

Total debt: $1.3 billion
Sponsor: Petroperú
Initial MLAs, underwriters and bookrunners: BBVA, BNP Paribas, Citigroup, HSBC, JP Morgan, Santander
ECA: CESCE
Tenor: 13 years
Pricing: Annual interest rate of 3.96%
Advisers: Allen & Overy, Estudio Echecopar, Muñiz, Skadden

Latin American M&A

Actis Acquisition of InterGen Mexican Portfolio

This landmark transaction involved the sale of one of the leading independent power generating platforms in Mexico, and saw Actis complete its largest acquisition to date.

InterGen's Mexican businesses includes 2.2GW of capacity across six operational CCGT plants and a 155MW wind farm with partner IENova. The portfolio also includes three gas compression stations and a 65km gas pipeline.

InterGen, which is jointly owned by Canadian Ontario Teachers' Pension Plan and China Huaneng Group/Guangdong Yudean Group, announced plans to offload its Mexican business interests in May 2017, and entered into an agreement with Actis to sell the portfolio for an enterprise value of $1.256 million in December.

Actis was invested via the Actis Energy 4 fund.

As part of the financing for the transaction (including the acquisition and to repay existing consolidated project debt), Actis' wholly-owned subsidiary Cometa Energía issued $860 million of senior secured notes due 2035 on the Singapore Stock Exchange, and also secured a separate credit facility. The notes priced on 19 April 2018 and the transaction closed the following week.

The platform was rebranded as Saavi Energia.

Total value: $1.256 billion
Debt: $860 million
Buyer: Actis Energy 4
Seller: InterGen
Bond issuer: Cometa Energía
Bookrunners: BNP Paribas, Citigroup, JP Morgan, Scotiabank, SMBC Nikko Capital
Tenor: Due 2035
Pricing: 6.375% coupon
Advisers: Bank of America Merrill Lynch, Barclays, Milbank, Skadden, Creel, Galicia, Shearman & Sterling, NautaDutilh, Loyens & Loeff

Latin American Airports

Salvador de Bahia Airport

This transaction featured the first full non-recourse loan for an airport financing in Brazil, a market where lenders often allocate delay and overrun risk to the sponsors.

Vinci Airports officially took over operations of Salvador de Bahia Airport on 2 January 2018, having won a 30-year concession for the operations, maintenance, extension and upgrading of the airport's terminal and runways in August 2017 under Brazil's fifth round of airport concession auctions.

Work includes a major expansion of the existing airside infrastructure, construction of a new departure area and refurbishment. The first phase of the project is expected to be complete by October 2019.

To finance phase one of the renovation and expansion work, Vinci signed a roughly R516 million ($134 million) loan on 29 June with Brazilian regional development bank Banco do Nordeste (BNB). The loan, which matures in 20 years, is also the longest financing for an airport in Brazil to date.

The loan from BNB was complemented by a letter of credit syndicated to seven banks, resulting in a highly visible transaction in the local market. Banks included Banco Bradesco, Itaú Unibanco, Banco ABC Brasil, ABN AMRO Bank, Banco BNP Paribas Brasil, Intesa Sanpaolo Brasil and Banco Sumitomo Mitsui Brasileiro.

Total value: R2.26 billion
Debt: R517 million
Borrower: Concessionária do Aeroporto de Salvador
Sponsor: Vinci Airports
Lender: Banco do Nordeste (BNB)
MLAs: Bradesco, Itaú BBA, ABC Brasil, ABN AMRO, Intesa Saopaolo, SMBC, BNP Paribas
Tenor: 20 years
Advisers: BNP Paribas, Mattos Filho Advogados, Vieira Rezende Advogados, ALG, ICF, ERM, Gras Savoye

Latin American Power

Porto de Sergipe 1 LNG to Power

Centrais Eléctricas de Sergipe (Celse), a JV between Ebrasil and Golar Power, closed on an innovative multi-currency hybrid financing for Porto de Sergipe I – Latin America's largest integrated LNG-to-power project to date.

Celse will provide a total of $400 million equity, including $123 million in cash reserves, split equally between Ebrasil and Golar Power.

Meanwhile, the non-recourse project financing – itself a rarity in the Brazilian market – included R3.2 billion ($984 million) of privately placed project bonds. Swiss Export Risk Insurance (SERV) covered the bonds, which were issued in local currency – a market first for bond issuers and insurers.

The SERV wrap relates to the fact that GE will be constructing the power plant as a turnkey contractor.

Meanwhile, the IFC and IDB Invest provided loans of $200 million and $288 million, respectively.

Total value: $2.046 billion
Debt: $1.646 million (R3.2 billion senior bonds, $200 million from IFC, up to R664 million from IDB Invest, $38 million from IDB Invest, $50 million mobilized from China Co-financing Fund for Latin America and the Caribbean, $120 million mezzanine debt from GE)
Total equity: $400 million
Sponsors: Ebrasil (50%), Golar Power (50%)
Bookrunner and initial purchaser: Goldman Sachs
Lenders: IDB Invest, IFC, GE
ECA: SERV
Tenor: 15 years (bonds, IFC loan, IDB loans), 5 years (mezzanine)
Pricing: 9.85% coupon (project bonds)
Advisers: Goldman Sachs, PFR Advisors, White & Case, Milbank, Stocche Forbes, Machado Meyer, Mott MacDonald, Grupo Mercados Energéticos Consultores

Latin American Solar

Cerro Dominador

Located in the Antofagasta region near Calama, in the Chilean desert at elevation of around 1,550m above sea level, the Cerro Dominador project comprises a 100MW solar PV farm (which has been operational since 2017) and 110MW concentrated solar power (CSP).

The financing directly relates to the CSP portion of the project. Cerro Dominador is the first CSP project in Latin America and one of the largest renewable energy project financing in the region to date.

The project was awarded 15-year power purchase agreements in 2013, as part of an energy auction by the Chilean Ministry of Energy. A total of 23 distribution companies will offtake the production.

EIG Global Energy partners acquired Cerro Dominador from former co-sponsor Abengoa, amid the latter's bankruptcy proceedings.

Abengoa and Acciona are the EPC contractors, with Acciona providing a wrap mitigating Abengoa's insolvency risk.

The project costs amount to roughly $1.2 billion, which was funded through equity and $860.2 million senior secured debt. This includes: $553.2 million term loan with a seven-year tenor; $90 million fixed-rate tranche provided by Korean investors; and $65 million loan from development banks. Financing also included a $32 million debt service reserve and a $120 million VAT facility.

Total value: $1.2 billion
Debt: $860.2 million
Sponsor: EIG Global Energy Partners
Lenders: Natixis, Société Générale,, Deutsche Bank, Santander, ABN AMRO, BTG Pactual, Commerzbank, Helaba, ICO, KfW-IPEX Bank, Kyobo, Corfo, Brookfield
Tenor: 7 years
Advisers: Astris Finance, Milbank, Clifford Chance, Morales y Besa, Barros y Errazuriz, Sargent & Lundy Consulting, ERM, Synex, Mandy McNeil

Latin American Wind

Mesa La Paz

AES and Mexican conglomerate Grupo Bal's joint venture EnerAB closed on the financing for the construction of the 306MW Mesa La Paz wind farm.

Located in the state of Tamaulipas, the project benefits from a 25-year power purchase agreement with Grupo Bal subsidiary Grupo Peñoles. The tenor of this agreement is significantly higher than the average of 15 years for private offtakers in the country.

The project achieved a debt-to-equity leverage of 76:24.

Financing comprised a $304.15 million senior secured notes due 2044, $72.6 million in credit facilities and $63 million in a VAT working capital line. The senior notes received a green-bond certificate by S&P.

This structure means that the financing covered the contracted cash flow and front loaded seven years of merchant exposure.

Closed on 21 May 2018, the transaction was one of the first greenfield project bonds in Mexico to take true construction risk and no credit enhancements. The bonds were privately placed in the US.

The financing also included a delayed draw feature, which is a characteristic usual to bank markets and atypical in project bonds.

Total value: $580 million
Total debt: $440 million
Sponsors: AES, Grupo Bal
Placement agents: JP Morgan, BNP Paribas
VAT provider: Bancomext
Tenor: 26.5 years
Pricing: 300bp above UST
Contractors: Acciona (balance of plant), Vestas (wind turbine supplier)
Advisers: Latham & Watkins, Paul Hastings, Galicia Abogados, Mijares Agoitia Cortes y Fuentes, DNV GL, Mandy McNeill, KPMG
Financial close date: 21 May 2018

IJGlobal Awards 2018

Asia Pacific

Asia Pacific Offshore Wind

Formosa I

The transaction to finance the development of Taiwan's first large-scale offshore wind project – the 128MW Formosa I offshore wind farm off the coast of Chunan Town, Miaoli County – represents a landmark deal for the region for several reasons.

Formosa I is the first offshore wind project financing deal in Asia, and it highlights the Taiwanese regulator Financial Supervisory Commission's efforts to bolster the island's financial capital supply chain. Domestically, it is also the first extended-tenor export credit agency-backed project financing in Taiwan.

Phase one

The transaction to finance the 120MW second phase of Formosa 1 included the refinancing of the project's 8MW pilot phase which has been fully operational since April 2017, having been brought to financial close by local Taiwanese renewables business Swancor Renewable in May 2016.

Financing for phase one, which consists of 2x 4MW SWT-4.0-120 Siemens wind turbines, was supported by debt provided by lenders including Cathay United Bank, EnTie Commercial Bank and BNP Paribas.

In January 2017, Macquarie Capital and Ørsted (formerly DONG Energy) acquired equity interests in Formosa 1 Wind Power – the project's special purpose vehicle – resulting in a new shareholding structure of Macquarie Capital (50%), Ørsted (35%) and Swancor (15%).

The ownership structure changed again, after financial close, in late 2018 when Macquarie Capital and Swancor each sold down half of their stakes to JERA, a Japanese joint venture between Tepco and Chubu Electric Power.

Pathfinder transaction

The sponsors drew on a group of four Taiwanese and seven international banks, along with Danish export credit agency EKF, to raise a NT$17.6 billion three-tranche term loan plus a NT$1 billion guarantee facility for the project's next stage of development.

Lenders from phase one – Cathay United, EnTie and BNP Paribas – were joined on the deal by ANZ, Crédit Agricole, DBS, ING Bank, KGI Bank, MUFG Bank, Société Générale and Taipei Fubon. The 11 MLAs did not take equal debt tickets which ranged from about NT$1.5-3 billion each, with BNP Paribas and Taipei-based Cathay United on the higher end.

The 16-year, fully amortizing debt package will fund the development, construction, commissioning, testing and operation of Formosa I's second phase and refinance phase one's corporate debt.

The term loan's three tranches consisted of an EKF-wrapped base facility (60% coverage), a commercial base facility and a commercial standby facility. Pricing was 230bp over three-month Taibor, stepping down to 200bp at the commercial operation date, which is expected in Q1 2020. Formosa 1 is the first project to receive an EKF guarantee in New Taiwan dollars.

The MLAs divvied up the structuring work, pairing a domestic bank with an international one. Cathay United and Crédit Agricole took the construction risk through their FX hedges along with co-documentation, while Taipei Fubon and MUFG Bank teamed up as co-insurance banks. BNP Paribas, ING and Société Générale were the interest rate hedge, model and technical banks, respectively. ANZ, DBS, EnTie and KGI Bank were hedge providers.

Power purchase agreement and suppliers

Financial close on the transaction in June 2018 followed some seven months after Formosa 1 Wind Power signed a 20-year power purchase agreement (with a five-year option) with state utility Taipower in December 2017. The PPA, however, had notable drawbacks, including a lack of linking to an inflation index.

International companies Jan De Nul, Siemens Gamesa Renewable Energy and Specialist Marine Consultants have been mitigating interface risk with their EPCI, wind turbine and marine coordination contracts.

Seajack will start installing 20x Siemens Gamesa wind turbines at the site in Q2 2019 in its first renewables contract beyond Europe, using the self-propelled vessel Zaratan.

Meanwhile, Swancor Renewable's parent company Swancor and China Steel – both equity holders in offshore wind projects – are the vanguard of the local supply chain of wind energy. Swancor hardener and resin are being used on Siemens Gamesa's blades, which began production in February 2019. China Steel, meanwhile, is jointly developing the 300MW Chong Neng project with Copenhagen Infrastructure Partners. Danish adviser FairWind intends to collaborate with Siemens Gamesa on the project's pre-assembly work by training Taiwanese technicians.

In the long-term, Formosa 1 is paving the way for other Taiwanese companies – including Century Iron and Steel Industrial, dredging and nearshore construction company Hung Hua Construction, and Taiwan Cogeneration Corporation – to be involved in other offshore wind projects.

Total debt: NT$18.7 billion (NT$17.6 billion term loan, NT$1 billion guarantee)
SPV: Formosa 1 Wind Power
Sponsors at financial close: Macquarie Capital (50%), Ørsted (35%), Swancor (15%)
MLAs: ANZ, BNP Paribas, Cathay United, Crédit Agricole, DBS, EnTie, ING, KGI Bank, MUFG Bank, Société Générale, Taipei Fubon
ECA: EKF
Tenor: 16-year door-to-door and fully amortized
Pricing: 230bp above 3-month Taibor, stepping down to 200bp at COD
Offtaker: Taipower
Advisers: BNP Paribas, Aon, Benatar & Co, Clifford Chance, EY, Lee & Li, Linklaters, Macquarie, Tsar & Tsai, Wood Group

Asia Pacific Midstream Oil & Gas

Australia Pacific LNG

Project company Australia Pacific LNG, the largest producer of natural gas in eastern Australia, undertook in 2018 the largest US private placement for an Australian project to date and the first major APAC oil and gas project bond. The transaction further opens up this longer-term debt market for the wider Australian infrastructure sector.

This transaction was distinct due to the direct sale of the notes to investors (with no underwriting), establishing an ongoing relationship between the issuer and the investors. Terms were negotiated with investors, rather than presented to the market as in the case of a project bond.

The $1.4 billion private placement achieved a 12-year tenor. It part repays a Export-Import Bank of China facility raised in 2012 as part of the original $8.5 billion APLNG project finance.

The long-term sale and purchase agreements are until 2035, and APLNG has been able in achieving a later maturity to better match the cash flow profile, and reduce debt and distribution break-even levels.

APLNG was the first coal seam gas-to-LNG project ever financed in 2012, and operations started in 2016.

Total value: $1.4 billion
Debt: $1.4 billion US private placement
Borrower: Australia Pacific LNG Processing Pty Ltd
Sponsors: Origin Energy (37.5%), ConocoPhillips (37.5%), Sinopec (25%)
Joint bookrunners and lead placement agents: Citigroup, JP Morgan
Co-placement agent: Australia and New Zealand Banking Group
Tenor: 12 years
Pricing: 4.82%
Advisers: Allens, Clayton Utz, Gas Strategies, Latham & Watkins, Lummus International, Netherland Sewell & Associates, Sullivan & Cromwell
Settlement date: 27 September 2018

Asia Pacific Social Infrastructure

Waikeria Prison Development

The Waikeria Prison Development PPP will provide the Department of Corrections with a state-of-the-art facility, supporting the New Zealand government's intention to deliver a more effective and humane justice system.

Sponsors Pacific Partnerships and Morrison & Co signed a 25-year concession to design, build, finance and maintain a new 500-prisoner facility on the site of the existing Waikeria Prison. The sponsor consortium also assumes responsibility and risk for providing an electronic security system, which is contracted to Honeywell.

The project was, surprisingly, the only PPP to come to financial close during the year 2018 in Australia and New Zealand, and it did not achieve this without overcoming certain challenges.

The rival bidder consortium withdrew before the end of the procurement, requiring a robust evaluation process for the sole bid. Meanwhile, a change of government during the tender put the project on hold.

Total value: NZ$850 million ($575.5 million)
Debt: NZ$762 million (NZ$735 million term loan, NZ$27 million debt service reserve facility)
Equity: NZ$88 million
Sponsors: HRL Morrison & Co (60%), Pacific Partnerships (40%)
Lenders: Australia and New Zealand Banking Group, KfW IPEX-Bank, Mizuho Bank, MUFG Bank, Natixis
Grantor: New Zealand Department of Corrections
Contractors: Cushman & Wakefield, Honeywell, CPB Contractors
Tenor: 5 years
Advisers: Anderson Lloyd, Aquenta, Ashurst, EY, Kensington Swan, King & Wood Mallesons, Minter Ellison, MUFG Bank, Russell McVeagh
Financial close date: 19 September 2018

Asia Pacific Solar

Sunraysia Solar Farm

The Sunraysia Solar Farm, developed by Maoneng Australia, is due to be among the very largest Australian solar plants at 255MWp. The deal saw UK-based John Laing Group enter Australian solar after two years circling the space, and Maoneng cement its promising position in the market with its second project in the country.

John Laing invested in the project at the pre-construction stage, in line with its strategy for entering Australian greenfield projects.

The contractors too are gaining sector footholds with the Sunraysia project. This is the largest renewables project on the books for EPC contractor Decmil, and its second major solar EPC undertaking.

The offtake structure is in keeping with the progressive Australian renewables sector, as AGL Energy and the University of New South Wales each signed 15-year PPAs for a combined 75% of output.

The output from the project will serve both the states of New South Wales and Victoria.

And there is more to come from Sunraysia, as Maoneng is developing Sunraysia Emporium – an adjacent large-scale, grid-connected energy storage project.

Total value: A$361.53 million ($257.17 million)
Debt: A$241 million (A$230 million term loan, A$11 million revolver)
Equity: A$120.53 million
Sponsors: John Laing (90.1%), Maoneng Group (9.9%)
Lenders: Bank of China, ING, Mizuho Bank, National Australia Bank, NordLB
Tenor: 5 years (term loan), 2 years (revolver)
Offtakers: AGL Energy, UNSW
Contractors: Decmil, Jinko Solar, NEXTracker, Schneider Electric
Advisers: Allens, Aon, Clifford Chance, Energy Action, EY, Jacobs, King & Wood Mallesons, Norton Rose Fulbright, Rothschild, White & Case, Willis Towers Watson

Asia Pacific Energy Storage

Bulgana Green Power

French developer Neoen's Bulgana Green Power Hub in Victoria represents not only the first project financing deal for a Tesla battery in Asia Pacific, but also the first agribusiness partnership of its kind.

The A$343 million ($244 million) wind and battery storage hybrid project consists of a 194MW wind farm and a 20MW / 34MWh battery storage unit using Tesla lithium-ion powerpacks.

The state government of Victoria will offtake the majority of Bulgana's output, having signed a sought-after 15-year PPA for 90% of the electricity generated by the wind farm.

The remaining 10% will be sold to Nectar Farms, a pioneering Australian producer of organic vegetables developing large high-efficiency, low-water consumption hydroponic greenhouses.

Neoen is a key player in the Australian renewables market, on target to deliver on its target of 1GW of operational assets by 2020. Bulgana is its largest single-phase project in Australia to date.

A group of international lenders provided debt with a tenor in excess of 20 years, exceeding the length of the PPA with the state.

Total value: A$343 million
Debt: A$108 million
Equity: A$115 million
Sponsor: Neoen
Lenders: KfW IPEX-Bank, Korea Development Bank, Société Générale
Agent bank: National Australia Bank
Tenor: Over 20.5 years
Offtakers: State of Victoria, Nectar Farms
Contractors: Siemens Gamesa (EPC services), Tesla (battery supplier), AusNet Services (transmission)
Advisers: Baker McKenzie, Elgar Middleton, EY, Jacobs, JCRA, Mazars, Minter Ellison, White & Case, Willis Towers Watson, WSP
Financial close date: 19 March 2018

Asia Pacific Transport

WestConnex

In 2017 the state government of New South Wales launched the sale of 51% of the concession holder for one of the largest infrastructure projects in Australia's history: the A$16.8 billion ($12 billion) WestConnex project to build 33km of new motorway, largely underground, to alleviate the congested roads system in Sydney.

The A$4 billion Stage 1 debt financing required extensive creditor analysis and structuring around both traffic and construction risk. This financing repaid existing debt, remaining Stage 1 construction capex and a A$1.1 billion bridge facility.

The bridge loan partly funded Sydney Transport Partners' A$9.3 billion upfront payment to the NSW government to acquire 51% of the concessionaire WestConnex, which has operational rights for around 63km of motorways to the end of 2060.

Total value of acquisition: A$9.3 billion
Equity: A$8.2 billion
Debt: A$1.1 billion at acquisition + A$4 billion to finance Stage 1 (A$2 billion 3-year loan, A$2 billion 5-year loan)
Buyer: Sydney Transport Partners (Transurban (50%), AustralianSuper (20.5%), Canada Pension Plan Investment Board (20.5%), Tawreed Investments (9%))
Seller: State of New South Wales
Lenders: Agricultural Bank of China, ANZ, Bank of China, CIBC, CBA, Crédit Agricole, Export Development Canada, ICBC, ING, KEB Hana Bank, Mizuho Bank, NAB, SMBC, Scotiabank, Société Générale, Westpac
Advisers: Advisian, Aquasia, Clifford Chance, Greenwoods & Herbert Smith Freehills, e3 Advisory, King & Wood Mallesons, KPMG, Macquarie Capital, Marsh, Morgan Stanley, UBS, WSP, Clayton Utz
Acquisition financial close date: 27 September 2018
Stage 1 financial close date: 26 October 2018

Asia Pacific Mining & Metals

Gruyere Gold

Perth-based Gold Road Resources raised a A$150 million ($106.7 million) corporate financing in May 2018 in a deal which gives the company the funding and flexibility it needs as it transitions from an explorer to a mid-tier gold producer with significant exploration upside.

Gold Road Resources has no operational assets, but the business is centred on the Gruyere Gold Mine project which is in construction – and in which Gold Road Resources owns 50% alongside partner Gold Fields.

Gold Road Resources was able to raise the corporate financing from banks, based on the quality of the Gruyere project, which at the time of the loan was in advanced construction. Banks have lent with the Gruyere mine as the source of debt repayment.

Three lenders provided a revolving credit facility, a working capital facility and an additional discretionary gold hedging facility so the company can manage its gold price risk exposure as Gruyere moves into production.

Gold Road Resources is also gaining from the new financing the ability to pursue new opportunities for exploration, including from its newly acquired 50% interest in the South Yamarna project.

Gold Road Resources acquired this from Sumitomo Metal Mining Oceania on 4 May 2018.

Total value: A$150 million
Debt: A$150 million (A$100 million revolving credit facility, A$50 million working capital facility)
Borrower: Gold Road Resources
Lenders: Société Générale, ING, National Australia Bank
Tenor: 5-year revolving credit facility
Advisers: Herbert Smith Freehills, PCF Capital, King & Wood Mallesons
Financial close date: 10 May 2018

Asia Pacific Waste

Kwinana Waste-to-Energy

The Kwinana Waste-to-Energy project heralds the launch of an entirely new sector in Australia, as the country's first large-scale energy-from-waste plant.

Phoenix sought the financial backing necessary for the project, but potential partners came and went. Then in 2015, Australia's own Macquarie Group stepped in as financial adviser to structure a project financing which ultimately attracted banks, a state lender and institutional lenders.

In December 2016, Macquarie signed on to also become an equity partner and co-developer. Netherlands-headquartered DIF came on board before close.

Kwinana is due to have capacity to receive and process up to 400,000 tonnes of residual waste per year to produce 36MW (net) baseload power.

Long-term 20-year contracts to underpin the project are in place with Rivers Regional Council and City of Kwinana, as well as contracts with Veolia and two regional councils.

Total value: A$698 million
Equity: A$275 million
Grant: A$23 million
Debt: Up to A$400 million (up to A$90 million fixed-rated CEFC tranche, A$310 million floating-rate tranche)
Sponsors: Macquarie Capital (40% equity investor and developer), DIF (60% equity investor), Phoenix Energy (developer)
Lenders: Clean Energy Finance Corporation, IFM Investors, Investec, Metrics Credit Partners, Siemens Bank, SMBC
Tenor: 5 years
Pricing: 300bp above BBSY
Advisers: ACIL Allen, Allens, Ashurst, DLA Piper, EY, Fichtner, Gilbert + Tobin, Herbert Smith Freehills, Macquarie Capital, Minter Ellison, Norton Rose Fulbright, Ramboll, SLR Consulting
Financial close date: 18 October 2018

Asia Pacific M&A

Acquisition of Equis Energy

The acquisition of Equis Energy, which comprises a 180-project development pipeline, has the claim to be the largest renewable energy transaction in history.

Global Infrastructure Partners (GIP) from the US with partners from Canada and China (Public Sector Pension Investment Board and CIC Capital) emerged from the acquisition as the owners of a dominant renewables developer with a presence in Australia, Japan, India and Indonesia, Thailand and the Philippines. The new owners have renamed the platform Vena Energy.

The size of Vena Energy's portfolio continues to evolve, but as of March 2019 the latest capacity was 12.22GW.

With such an immense and diverse portfolio of assets, due diligence and preparations spanned shovel-ready, in-construction and operational assets, FDI approvals in Australia and $1.3 billion of existing project financing liabilities across 40 facilities.

Nevertheless, from signing binding agreements in October 2017, GIP and its co-investors brought the deal to completion in around three months.

Total value: $5 billion
Equity: $3.25 billion
Debt: $470 million acquisition financing, $1.3 billion assumed non-recourse project financings
Buyers: Global Infrastructure Partners, Public Sector Pension Investment Board, CIC Capital
Seller: Equis Funds Group
Lenders: ABN AMRO Bank, BNP Paribas, Commonwealth Bank of Australia, Crédit Agricole, DBS Bank, ING, Intesa Sanpaolo, MUFG Bank, Rabobank, Siemens Bank, SMBC, Société Générale
Tenor: 5-year acquisition facility
Advisers: Allen & Overy, Arup, Clifford Chance, Credit Suisse, JP Morgan, Mazars, Skadden
Financial close date: 19 January 2018

Asia Pacific Biomass

Chana Green

A record 18-year debt tenor is difficult to imagine for a limited-recourse biomass project finance deal in Asia. Add the project's location – Chana, Songkhla, in Thailand's southern region – where risk of political conflict and unrest is real, and this transaction becomes even more notable.

However, that is exactly what Bangkok-based Gulf Energy Development (GED) achieved on its 25MW Chana Green biomass project, working with the Asian Development Bank (ADB) and Bangkok Bank (BBL) to bring the financing for the project across the finishing line.

GED's debt-to-equity target tends to be 3-to-1 on projects, meaning that this some Bt2.3 billion ($71.8 million) project was forecasted to have a debt package of about Bt1.725 billion.

Yet, project finance debt outpaced that mark with Bt1.992 billion split between two tranches: Bt1.109 billion provided by the ADB and around Bt883.2 million provided by BBL. Pricing was over THBFIX and a fixed coupon, with ADB understood to have the floater.

Special purpose vehicle Chana Green intends to supply the biomass plant with residual waste from rubber wood – a rubber tree by-product from nearby farmers – sourced at market-based prices.

The power plant should start commercial operations by March 2020.

Debt: Bt1.992 billion (Bt1.109 billion from the ADB, around Bt883.2 million from BBL)
Borrower: Chana Green Company Limited
Sponsor: Gulf Energy Development
Lenders: Asian Development Bank, Bangkok Bank
Tenors: 18 years (ADB-tranche), 15 years (BBL-tranche)
Contractor: Sino-Thai Engineering and Construction
Advisers: Baker McKenzie, Marsh, Norton Rose Fulbright, Owl Energy
Financial close date: 19 March 2018

Asia Pacific Refinancing

Bayfront Infrastructure Capital

It is axiomatic that the test of a landmark transaction is its replicability. Singapore-based Clifford Capital was deeply aware of this truism when it began work on the transaction, setting the stage for Asia's first project finance-backed collateral loan obligation (CLO) issuance in July 2018.

The issuer SPV Bayfront Infrastructure Capital's book building on the $458 million issue had really closed before it opened, as Clifford Capital spent months gaining feedback and backing from institutional investors in Asia (notably its own shareholders, including Temasek and Prudential), Europe and the Middle East. It had 25 strong orders but closed on 16.

Clifford Capital will attempt to lower the PFCLO market's transaction costs by establishing a loan warehousing platform by Q3 2019 to institutionalise the origination and structuring process.

Total issue: $458 million ($320.6 million Class A notes, $72.6 million Class B notes, $19 million Class C notes, $45.8 million subordinated notes)
Sponsor and collateral manager: Clifford Capital
Issuer: Bayfront Infrastructure Capital
Contributor banks: Clifford Capital, DBS, HSBC, MUFG Bank, SMBC, Standard Chartered
Global coordinators: Citi, Standard Chartered (both also bookrunners and lead managers)
Bookrunners and leads: DBS, HSBC, SMBC Nikko
Co-manager: MUFG Bank
Tenor: 20 years
Pricing: 145bp above 6-month US Libor (Class A notes), 195bp (Class B notes), 315bp (Class C notes), residual (subordinated notes)
Advisers: Allen & Gledhill, Clifford Chance, DB International Trust, DBS, Deutsche Bank, Latham & Watkins, Linklaters, Moody's, TMF Singapore H

Asia Pacific PPP

Tibar Bay

A cornerstone of the government of Timor-Leste's development strategy, the Tibar Bay port terminal project represents the country's first-ever PPP undertaking – and attracted more private sector interest than any previous private investment opportunity outside the oil and gas sector.

Bolloré Group was selected in 2016 to build and operate the port project under a 30-year concession.

The project carries an estimated $490 million cost over the length of the concession, comprising an initial investment of $280 million and a further $210 million in expansion costs. The concessionaire has committed to invest some €360 million in to the project.

Financing for the initial construction stage involves three sources: $105 million private debt, $129.45 million in upfront government viability gap financing (VGF), and $45 million equity from Bolloré.

A source with direct knowledge of the financing package told *IJGlobal* that the roughly $105 million private debt consists of a fixed-rate Bolloré shareholders' loan with a five-year tenor. Adjustments subject to discussions with the grantor are also expected.

The SPV Timor Port will operate the port which is expected to be operational by the end of 2021.

Construction value: $280 million
Debt: $105 million shareholders' loan
Equity: $45 million
Government VGF: $129.45 million
Project company: Timor Port
Concessionaire: Bolloré Ports
Lender: Bolloré Group shareholders
Tenor: 5 years (with adjustments subject to discussion with grantor)
Escrow agent: United Overseas Bank
Advisers: International Finance Corporation, Asian Development Bank, Gide Loyrette Nouel, AFG Advogados, Hamburg Port Consultant, EcoStrategic, EGT Engenharia-FASE Estudos e Projetos consortium

Asia Pacific Hydro

Coc San

InfraCo Asia became a sponsor of the 29.7MW Coc San run-of-river hydro plant in 2012 when the project was at risk of being abandoned. It divested from the asset in November 2018, realising roughly 2x the value of its original $7.5 million investment having entirely restructured the project.

Tokyo Electric Power Company (TEPCO) was the buyer of InfraCo Asia 33.4% stake in Coc San in what is the Japanese utility's first investment in a project outside of Japan. It owns and operates over 160 hydropower projects in Japan.

Project implementation had halted in 2011 at a relatively early stage of development due to the original sponsors exhausting all initial capital and falling to raise long-term debt.

InfraCo brought Singapore-based Nexif into the project as a developer, closed a project financing in 2014 with Saigon Hanoi Commercial Bank as the sole lender, and brought the plant into commercial operations in 2016.

Shortly after operations began, the sponsors closed on a refinancing and then InfraCo Asia launched a competitive sale process for its stake which attracted more than 10 indicative bids.

The plant benefits from a 20-year PPA with Vietnamese state utility EVN and a 50-year land rights contract. EVN proposed severing the link to CPI for tariff payments on hydro projects in mid-2014, but InfraCo Asia was among those to successful lobby to scrap the rule change.

Acquisition value: roughly $15 million
Buyer: TEPCO
Seller: InfraCo Asia
Existing project lenders: Saigon Hanoi Commercial Bank
Offtaker: Northern Power Corporation
Advisers: Capital Partners Group, Reed Smith, EY
Financial close date: 9 November 2018

Asia Pacific Upstream Gas & Oil

Project Gajah

The deal was the largest reserve based financing in Asia in 2018, combining two upstream natural gas assets in Indonesia operated by subsidiaries of Medco Energi.

The $500 million revolving senior secured reserve based loan facility benefits from the combined assets creating a diversified borrowing base.

Medco E&P Malaka has an 85% working interest in the Block A Gas Development project, which has around 350 billion cubic feet of discovered reserves. Medco has completed 97% of the development, which includes construction of a central processing plant as well as the drilling of wells.

Medco E&P Tomori Sulawesi has a 30% interest in the Senoro onshore gas field that has been in operation for four years and is designed to produce natural gas at a rate of 310 million standard cubic feet per day.

The projects supplies 80% of its gas to the Donggi Senoro LNG plant and 20% to a nearby ammonia plant.

The financing replaces a development loan raised for Block A Gas Development in 2017. Both deals had the same MLAs.

This revolver includes a suite of hedging arrangements to protect against foreign exchange, interest rate and commodity price risks.

Debt: $500 million revolving RBL
Sponsors: Medco E&P Malaka, Medco E&P Tomori Sulawesi
MLAs, underwriters and bookrunners: Société Générale, ING, ANZ
Additional lenders: Bank of China, BNP Paribas, Crédit Agricole, Intesa Sanpaolo, Mizuho, SMBC
Tenor: 6 years
Advisers: Gibson Dunn, Herbert Smith Freehills, Hadiputranto Hadinoto & Partners, Hiswara Bunjamin & Tandjung, ERM, Lummus Consultants, JLT Speciality, Mazars

Asia Pacific Geothermal

Rantau Dedap

The sponsors of the 98MW Rantau Dedap project in Indonesia completed eight years of exploration and development, and four years of financing negotiations before finally closing on this deal.

The Asian Development Bank's Clean Technology Fund (CTF) helped fund exploration costs, the first time the development bank has supported a geothermal project from the initial exploration phase.

Geothermal resource is notoriously hard to predict, and a PPA agreed with PLN in 2014 needed to be renegotiated after the size of the project was reduced from 240MW following the exploration period.

After protracted talks, PLN signed on a 30-year PPA carrying a tariff of $0.13 per kWh in October 2017. Indonesia's Ministry of Finance is covering the first 15 years of the PPA with a business viability guarantee.

The sponsors raised just over $700 million in debt from a group of commercial banks, ECAs and development finance institutions. The roughly $126 million commercial bank tranche benefits from 100% political risk and 90% commercial risk insurance from NEXI, while JBIC provided a direct loan of around $189 million.

The existing CTF facility was also extended by 20 years and expanded to around $175 million.

Total value: $701.29 million
Debt: $539.99 million
Sponsors: Engie (42.05%), Marubeni (32.05%), Supreme Energy (25%), Tohoku Electric Power (10%)
Bank lenders: Mizuho, MUFG Bank, SMBC
ECAs: JBIC, NEXI
DFIs: ADB, CTF
Tenor: 20 years and 6 months
Advisers: Milbank, Latham & Watkins, Mott MacDonald, Aecom, Leighton Contractors, Daya, Alam Tehnik Inti, Loyens & Loeff, JLT

Asia Pacific Petrochemicals

Long Son

Siam Cement of Thailand's patient, 10-year long mission to build a petrochemicals plant in Vietnam paid off in 2018 as it arranged financing.

The Vietnamese government originally approved construction of the Long Son plant in 2008 – to local partner PetroVietnam and Siam Cement, as well as Qatar Petroleum.

Over the years, Siam Cement eventually picked up the equity ownerships of both Qatar Petroleum and PetroVietnam. The Qatar Petroleum's 25% divesture was finalised in March 2017 and the PetroVietnam's 29% stake sale in May 2018.

Siam Cement continued talks with banks over the debt package starting in early 2015 but the terms were only firmed up in 2018: the $3.2 billion debt package, denominated in US dollars at a tenor of 14-years, was signed in August 2018 with six banks, both Thai and international.

Long Son represents a rare cross-border deal in South East Asia to be funded by local and international banks – which is why it is the recipient of *IJGlobal*'s petrochemicals award for 2018.

The Long Son complex will be located in Ba Ria-Vung Tau province, 90km south east of Ho Chi Minh City. The site will also include other supporting facilities, such as a port, a power plant and warehouses.

Total value: $5.4 billion
Debt: $3.2 billion
Sponsor: Siam Cement
Lenders: Bangkok Bank, Export-Import Bank of Thailand, Krungthai Bank, Mizuho Bank, Siam Commercial Bank, SMBC
Tenor: 14 years
Advisers: SMBC (financial to sponsor), Allen & Overy (legal to sponsor), Clifford Chance (legal to lenders)
Financial close date: 3 August 2018

Asia Pacific Coal-Fired Power

Nghi Son II

Nghi Son II is Vietnam's first international independent power producer project to cross the finishing line and reach financial close in over a decade.

In 2013, South Korea's KEPCO and Japan's Marubeni beat two other bidding consortia: one led by EDF and GDF Suez, and the other by Mitsui Co.

The Vietnamese government issued the notification of award to build and operate the 1,200MW coal-fired power plant in 2013, but it would take another four years – until April 2017 – for the 25-year PPA to be signed.

By July 2017, an international bank syndicate of seven banks led by financial adviser SMBC had been formed in anticipation of receiving the final stamp of the approval, the concession contract with Vietnam's Ministry of Industry and Trade and state utility EVN.

After several delays, the concession contract was signed in November 2017, clearing the way for the financing to sign.

The multi-sourced debt package was signed off in mid-April 2018, narrowly missing the target to reach financial close by the end of the Japanese financial year in March.

Total value: $2.46 billion
Total debt: $1.87 billion ($748 million bank debt, $560 million loan from KEXIM, $560 million loan from JBIC)
Sponsors: KEPCO, Marubeni
Bank lenders: DBS Bank, Malayan Banking, Mizuho Bank, MUFG Bank, OCBC, Shinsei Bank, SMBC
DFIs/political risk guarantors: KEXIM, JBIC
Tenor: 20 years and 3 months
Offtaker: Electricity of Vietnam (EVN)
EPC contractor: Doosan Heavy Industries
Advisers: SMBC, Allen & Overy, Clifford Chance, Frasers, VILAF, SSEK, Bae Kim & Lee
Financial close date: 13 April 2018

Asia Pacific Onshore Wind

Douhoku Onshore Wind Project

One of Japan's largest renewable energy developers, Eurus Energy, undertook Douhoku onshore wind complex, a portfolio of seven sites totalling a capacity of around 517MW. The wind farms are spread across Japan's northernmost island, Hokkaido.

The offtaker Hokkaido Electric, a legacy regional monopoly, imposed unlimited curtailment in the event that supply of electricity in the region exceeds demand.

Eurus Energy worked with lenders MUFG Bank and SMBC to incorporate the downside risk in the cash flow model, and agreed to reconsider the model in the event of a significant change in projected electricity demand or supply by the offtaker.

MUFG Bank and SMBC arranged a debt package for the project totalling approximately ¥109 billion ($978 million), consisting of a ¥97.662 billion term loan that matures on 31 August 2043 and a ¥11.304 billion VAT facility that matures on 31 August 2026.

The sponsor and arrangers also mitigated the so-called project-on-project risk by incorporating cross-default clauses on the transmission line project company, which also operates a storage battery and connects the wind complex to Hokkaido Electric's grid point.

Cross-default clauses were included in each loan agreement.

Total debt: ¥109 billion (¥97.662 billion term loan, ¥11.304 billion VAT facility)
Sponsor: Eurus Energy Holdings (100%)
MLAs: MUFG Bank, SMBC
Tenor: 25 years (term loan), 8 years (VAT facility)
Offtaker: Hokkaido Electric
Legal advisers: Nagashima Ohno & Tsunematsu (sponsor), Nishimura & Asahi (lenders)
Financial close date: 31 August 2018

Asia Pacific Gas-Fired Power

Java I

One of the first international open tenders to be held for IPPs, Java 1 is expected to pave the way for future combined cycle-gas turbine (CCGT) and floating storage regasification unit (FSRU) power plants both in Indonesia and across the region.

In June 2015, under pressure from foreign investors and lenders to conduct procurement more transparently, state-owned PLN invited tenders for Java 1. The project drew the market's attention because it was the first IPP in Indonesia not to have a government guarantee for the state utility's obligations.

After several delays, the tender was relaunched in mid-2016. The Marubeni, Pertamina and Sojitz consortium were named preferred bidder in late November 2016.

The roughly $1.3 billion financing of the 25-year BOOT is split between three tranches: $604 million provided by JBIC; some $400 million commercial debt provided by a syndicate of banks each providing a roughly $80 million ticket, and insured by NEXI; and around $300 million provided by the ADB.

Java 1 is expected to begin operations in mid-2021.

Total value: $1.8 billion
Total debt: $1.3 billion
Total equity: $500 million
SPVs: Jawa Satu Power (JSP), Jawa Satu Regas (JSR)
Sponsors: Pertamina, Marubeni, Sojitz, Mitsui OSK Lines
MLAs: Crédit Agricole, Mizuho Bank, MUFG Bank, OCBC Bank, Société Générale
DFIs: ADB, JBIC
Guarantor: NEXI
Tenor: 21 years
Pricing: 125bp above Libor (commercial debt)
Advisers: ING, Shearman & Sterling, Pöyry, EY, Allen & Overy, Marsh, Lummus, JLT, Jacobs, Mayer Brown

IJGlobal

Awards 2018

MENA

MENA Power

Sakaka Solar PV

MENA market participants have been waiting a long time for the renewable energy development to take off in Saudi Arabia.

The country has excellent wind and solar resource potential, large tracts of undeveloped land for projects, significant and growing power demand, and hugely credit worthy government-owned counterparties.

Back in 2013, the Saudi Arabian government set out plans to procure 23,900MW of renewable energy by 2020 and 54,000MW by 2032.

Yet until this year, the country had not financed a single renewable energy IPP. This despite its neighbouring Gulf States enjoying increasing success in procuring solar power plants. The relatively small emirate of Dubai, for example, has attracted record-breaking tariff bids for solar projects in a succession of ever-larger developments.

This inertia was not for a lack of trying. Saudi Arabia has made renewable energy a central pillar of its Vision 2030 economic plan. It has just taken the country a while to decide exactly how it was going to deliver on its targets

After many false starts, the government finally established the Renewable Energy Project Development Office (REPDO) in 2017 to manage the procurement process for utility-scale renewables projects.

REPDO's first round of projects included just one wind farm of 400MW – Dumat al Jandal – and one solar plant of 300MW – Sakaka.

Highly competitive

REPDO issued an RFQ for Sakaka in April 2017 and attracted a staggering 128 applications, which was testament to the bottled-up demand for solar in Saudi Arabia. The agency subsequently pre-qualified 27 companies and swiftly issued a preliminary RFP in July 2017.

At the beginning of October that year, it opened eight commercial and technical bids, with results that attracted headlines around the world.

A joint venture of Masdar and EDF had submitted a tariff offer in Saudi Riyals equivalent to $0.01786063 per kWh – the first time anywhere in the world a bid of under 2 dollar cents had been offered in a solar tender.

A consortium led by Saudi-based developer ACWA Power was in second place with a bid of $0.023417 per kWh, which was still lower than any bid seen in a solar tender before.

REPDO then shocked the market further by disqualifying the Masdar/EDF bid and only putting ACWA Power and third-placed Marubeni through to the final bid stage.

It subsequently picked the ACWA Power consortium as its preferred bidder in January 2018, and signed a 25-year PPA with it a month later.

The official reason for the disqualification was the use by Masdar and EDF of bifacial solar modules – a relatively new and untested technology. A high local content requirement also helped ACWA Power, as it undertakes its own O&M contracts.

Favouring local firm ACWA Power in this way raised some eyebrows, though the company has a prolific and unrivalled record of winning power tenders in the wider region in recent years.

Financing

ACWA Power initially thought it could reach financial close as soon as the end of February 2018. However, land issues surrounding the chosen six square kilometre site slowed progress. The financing was finally completed in November.

The project has a total cost of $308 million. The sponsors raised a $222 million term facility structured as a soft mini-perm and an additional $3 million standby facility to fund any potential cost overruns. Remaining costs have been funded by equity and pre-completion revenues.

Arab National Bank also provided an equity bridge loan.

ACWA Power has increasingly used soft mini-perms as a way of reducing financing costs for its projects. The debt facility for Sakaka is structured to be refinanced after 5.5 years, though it has a theoretical repayment schedule of 20-25 years.

Natixis was the sole underwriter of the senior debt, with the intention of syndicating its loan shortly after financial close. Pricing on the debt starts at 130bp and rises to 260bp over the life of the facility.

Setting precedents

As the first renewable energy IPP to be financed in Saudi Arabia, Sakaka is hugely significant. The country's latest target is to have at least 9.5GW of renewable energy capacity operational in the kingdom by 2023.

Sakaka has demonstrated that REPDO can attract record bids for its projects and deliver them to financial close in a very short timeframe.

The Saudi Arabian government will be especially pleased that this project, its first ever renewable energy IPP, broke the record for lowest solar tariff that was previously held by the Sweihan project located in Abu Dhabi.

Next for REPDO is the second round of its renewables programme, which consists of seven sites for solar and a combined generating capacity of 1,515MW. The tender process is ongoing and ACWA Power is again expected to be a very competitive bidder.

Finally, the Saudi Arabian renewable market is really starting to gain momentum.

Total value: $308 million
Debt: $225 million
Sponsors: ACWA Power (70%), Al Gihaz (30%)
MLA: Natixis
EBL provider: Arab National Bank
Tenor: 20-25 year soft mini-perm (with refinancing expected after 5.5 years)
Procurement Agency: REPDO
Legal advisers: DLA Piper, Hogan Lovells, Covington
Financial adviser: SMBC
Other advisers: Fichtner, AF Aries, INDECS, Deloitte

MENA Water

Salalah IWP

The ACWA Power-led sponsor consortium reached financial close on the Salalah independent water project (IWP) at a time when low oil prices were impacting the economic performance and balance of payments position of oil exporting Oman, causing a steady fall in the country's sovereign credit rating. However, Oman's well-established IWP sector ensured a mix of local and international lenders participating on the deal – and even convinced Siemens Bank to embark on its first primary transaction in the GCC region.

Oman Power and Water Procurement Company (OPWP) awarded the 25 million gallons per day (MIGD) seawater reverse osmosis desalination plant to a consortium of ACWA Power, Veolia and Dhofar International Development and Investment Holding Company (DIDIC) in January 2018, following a public tender process. The consortium was named preferred winner in December 2017, defeating rival bids from JGC with Bhawan Group and Dosan, and ACS Cobra with Tedagua.

A special purpose vehicle, Dhofar Desalination Company (DDC), will develop Salalah on a build, own and operate basis, and sell its entire potable water capacity to OPWP under a 20-year water purchase agreement (WPA).

The asset will help the Omani government meet growing demands for water in the Dhofar region, especially as contracts for older facilities approach expiration, and the WPA gives OPWP the option to call on the plant to increase water dispatch through temporary utilisation of redundant capacity to help the utility meet any shortfall in supply.

The Salalah IWP is expected to cost around OR60 million ($155.4 million).

Debt financing for the deal was sourced from three banks: Standard Chartered Bank, Bank Muscat and Siemens Bank. The financing mix included two tranches of US dollar-denominated debt (tranche A provided by Standard Chartered Bank and Siemens Bank, and tranche B provided by Bank Muscat), alongside a local currency tranche from Bank Muscat.

Total value: $155.4 million
Total debt: $121.17 million ($50 million international tranche A, $31 million international tranche B, $40.17 million local tranche)
Project company: Dhofar Desalination Company (DDC)
Sponsors: ACWA Power, Veolia Middle East, Dhofar International Development and Investment Holding Company (DIDIC)
MLAs: Standard Chartered Bank, Bank Muscat, Siemens Bank
Tenor: 22 years
Contractors: Fisia Italimpiant and Abeinsa (EPC), Veolia First National Water (O&M)
Advisers: PwC, Allen & Overy, Shearman & Sterling, BDO

MENA Refinancing

Al Dur Power & Water Company

The successful refinancing of the Al Dur independent water and power plant (IWPP) saw the sponsors replace the original debt financing signed in mid-2009 during the global financial crisis.

One of Bahrain's flagship power projects, Al Dur IWPP accounts for around one-third of the country's power and water production with a combined capacity of 1,243MW of power and 48 million gallons per day of water.

The Electricity and Water Authority (EWA) of Bahrain in 2008 awarded the right to develop, finance and operate the project to a consortium consisting of ENGIE and the Gulf Investment Corporation (GIC). Other shareholders in Al Dur Power & Water Company – including Social Insurance Organization, Capital Management House and Bunyah GCC Infrastructure Fund – joined in 2009.

Al Dur Power & Water Company benefits from a 25-year power and water purchase agreement signed in 2008 with EWA with its contractual obligations guaranteed by Bahrain's Ministry of Finance.

The IWPP reached full commercial operations in early 2012.

Al Dur achieved financial close in 2009 in the midst of the financial crisis with a total project cost of $2.2 billion.

The refinancing deal is a follow-on of an agreement to extend the original seven-year tenor of the initial debt, which had a maturity date of 29 December 2016.

The $1.31 billion deal featured a dual-tranche structure, and saw the borrower coordinating with over 20 counterparties (including new lenders, existing lenders, exiting lenders/ECAs and novation of interest rate swaps). The new debt comprises a $450 million term loan due 26 May 2028 and a total of $846 million Islamic facilities.

Total value: $1.31 billion ($450 million international debt, $846 million Islamic debt, $12.5 million company cash)
Sponsors: Engie (45%), Gulf Investment Corporation (25%), Capital Management House (15%), Social Insurance Organization (10%), Bunyah GCC Infrastructure Fund (5%)
Lenders: Ahli United Bank, Al Rajhi Bank, Agicorp, Arab Bank, Arab Banking Corporation, ANB, Banque Saudi Fransi. BNP Paribas, Crédit Agricole CIB, EDC, GIB, KFH, KfW IPEX-Bank, Mashreq Bank, MUFG Bank, NBK, NCB, Riyad Bank, Société Générale, Standard Chartered Bank
Tenor: $450 million term loan due 26 May 2028, $346.2 million Islamic facility due 26 May 2028, $300 million Islamic facility due 26 May 2032
Advisers: Standard Chartered Bank, Clifford Chance, Hassan Radhi & Associates, Latham & Watkins, Shearman & Sterling, WSP, JLT Group, BDO

MENA Waste

Sharjah Waste-to-Energy Company

The Sharjah Waste-to-Energy project in Abu Dhabi will be the first project financed waste-to-energy plant in the Gulf Cooperation Council (GCC). The 30MW facility, due to enter commercial operations in Q4 2020, is expected to divert some 300,000 tonnes of solid waste per year from landfill sites, and marks a significant step in the Sharjah emirate's 'zero waste-to-landfill' by 2020 target and the UAE's overall goal of diverting 75% of municipal solid waste (MSW) from landfills by 2021.

The incineration process will convert the waste into produced heat which is then used to drive an electrical turbine and feed into the Sharjah electricity grid. The flue gas of the waste incineration will be treated before being released into the atmosphere. The by-products of the waste incineration such as bottom ash are treated as well, temporarily stored at site and later collected.

Masdar and Bee'ah in 2017 set up a joint venture – Emirates Waste-to-Energy Company (EWEC) – to deliver the project. Abu Dhabi-based Masdar will be responsible for the financing, design, construction, operation and maintenance of the plant. Bee'ah, which operates the existing material recovery facility in Sharjah, will co-develop the project and supply the feedstock for the plant under a 25-year waste supply agreement (WSA).

The facility is further underpinned by a power purchase agreement (PPA) which will see the Sharjah Electricity and Water Authority purchase the power produced by the plant over a 25-year period.

The Sharjah Waste-to-Energy project brought together five international and regional lenders to provide a $164 million debt package on a soft mini-perm basis. The lending/hedging group comprised Abu Dhabi Commercial Bank (ADCB), Standard Chartered Bank, SMBC, Siemens Financial Services, Abu Dhabi Fund for Development (ADFD) and Commercial Bank of Dubai. The transaction also marks the first syndicated deal for the ADFD.

It is expected that the successful financing of the Sharjah Waste-to-Energy project will pave the way for more similar projects that are needed in the region.

Total value: $224.4 million
Total debt: $164 million
Total equity: $60.4 million
Sponsors: Masdar (50%), Bee'ah (50%)
Lenders: Standard Chartered, Abu Dhabi Commercial Bank (ADCB), Abu Dhabi Fund for Development (ADFD), Siemens Financial Services, SMBC
Guarantor: Islamic Corporation for the Insurance of Investment and Export Credit (ICIEC)
Advisers: Shearman & Sterling (legal adviser to sponsors), SMBC (financial adviser to sponsors), Clifford Chance (legal adviser to lenders), Atkins (technical adviser to lenders)

MENA Downstream Oil & Gas

Duqm Refinery Project

The Oman Oil Company (OOC) and Kuwait Petroleum International (KPI) teamed up to close on the first oil and gas project to be sponsored by a joint venture between two Middle Eastern government-owned oil companies – Duqm Refinery.

The $8.3 billion project is supported by a roughly $4.61 billion debt package bringing together 29 regional and international banks, along with three credit export agencies ECAs.

The senior debt facility boasts the largest Ijara tranche to date at $890 million provided by five regional banks, along with commercial loans and tranches covered by UKEF, CESCE and KEXIM. KEXIM also provided a direct facility.

Total value: $8.3 billion
Total debt: $4.61 billion
Total equity: $3.7 billion
Sponsors: Oman Oil Company (50%), Kuwait Petroleum International (50%)
Lenders: Ahli Bank Oman, Ahli United Bank, Arab Petroleum Investments Corporation, Bank Dhofar, Bank Muscat, Bank Sohar, BNP Paribas, Boubyan Bank, Commercial Bank of Kuwait, Crédit Agricole Group, Credit Suisse, Groupe BPCE, HSBC, ICBC, Intesa Sanpaolo, KfW, Korea Development Bank, Kuwait Finance House, MUFG Bank, National Bank of Kuwait, National Bank of Oman, Natixis, Qatar National Bank, Santander, SMBC, Société Générale, Standard Chartered Bank, UBI Banca, Warba Bank
ECAs: KEXIM, CESCE, UKEF
Tenor: 16 years (commercial), 16 years (Ijara) 17 years (CESCE cover), 17 years (KEXIM cover), 17 years (UKEF cover), 19 years (local)
Advisers: Ashurst, Allen & Overy, Latham & Watkins, Crédit Agricole, Peace Crowell, Greengate, Dentons, The International Counsel Bureau, Lee & Ko, Loyens & Loeff

MENA Upstream Oil & Gas

KIPIC Al Zour LNG

The South Korean consortium of EPC contractors – Hyundai Engineering Company, Hyundai Engineering & Construction, and Korea Gas Corporation – precluded the involvement of two export credit agencies guaranteeing well up to $1.3 billion of commercial debt for Kuwait Integrated Petroleum Industries Company's Al Zour LNG import project.

KEXIM and K-SURE agreed to provide cover for two tranches of $650 million debt provided by SMBC, Santander, ING Bank and BBVA, with eight Sharia-compliant banks contributing to the remaining KD390 million ($1.28 billion) in debt.

The LNG import regasification plant is designed to be able to input all types of liquefied natural gas – from lean to richer – allowing KIPIC's parent company Kuwait Petroleum Corporation access to feedstock from almost anywhere in the world.

The plant is due to include eight tanks with 225,500 cubic metres of gas storage capacity each, making it the largest LNG terminal in the world.

Total value: $3.673 billion
Total debt: $2.571 billion
Equity: $1.102 billion
Sponsor: Kuwait Integrated Petroleum Industries Company (KIPIC)
Bank lenders: Ahli United Bank, BBVA, Boubyan Bank, Commercial Bank of Kuwait, Gulf Bank, ING, Kuwait Finance House, Kuwait International Bank, National Bank of Kuwait, Santander, SMBC, Warba Bank
ECAs: KEXIM, K-SURE
Tenor: 13 years
EPC contractor: consortium of Hyundai Engineering Company, Hyundai Engineering & Construction, and Korea Gas Corporation
Advisers: SMBC, Clifford Chance, Al Tamimi, ASAR – Al Ruwayeh & Partners, Linklaters, Lee & Ko

MENA Airports

Queen Alia International Shareholder Restructuring

This deal involved a complex change in the shareholder group of Jordan's main international airport in capital city Amman.

A consortium of Meridiam, Groupe ADP, and ASMA Capital acquired a controlling 85.25% stake in Airport International Group, the SPV which operates the Queen Alia International Airport airport.

Groupe ADP was already a shareholder in the project and increased its stake, while Meridiam and ASMA Capital are new to the sponsor group.

Among the owners before the sale, only EDGO Investment Holdings has retained a stake.

Debt facilities attached to the project created additional complexity. In 2007 the original sponsor group signed on a $675 million project financing to fund a 25-year concession to expand, refurbish and operate the airport. The IFC and Islamic Development Bank arranged the debt.

Then in 2014 a second debt package was raised from a group of commercial banks to fund construction of a second phase of development to increase annual passenger traffic to 12 million.

Costs associated with the development work have increased and so the shareholder restructuring also saw Jordan's Ministry of Transport provide a loan to the project and Meridiam extend a shareholder loan.

Estimated acquisition value: $441 million
Buyers: Aeroports de Paris, Meridam Infrastructure Europe III, IDB Infrastructure Fund II
Sellers: Abu Dhabi Investment Company (38%), Noor Financial Investment Company (24%), EDGO Group (9.5%), Joannou & Paraskevaides (9.5%), J&P Avax (9.5%)
Advisers: Freshfields, Clifford Chance, Operis
Financial close date: 19 April 2018

MENA M&A

BHGE Acquisition of a 5% stake in ADNOC Drilling

This transaction demonstrates a growing willingness by state-owned entities in the Gulf region to invite investment from foreign companies in exchange for technical expertise.

Abu Dhabi National Oil Company (ADNOC) agreed to sell a 5% stake in its drilling and well construction business ADNOC Drilling Company to GE subsidiary Baker Hughes. The US oil services company paid $550 million for the stake, valuing ADNOC Drilling at $11 billion.

The deal will see ADNOC Drilling gain exclusive access to Baker Hughes' drilling services, technology and proprietary equipment as it looks to expand its operations.

ADNOC plans to grow its conventional drilling activity by 40% by 2025 and substantially ramp up its number of unconventional wells over the next decade. This deal is intended to help ANOC Drilling reduce its drilling times by 30% as early as the end of the year.

For Baker Hughes, the deal represents an opportunity to gain market share in the UAE, which has historically been monopolised by state-owned companies.

The deal is the first time ADNOC has brought in an international strategic partner to acquire a direct equity stake in one of its existing subsidiaries.

In December 2017, ADNOC completed an IPO of ADNOC Distribution, its fuel distribution business, with international investors taking a minority share of the 10% stake put up for sale.

Acquisition value: $550 million
Buyer: Baker Hughes
Seller: Abu Dhabi National Oil Company
Advisers: Citigroup, Moelis, King & Spalding, White & Case
Financial close date: 19 November 2018

MENA Mining & Metals

Emirate Steel Refinancing

Emirates Steel Industries, a fully-owned subsidiary of Senaat, is the only integrated steel plant in the UAE.

Senaat raised a $700 million bridge facility in 2008 to initially fund construction, and replaced this with a $1.1 billion long-term debt facility provided by a group of local banks in 2010.

This long-term debt was then refinanced in May 2014 with a new $1.3 billion eight-year facility provided by a mix of local and international banks. This deal featured a tranche of Islamic finance debt.

In 2018 the sponsor refinanced the debt again, this time for a short roughly three-year period, with $400 million of entirely Islamic finance debt. Sweden's export credit agency and a mix of local and international lenders participated in this latest deal.

The deal has significantly reduced financing costs compared to the 2014 finance, which was agreed in a more challenging time for local debt markets. It also includes a liquidity support agreement under which Senaat undertakes to support Emirates Steel under certain circumstances in relation to increased gas and/or electricity prices.

This extra security may prove vital, as in early 2019 Emirates Steel predicted a slowdown in regional construction for the year as well as rising iron ore prices.

Debt total: $400 million
Sponsor: Emirates Steel Industries
Lenders: Abu Dhabi Islamic Bank, BNP Paribas, Citibank, First Abu Dhabi Bank, MUFG Bank, Svensk Exportkredit, Union National Bank
Debt maturity: 2022
Advisers: Dentons, Linklaters

MENA Petrochemicals

Farabi Yanbu

Downstream oil and gas developments take a huge amount of investment. If sponsors of these developments fund them through project finance, they must demonstrate to lenders that they are reliable counterparties and that there is limited market competition.

In the MENA region, this typically translates into state-owned entities raising debt from international commercial banks and export credit agencies. Lenders are essentially taking sovereign risk, and competition is likely to be limited due to state backing.

The financing of the Farabi Yanbu petrochemicals complex in Saudi Arabia is an exception to the rule. Privately owned Farabi Petrochemicals Company turned to a group of local lenders to provide the entire SR2.15 billion ($573 million) debt for the project.

Farabi was established in 2002 and has operational production facilities at Jubail in the Eastern Province of Saudi Arabia, which manufacture petrochems products such as paraffin and benzene.

These new facilities in Yanbu will produce linear alkyl benzene, paraffin and derivative products.

The reliance on local commercial banks on the transaction demonstrates these institutions increasing sophistication and expertise with project finance transactions, particularly as the project is exposed to a significant degree of market risk.

Debt: SR2.15 billion (SR1.2 billion government loan, SR900 million Islamic loan)
Equity: SR1.25 billion
Sponsor: Farabi Petrochemicals Company
Lenders: Saudi Industrial Development Fund (SIDF), Banque Saudi Fransi, National Commercial Bank, Samba Financial, SABB
Tenor: 15 years
Legal advisers: Linklaters, Zamakchary & Co, White & Case, Law Firm of AlSalloum and AlToaimi

Winning companies

IJGlobal Awards 2018

Global
Page 64

Sponsor
Macquarie Capital

MLA
MUFG Bank

Financial Adviser
SMBC

Legal Adviser of the Year
Allen & Overy

Europe & Africa
Page 67

Sponsor
Ørsted

European MLA
Lloyds Banking Group

African MLA
Standard Chartered Bank

Fund Manager
Infracapital

Bond Arranger
Citigroup

Alternative Lender
Aviva Investors

Financial Adviser
Rothschild & Co

Legal Adviser
Ashurst

Technical Adviser
Arup

Model Auditor
BDO LLP

North America
Page 70

Sponsor
ACS Infrastructure

MLA
MUFG

Fund Manager
AMP Capital

Bond Arranger
Citigroup

Financial Adviser
Ernst & Young

Legal Adviser (Private Sector)
Norton Rose Fulbright

Legal Adviser (Public Sector)
Fasken

Corporate Trust Provider
Wilmington Trust

Technical Adviser
Arup

Insurance Adviser
INTECH Risk Management

Tax Adviser
KPMG

Model Auditor
BDO LLP

Latin America
Page 74

Sponsor
Actis

MLA
MUFG

Bond Arranger
SMBC

Innovation Award
Natixis

Financial Adviser
Astris Finance

Legal Adviser (Local)
Garrigues

Legal Adviser (International)
Clifford Chance

Asia Pacific
Page 77

Sponsor
Marubeni

MLA
Société Générale

DFI
Asian Development Bank

Bond Arranger
Citigroup

Financial Adviser
SMBC

Legal Adviser
Allen & Overy

MENA
Page 79

Sponsor
ACWA Power

MLA
Standard Chartered

DFI
IFC

Financial Adviser
SMBC

Legal Adviser
Allen & Overy

Technical Adviser
Mott MacDonald

Global Sponsor of the Year

Macquarie Capital

When it comes to sponsors on the international infrastructure scene, few hold a candle to Macquarie Capital as it drives major transactions around the globe – according to *IJGlobal's* independent panel of judges.

The judges identified a "strong diversified range of deals" as well as saluting Macquarie Capital for being "very prominent market-wide" and "winning deals in competitive environments".

Among the highlights from a successful year, Macquarie Capital led the consortium to financial close in March on the Grangegorman campus in Dublin. This 27-year, availability-based PPP was procured by Ireland's National Development Finance Agency, and is the largest education project ever to be procured in the country.

Macquarie Capital was active in the renewable energy space and in central Sweden closed financing on a 56-turbine, 235MW onshore wind farm.

This project is of significant scale as one of Europe's largest single-site onshore wind farms and increases Sweden's installed wind generation by around 3.5%. It is market-leading example of the transition of onshore renewables into an unsubsidised market place and involved what is believed to be one of the longest corporate wind energy PPAs globally – a 29-year, fixed-volume agreement with a Norsk Hydro subsidiary.

Staying with wind, but moving offshore, Macquarie Capital's role on Taiwan's pioneering 128MW Formosa 1 figured in winning it this award. It held 50% of the equity, working alongside Ørsted and Swancor Renewable, and set the scene with this pathfinder for the nation's renewables agenda.

In Australia, Macquarie Capital came in to take a 50% equity stake in the Murra Warra wind farm at financial close in March 2018. This deal was the first equity investment made by Macquarie in a construction-stage renewables project in Australia since 2011.

Alongside fellow sponsor RES, it raised A$320 million in debt for the 226MW wind farm which is underpinned by long-term corporate PPAs signed in December 2017. The four offtakers are Telstra, ANZ, Coca-Cola Amatil, and the University of Melbourne.

RES and Macquarie plan to add a further 55 turbines in the second phase, bringing total capacity to 429MW.

Macquarie Capital also played a pivotal role in Western Australia to deliver the 36MW Kwinana energy-from-waste plant – the first large-scale thermal EfW project to be financed in the country.

The Australian sponsor – Phoenix Energy – drew on Macquarie's experience in Europe to obtain a A$400 million, five-year debt package with competitive pricing, banked against a predominantly merchant offtake structure.

Global Financial Adviser of the Year

SMBC

The 2018 calendar year proved to be a busy one for the SMBC financial advisory team with strong performance around the world.

Frederic Droulers, London-based head of power and infrastructure advisory, says: "We are delighted to have received the Global FA Award from *IJGlobal* this year. This highlights our strong drive and long-term commitment to extensively support international sponsors on delivering project finance transactions and acquisitions worldwide."

Droulers adds: "We look forward to continue using our advisory activities to lead the way in project finance innovation across all sectors."

Laughlan Waterson, SMBC managing director and co-head of energy and natural resources, says: "This is testament to the continuous efforts by SMBC's teams around the world to provide market leading financial advice across a wide range of different infrastructure, energy and oil and gas projects, following our approach to offer a consistent service to an increasingly globalised marketplace. Of course, this would not have been possible without our clients, partners and stakeholders whom we thank for their support."

Having been so active across the international market it is difficult to single out leading transactions, but here follow some high-profile transactions the bank advised on.

In North America, SMBC was sole buy-side adviser on Transurban's acquisition of the A25 toll road and bridge project in Canada – acting for the buyer on its bid to acquire 100% of the equity interest from Macquarie Infrastructure Partners. It was recently mandated on an Ethan cracker project and an IPP in the US and is currently working on seven advisory mandates in the region.

It was also financial adviser on the Lima Airport expansion project in Peru as well as winning mandates for 4G-related project financing in Colombia. Last year, SMBC won two further FA mandates for a solar project in Mexico and the refi of a toll road in Peru.

Latin America was a key market for SMBC having established a dedicated project finance team in the country a few years ago.

One key deal saw it act as structuring bank on the Prime Energia transaction in which SMBC provided financial advisory services to the sponsors. The PF element was a $400 million, five-year loan to Prime Energia, a Chilean indirect subsidiary of Glenfarne Asset Company.

This was the first internationally-syndicated transaction with Chilean capacity payment and syndication was challenging, especially when the borrower earlier that year tried – and failed – to launch high-yield bond. Underwriters (SMBC and Natixis) reached out to more than 30 international PF banks to finally complete the syndication.

Global MLA of the Year

MUFG Bank

MUFG Bank was singled out for this accolade at this year's New York awards dinner, based on numerous factors that range from judges' experience of dealing with the lender through to the variety of transactions across international markets.

IJGlobal presented the award in New York and here interviews two US-based MUFG managing directors – Erik Codrington, who heads up the project finance team for the Americas, and Ralph Scholtz, who leads in Latin America.

When it comes to identifying the deals the bank takes greatest pride in, Codrington takes a deep breath and says: "It's a bit like asking which of your children you love most!"

However, when it comes to deal activity, there is no holding him back: "This last year we had a record year for project finance in the Americas, closing about 80 transactions across the firm – bank debt, capital markets and term loan B."

The largest and possibly most innovative deal that MUFG closed in 2018 was the $2.1 billion underwrite of Starwood Energy's acquisition of GE's project finance loan portfolio. The largest PF underwrite the bank has concluded in the sector, with the take-out expected to come from the CLO market.

"I think only MUFG could do this deal," says Codrington. "Because of the size of the required underwrite, and because we had to analyse the more than 50 loans in the GE portfolio. We were already in half the deals, but we have a big enough team to analyse the other half quickly."

Other stand-out deals include the fully underwritten acquisition of 8point3 Solar by Capital Dynamics; a strong market indicator as MUFG sees a marked uptick in M&A of project assets across the US, a significant driver for its business in 2018 and 2019.

Meanwhile in Europe, Open Fibre stands out as a lead transaction alongside Middle East deals like Al Dur in Bahrain and Oman's Duqm; while Formosa I offshore wind farm and Java 1 speak to the bank's strength in APAC, alongside Sydney Desal where it brought in a diverse group of Japanese institutions.

For LatAm, Scholtz is bullish seeing greatest opportunity in Brazil and Mexico (once the market settles down post-election), while Colombia and Peru are heading in the right direction: "We have a bank in Mexico and Brazil and we are looking at local currency solutions. We hope to find ways to use our local balance sheet to support what we do across borders."

MUFG is leveraging skills across the bank, for example, taking expertise from the UK on offshore wind to support deals as they emerge in fresh markets. This is a strategy that it has used to great effect – particularly in 2018.

On the back of a strong year, Codrington rounds it off nicely: "For clients that need heavy lifting, we want to be seen as the bank with big shoulders."

Global Legal Adviser of the Year

Allen & Overy

Given the level of competition and diversity of sectors covered at *IJGlobal*'s four independent judging sessions, it is impressive that one law firm – Allen & Overy – should dominate the market and lead the field by a comfortable margin.

However, as A&O partners Gareth Price and David Lee say, this is the culmination of a strategy they have been driving for a number of years, speaking to *IJGlobal* in the UK.

Price, A&O global head of projects and energy, says: "While some people see us as UK-heritage, we truly are a global firm. David and I have for a long time been positioning teams around a long-term view, driving our investment decisions around mega-trends that range from accelerating urbanisation to demographics, climate change and resource poverty/affluence, and shifts in economic power."

This sentiment is echoed by Lee, global head of infrastructure: "A strong local presence in delivering energy and infrastructure deals is vital. You're not going to win deals unless you invest in the best legal team that combines specialist local expertise with international project development and financing credibility."

And this strategy stood it in good stead in 2018, and the partners point to numerous deals – many award *IJGlobal* winners – that helped them on the way to winning this coveted prize.

Primary among these deals was A&O's involvement in the acquisition of John Laing Infrastructure Fund by Dalmore Capital and Equitix. The firm was also proud of having acted on GIP's 50% acquisition from Orsted of Hornsea One, the world's largest offshore wind farm. This deal was a serious contender for an award, but was pipped by SeaMade.

In the Middle East, the A&O partners single out Duqm in Oman where the firm advised the project company on all aspects of development and financing for the greenfield oil refinery. Meanwhile in Indonesia, the firm acted for a group of ECAs on Java 1, the first gas-to-power project in Asia.

However, the A&O partners were keen to point out that it is not only closed deals from 2018 that have them excited, identifying two ongoing transactions that they feel are particularly impactful.

A&O is advising the consortium of Lufthansa, JAL, KAL, Air France, Carlyle, Ullico and JLC Loop Capital on the redevelopment of JFK Airport in New York which will be one of the largest project finance deals in US history.

Meanwhile in Africa, it is acting for the lenders on the $5 billion mining project to be developed by Emirates Global Aluminium's subsidiary in Guinea, which will encompass a bauxite mining operation; a world class alumina refinery; and a range of associated infrastructure.

European and African Sponsor of the Year

Ørsted

No other sector in Europe has attracted so much capital for major greenfield developments as offshore wind in recent years, and no other sponsor has such a dominant position in that market.

Denmark-based Ørsted has taken the lead in global offshore wind thanks to its unique strategy of bidding for projects on balance sheet before selling half of a wind farm's equity and raising long-term debt against that divested stake.

This strategy reduces a project's financing costs and has allowed Ørsted to build up an enviable portfolio of offshore wind farms in the UK, the Netherlands, Germany, the US and Taiwan.

In 2018, Ørsted completed refinancings for two of its operational wind farms in the UK – the 573MW Race Bank project off the coast of Lincolnshire, and the 210MW Westermost Rough off the Holderness coast.

Both deals attracted significant interest from lenders, both commercial banks and institutional investors, underlining the sponsor's continuing bankability.

Ørsted's standout deal of 2018 however was the completion of the sale of its 50% stake in the in-development 1,200MW Hornsea 1 offshore wind farm to GIP for £4.46 billion ($5.8 billion), which reached financial close in November 2018. GIP raised £3.6 billion in debt for the acquisition in a multi-tranche project financing.

The deal was a first of a kind in many respects. It is the largest single-project financing ever for any new renewable energy development anywhere in the world. The debt is split between investment grade bonds, bank loans and a mezzanine debt facility provided by Danish pension fund PFA.

The debt package attracted more than 30 lenders, including 16 commercial banks and 14 institutional lenders, while Denmark's export credit agency EKF guaranteeing some tranches.

European MLA of the Year

Lloyds Banking Group

Lloyds had a hugely resurgent 2018, finishing 13th in *IJGlobal*'s year-end league tables for European MLAs. To put this in context, the previous year it had finished 32nd and had committed less than a third of the total lending it achieved in 2018.

It took the largest share of European lending since 2012 and the total accredited value of its loans, at just shy of $3 billion, was the highest it had achieved since 2008.

Our judges were not just impressed by the bank's increased activity. They also noted how it had played a major role in some of Europe's most significant deals last year.

Lloyds acted as agent and provided half of the acquisition bridge loan for Dalmore Capital and Equitix's £1.6 billion ($2.2 billion) acquisition of the John Laing Infrastructure Fund, a portfolio of 65 diverse PPP assets primarily located in the UK. Lloyds was well positioned to participate in the deal, being a lender to many of the underlying assets.

The bank was also sole structuring bank, joint bookrunner, fronting bank and MLA in the financing of the first ever 3rd party construction of a midstream pipeline – Antin Infrastructure Partners' investment in the Humber Gathering System. The subsea gas pipeline from Dana Petroleum and Premier Oil's Tolmouth gas field will deliver up to 8% of the UK's natural gas requirement from the southern North Sea once constructed.

Lloyds was also MLA and hedge provider on the financing package for Hornsea 1, the world's largest offshore wind farm. Its subsidiary Scottish Widows participated on the deal too as a fixed rate bond purchaser.

2018 also saw a reorganisation of the bank's infrastructure division. Lloyds promoted Guillaume Fleuti in March to lead a new combined infrastructure group, which includes origination, structuring and execution of transactions as well as ongoing client coverage.

African MLA of the Year

Standard Chartered Bank

Standard Chartered has long been one of the leading project finance banks around the world, and 2018 represented another year where the bank showed its global reach.

Each year our judges are hoping to see international lenders gets major transactions completed in sub-Saharan Africa, where the pace of development can be to painfully slow but where projects can have an outsized economic impact.

This year Standard Chartered stood ahead of the crowd having work on a number of impressive transactions in Africa.

An EDF-led consortium closed on a limited recourse financing for the €1.2 billion ($1.4 billion) Nachtigal hydropower plant in Cameroon. Standard Chartered was the local coordinator, intercreditor agent, offshore trustee, and offshore account bank for the deal, which was structured with a synthetic 21-year tenor to allow local lenders to participate long-term, while providing a natural hedge for the local currency offtake payments.

Standard Chartered also played a major role in refinancings undertaken by Africa-focused exploration and production company Kosmos. The bank acted as MLA for the refinancing of the company's revolving credit facilities and as MLA, underwriter, onshore accounts banks, and facility agent for the refinancing of the its reserve based lending facility and accordion.

In another significant deal during the year, the bank was an MLA on the $1.1 billion financing to part-fund the expansion of Indorama's Eleme petrochemicals plant in Port Harcourt, Nigeria. The expansion works include the construction of a 0.8 metric tonnes per annum (mtpa) ammonia plant, a 1.4 mtpa urea plant, an 11km gas pipeline spur and other associated structures. The expansion will double the fertiliser capacity of the complex to 2.8 mtpa.

The deal is highly strategic for Nigeria, due import substitution benefits and the generation of foreign currency revenues.

European and African Fund Manager of the Year

Infracapital

The judges highlighted Infracapital's impressively focussed approach to the mid-market, its breadth of activity, and its success in fundraising last year.

Infracapital completed fundraising for its Infracapital Partners III within 6 months of launch, at its hard cap of £1.85 billion, despite significant LP oversubscription. This disciplined approach is based on a firm strategy to focus only on the mid-market. The record speed of fundraising has been matched by deployment, with 20% 0f the fund committed within 6 months of final close.

Meanwhile, Infracapital Partners II reached the end of its investment period last year. It has been producing gross IRR of 23.3% and an 8.1% yield, demonstrating significant value in the mid-market space. The fund manager has also deployed most of its Greenfield Fund, raised in 2017.

Among its stand-out investments in 2018 was its acquisition of a controlling stake in Energetics, one of the UK's largest independent network owners that builds, owns and adopts last mile electricity and gas connections. It has built a network of over 225,000 installed connections, and has an orderbook of another 172,000 connections. It has a market share in Scotland and Northern England of 47%.

It also acquired rural area broadband business CCNST last year with the intention of expanding its existing network of 3,300km of fibre serving 60,000 premises in Bavaria, Germany.

Another significant deal was the injection of an additional £150 million into Bioenergy Infrastructure Group by Infracapital and its partners Helios Energy Investments and Aurium Capital Markets. Infracapital originally invested in the business, which operates a portfolio of 20 waste-to-energy projects in the UK, in October 2015. The proceeds of the new investment will be used to add further waste-to-energy assets to the portfolio.

European and African Bond Arranger of the Year

Citigroup

In a year when the bank completed innovative work in bond markets around the world, its deals in Europe stood out.

IJGlobal league tables show that Citigroup was an arranger on 16 infrastructure transactions in 2018 in the region, with a combined value of more than $24 billion. A handful of these deals were hugely significant.

It acted as co-financial advisor, co-placement agent, financing bank, sole ECA arranger and hedging bank to GIP for financing backing its acquisition of a 50% stake in the Hornsea 1 offshore wind farm in the UK.

The debt package featured a £1.3 billion private placement, including both CPI-linked and fixed-rate notes. It sat alongside a bank facility, export credit agency guaranteed debt, and a mezzanine tranche.

Citi brought in 13 UK and North American institutional investors for the notes, in what is the largest renewable energy financing ever. Quite some achievement for a greenfield project, and considering the debt was raised at the holdco level and against a partial ownership of the asset.

The bank also arranged the debut international bond issuance for energy utility EPIF, which has its primary operations in the Slovak Republic and Czech Republic. Citi priced a €750 million six-year Reg S senior unsecured bond at 1.659%, following a four-day roadshow across five European cities. This marketing activity was repaid by strong support from German investors, and comparatively tight pricing for an issuance from a corporate based in the Central and Eastern Europe region.

Another standout deal was the €180 million private placement raised by Terminal Investment Limited, which owns interests in 38 terminals in 24 countries across five continents. TIL exceeded its fundraising target, building off the success of previous debt raises.

European and African Alternative Lender of the Year

Aviva Investors

2018 will go down as a record-breaking year for Aviva Investor as it managed to deploy over £2 billion in total assets. It made most of its investment in the UK.

Our judges were impressed by the variety of the lending undertaken by Aviva. As well more traditional long-term fixed rate debt facilities, it also showed appetite for floating rate and sub-investment grade deals. It also embraced flexibility in structures, financing minority holdco deals and 100% holdco deals, employing deferred drawdowns and taking part in short-term financings.

Among its standout transactions was the refinancing of the 73MW Cory Riverside energy-from-waste plant in Bexley, UK. Aviva Investors was the cornerstone investor with a £185 million investment in a 20-year fixed rate fully amortising loan.

The refinancing facilitated the acquisition of the operational waste plant by Dalmore, Semperian, Fiera Infrastructure and Swiss Life in June 2018.

Another novel deal was the financing of an acquisition of a solar portfolio in the south-west of Spain by ContourGlobal. The portfolio consists of four CSP plants with a total generating capacity of 200MW.

Aviva's investment was split between three clients, including the first investment by our AIEID European Infrastructure Debt Fund. The financing is structured as a 19-year fully amortising facility backed by regulated revenues over the term of the debt.

The lender participated on some of the biggest deals of the year, including the financing of the 1,218MW Hornsea 1 offshore wind farm. GIP bought a 50% stake in what will be the world's largest offshore wind farm, backed by one of the largest project finance debt packages ever assembled for a renewables asset. Aviva Investors invested £400 million in fixed-rate and inflation-linked bonds.

European and African Financial Adviser of the Year

Rothschild & Co

Rothschild & Co had an excellent year in 2018, advising on more than 50 infrastructure-related transactions across a wide range of sectors and geographies.

Many of the largest transactions featured consultancy on both M&A and financing, perfectly matching its strategy to marry those advisory services in its offering to clients.

Among the many deals completed by Rothschild & Co last year, the £885 million refinancing of the Porterbrook rolling stock company (ROSCO) was the headline pure financing deal. It was sole adviser to Porterbrook on the refi of its existing term loan, revolving credit facilities, and junior debt with new drawn and undrawn bank facilities.

At a time when the ROSCO model is under pressure from new entrants to the market, the deal managed to reduce Porterbrook's debt margins by around 40% with pricing coming in under 100bp over Libor. The deal also replaced a legacy swap portfolio of both off-market and reverse swaps with a single new swap.

Rothschild advised in debt restructuring and subsequent sale of 3i Group's sale of a 65% stake in Scandlines ferry service between Germany and Denmark. The debt restructuring reframed the asset as critical infrastructure through a credit re-rating process and €1 billion refinancing which saw the business transition from a leveraged loan structure to a fully portable yielding infrastructure-style debt structure.

Another major refinancing and sale it advised on last year was that of Dunkerque LNG. It worked with Fluxys in its negotiations with co-owners EDF and Total who were selling their interests. It completed a €800 million refinancing of shareholder contributions and then assisted Fluxys on the establishment of a consortium that would ultimately win a controlling 60% stake in the asset.

European and African Legal Adviser of the Year

Ashurst

Ashurst has walked away with this coveted prize for 2018 thanks to a truly diverse mix of deals done during the year.

As well as advising on some of the most talked about transactions in Europe last year, the law firm also has a very strong Africa practice, and this blend put it above its rivals.

Big ticket deals for 2018 included advising the winning consortium on the acquisition of 100% of the Cory Riverside waste-to-energy project in the UK, acting for the EIB as it made one of its largest loans as part of the financing of the Trans-Adriatic Pipeline, and representing ConnectPlus on the refinancing of the M25 motorway in the UK.

Ashurst advised Banca IMI, UniCredit, BNP Paribas, Credit Agricole, ING, and Cassa Depositi e Prestiti on the €1 billion ($1.2 billion) refinancing of a 400MW portfolio of solar PV assets in Italy owned by EF Solare.

The deal was the largest ever refi of Italian solar assets, and featured a novel credit line which will allow the sponsor to finance new plants for which banks have not yet completed due diligence.

Another major transaction for the law firm last year was the Wales and Borders rail franchise, the largest contract to ever be awarded by the Welsh Authority of the UK.

Ashurst advised KeolisAmey which will act as operator and development partner under the franchise and provide infrastructure manager services in connection to integrating the metro system on the Core Valley Lines around Cardiff.

In Africa the firm advised Newcrest Mining on the sale of a 89.89% stake in the Bonikro gold mine in the Ivory Coast to F&M Gold Resources and Africa Finance Corporation for $81 million.

European and African Technical Adviser of the Year

Arup

The breadth of work completed by Arup across the region last year was truly impressive. Its deals that reached financial close were spread across 13 countries in Europe and Africa, representing a cross section of market leading deals.

The type of work Arup conducts is broad too. Its roles include developing a business case for greenfield projects, environmental and technical evaluation, buyside transaction advice, vendor due diligence, lenders technical advisory, post transaction services, equity M&A advisory, procurement advice, financial modelling, valuation, debt structuring, re-financing and advising government authorities.

Among its standout deals was its buy-side technical due diligence service on AXA Investment Managers' successful acquisition of Agility Train West, which will finance, own, maintain and provide the Great Western main line train operator with 57 trains as part of phase one of the InterCity Express Programme.

Arup's provided a technical review of Hitachi's vehicle design, manufacture, commissioning of the trains, comprehensive review of its asset management and maintenance procedures. Arup's review also considered the potential impact of future technology changes (i.e. hydrogen or battery powered trains) on this project, while considering barriers to re-leasing.

Arup also performed a full contractual review, considering the unusual structure, and analysed adequacy of Hitachi's train availability and reliability payments. Arup tested the complex payment mechanism provisions through several scenarios to understand the risk maintained by the Agility Trains.

In the energy sector, Arup provided both vendor technical due diligence services and in-house commercial due diligence during the sale by GSIP and 3i of a majority stake in Finnish electricity distribution business Elenia.

European and African Model Auditor of the Year

BDO LLP

In 2018 BDO LLP further consolidated its position as the leading model auditor across the world, topping *IJGlobal*'s year-end league tables with more than 30% of the overall market.

In Europe and Africa, its work covered more than 20 bids and financial close transactions in transport, social infrastructure and renewable energy sectors. Its deals spanned from district heating in Finland to solar power in Mali.

Notable deals included Haren Prison in Belgium in which BDO supported sponsors Macquarie, FCC Construction and Denys NV. The project was awarded in 2013 but only reached financial close in 2018 due to political opposition and Eurostat scrutiny. When approval was finally forthcoming, financial close was achieved in an impressively tight timetable.

Another big deal was the A16 Rotterdam PPP in the Netherlands. BDO advised the sponsor consortium on this 25-year design, build, finance and maintain concession which will connect the A13 and A20.

The project's financing was very innovative, incorporating a shareholder bridge facility, three equity bridge facilities, two milestone bridge facilities, three term loan facilities, two construction bridge facilities, a post-construction facility and four debt service facilities, totalling €930 million. The financial model had to undergo significant structural change during the bid stage after a financing offer from the EIB was declined.

BDO LLP also provided model assurance services to the project company for the 875MW Triton Knoll offshore wind farm in the UK. The project financing featured 15 international commercial banks for a debt package which totalled more than £2 billion. Triton Knoll will be one of the largest offshore wind projects in the world once it is constructed.

North American Sponsor of the Year

ACS Infrastructure

To reach financial close on one multi-billion dollar infrastructure project in North America during a year is impressive, to be the sponsor of three just looks greedy.

By any measurement, ACS had an outstanding 2018, bringing Gordie Howe International Bridge, the Automated People Mover (APM) at Los Angeles International Airport, and Finch West Light Rail Transit all to close.

In addition, ACS structured a highly complex refinancing on one of the largest P3 projects in Canada (Autoroute 30), is successfully transitioning Ohio's first P3 and largest highway construction project ever (Portsmouth Bypass) into operations, has seven P3 projects in tender (three in proposal stage, four in qualifications) and structured six DBF transactions through its role as financial adviser to its construction affiliates.

Gordie Howe involves the construction of a new six-lane, 2.5km cable-stayed bridge between Windsor in Canada and Detroit in the US. The bi-national nature of the project created complexities related to foreign exchange, tax structure and cross-border regulations. The bridge required a capital investment of roughly C$3.8 billion.

ACS was also lead sponsor on the $2.5 billion APM project, which was funded through a debt package that combined short-term bank debt with private activity bonds in an unusual hybrid structure for the US market. The deal also faced complexity in the bid phase, as the introduction of the Tax Cuts and Jobs Act 2017 mid-process required changes to committed proposals.

Finch West LRT meanwhile was one of the largest private financings of a P3 in Canada. ACS and its co-sponsors Aecon and CRH Canada Group reached financial close on the project a mere 26 days after being confirmed as preferred bidder. The debt was split between 20-year notes, 35-year notes, a six-year credit facility, and a small mezzanine tranche.

North American MLA of the Year

MUFG

Being dominant in the year-end league tables is no guarantee of success in the awards, but it does help.

MUFG lent $2 billion more than its closest competitor in North America in 2018, taking close to an 8% share of the MLA market. Its 68 completed deals compares to fellow Japanese banking giant SMBC which managed to lend on 'only' 39 financial close transactions.

The variety and profile of the deals the bank worked on also gave them the advantage last year. As one of our judges summarised: "MUFG acted as MLA for very large, complex and innovative deals in 2018 that included diverse kinds of asset classes."

One of the bank's headline deals from last year was the $2.1 billion acquisition by Starwood Property Trust of GE's project loan portfolio and project finance business. MUFG acted as sole underwriter, coordinating lead arranger, administrative agent, collateral agent, and depositary bank for the buyer.

The portfolio comprises 51 projects located in the US, Mexico, Europe, Canada, Qatar, UAE, and Australia, and includes gas-fired, wind, solar, LNG, pipeline, coal, petrochemical, and waste-to-energy projects.

The transaction required funding in five different currencies, a delayed-draw term loan facility to fund eight projects under construction, and a revolving credit facility to provide project level letter of credit.

In another major deal, MUFG acted as coordinating lead arranger, documentation agent and joint lead arranger, joint bookrunner, admin agent and intercreditor agent for a special purpose vehicle established by Freeport LNG Development. The facility was used for the three-train natural gas liquefaction and export facility on the site of FLNG's existing liquefied natural gas receiving and regasification facility on Quintana Island, near Freeport, Texas.

North American Fund Manager of the Year

AMP Capital

The Sydney-based fund manager had a successful year on all fronts last year. It recorded achievements in fundraising, asset management and deployment of capital, with North America the location for many of these successes.

AMP Capital Infrastructure Debt Fund III, an unlisted fund targeting assets in OECD countries and a 10% IRR, reached final close in late 2017 and closed on two major US deals in 2018.

The first was a $500 million co-investment alongside CDPQ to Tillman Infrastructure backing its rollout of new telecoms towers in the US. AMP's contribution was $200 million and there is an option to double the total investment depending on Tillman's future growth needs.

Towards the end of the year, the debt fund also lent $190 million to Maryland-based core infrastructure company Synagro to refinance its outstanding term loan B.

On the equity side, AMP Capital Global Infrastructure Fund II was in active fundraising in 2018, reaching first close in August. The fund also made deployments in two US assets during the year.

It formed a 50:50 JV with Invenergy to own and operate its portfolio of natural gas-fired generation assets across the America. The portfolio includes seven operational plant in the US and Canada with a combined capacity of 2,680MW.

Alongside the equity acquisition, Invenergy and AMP Capital closed a $350 million term loan B and $65 million LC facility that replaced an existing term loan B/C while including an additional operating facility to the new term loan B collateral package.

AMP also signed on the acquisition of 100% of Everstream, a regional fibre network service provider operating in the US Midwest. The deal was reported to have a cash consideration price of over $200 million. Everstream's network consists of 10,300+ route miles of fibre.

North American Bond Arranger of the Year

Citigroup

Citigroup topped *IJGlobal*'s bond arranger year-end league table for 2018 in the highly competitive North American market. It completed 44 transactions that demonstrated the breadth of its work.

The bank led bonds for airports and related assets, roads, renewables (including portfolios), assets in the energy space, and other non-conventional assets such as weigh station bypass systems.

In addition, outside of senior secured bonds at the asset level, Citi structured and executed bonds entailing minority or HoldCo risk (the Clover deal for example), as well as securitization (sPower 2).

For Clover, Cordelio Power closed C$678 million and $149 million of senior secured notes in Canada and the US, respectively, to refinance bridge loans used to fund the acquisition of 49% of Enbridge's interest in select renewable assets in North America.

The notes were secured by a first priority security interest in the membership interests of the issuers and all of their assets (including equity interests in the JV partnership). The transactions were marketed simultaneously to both Canadian and U.S. investors and issued in two currencies, and the deals were 3x oversubscribed.

In September Citi was one of the arrangers of the $498.7 million back-leverage notes secured by the class B membership interests in sPower's 652MW portfolio of 16 operating, utility-scale solar projects.

The notes leverage cashflows through maturity of all PPAs, plus post-PPA cashflows for several of the projects (representing less than 10% of debt sizing cash flows), and a balloon sized to contracted and some post-PPA cashflows beyond maturity of the notes.

North American Financial Adviser of the Year

Ernst & Young

Our judges commented that 2018 was a huge year for EY. It was financial adviser on several landmark transactions to reach financial close, in several instances with clients undertaking their very first P3s in the North American market.

It also won mandates to advise on nearly $50 billion of new projects. These include some of the world's largest P3s (Gateway, Maryland Capitol Beltway, LA Metro), whole programmes like Georgia DOT's and Newfoundland, and it also worked on advance multiple healthcare and transit projects across Canada (Edmonton, Surrey, RER, STM Blue Line, VIA HFR).

EY advised Los Angeles World Airports (LAWA), on its ambitious Landside Access Modernization Program (LAMP) for what is the busiest origin and destination airport in the world and a future Olympic destination. EY acted as a commercial and financial adviser on the P3 procurements for the $2.8 billion Automated People Mover (APM) and $1.3 billion Consolidated Rent-A-Car (ConRAC) facility.

Another major deal was the project to deliver a new automated fare collection system in Boston, for which EY acted as commercial and financial adviser to Massachusetts Bay Transportation Authority. This was the first P3 project for the delivery of a new "smart ticketing" solution in the US and will allow MBTA customers to use their phones and contactless credit cards to access all of the MBTA's transportation system (subway, rail, bus, ferry).

In Canada, EY advised on the procurement and financing of a $1.2 billion, new 720,000 square foot healthcare facility in Ontario. EY undertook transaction structuring, procurement process development, payment mechanism, proposal evaluation, value-for-money analysis, risk assessment, public sector comparator and shadow bid model construction, and financial advisory.

North American Legal Adviser of the Year (Private Sector)

Norton Rose Fulbright

It was not just the sheer volume of deals completed by Norton Rose Fulbright in North America last year that caught our judges' attention, though 28 financial close transactions recorded in *IJGlobal*'s year-end league tables is impressive.

Instead, the judges praised the variety of sectors and asset classes that the firm advised across last year. One judge was impressed by how in the P3 space the firm had advised on four major deals to close in 2018, which had a combined value of more than $5 billion.

Norton Rose Fulbright advised CDPQ Infra in its dual role of sponsor and authority on the automated light rail tansit (LRT) project in the Greater Montreal Region, which will deliver a 67km of track and 26 stations.

Another significant transport transaction was the Finch West LRT in Toronto, which has a total contract value of C$2.5 billion and involves the construction of a new 11km rail route. Norton Rose Fulbright advised procurement agencies Infrastructure Ontario and Metrolinx on the project.

Outside of P3, the firm represented Longroad Energy Partners, as sponsor, on the construction and back-levered term debt and tax equity financing of the first merchant solar project in the US – the 313MW Phoebe project in West Texas. The deal is hugely significant as some wind farms have been financed on a merchant basis over the last few years, but no one had managed to finance a solar project on that basis until this project.

The firm also advised Brookfield Infrastructure on its acquisition of Enbridge's Canadian natural gas gathering and processing business in the Montney, Peace River Arch, Horn River and Liard basins in British Columbia and Alberta for C$4.31 billion. This is widely considered the most significant midstream deal in Canada in 2018.

North American Legal Adviser of the Year (Public Sector)

Fasken

Canadian law firm Fasken has built up an enviable record advising on P3s and is particularly well-known for its public sector advisory work.

Fasken was been involved in some of the highest profile and largest projects not only in Canada, but in North America for 2018. These included the REM project in Montreal, the Trans Mountain Pipeline, the Gordie Howe Bridge, and the A25 and Waneta Dam transactions.

Fasken acted for the Government of Canada and the Windsor Detroit Bridge Authority on the Gordie Howe International Bridge Project. It was involved with all aspects of the deal from the outset including drafting all documentation, negotiations with bidders, liaising with all levels of government in both Canada and the US.

The project is the first major new border crossing between the US and Canada in decades and will be the largest port of entry and border crossing between the countries. It was procured and paid for solely by the Government of Canada. Canada, Michigan and the US federal governments worked together to accomplish the transaction as mandated by an historic crossing agreement signed by Canada and Michigan and a Presidential Permit.

In another major 2018 deal, Fasken acted for the Agence Régionale de Transport Métropolitain, the planning agency for transit in Montréal, on the Réseau express métropolitain (REM) project.

Once completed, the REM will be one of the largest automated transportation system in the world after Singapore, Dubai and Vancouver. It is also the largest piece of public transportation infrastructure in Canada since the Montréal metro, inaugurated in 1966.

Valued at $6.3 billion, the REM project is also significant as it was the first infrastructure project in Canada to receive funding from the newly-formed Canada Infrastructure Bank.

North American Corporate Trust Provider of the Year

Wilmington Trust

Corporate trust providers play a vital yet often overlooked role in the successful financing of major infrastructure projects.

Wilmington Trust was involved in more the 60 transactions in 2018 that ranged from as small as $20 million to as large as $1.5 billion, covering a wide variety of sectors. In terms of types of deal, it worked on everything from vanilla bilateral loans to holdco back-leveraged financings.

In the oil and gas sector, Wilmington was noteholder representative, collateral agent, depository agent and escrow agent on a deal which saw AMP Capital and Blackstone participate in a $1.5 billion financing for Cheniere's holding company interests it has in the multiple LNG facilities in North America.

The firm's standout transaction in the power sector was the roughly $260 million financing of a high-voltage transmission line in Texas. OMERS and GIC are sponsors of Texas Transmission Finco, a minority member in Texas utility Oncor Electric Delievery Company. Morgan Stanley arranged a three-tranche debt package for the borrower that featured Prudential, RBC and EDC as lenders. Wilimington acted as intercreditor agent, collateral agent, and depositary agent.

In the funds space, Wilmington served as administrative agent, collateral agent, and depositary agent on a $175 million equity bridge loan supporting Capital Dynamic's latest clean energy fund. Nomura and Commonwealth Australia Bank were lenders on the deal.

The Clean Energy and Infrastructure VII fund reached final close at $1.2 billion in August 2018, and it has already started deploying capital. Wilmington has taken similar roles on non-recourse financings connected to the fund, including the acquisition of a stake in the 121MW Springbok 3 solar plant in California.

North American Technical Adviser of the Year

Arup

For a firm like Arup that has such a global footprint, being active on multiple major projects all at the same time is par for the course. Yet 2018 proved an especially busy year, with the firm working on more than 40 ongoing transactions, many of which it helped to bring to financial close.

It has built off previous success on projects such as Long Beach Civic Centre to win mandates advising public sector clients such as the City of Napa, the City of Los Angeles and City of Denver.

A phrase repeated during the judging session for this category was that Arup is "a market leader", and a couple of its major projects from 2018 demonstrate why.

Arup provided due diligence advisory services to OMERS Infrastructure for the acquisition of a shareholding in integrated utility company Puget Sound Energy (PSE). PSE is the largest integrated electric and natural gas utility in Northwest US and supplies electricity and gas to over 1 million customers.

In a complex and highly competitive sale process, Arup worked closely with the advisory team to ensure an integrated view of the valuation inputs and risk profile for the transaction, providing assurance in advance of the investment committee stages.

Another major energy transaction for Arup last year was the acquisition of a 49% stake in the Maurepas pipeline in Louisiana, by Alinda Capital Partners from the pipeline operator SemGroup. The 100 mile pipeline serves refineries in the Gulf Coast region, and poses environmental challenges given that it runs through 'high consequence areas' with several waterway crossings.

Arup advised Alinda, helping to develop a bottom-up assessment of the long-term capex and opex requirements for the pipelines, based on analysis of the construction history, pipeline integrity reports and expected maintenance activities.

North American Insurance Adviser of the Year

INTECH Risk Management

INTECH holds a unique position in the market, operating as an independent insurance and risk management consulting company that has built up a strong reputation in the energy and infrastructure market.

During 2018 it worked on transactions spanning the power sector, P3s, and other types of project finance and M&A deals. It is active in both North America and Latin America, but its most impressive transactions from last year were located in the former. As well as being involved in headline deals like Finch West LRT and the MBTA automated fare collection system, the firm had to overcome unique challenges on some other deals.

INTECH worked as lenders' insurance adviser on the automated people mover project at Los Angeles International airport. The authority agreed to take on the earthquake and terrorism risks on the deal, which traditionally are insurable risks passed down to bidding teams. This alleviated cost concerns for these two risks especially in consideration that both are considered high hazard territories being an airport and California.

However, the proposed authority risk allocation did not include typical insurance provided coverage for project delay and loss of revenue risks related to those events, and the contractual relief contained the typical fault based carve-outs to such relief that do not typically exist on insurance policies. As such, the insurance programme had to dove-tail with gaps in coverage in the authority provided relief to provide adequate protection.

INTECH also worked as lenders insurance adviser on the Gordie Howe Bridge deal, which required an innovative approach to insurance due to the cross border nature of the project along with the non-traditional insurance placement approach for P3 projects in both the US and in Canada.

North American Tax Adviser of the Year

KPMG

KPMG's coverage of infrastructure projects in North America is now comprehensive; having built a team in the region that has expertise in every corner of the market.

During 2018, it performed the role of tax adviser, essential to the ultimate success of any project, on 20 separate infrastructure transactions in North America that reached financial close.

Notable deals include Antin Infrastructure Partners' acquisition of 100% of the equity interest in US fibre services company FirstLight from private equity firm Oak Hill Capital Partners. KPMG acted as tax adviser to Antin, providing a full set of tax advisory services in relation to the acquisition, including tax due diligence, tax structuring and tax modelling assistance.

Through its modelling work it identified the cash tax impact associated with key tax items relevant to the deal (including opportunities arising from US tax reform); identified an optimal tax structure; and undertook diligence to identify any historical tax issues that would adversely affect deal value.

It was also tax adviser to Transurban Group on its acquisition of 100% of equity in the A25 in Canada from Macquarie Infrastructure Partners. The A25 is a 7.2-km toll road and bridge in Montreal North, which opened in May 2011 and is one of only two toll roads in the entire province of Quebec.

Another major acquisition for KPMG in 2018 was the deal that saw IFM Investors and British Columbia Investment Management agree to acquire a 37.5% stake and 25% stake, respectively, in Global Container Terminals (GCT) from Ontario Teachers' Pension Plan. GCT, headquarter in Vancouver, operates four marine container terminals in the US and in Canada. KPMG was tax adviser to IMF Investors throughout the entire acquisition process.

North American Model Auditor of the Year

BDO LLP

A buoyant P3 market in North America was good news for BDO LLP last year, as it won work on 20 deals either at bid stage or as they reached financial close.

The firm's continuing ability to provide comfort and required risk mitigation to sponsors and financial investors on major infrastructure projects is reflected in *IJGlobal*'s year-end league tables for 2018, which showed it in 1st position for model auditors in terms of both transaction count and total value of deals.

One of the firm's major deals from last year was the Gordie Howe International Bridge. BDO LLP supported the winning consortium on the project, which entails the construction of one of the world's longest bridges, connecting Canada and the US.

BDO LLP also supported the winning bidder on the Consolidated Rental Car (ConRAC) project at Los Angeles International airport – the first ever P3 for a ConRAC service in the US. The new facility will consolidate the operations of rental car agencies at LAX, currently spread across 23 separate properties. The facility will comprise almost six million square feet and be the largest ConRAC facility ever built – providing over 18,000 parking spaces and 20 rental car facilities.

The firm also had a successful year in the energy sector. BDO LLP supported Axium Infrastructure in its acquisition, with ManuLife, of a 35% stake in Northwestern Hydro, a 303MW portfolio in British Columbia, from Alta Gas. It also supported the subsequent refinancing of the short-term bridging facility with a C$650 million private placement bond.

The firm provided an initial review of the acquisition financial model, which was then rolled forward to the bond financing in August 2018. BDO LLP worked with the support of its international network to provide a review of the model's tax treatments in conjunction with a BDO International member firm in Vancouver.

Latin American Sponsor of the Year

Actis

Actis has established itself as one of the world's leading emerging markets investors. Its activity spans private equity, energy, infrastructure and real state, offering a multi-asset strategy. Its portfolio in the energy sector includes subsidiaries Aela Energia, Atlantic, Atlas, Cerro de Hula, Echo Energia, and Zuma Energia.

Actis has committed more than $3 billion in investments in Latin America to date, and in 2018 it was involved in more than a dozen transactions.

The company's largest transaction of 2018 was the $1.256 billion acquisition of Intergen's Mexican assets. In fact, it was the largest acquisition ever completed by Actis. The asset will be held in its Actis Energy 4 fund.

The portfolio consists of six combined-cycle gas turbine plants with a combined 2.2GW capacity, one 155MW wind farm (co-owned with IEnova), three natural gas compression stations, and a 65km gas pipeline. The sponsor raised $860 million in acquisition debt through bonds that mature in 2035 and have a coupon of 6.375%.

Actis' Brazilian subsidiary Atlantic Energias Renovaveis closed in 2018 an innovative financing for its 207MW Santa Vitoria do Palmar wind complex located in Rio Grande do Sul.

IDB Invest provided a total credit guarantee greater than the total value of the debentures issued to fund the project. The measure improved the credit rating of the papers to a grade better than the Brazilian sovereign rating, leading the bonds to be five times oversubscribed and to close at the lowest range of interest rates.

Atlantic Energias Renovaveis also closed a $120 million refinancing of the 50MW El Naranjal and 16MW Del Litoral solar PV plants in Uruguay in June 2018. The financing consisted of a 24-year full amortising senior secured facility with AllianzGI as the anchor investor, and a smaller subordinated debt package.

Latin American MLA of the Year

MUFG

It was a clean sweep for MUFG in the Americas this year, with the Japanese bank winning both the North American and Latin American MLA awards.

With a team of 70 professionals based in New York and Los Angeles as the backbone of their Americas offering, the bank is a formidable force in the market.

Among its most impressive deals in 2018 was the financing supporting the construction and operation of a seawater desalination plant and associated facilities at the Minera Spence copper mine in Chile.

MUFG acted as coordinating lead arranger, financial adviser and hedge coordinator for sponsor Caitan, a special purpose vehicle established by Mitsui & Co and Técnicas de Desalinización de Aguas, on the $472 million term loan and $46 million letter of credit facility raised for the project.

One of the interesting features of the deal is that the project has entered into a construction plus 20-year BOOT agreement with the owner of the mine, which includes robust termination provisions that trigger a termination payment sufficient to cover all the outstanding debt.

Another significant deal was the financing of a 71MW PV solar project located in Los Rodriguez, San Miguel de Allende in the state of Guanajuato, Mexico.

The project was awarded a 20-year power purchase agreement by the Mexican Federal Electricity Agency, Centro Nacional de Control de Energia, for the Clean Energy Certificates and 15-year PPA for energy and capacity in one of the country's most competitive renewable energy tenders yet.

MUFG acted as joint lead arranger, senior lender, administrative agent, collateral agent and VAT lender for sponsor X-Elio Energy.

Latin American Bond Arranger of the Year

SMBC

Leveraging off the bank's established market presence in Latin American project finance, SMBC and SMBC Nikko have integrated their bank and securities platform to provide a comprehensive financial solution to its infrastructure finance customers.

As a result, SMBC Nikko has been leading on project bond issuances both public and private across Latin America, in many cases as an active bookrunner.

EVM II is an 850MW in-development, combined-cycle gas turbine power plant located 60km northeast of Mexico City that is due to achieve commercial operations in June 2020. In August, sponsors EVM Tenedora and GE Energy Financial Services placed $469 million of senior secured private placement notes, with SMBC Nikko acting as lead agent.

This landmark transaction is the largest private placement for a power project ever closed in Latin America. The notes provided an efficient financing for a greenfield project through a hybrid structure that also included a term loan A tranche, LC facilities and a local VAT facility. The deal was evidence of growing appetite in the US private placement market for Latin American project debt.

Another landmark deal for SMBC last year was also in Mexico. When Actis acquired InterGen's operating assets and corporate platform in Mexico in April 2018, SMBC Nikko, BNP Paribas, JP Morgan, Citi and Scotia coordinated a 144A/Reg S offering of $860 million senior secured notes rated Baa3/BBB to part-finance the deal.

The issuer originally planned to fund the deal with a three-year term loan provided by the underwriters that would have been taken out by a bond after the acquisition. Instead, the issuer managed to find the way to issue the bond, purchase the assets from InterGen and collateralize simultaneously.

Latin American Innovation Award

Natixis

Our judges specially requested this next award, in acknowledgement of a truly outstanding year for Natixis in Latin America.

Despite having a relatively small team in the region compared to some of its rivals, the French bank punched well above its weight to close on 11 transactions in 2018.

This award is not in connection to volume of work completed by the bank however, but instead for the innovation it has facilitated in the market.

There is no better example of this than the $175 million 29-year hybrid private placement and fixed rate loan supporting the Cajamarca Transmission Line in Peru. Natixis was sole placement agent, sole rating adviser and bookrunner on the notes, and administrative agent of the loan. This was the first ever hybrid loan and private placement deal in Latin America.

Natixis privately placed $100 million to three US insurance companies, with the notes rated BBB-, and was sole lender on the loan. This dual placement strategy allowed the sponsor to tap two pockets of liquidity simultaneously at attractive terms.

Another standout deal for Natixis in 2018 was its role lending on the $758 million debt package supporting the development of the 210MW Cerro Dominador CSP and PV project in Chile's Atacama Desert. Natixis was a lender on the main term loan for the project, and the sole provider of its debt service reserve facility.

The deal was difficult to get to financial close not just because of the perceived risks and additional costs associated with CSP technology, but also because of original equity sponsor Abengoa having to sell its share in the project mid-development due to filing for Chapter 11 and Chapter 15 bankruptcy protection.

Latin American Financial Adviser of the Year

Astris Finance

Astris, an investment bank solely focused on raising financing for energy and infrastructure projects, has now been active in Latin America for just shy of 20 years.

It built on all those years of experience to achieve strong results in 2018, with six deals closed across the region representing more than $1.8 billion in debt raised.

The most challenging of the Latin America deals completed by Astris in 2018 was the 210MW dual PV and CSP Cerro Dominador solar project in Chile.

It is the first CSP project in Latin America, amongst the largest CSP projects in the world, and by far a world record in terms of storage capacity with 17.5 hours of storage through molten salts. Astris raised some $758 million of senior debt on behalf of private equity fund EIG, who took over the project from Abengoa, its initial developer/contractor.

Challenges included the sheer size of the project, the fact CSP of this size is relatively non-proven technology, the equity sale by Abengoa that warranted structuring a complex co-EPC and co-O&M structure with Acciona, underpinned by complex arrangements with respect to the IP related to certain proprietary components of the project. All this and the testing dynamics of the Chilean market with respect to spot prices and DistCo PPA demand.

Astris also advised on the financing of two Mexican road PPPs during the year. The first is the Pirámides – Tulancingo – Pachuca highway conservation project, a 183km road between the states of Mexico and Hidalgo sponsored by a consortium led by Sacyr. The second is the 487km Arriaga-Tapachula highway in the state of Chiapas, which is being developed by a group of local sponsors. These deals demonstrate how established Astris now is in the Mexican market.

Latin American Legal Adviser of the Year (Local)

Garrigues

This Chilean law firm had another strong year in 2018, advising on major transactions both in project financing and restructuring.

The *IJGlobal* year-end league tables show the firm advising on an impressive 16 deals to reach financial close, in its home market of Chile, in Peru, Mexico, and Colombia.

In May, it advised on a debt package raised by a Chilean entity owned by EDF and Andes Mining & Energy for the acquisition of 100% of the shares in Sociedad Eléctrica Santiago. The entity owns and operates the 100MW Renca diesel power plant; 379MW Nueva Renca combined-cycle diesel power plant; the 139MW Santa Lidia open-cycle diesel power plant; and the 132MW Los Vientos combined-cycle diesel power plant.

Alongside Allen & Overy, Garrigues advised the lenders on the financing of the construction and operation of a seawater desalination plant and associated facilities at the Minera Spence copper mine in Chile. Mitsui & Co and Técnicas de Desalinización de Aguas raised a $472 million term loan and a $46 million letter of credit facility for the project.

Garrigues also advised Banco Santander and BBV on an additional $40 million loan to the sponsors to finance VAT arising from construction.

Another substantial deal during the year was the $310 million construction financing provided by Banco Santander and Euroamérica for the Rutas del Loa toll road concession in northern Chile.

Intervial Chile, a subsidiary of ISA of Colombia, is the sponsor of the 136km road project, which links the port of Antofagasta with Calama, Chile's copper mining heart. This innovative transaction was designed for banks and institutional investors, and during the construction stage there will be public bonds issued to repay the construction loan.

Latin American Legal Adviser of the Year (International)

Clifford Chance

2018 was another very strong year for Clifford Chance in the highly competitive Latin American market. Its work was spread across the region, advising on deals that closed in Argentina, Brazil, Chile, Colombia, Ecuador, Mexico, Peru, and Uruguay.

As well as transaction advisory, the firm has been working with Argentina's Ministry of Finance and it's newly created PPP unit to develop a structure for the financing of infrastructure through their nascent PPP programme.

In terms of deals, Clifford Chance was involved in some of the most innovative and challenging financings completed during the year.

The firm advised lenders on the 210MW Cerro Dominador PV and CSP project in Chile. The deal faced significant challenges due to technology risk and the need for EPC contractor Abengoa to sell its equity after filing for bankruptcy.

The deal has a multi-tranche structure. Given the size of the financing ($1.4 billion total capex) the sponsors had to tap a range of sources: the international market, the local market and the institutional market.

Clifford Chance also advised IDB on its first-ever issuance of a Reais-denominated guaranty of a Brazilian infrastructure bond backing the Santa Vitória do Palmar wind project. The innovative offering leverages IDB's AAA credit rating to promote development financing since, due to the IDB guaranty, the issuer of the Brazilian infrastructure bonds was able to offer its investors a domestic Brazilian investment with a local AAA rating, higher than Brazil's sovereign debt rating.

The firm also advised Natixis and certain note holders on the innovative refinancing of the Cajamarca Transmission Line project in Peru, which was structured as a hybrid term loan and private placement debt package – a first for the region.

Asia Pacific Sponsor of the Year

Marubeni

You need a lot of patience if you want to develop major power projects in Indonesia or Vietnam. The demand for new generation is huge in these countries, but projects often get tied up in bureaucratic knots for many years, and some are never completed at all.

All of which underlines what an excellent year Japanese developer Marubeni had in 2018, closing two major projects in Indonesia and another one in Vietnam.

The most eagerly anticipated of the three has been Java 1 in Indonesia. The project consists of developing a 1,760MW gas-fired combined-cycle power plant and associated floating storage and regasification unit. It is the first time a gas-to-power facility has been project financed anywhere in Asia.

Marubeni and co-sponsors Pertamina and Sojitz raised just over $1.3 billion in loans to fund construction, with Japanese export credit agencies JBIC and NEXI lending directly and providing guarantees, respectively.

Marubeni also reached financial close on the Rantau Dedap geothermal project in Indonesia, which it is a sponsor of alongside Engie, Supreme Energy and Tohoku Elelctric Power. JBIC and NEXI both participated in this financing too, as did the ADB and several commercial banks, with $540 million in debt raised in total.

The sponsor's third project to close in 2018 was the 1,200MW Nghi Son 2 coal-fired power plant in Vietnam. Marubeni was awarded the project 10 years previously following an international bidding process, only reaching financial close on the roughly $1.9 billion debt package in April 2018.

As one of our judges commented: "Marubeni is undoubtedly the sponsor of the year. It closed challenging deals in difficult jurisdictions, especially Java 1 which had unique features. It is also interesting to see a sponsor close gas-fired, coal-fired and a geothermal deal all in one year".

Asia Pacific MLA of the Year

Société Générale

French bank Société Générale may not have been the most active lender in Asia Pacific last year, but the deals it was involved in were truly transformative.

Its 33 deals and combined lending of $1.7 billion was impressive, though slightly behind the largest of the Japanese and Australian banks. But awards are not all about league tables, and the work completed by Société Générale in 2018 made it a worthy winner of the best MLA award according to our judges.

Foremost in its portfolio of transactions was the financing of the 128MW Formosa 1 offshore wind farm in Taiwan, the first in a long pipeline of offshore wind deals to come in that country. Strong interest from a club of commercial banks demonstrated the potential for the sector and the robustness of the project contracts.

The deal was also the first in which EKF had participated in in Taiwan, which took part alongside four local lenders and seven international banks.

In Australia, SG acted as MLA, hedge provider and bank guarantee provider in the A$235 million project financing for the Bulgana Green Power Hub. French renewable energy producer Neoen is the sponsor of the project, which comprises a 194MW wind farm and a 20MW/34MWh Tesla lithium-ion battery.

As the first agribusiness partnership of its kind in the world, the Green Power Hub will provide Nectar Farms, Australia's largest high efficiency, hydroponic greenhouse, with 100% renewable energy. It will use up to 15% of the energy generated by the Green Power Hub, with the remaining 85% going straight into the local grid.

SG was also MLA, underwriter, bookrunner, technical & modelling bank and hedge counterparty in an up to $500 million RBL in favour of Medco's Block A gas development project and Senoro gas field project, both in Indonesia.

Asia Pacific DFI of the Year

Asian Development Bank

It has been another outstanding year for Asia's leading development finance institution.

The ADB's Private Sector Operations Department approved some 36 deals amounting to $3.68 billion, with year-end commitments comprising 30 deals.

The bank invested into companies and projects across the region, including: Armenia, India, Kazakhstan, Indonesia, China, Sri Lanka, Thailand, Vietnam and investments covering multiple countries.

Its investments covered a diverse range of sectors including financial institutions, agriculture, power, healthcare, waste and waste-water treatment, and transport.

Among its standout deals of 2018 was the 98MW Rantau Dedap geothermal project in Indonesia, for which the ADB provided funding during the exploration stage and as part of the final construction debt package. Support during the exploration phase reduced resource risk, a key issue for geothermal renewable energy, and enabled the power plant to be financed on a project finance basis.

Last year the bank also advised on the financial structuring, conducted an early stage safeguards review, and was an anchor lender on Thailand's first major IPP for four years – the 2,500MW combined-cycle Chonburi power plant. The total project cost is $1.5 billion with a debt-to-equity ratio of 75:25 resulting in a relatively long tenor of 23 years.

ADB also supported Thailand's leading IPP B.Grimm on the first certified green bond in Thailand. Specifically the proceeds of the bond will be used to fund construction and the refinancing of solar power plants in Thailand but more broadly, it is hoped the deal will encourage more green bonds in Asia. Until now, they have been rare outside of China.

ADB assisted B.Grimm with its application to the Climate Bond Initiative and was also a subscriber to the bonds.

Asia Pacific Bond Arranger of the Year

Citigroup

Citigroup had another outstanding year in 2018, continuing its work to innovate and open up new pools of liquidity for the energy and infrastructure sector.

The bank says its sees project sponsors becoming more sophisticated in exercising financial discipline, and leveraging institutional investor liquidity for funding requirements to achieve the most efficient capital structure.

And with banks' balance sheets becoming increasingly constrained by capital limitations, new ways are being developed to utilise institutional investor liquidity.

These two trends were evident in Citigroup's two outstanding transactions from 2018.

Firstly Citi was a joint global manager on Asia Pacific's first ever securitization of project and infrastructure finance loans. Bayfront Infrastructure Capital, managed by Clifford Capital, distributed the floating rate notes to Reg S investors in a collateralised loan obligation structure.

The underlying loan portfolio represented 30 projects encompassing 37 tranches of debt located across APAC and the Middle East purchased directly from bank lenders in the region. This effectively offloaded capital from banks' balance sheets, enabling them to recycle capital to be utilized in new project & infrastructure funding requirements in the region.

The structure of the deal also mitigates barriers to entry for investors, such as specialized resources, portfolio concentration and emerging market risks.

The second major deal of the year for Citi was the $1.4 billion project bond to refinance existing debt facilities for the Australia Pacific LNG project. The deal represented the largest-ever US private placement issued in Asia.

Citi was a bookrunner, alongside ANZ and JP Morgan, on the long-term fixed-rate debt that replaced construction stage loans from China Exim.

Asia Pacific Financial Adviser of the Year

SMBC

Yet again SMBC is setting the precedent for financial advisory in the Asia Pacific region. The Japanese bank has a truly global focus and also had strong years in other regions but it remains the team to beat in its our backyard.

In 2018, SMBC signed 24 new mandates for energy and infrastructure projects. These span a wide range of sectors and markets – offshore wind in Taiwan, hydro in Thailand, solar in Vietnam, gas-to-power in both Bangladesh and Indonesia, airports in the Philippines, roads in Thailand, water projects in Vietnam, and biomass in Japan.

In total, it has a pipeline of 35 deals.

The bank saw two of its major advisory projects reach financial close last year, both the Vietnam.

On 3 August 2018, Long Son Petrochemicals Company Limited, a subsidiary of Siam Cement Group, signed a $3.2 billion loan package for the construction and development of its integrated petrochemicals project in Vietnam.

SMBC was also financial adviser to sponsors Marubeni and KEPCO on the 1,200MW Nghi Son 2 coal-fired power plant in Vietnam, a project more than 10 years in the making. The financing involved two ECAs and seven commercial banks providing the 20.25 year financing. Nghi Son 2 is the first power plant awarded on a competitive basis in Vietnam, and is the first of a number of IPPs that have been waiting to be developed since the Mong Duong 2 IPP project in 2012.

Next year SMBC expects the 640MW Yunlin and 360MW Guanyin offshore wind projects in Taiwan to reach financial close. The projects, both of which it is financial adviser for, will be the largest offshore wind developments in the country with a debt requirement of roughly $3.5 billion.

Asia Pacific Legal Adviser of the Year

Allen & Overy

In an excellent year globally for the firm, Allen & Overy had an impressive 2018 in the Asia Pacific region. It had a role on virtually all of the major projects to reach financial close during the year, with *IJGlobal*'s year-end league tables recording 28 deal with a combined value of just under $20 billion.

The law firm claims the most extensive footprint in the region, giving it unrivalled geographical coverage, with project finance partners located in Tokyo, Singapore, Jakarta, Seoul, Hong Kong, Ho Chi Minh City, Bangkok, Sydney, and Perth.

In total in the Asia Pacific, the firm has more than 40 specialist project finance lawyers led by 19 experienced partners.

A&O had the high profile but challenging role of advising ECAs and commercial banks on the $1.77 billion project financing of the Java 1 gas-fired power plant and FSRU development. The deal is the first ever gas-to-power project in Asia, and has an unusual and complex structure.

The project is being developed by Pertamina, Marubeni and Sojitz. Project participants had to take account of the complexities involved with an integrated project with layers of "project on project risk", requiring some careful lawyering and risk management.

In Vietnam, A&O advised sponsors Marubeni and KEPCO on the financing of the 1,200MW Nghi Son 2 coal-fired power plant, which took 10 years to get to financial close.

The project is the first successful limited recourse financing of a BOT power project using imported fuel and trans-shipment in Vietnam. These trans-shipment arrangement added significant complexities to the deal.

Another significant deal last year was the project financing of the 670MW Nam Theun 1 hydropower project in Laos, which is supported by an offtake agreement with EGAT in Thailand.

MENA Sponsor of the Year

ACWA Power

Another year of ground-breaking deals has further cemented ACWA Power's position as the sponsor to beat in the MENA region.

In 2018, the Saudi Arabian developer closed on a record-setting solar PV project in Saudi Arabia and an Omani IWP, while also winning tenders for another IWP in Saudi Arabia and an IWPP in Bahrain. It also spent 2018 putting the final touches to the financing for the region's largest ever CSP project. As one of our judges put it, this company "is not just competitive, it delivers".

The stand out financing for the company in 2018 was the Sakaka IPP in Saudi. The project carries the lowest ever tariff bid for a solar project anywhere in the world, equivalent to roughly $0.0234 per kWh. Natixis was the sole underwriter for the $240 million debt package, structured as a six-year mini-perm.

Sakaka is a hugely significant deal for Saudi Arabia as it pursues its target of developing 9.5GW of renewables capacity within the next five years.

ACWA Power's other financial close deal of the year was for Salalah IWP, a 25 million gallons per day reverse osmosis desalination project in Oman. The financing featured local and international lenders and was notable for the participation of Siemens Bank in its first investment of this kind in the region.

The developer was awarded the contract to develop the 1,500MW Al Dur 2 IWPP project in Bahrain in October 2018 following a competitive tender process. It is now moving towards financial close on a roughly $900 million debt package that is expected to feature ECA and commercial bank debt.

It also won the tender for the Rabigh 3 IWP project in Saudi Arabia in November 2018, and by March 2019 it had closed on the 950MW fourth phase of Dubai's solar programme – the first to feature a CSP component.

MENA MLA of the Year

Standard Chartered

2018 saw Standard Chartered's Middle East project finance team execute on an impressive eight deals that demonstrated innovation and diversity. Its portfolio of deals spanned a wind deal in Jordan, a refinery in Oman, and a mini-perm refinancing in Bahrain.

Many of the transactions included numerous exceptional characteristics demonstrating Standard Chartered's continued commitment to finding pioneering solutions to address the Middle East's substantial infrastructure needs.

The largest deal the bank worked on last year was the Duqm Refinery greenfield development in Oman. The project entails the development of a 230,000 bpd refinery and related infrastructure including a product export terminal at the Port of Duqm. It has a total cost of nearly $9 billion, and 29 financial institutions from 13 countries provided the $4.6 billion debt package. Three export credit agencies also provided insurance and guarantees.

The project is the first major industrial development in Sezad and will be the springboard for making Sezad one of the largest developments of its kind in the Middle East.

It is the first major cross border refinery project in the Middle East region, the first joint venture of a refinery project in the region between government owned oil companies of two Middle East countries, and the first refinery in the Middle East to process crude from another Middle Eastern country on a long-term contractual basis.

Standard Chartered was also an MLA on the $71.4 million debt package supporting Daehan Wind Power and Abour Energy's 51.75MW wind farm in Jordan. Having limited indigenous resources of energy, Jordan is highly dependent on imports to satisfy its demand for electricity, making new renewable energy project strategically very important for the country. The project benfits from a 20-year offtake agreement with state utility NEPCO.

MENA DFI of the Year

IFC

In a region awash with petrodollars, it is easy to miss the development finance deals being done in its emerging economies, obscured as they are by the behemoth energy transactions that dominate debate and grab headlines.

But IFC has continued in recent years to meet its objective of facilitating the financing of projects which could not be banked without its assistance.

2018 yet again demonstrated IFC's ability to get deals done in the most challenging of environments. Among its deals from the year was a 7MW rooftop solar project in Gaza, while it was also provided a direct loan and debt through its Managed Co-Lending Portfolio Program to Atheer Telecom Iraq for the repair and upgrade of its telecoms network damaged by the conflict with ISIS.

As an ongoing initiative, IFC is lobbying the region's emerging nations such as Tunisia, Lebanon, Palestine and Iraq to launch potentially bankable renewables projects in the near future, to help those states become less reliant on imported fuels.

The development bank's major closed deals in MENA last year happened in Jordan, a country where it has already been active in renewables procurement. In January, it closed on the 10th renewables project in Jordan to feature IFC support – the 200MW Baynouna solar.

Masdar is the sponsor of the project, which was backed by a $188 million debt package arranged by the IFC, which was the sole MLA on the deal. JICA, DEG, OFID, FMO and EAB also lent 18.5-year loans to the project, which benefits from a 20-year PPA with state utility NEPCO.

Later in the year, the 50MW Abour Energy wind farm and 51.75MW Daehan wind farm, both backed by the IFC, also reached financial close. The former is being developed by Xenel International, while KOSPO and Daelim are the sponsors of the latter.

MENA Financial Adviser of the Year

SMBC

In the space of a few short years, SMBC has gone from one of many leading financial advisers in the Middle East and North Africa to a strong number one in the market.

2018 solidified this position with a strong mix of public sector and private sector mandates. Five transactions it advised on also reached financial close during the year, according to *IJGlobal* year-end league tables, including the record-breaking 300MW Sakaka solar PV project in Saudi Arabia.

Sakaka attracted the lowest ever tariff for a solar tender anywhere in the world, and is the first in a long pipeline of renewable energy projects due to be developed in Saudi Arabia over the next few years. SMBC has been working as financial adviser to the Ministry of Energy, Industry and Minerals on its highly ambitious National Renewable Energy Programme.

Elsewhere SMBC advised on the financing of the Sharjah waste-to-energy project, the first project of its kind anywhere in the region. Sponsors Masdar and Bee'ah are developing a facility to treat around 330,000 tonnes of waste per year and to produce 30MW of electricity. Lenders on the roughly $163 million financing included Abu Dhabi Commercial Bank, Abu Dhabi Fund for Development, Siemens Bank, Standard Chartered Bank and SMBC.

Like Sakaka, the deal is hugely strategically important, as Sharjah has a target of zero waste-to-landfill by 2020, while the wider UAE is aiming to divert 75% of its solid waste from landfill by 2021.

SMBC also advised KIPIC on the financing of a permanent LNG regasification plant in Kuwait.

The project has a total cost of $3.6 billion and KIPIC raised $2.6 billion through an ECA-backed debt package. The financing was over-subscribed with funds coming from Europe, Korea, Japan and Kuwait. The debt carries a tenor of 10 years plus construction.

MENA Legal Adviser of the Year

Allen & Overy

The judges acknowledged that competition was again very high in this category, but picked A&O over its rivals thanks to some very complex transactions reaching financial close.

The hard figures support A&O's selection too. In *IJGlobal*'s year-end league tables, it came out a clear 1st in the MENA legal adviser rankings, with its 12 closed deals almost double its closest rivals. Accumulatively the transactions it worked on had a value of more than $18.5 billion, and it took more than 15% of the legal adviser market.

Anywhere you look in the region and A&O is there. The firm is advising on most, if not all, of the UAE's strategic power projects, including bids for the mega solar projects in Abu Dhabi and Dubai, and advised lenders on ACWA Power's DEWA IV CSP project. The firm is also advising various consortia on bids for Sakaka solar PV, Dumat Al Jandal wind farm, Rabigh IWP, Dammam STP, district cooling projects in Saudi Arabia and the Egyptian FiT phase 2 project.

As for closed transactions, A&O advised the project company on all aspects of the development and financing of the 230,000 barrels per day greenfield oil refinery project at Duqm Special Economic Zone in the Sultanate of Oman.

The Duqm refinery has a total cost of nearly $9 billion and the sponsors raised a $4.6 billion debt package to part-fund construction.

A&O also advised the sponsors of the Salalah IWP in Oman, which reached financial close in August 2018. The project will have a capacity to generate 25 million gallons per day of desalinated water.

In an upcoming deal, A&O is advising nine ECAs and other lenders on the $6 billion BAPCO refinery expansion. This project will increase the capacity of the facility from 267,000 to 360,000 barrels per day and dramatically upgrade the production slate.

MENA Technical Adviser of the Year

Mott MacDonald

Already an established presence in the region, Mott MacDonald doubled the size of its MENA team in 2018.

The company offers a full suite of technical advisory services including transaction advisory, environmental and social advisory, lender's technical advisory and owner's engineer advisory. Its clients in the region include governments, lenders, IFIs and bidders on various types of transaction.

Possibly its most challenging deal from 2018 was the financing of the Agadir desalination project in Morocco. With a 275,000 m3 production capacity per day, Agadir is the world's largest plant designed for drinking water and irrigation. It has the particularity that it is a mutualised project: there are two PPPs in the plant (for drinking water and irrigation water) which adds complexity, but creates efficiencies.

The desalination project will supply drinking water to 2.3 million inhabitants by 2030, 20% of whom live in rural areas. The second half of the project represents 125,000 m3/d of desalinated water for irrigation, and a distribution network to cover 13,600 hectares of farmland.

The plant is alleviating a drought crisis. Water stocks in Agadir's farming areas were seven times lower in 2008 than in 1982, and the average rainfall is expected to decline in coming decades. The project design provides for possible capacity expansion up to 450,000 m3/day.

Other major recent projects for Mott MacDonald in the region include the Al Dur II IWPP in Bahrain for which it provided lenders' technical advisory services, and the DEWA CSP project, which represents the largest investment in CSP in a single site anywhere in the world.

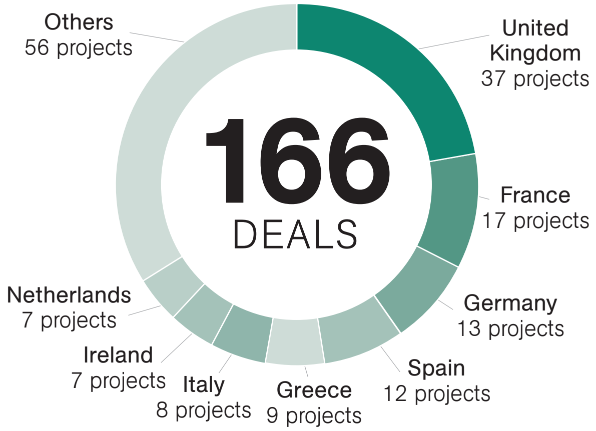
The firm provided DEWA with technical feasibility studies, functional specifications and contribution to request for proposals documents, assistance throughout the whole competitive bidding process, and ongoing training and capacity building.

Europe

INSIDE

Power struggle in Bulgaria
Acquisition of Veja Mate offshore wind
Germany walks on cooling coals

Pipeline & procurement deals



Projects with recent tender updates

- Hinkley Point C Nuclear Power Station
- Clogherhead Offshore Wind Farm
- Croatia FTTH Network
- Dieppe-Le Treport Offshore Wind Farm
- Ireland Higher Education PPP (Bundle 1& 2)
- Moscow-Kazan HSR
- Dunkirk Offshore Wind Farm
- Ploiesti-Suceava HSR

Closed deal values by sector

Renewables: $12.73 billion

Transport: $8.88 billion

Power: $3.21 billion

Telecoms: $2.72 billion

Oil & Gas: $2.19 billion

Mining: $772 million

Countries with highest closed deal values

France	$7.07 billion	17
United Kingdom	$6.71 billion	31
Spain	$6.21 billion	13
Germany	$2.60 billion	3
Italy	$2.43 billion	21
Russia	$1.30 billion	3
Belgium	$929 million	3
Norway	$820 million	4
Luxembourg	$750 million	1
Sweden	$422 million	4
Netherlands	$363 million	6
Iceland	$305 million	1
Armenia	$294 million	1
Portugal	$293 million	5
Ireland	$260 million	3
Finland, Sweden	$207 million	1
Ukraine	$177 million	1
Turkey	$116 million	2
Finland	$100 million	2
Slovakia	$63 million	1
Greece	$43 million	1
Hungary	$12 million	1

Transactions that reached financial close

10 Jan
Acquisition of Guillena-Salteras Solar PV Plant

29 Jan
Syvash Wind Farm Phase I

15 Feb
Yerevan CCGT Power Plant

18 Mar
Skinansfjellet & Gravdal Wind Farms

19 Mar
Irish Social Housing Bundle I

26 Mar
La Fernandina, Miramundo & Zafra Solar PV Plants

Source: *IJGlobal*, from 1 January 2019 to 31 March 2019

DATA ANALYSIS: Uncertainty around conventional energy sources in Bulgaria could open the door for renewables. By Lyudmila Zlateva & Daniela Todorova.

Power struggle

In early March state-owned NEK launched the process to find private partner for the 2GW Belene nuclear power station, with reported interest from: CNNC; Korea Hydro and Nuclear Power; Framatome; and GE.

The Lv9-20 billion ($5.2-11.5 billion) project has suffered several false starts, though, and a target to have completed construction in eight years looks optimistic given public opposition.

Plans to add a new unit at the Kozloduy nuclear power station look even more uncertain given a court decision in May 2018 to reject its EIA.

Renewable energy should be well-placed to plug this gap, particularly given the base of renewables projects already active in the country.

Renewables

Largely due to generous feed-in tariffs introduced in a rush to modernise its heavily regulated energy sector, Bulgaria was among the EU countries that exceeded their national targets for production and consumption of energy from renewable sources under the "Europe 2020" strategy. By 2016 Bulgaria had already passed its 2020 target of 16% renewables, reaching 18.8% of the total power mix.

The country's Ministry of Energy recently introduced market changes to further boost renewable energy projects. In light of the 1.1GW of new renewables to be connected to the grid by the end of 2026 as forecasted by ESO, the country leaned in to the EU's push to replace its feed-in tariff scheme with a more market-based feed-in premium.

The intention is to attract investments into the sector, while taking some of the burden off state utility NEK which is obliged to buy all power generated by renewables.

As shown by data compiled by *IJGlobal*, there has been a tangible increase in the energy produced by renewable sources in the period 2011-14, stimulated by feed-in tariffs for smaller scale wind and solar, which led to fragmentation of the capacities. However as tariffs subsequently reduced, renewables have been growing at a much slower pace.

The country boasts a few large-scale renewable energy projects, though all were commissioned before 2012. They account for 383.9MW of installed capacity: 156MW St Nikolas Kavarna wind farm; 72.5MW Vetrocom wind farm phase I and II; 60.4MW Karadzhalovo solar PV; 60MW Suvorovo wind farm; and 35MW Kaliakra wind farm.

Conventional energy sources

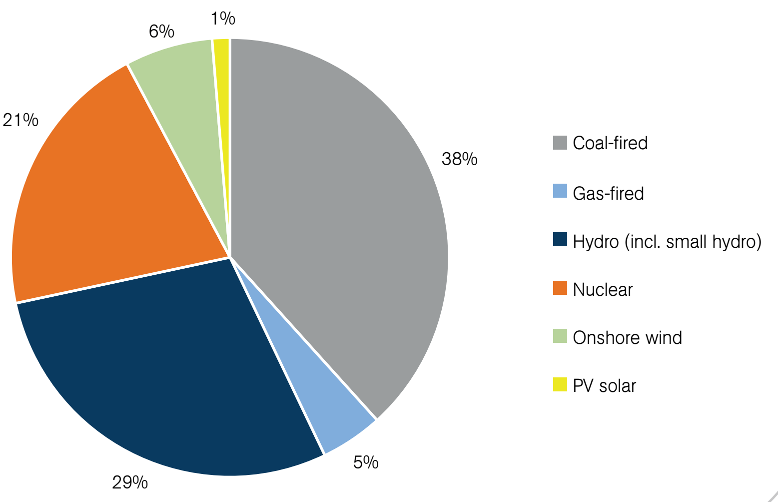
IJGlobal data shows that 64% of total power capacity in the country is from conventional power plants, followed by hydro (29%) – a traditional source heavily developed since the 1960s.

Around one third is produced by nuclear facilities 1GW Kozloduy Unit 5 and 1GW Kozloduy Unit 6. Other large generators include three coal-fired plants: 1,456MW Maritsa Iztok-2, 900MW ContourGlobal Maritsa East 3, and 670MW AES Galabovo.

While two of these coal-fired facilities have been completely rebuilt or thoroughly modernised, the state-owned Maritsa Iztok-2 has been at the centre of an ecological debate given it is the largest coal-fired power plant in the Balkans. Maritsa Iztok-2 might face further issues related to emissions spending and a possible shutdown if not modernised.

Bulgaria comfortably met its early renewables targets and has introduced reforms to accelerate solar and wind developments, but these technologies still only make up a small fraction of total generation. It is yet to be seen whether foreign investors will be attracted to its upcoming renewables projects.

Installed capacity by sub-sector



Source: *IJGlobal*

DEAL ANALYSIS: A consortium of four investors drew on 18 lenders to acquire a majority stake in one of Germany's largest offshore wind farms. By Elliot Hayes.

Acquisition of Veja Mate

In February, a consortium of Commerz Real, Ingka Group, KGAL Group and wpd invest reached financial close on the acquisition of a majority stake in Veja Mate, an operational 402MW offshore wind farm in the German North Sea.

The deal, which saw two existing shareholders exit the asset, had a value of €2.3 billion ($2.6 billion) and featured both equity and holding company debt.

The asset

The sellers – a Highland Group-led consortium – acquired Veja Mate from Bard, the project's original sponsor, in September 2014 for €1.3 billion.

The consortium of Highland Group, Copenhagen Infrastructure Partners II (CIP II) and Siemens Financial Services brought the offshore wind farm to financial close for a total value of €1.9 billion on 29 June 2015, shortly before the deadline to qualify for a grid connection.

SMBC was bookrunner on a €1.27 billion debt syndication that closed in September 2015. The debt had a 12.5-year tenor post-construction with pricing starting at 200bp above Euribor, stepping up to 225bp.

Commissioned in May 2017, Veja Mate consists of 67x 6MW Siemens SWT-6.0-154 turbines and benefits from an eight-year FiT of €194 per MWh. An additional 4.7-year FiT of €154 per MWh is also in place.

The sponsors restructured the senior debt facilities in July 2018. Terms of the refi were not disclosed, but a source close to the deal said that the existing 67:33 debt-to-equity ratio remained in place.

The deal

Commerz Real, Ingka Group, KGAL Group and wpd invest collectively paid roughly €600 million for an 80% shareholding. Commerz Real, Ingka Group and wpd invest paid around €200 million for their respective stakes, while KGAL Group – via the Enhanced Sustainable Power Fund 4 – paid significantly less for its single-digit shareholding.

The buyers assumed the debt-package that was raised for the 2018 refinancing.

The transaction saw Highland Group and CIP II divest their stakes, while Siemens Financial Services stayed on with a reduced stake, resulting in a new shareholding structure of: Commerz Real (27%); Ingka Group (25%); wpd invest (21%); Siemens Financial Services (20%); and KGAL Group (7%).

Debt

The acquisition of the 80% shareholding had a debt-to-equity ratio of around 60:40.

A total of 18 lenders provided debt, on different terms. The lenders comprised Astorg Infrastructure 1, Banco Santander, BayernLB, CaixaBank, Commerzbank, EKF, Helaba, KfW, KfW IPEX-Bank, Natixis, NRW Bank, Rivage Euro Dette Infrastructure 1, SCOR Infrastructure Loans II, Shinsei Bank, SMBC, Société Générale, Sumitomo Mitsui Trust Bank and Zencap Infra Debt 2.

Advisers working on the deal included: Amsterdam Capital Partners as exclusive financial advisers to the buyers; Watson Farley & Williams as legal advisers to the buyers; Green Giraffe and FIH Partners as exclusive financial advisers to the existing owners; and CMS as legal adviser to the sellers.

Technical

Veja Mate exports power to the transmission grid via the BorWin2 converter station to the onshore Diele substation near Weener, having been connected to the platform in mid-December 2016.

A 50:50 partnership between Boskalis and Volker Wessles was awarded the €500 million contract for the design, procurement, fabrication, supply, transportation, installation and testing of the foundations in June 2015.

Smulders was contracted to provide design, production, transportation and installation of a topside and jacket, while Sormec was contracted to supply a M350/3S telescopic boom crane in October 2015.

EMS Maritime Offshore was awarded the contract to guard the offshore wind farm with its fleet of guard vessels. SMC was contracted to deliver full-scope marine coordination and vessel management on the project.

Timeline

- **11 September 2014** – Highland Group's consortium acquires project from Bard
- **29 June 2015** – Financial close
- **31 May 2017** – Wind farm commissioned
- **6 July 2018** – Refinancing closes
- **13 February 2019** – Financial close on acquisition of 80% stake

DATA ANALYSIS: The move to cut coal from the national energy mix has sent ripples through Germany's energy sector. By Lyudmila Zlateva & Sophia Radeva.

Walking on cooling coals

A German government-appointed commission announced on 26 January that the country should shut down all of its coal-fired power plants by 2030 at the latest. The German government and 16 regional states must now implement the roadmap proposals.

The decision follows Germany admitting that it was on track to fail its 2020 emissions targets, and the plans put forward by the commission are at the center of Germany's strategy to shift to renewables. Berlin is looking to reduce carbon dioxide emissions from the energy sector by over 60% by 2030, compared to 1990 levels.

Under the proposed multi-billion plan, Germany's coal-fired capacity would be reduced to 30GW by the end of 2022 and then 17GW by the end of 2030, as shown by *IJGlobal* data. Currently, coal-fired power plants account for some 42GW of the country›s installed capacity.

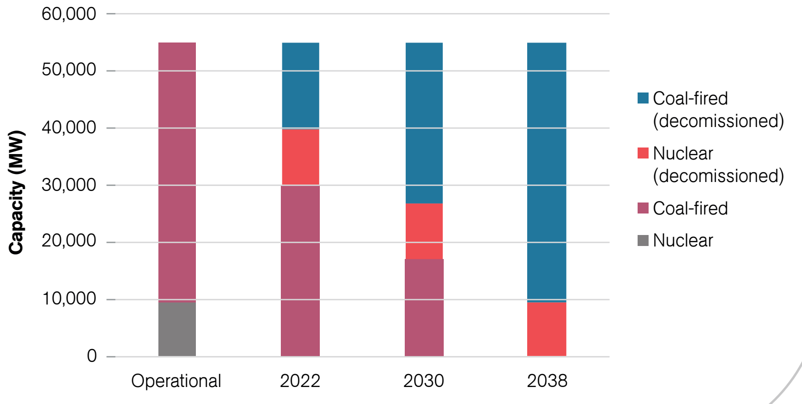
Nuclear reaction

In addition to shutting down coal-fired, Germany remains committed to its pledge to phase out its nuclear power programme by 2022.

IJGlobal data shows that nuclear power plant operators in Germany (including RWE, E.ON, EnBW and Vattenfall) will have to shut down around 10GW of nuclear power distributed across seven facilities by the 2022 deadline. E.ON is due to take the hardest hit, followed by EnBW, RWE and Vattenfall.

Among the nuclear plants slated for decommissioning are: 1,410MW Brokdorf; 1,288MW Gundremmingen C; 1,360MW Grohnde; 1,336MW Emsland; 1,392MW Philippsburg; 1,485MW Isar 2; and 1,320MW Neckarwestheim

Nuclear and coal-fired to be decomissioned



Source: *IJGlobal*

Powering on

This shift away from nuclear – and now also coal-fired power generation – has sent ripples through the German energy sector, pushing E.ON and RWE to separate its renewable energy businesses from their coal and nuclear operations due to anticipated dwindling margins. The German powerhouses unveiled in March 2018 a complex assets exchange deal which will see E.ON merge its renewables operations with RWE subsidiary Innogy – with the combined business to be subsumed into RWE, greatly boosting its renewable energy offering.

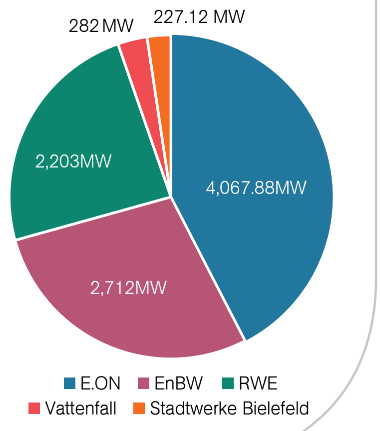
E.ON in turn gains Innogy's regulated energy networks and customer operations. The merger, which has a total value of €43 billion ($56.6 billion), is expected to close no earlier than mid-2019.

Sweden's Vattenfall, meanwhile, had as early as 2016 completely divested its German brown coal portfolio of assets to Polish energy group EPH.

While Germany decision to exit coal comes as no surprise, the phase-out policy means that even the most modern, newly-build coal-fired power plants – such as Uniper's €1.5 million ($1.7 million), 1.1GW power plant in Datteln – risk not to be connected to the grid.

However, despite the political will to cut coal from the national energy mix, it represents a significant portion of Germany's power generation capacity. Data compiled by *IJGlobal* shows that coal-fired power plants account for nearly 46GW of installed capacity, only behind onshore wind and solar.

Nuclear power owners by capacity



Source: *IJGlobal*

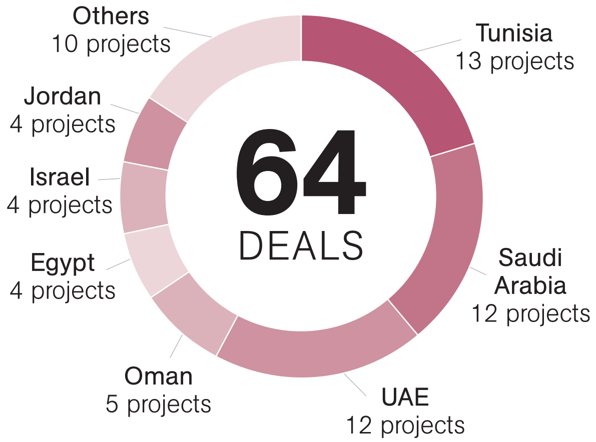
Middle East & Africa

INSIDE

You queue and wait – Kuwait PPP

DEWA solar IV, UAE

Pipeline & procurement deals



Closed deal values by sector

Mining: $6.73 billion

Renewables: $4.36 billion

Water: $1.02 billion

Oil & Gas: $400 million

Projects with recent tender updates

Tanajib Co-Generation Power Plant
DEWA V solar PV
Rabigh Solar PV Plant
New Mansoura Desalination Plant
Noor Midelt CSP-PV Plant Stage I
Etihad Railway Network Stage II
ADNOC Oil Pipelines
6 October Dry Port

Closed deals by country

United Arab Emirates	$10.86 billion
Saudi Arabia	$700 million
Egypt	$400 million
Bahrain	$238 million
Tunisia	$196 million
Israel	$97 million
Algeria	$24 million

Transactions that reached financial close

29 Jan Acquisition of 51% of Tenes Desal

31 Jan DEWA IV CSP

01 Feb Emirates Global Aluminium Refinancing

28 Feb Acquisition of a 30% Stake in IDE Technologies

04 Mar Rabigh 3 IWP

18 Mar Acquisition of a 30% Stake in Rabigh IWSPP

Source: *IJGlobal*, from 1 January 2019 to 31 March 2019

DATA ANALYSIS: Kuwait has once again restructured its PPP agency to match its infrastructure ambitions. By Miroslav Hadzhiyski.

You queue and wait

Kuwait recently announced the restructuring of its Kuwait Authority for Partnership Projects (KAPP), which has failed to deliver on a long list of proposed PPPs in the country. Only one project has reached financial close in Kuwait using the PPP model – the 1,500MW Az Zour North gas-fired power plant – and that project was actually procured under KAPP's predecessor agency Partnerships Technical Bureau (PTB).

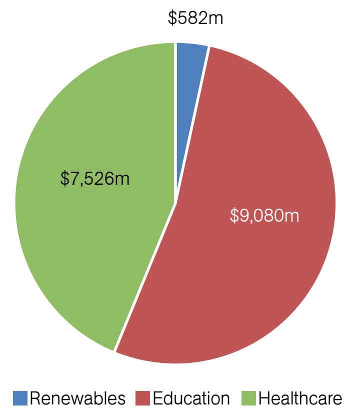
The government's changes in the PPP law aim to remove administrative barriers that have delayed planned projects. Ever since PTB was launched in 2008 the government's PPP plans have been, and remain, extensive.

The Kuwait government aims to add another 4.5GW of power capacity via the PPP model by procuring the previously cancelled Al Khairan and Az Zour North 2 IWPPs.

With the PPP programme stalled, the government is pushing forward other infrastructure plans that dwarf the pipeline KAPP has been responsible for.

The Kuwait National Development Plan highlights infrastructure development, sustainable diversified economy and high quality healthcare as strategic priority areas. The government has set targets to increase university campus capacity by 40,000 places, to improve public healthcare service quality by adding 8,000 beds, and to increase power produced from renewable energy to 15% of overall capacity by 2035.

Kuwait National Development Plan infrastructure projects by sector

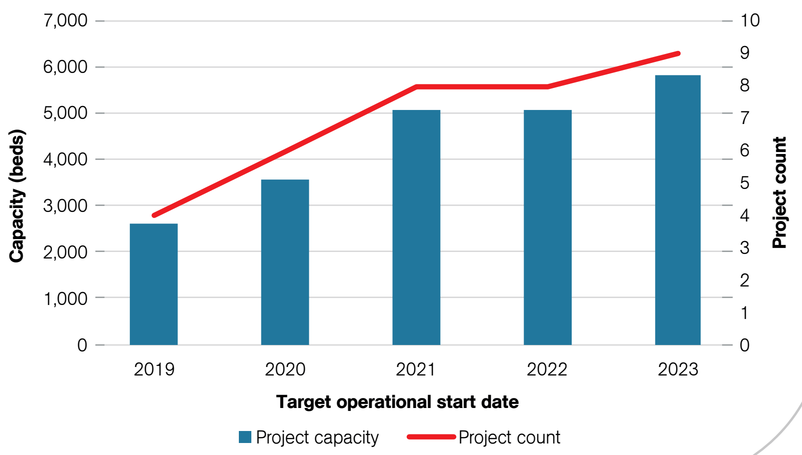


Source: *IJGlobal*

As *IJGlobal* data illustrates, the lion's share of government spending is focused on improving the university facilities and the public healthcare system capacity and service quality. These projects, which are being publicly funded, include expansions of operating facilities and the development of new ones. The government plans to complete all healthcare facility projects by 2023.

The biggest healthcare projects in terms of value are the Al-Sabah Hospital Expansion and the Kuwait Children's Hospital. As *IJGlobal* data suggests, the five biggest hospital expansions will lead to a capacity increase of more than 4,000 beds.

Cumulative capacity of upcoming healthcare facilities



Source: *IJGlobal*

The majority of these non-PPP infrastructure projects under the New Kuwait programme are under construction and expected to reach operational stage within five years.

The biggest upcoming project not yet in construction is the Al Shegaya energy complex, which is being commissioned by the Kuwait Petroleum Corporation. Its three phases are expected to generate up to 2,700MW from renewable sources – such as PV solar, concentrated solar power (CSP) and wind – by 2022.

Kuwait's failure to procure PPPs has never been due to a lack of ambition, and many of the projects in its PPP pipeline are essential to its wider economic goal of diversifying beyond a dependence on oil revenues. Instead an inability to streamline procurement and approval processes, and ultimately make projects bankable, have held back its infrastructure programme.

Private developers and lenders will hope the latest reinvention of KAPP will start to address those issues.

DEAL ANALYSIS: An ambitious sponsor, a long PPA and Chinese backing saw MBR's fourth phase grow… and grow. By James Hebert.

DEWA solar IV, UAE

Initially a 200MW project, the fourth phase of the Mohammed bin Rashid Al Maktoum (MBR) solar park in Dubai comprised a 700MW concentrated solar power (CSP) unit and a 250MW solar PV component by the time an ACWA Power-led consortium brought the project to financial close on 31 January (2019).

Phase one to four

Dubai's Electricity and Water Authority (DEWA) has incrementally increased the total generating capacity of the MBR solar park. The solar park's first phase was a 13MW pilot solar PV which began operations in 2013. A 200MW second phase followed in March 2017, and the 800MW third phase is due to be commissioned in 2020.

DEWA launched an advisory tender for a 200MW CSP project on 31 May 2016, selecting a team of KPMG (financial), Ashurst (legal) and Mott MacDonald (technical) on 25 August.

An EOI was issued on 5 October 2016, which attracted 30 responses within three weeks. The procurer eventually pre-qualified five consortia, issuing the RFP on 19 January 2017.

ACWA Power, with Shanghai Electric as EPC contractor, submitted the lowest bid at $0.0945 per kWh, while runners-up Masdar and EDF, with Abangoa as EPC contractor, submitted a bid of $0.1058 per kWh.

ACWA Power also submitted an alternative tariff of $0.073 per kWh for an expanded 700MW project.

DEWA accepted this alternative bid on 18 September 2017, signing a BOO contract and a 35-year PPA with the Saudi developer.

The project would have reached financial close in 2018, but then ACWA Power offered to add an additional 250MW of solar PV at a tariff of just $0.024 per kWh.

Financing

The 950MW DEWA IV had a total project cost of Dh16 billion ($4.4 billion) at financial close. Equity requirements are said to be roughly $1.5 billion, resulting in a debt-to-equity ratio of around 66:34.

Shareholders of the project's SPV, Noor Energy 1, are: DEWA (51%); ACWA Power (24.99%); and Silk Road Fund (24.01%).

Only the two private sector sponsors are making equity investments, of around $750 million each. Silk Road Fund became a shareholder in July 2018.

Meanwhile, the roughly $3 billion debt package consists of two tranches. A $2.19 billion debt facility will be provided by a group of Chinese banks comprising mandated lead arranger ICBC along with Agricultural Bank of China, Bank of China, China Minsheng Bank and Silk Road Fund.

The remaining $828 million of debt will be provided by international lenders including Natixis, Standard Chartered and Union National Bank.

The debt package is structured as a 27-year soft mini-perm with pricing starting at 200bp above Libor, before rising sharply to 330bp after nine years to incentivise a refinancing.

Silk Road Fund has said it considers the project a part of China's Belt & Road Initiative. China's Shanghai Electric is the EPC contractor, while ACWA Power's 100% owned subsidiary NOMAC will undertake the O&M contract.

Hybrid power

DEWA IV's CSP and PV units will complement each other; the CSP component can store energy for use at night over 15 hours, while the PV can cover the rest of the 24-hour period. The PV only represents 5% of the revenue on the project, but enables daytime power generation.

The CSP will include a solar tower with an installed power capacity of just under 100MW, which at 260 metres high is due to be the world's tallest when completed.

Construction on DEWA IV's tower began on 21 December 2018. The CSP component will also consist of three parabolic troughs of 200MW each which will cover an area of $43km^2$.

DEWA IV will be commissioned in stages, starting in Q4 2020.

Advisory

DEWA was advised on the deal by KPMG, Ashurst and Mott MacDonald. Covington was legal adviser to ACWA Power, while Allen & Overy advised the lenders. ■

Timeline

- **5 October 2016** – EOI issued
- **19 Janaury 2017** – Five pre-qualified for 200MW
- **18 September 2018** – ACWA Power awarded 700MW
- **21 December 2018** – CSP tower construction begins
- **31 January 2019** – Financial close on 950MW

North America

INSIDE

Funding US wells, not walls

Tłcho All-Season Road, Canada

Pipeline & procurement deals

Projects with recent tender updates

- C4GT Gas-Fired Power Plant
- Dallas-Houston HSR
- Cedar Springs Wind Farm
- Illinois State University Student Housing
- Guernsey Power Station
- Jackson Generation CCGT Power Plant
- KCI Airport Terminal Modernization
- Orleans Health Hub PPP

Closed deal values by sector

Oil & Gas: $27.35 billion

Power: $13.27 billion

Renewables: $5.33 billion

Transport: $312 million

Water: $225 million

Mining: $7 million

Closed deals by country

United States	$46.33 billion	82
Canada	$2.30 billion	10

Transactions that reached financial close

- **17 Jan** Ranchero Wind Farm
- **31 Jan** Acquisition of Emera's New England CCGT Portfolio
- **25 Feb** Acquisition of Meritage Midstream
- **28 Feb** Acquisition of Noble's Wind Portfolio
- **12 Mar** BearKat II Wind Farm
- **28 Mar** Acquisition of a Stake in EPIC Crude Oil Pipeline

Source: *IJGlobal*, from 1 January 2019 to 31 March 2019

DATA ANALYSIS: The year started strong for the North American oil and gas sector. By Aleksandar Arsov.

Funding US wells, not walls

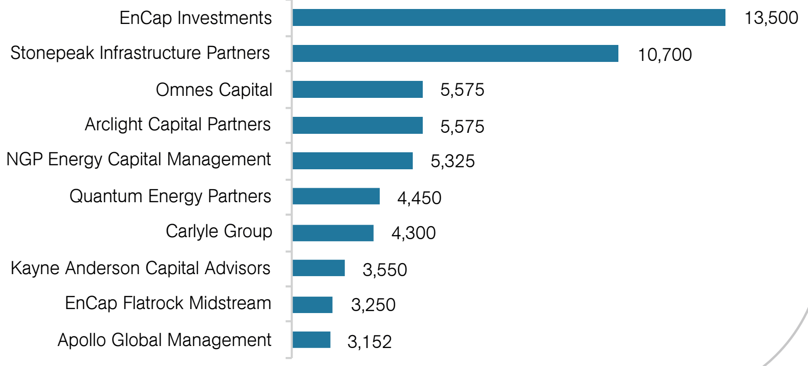
The first couple of months of 2019 saw substantial deals for the oil and gas industry in North America.

Permian Basin water management services platform Waterfield Midstream was formed in February by Blackstone Energy Partners-managed funds. The New York-based fund manager also agreed to acquire a controlling stake in US midstream energy company Tallgrass through its $7 billion Blackstone Infrastructure Partners fund in a deal worth roughly $3.3 billion.

Although marketed as an open-ended fund with a multi-sector strategy, Blackstone's fund held its first close at $5 billion in July 2018 and had raised $7 billion by February (2019), most of which was deployed through its latest oil and gas acquisition. Blackstone's recent activity conforms to the general trend on the continent – the oil and gas sector is increasingly important for fund managers.

As demonstrated by *IJInvestor* data, North America-focused funds that target multiple sectors – including oil and gas – raised significantly more capital over 2018 ($18.8 billion) compared to the previous two years combined ($16.9 billion).

Top 10 fund managers by final size ($m)



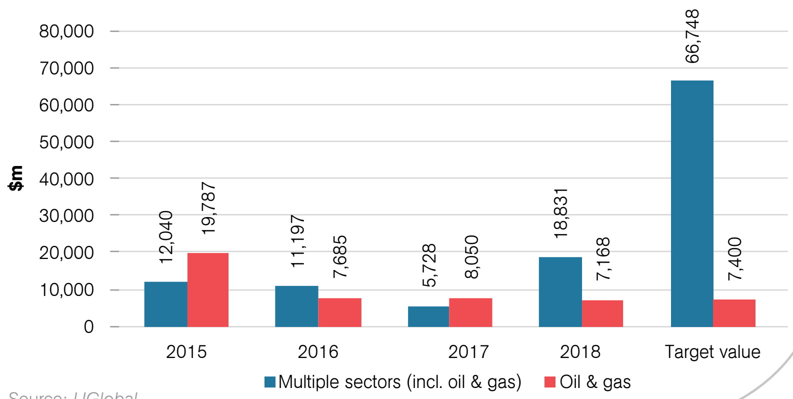
Source: *IJGlobal*

Unlisted infrastructure funds focused exclusively on oil and gas assets in North America, on the other hand, raised $7.2 billion at final close in 2018. The number is a bit lower compared to the previous year ($8.1 billion), but fundraising remains stable considering the $7.7 billion raised in 2016.

North America-focused vehicles targeting various energy sectors including oil and gas, which have not reached final close yet, aim at collecting more than 3x the amount raised by similar funds in 2018. The relatively large figure is due to the aforementioned Blackstone Infrastructure Partners fund that has a target size of $40 billion.

IJInvestor data suggests sustainable growth in capital raising by oil and gas-specific funds in North America, as target value of such schemes is close to the capital raised at final close during the last three years.

Final close (2015-18) and target size of North America-focused O&G funds



Source: *IJGlobal*

EnCap Investments and Stonepeak Infrastructure Partners are the top two oil and gas-focused players in North America by amount raised at final close. Stonepeak committed $1 billion in equity to Dallas-based Discovery Midstream Holdings II in January this year (2019). The deal follows the acquisition of Discovery Midstream by Oklahoma-based midstream company Williams Partners and KKR's Global Infrastructure Investors III in the summer of 2018.

Excluding Omnes, which is headquartered in France, nine of the top 10 managers of oil and gas-focused funds are domiciled in the US. This is in line with *IJInvestor* data that indicates that fund managers have a clear preference for the US when it comes to establishing oil and gas funds.

DEAL ANALYSIS: This P3 undertaking uniquely features the involvement of Northwest Territories local companies and First Nations. By Ila Patel.

Tłıcho All-Season Road, Canada

The Tłıcho All-Season Road (TASR) P3 project reached financial close earlier this year. Despite being procured as a P3 with the typical DBFOM model, there are no banks involved, the private developers are providing a small percentage of the equity and a large chunk of the financing is being provided by the government.

The new all-season road project is part of the government of Northwest Territories (GNWT) department of transport's efforts to make strategic investments in the region's transport system.

The 97km highway going from kilometer 196 of Highway 3 to the community of Whatì will have a 25-year concession (excluding construction). By replacing the southern section of the existing winter road serving the region, the TASR will not only provide year-round access to Whatì but will also increase the window of access to the communities of Gamètì and Wekweètì.

The project also includes four major water crossings to be developed on the 97km route with three bridges and one major culvert.

The road will also provide access to new areas of undeveloped mineral resources, opening the door for industry to unlock the region's full economic potential.

Procurement

In March 2017, GNWT announced it had mandated insurance adviser INTECH Risk Management for the project. It was also made public that EY and Torys were on board as financial and legal advisers, respectively.

An RFQ was then issued in the same month with a project information session held, and bids were submitted in May with five teams understood to have responded to the RFQ.

At that time, it was understood that the Northwest Territories' provincial government-owned Tłıcho Investment Corporation would be supporting more than one team in their proposals – something that was confirmed at financial close.

In September, the final shortlist was announced to proceed to the RFP stage. They were:

Aurora Access Partners comprising Alberta Highway Services, BBGI CanHold, Colas Canada, COWI North America, EGT Northwind, Graham Capital Partners and Graham Infrastructure, Nuna Logistics, NWT Construction, and Tetra Tech Canada.

NAE Transportation Partners bringing together Eiffage, Innovative Civil Constructors, LaPrairie Works, North American Construction Group, and Stantec Consulting.

North Star Infrastructure consisting of Hatch Corporation, Kiewit Canada Development, Peter Kiewit Cons, and Thurber Engineering.

The RFP was issued in December, with technical submissions submitted in September the following year (2018) and financial submissions submitted shortly after.

The North Star Infrastructure (NSI) consortium was selected as preferred bidder in November 2018 with financial close taking place just three months later (February 2019).

Unique to the project is the involvement of local companies and First Nations. The winning consortium is contractually obligated to procure a significant percentage of project resources and labour from First Nations and/or local Northwest Territories businesses while also providing training over the contract period.

Financing

The total value of the contract with NSI is C$411.8 million ($311.2 million) to build and maintain the road over 28 years (2-3 years for construction) and is split as follows: 75% funding to be provided by GNWT; 25% funding provided by the Canadian government through Infrastructure Canada; and 20% equity ownership in NSI by the Tłıcho government (C$16 million from the government).

Total construction cost is C$213.8 million, comprising C$184.1 million pre-development and construction and $29.7 million GNWT costs.

After the road goes into service in 2022, the GNWT will pay the NSI team C$10.4 million per year over the 25-year term. Part of this payment is indexed at an assumed 2% per year (linked to actual CPI over the period).

Construction is expected to start later this year with substantial completion slated for late 2021.

Timeline

RFQ issued	Three teams shortlisted	RFP issued	PB announced	Financial close
20 March 2017	13 September 2017	5 December 2017	13 November 2018	13 February 2019

Latin America

INSIDE

Peru gets connected

Autopista al Mar 1, Colombia

Pipeline & procurement deals

Projects with recent tender updates

- Norte-Sul Railroad Estrada de Ferro 151
- Mexicali-Hermosillo Transmission Line
- Peru's Broadband Network Portfolio Part I & II
- Puerto Maldonado Wastewater Treatment Plant
- Santana-Mocoa-Neiva 4G Toll Road
- Vale Azul II Gas-Fired Power Plant
- Maya Rail
- Ituango Hydropower Plant

Closed deal values by sector

Mining: $2.60 billion

Power: $1.58 billion

Transport: $1.39 billion

Renewables: $1.05 billion

Oil & Gas: $50 million

Closed deals by country

Chile	$3.45 billion	7
Colombia	$1.48 billion	3
Mexico	$1.400 billion	3
El Salvador	$800 million	1
Brazil	$527 million	7
Argentina	$324 million	2
Uruguay	$83 million	1
Panama	$50 million	1

Transactions that reached financial close

- **31 Jan** Granja Solar PV Plant
- **07 Feb** Rutas del Pacifico
- **11 Feb** Tropicalia Transmission Line
- **01 Mar** Acquisition of Colombian Wind Portfolio
- **19 Mar** El Llano Solar PV Plant
- **22 Mar** Puerta de Hierro-Palmar de Varela Road

Source: *IJGlobal*, from 1 January 2019 to 31 March 2019

DATA ANALYSIS: Peru has turned to project financing to build out its fibre optic network. By Lyudmila Zlateva, Katerina Ilieva & Juliana Ennes.

Get connected

Telecoms projects are on the rise across Latin America, including Peru, where ProInversión recently awarded six broadband network PPP projects for a total investment of $358 million.

The country introduced the ambitious National Fibre Optical Backbone Network (RDNFO) PPP programme as a way to incentivize operators to invest in extending their networks into low-density areas and challenging terrain, bringing down high-speed internet prices and reaching more users.

Peru's investment fund in telecommunications (FITEL), an entity of the transport and communications ministry with the goal of promoting universal access to essential telecoms, will help finance the recently awarded projects. FITEL will provide non-reimbursable financing of up to $632 million.

Gaining momentum

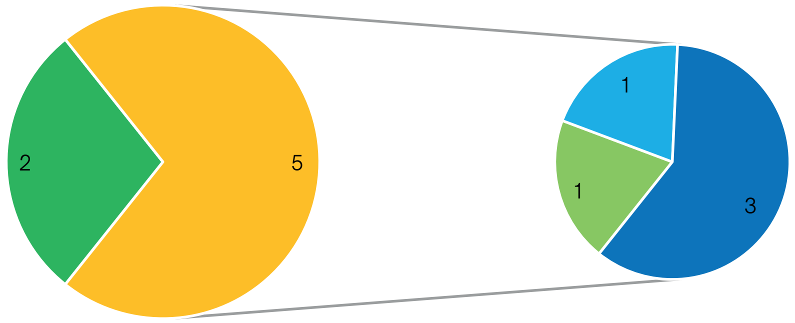
IJGlobal data shows that the number of Peruvian broadband projects has been on the rise since 2016.

Peru has a total of 21 regional projects in different stages of development. Expectations are that the expansion of the broadband network will largely improve services provided by state-owned institutions on a national level in areas that require greater social action – as is the case in rural and remote locations.

Palpable results are expected post 2020, as *IJGlobal* data shows that some in-development broadband networks are scheduled to be completed in H1 2020.

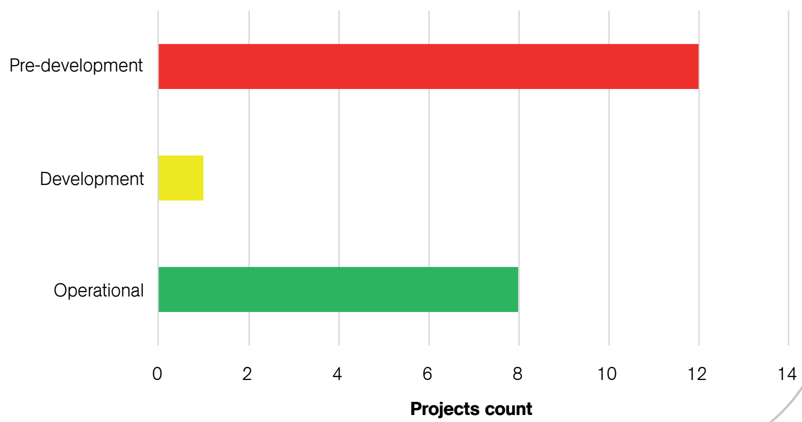
These latest broadband tenders, which represent an impressive pipeline of nearly 10,000km fibre optic across some 2,300 localities, have attracted a mix of regional and international players. Hong Kong's Yangtze Optical Fibre and Cable Company teamed up with local Yachay Telecomunicaciones to win the Áncash, La Libertad, Arequipa and San Martín bundle. Peruvian DHMONT, Telkom and Bantel, meanwhile, snatched the Huánuco and Pasco projects.

Brazilian mobile and internet projects



Source: *IJGlobal*

Peruvian broadband projects by development stage (2016-19)



Source: *IJGlobal*

LatAm telecoms

Meanwhile, Brazil is the largest single market in the region and a benchmark yet to be reached by Peru. The Brazilian market boasted 28.7 million broadband subscribers at end of 2017, with fibre optic networks being mostly developed in the south and central parts of the country.

The country has long been a preferred landing point for undersea internet cables. Stand-out projects include the Santos-Fortaleza-Boca Raton fibre optic broadband and the Seabras 1 Submarine fibre optic broadband – linking New York and Sao Paulo, with an additional landing point in Fortaleza. ■

DEAL ANALYSIS: The largest of the 4G road projects finally reaches financial close, setting a new benchmark for Colombian deals. By Juliana Ennes.

Autopista al Mar 1, Colombia

Colombia's Autopista al Mar 1 project – the largest of the 4G road programme – reached financial close in last month (March), making it the second project to close since president Iván Duque took power in 2018.

This has significantly boosted market confidence that other projects in the programme will close over the course of 2019.

The 176km Autopista al Mar 1 will connect the city of Medellín to the main highways in the country, including 4G road project Autopista al Mar 2 and Conexión Pacífico 2.

The build, operate and maintain project will improve mobility between Medellín and other important commercial centres, such as the Caribbean Coast (Urabá Antioqueño) and the Pacific Coast (Buenaventura), with construction including links to 12 cities plus the metropolitan region around Medellín.

The winning concessionaire, Desarrollo Vial al Mar (Devimar), will also:

- improve and operate the 71km existing road between Santa Fe de Antioquia and Bolombolo
- build and operate a second carriageway on the 43km stretch between Medellín and Santa Fe de Antioquia
- build one tunnel and 39 bridges.

Colombia's national infrastructure agency (ANI) estimates that around 2.27 million people in Antioquia will benefit from the project with other transactions to reach financial close within the next months – good news for market participants who have seen the 4G programme move at a sluggish pace since 2017.

Already under construction, the project completed 30% of expected works in March 2019.

The concessionaire

The Devimar team include both local and international experience, something that was considered critical in the financing process.

The team consists of Strabag (37.5%), Sacyr (37.5%) and Concay (25%).

Jesús Rodríguez Robles, general manager of Devimar, said: "To Devimar, reaching this financial close means a very important milestone. The strength of the Autopista al Mar 1 project is reflected in the vote of confidence from international and national banks. We are very satisfied because with these works we are going to bring development and well-being to Antioquia and Colombia."

The financing

Autopista al Mar 1 closed with financing totalling Ps2.23 trillion ($717.1 million). Unusually, the project was financed using dual-currency, with loans both in Colombian pesos and US dollars.

The 15-year tenor loan included six different tranches:

- one US dollar-denominated tranche totalling $220 million
- four peso-denominated tranches amounting to Ps1.34 trillion
- one URV-denominated tranche of around Ps190 billion

"The financing of al Mar 1 had some of the most interesting and novel features ever seen in the 4G market. It was very challenging and also very rewarding to be a part of such a fantastic transaction," said Clifford Chance senior associate Alberto Haito.

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.

"We still see a relevant role for development banks in financing the 4G. Despite the presence of international institutions in al Mar 1, this shows that the market is not completely ready for all risks associated with the 4G programme," an investor close to the project told *IJGlobal*.

Another source close to the deal commented that having a pool of institutions familiar with the Colombian market helped this deal reach financial close.

For Autopista al Mar 1, FDN provided senior debt totalling $178 million. Additionally, the institution provided credit for multilaterals, international banks and funds in pesos through its local currency fund – Fondeo en Pesos – essential to get the deal across the finishing line.

Lenders on deal were:

- US dollar tranche – SMBC, KfW IPEX-

Timeline

- **February 2014** – ANI announces shortlist
- **30 June 2015** – Devimar named preferred bidder
- **September 2015** – Construction contract signs
- **November 2017** – Devimar launches financing
- **21 March 2019** – Financial close

Bank, Société Generale

- peso tranches – IIC, IDB (with IIC as agent acting on its behalf), FDN, ICO, CAF
- URV tranche – BlackRock

BlackRock participated in the financing through its debt fund Fond de Capital Privado Deuda Infraestructura Colombia, under the structure of BlackRock Infrastructure Management I.

Devimar launched the financing for the road in November 2017. *IJGlobal* reported at the time that SMBC was financial adviser to the sponsors.

Legal advisers on the financing included: Clifford Chance, to the lenders (international); Binder Grösswang Rechtsanwälte, to the lenders (Austrian); Philippi Prietocarrizosa Ferrero DU & Uría, to BlackRock; Brigard Urrutia, to the lenders (local); Paul Hastings, to the obligors and sponsors (international); Katten Muchin Rosenman UK, to the obligors regarding the hedges; and Godoy & Hoyos, to the sponsors (local).

Conclusion

The use of dual-currency financing, facilitated by FDN set the benchmark for what can be achieved in Colombia.

> "To Devimar, reaching this financial close means a very important milestone. The strength of the Autopista al Mar 1 project is reflected in the vote of confidence from international and national banks"

This road project will also likely open doors for other international players who have long watched the market with interest from afar but been hesitant because of various risks associated with financing in local currency.

Key to ensuring deals stay on track will be the involvement of developments banks. Having international sponsors also helped attract the likes of Société Générale and KfW IPEX-Bank, new entrants to Colombia's 4G road programme.

The next projects expected to reach financial close include:

- Puerta de Hierro
- Rumichaca-Pasto
- Vias del Nus
- Mar 2
- Pamplona-Cucuta

Clifford Chance's senior associate Alberto Haito told *IJGlobal* that he believes the 4G programme will get more active in 2019: "This year looks promising for some of the 4G projects going to international markets. We believe that in the short term we should see a couple more projects closing."

Finally, the road programme seems to be starting to gain momentum. ■

Asia Pacific

INSIDE

Acquisition of Glow Energy

NSW Regional Rail, Australia

Pipeline & procurement deals

Projects with recent tender updates

- Van Phong 1 Coal-Fired Power Plant
- West Bengal Turga Hydro Power Plant
- Yangon Inner Ring Expressway
- Talimarjan CCGT Phase II
- Melbourne's North & South Arterial Roads
- Mandalay-Muse Rail
- Khavda PV Solar Park
- Java 9 & 10 Coal-Fired Power Plants

Closed deal values by sector

Transport: $6.91 billion

Power: $5.09 billion

Renewables: $1.02 billion

Social & Defence: $308 million

Countries with highest closed deal values

India	$3.89 billion	9
Philippines	$3.38 billion	4
Japan	$2.75 billion	11
Australia	$963 million	9
South Korea	$808 million	2
Indonesia	$775 million	1
New Zealand	$300 million	1
Sri Lanka	$270 million	1
Laos	$189 million	1
Fiji Islands	$162 million	1
Malaysia	$90 million	1
Taiwan, Hong Kong	$28 million	1
Mongolia	$19 million	1

Transactions that reached financial close

- **22 Jan** Fiji Hospital Portfolio Refurbishment
- **11 Feb** Mindanao Roads Upgrade
- **27 Feb** Yokosuka Coal-Fired Power Plant
- **11 Mar** Colombo LRT
- **14 Mar** Ausa-Chakur-Loha-Waranga Road Expansion
- **14 Mar** Nam Ngum 2 Hydropower Bond Facility

Source: *IJGlobal*, from 1 January 2019 to 31 March 2019

DEAL ANALYSIS: Global Power Synergy had to forgo Glow Energy's trophy asset to finally push through its deal with Engie. By David Doré.

Acquisition of Glow Energy

Global Power Synergy (GPSC) late last month submitted a tender offer for the remaining shares of Glow Energy, one of Thailand's largest IPPs, having completed an SPA with Engie to acquire its 69.11% stake in the company.

"It is the first time in Thailand's M&A history," said an adviser, "where an anti-trust regulator blocked a transaction on the ground of non-competitive effect."

Transaction

The Bt137.23 billion ($4.332 billion) all-in transaction involved three components: GPSC's Bt93 billion deal with Engie; GPSC's Bt40.926 billion tender offer for the remaining shares; and Glow's Bt3.3 billion sale of its main plant to B Grimm to meet a regulatory remedial requirement

Engie announced the SPA with GPSC for the sale of its interest in Glow in June 2018. The offer price was Bt96.50 for each of the 1,010,976,033 shares, translating to a Bt97.559 billion transaction.

The final SPA reduced the price to Bt91.9906 per share, meaning the final deal was Bt93 billion due to the removal of a key asset.

GPSC's tender offer for the remaining 451,889,002 shares of Glow (30.89%) had an initial price equal to that in the SPA. However, the Glow board approved 18 March a remaining Bt1.177 per share dividend to shareholders. The net tender offer price was Bt90.57 per share, meaning the offer totalled Bt40.926 billion.

Some three months after the parties agreed on the original SPA, Korn Chatikavanij, a former finance minister, asked Prime Minister Prayuth Chan-ocha to request that the ERC review the transaction. The regulatory watchdog surprised the parties when it subsequently blocked the deal in October 2018.

Post-transaction GPSC would control 80% of Map Ta Phut Industrial Estate's PPPAs, with PEA handling a fifth. ERC insisted the deal would give GPSC effective monopoly control of Map Ta Phut's PPPAs.

"GPSC, Engie, and the advisers worked together to identify the assets located in the overlapping area to propose to the regulator," said the adviser when asked whose team first broached the sale of SPP1 – Glow's main power plant in the industrial estate. The transaction was back on track when ERC ruled in late December the parties could solve the problem by selling the cogeneration plant.

A competitive bidding process quickly launched in January (2019), culminating in the 22 February announcement that B Grimm Power had agreed to purchase SPP1 for Bt3.3 billion. That sale closed on 13 March.

Acquisition financing

GPSC's acquisition finance target combines short-term capital increase (52%) with long-term debenture issuance (48%). The Thai company is relying on short-term bridging loans from private banks and its two major shareholders PTT Global Chemical (PTTGC) (22.73% interest in GPSC) and PTT (22.58%). PTT holds 48.79% in PTTGC.

A part of the acquisition financing is a syndicated loan understood to be slightly under Bt100 billion from four Thai banks: Bank of Ayudhya (Krungsri); Siam Commercial Bank (SCB); Kiatnakin Bank; and Krungthai Bank (KTB).

GPSC is paying for the tendered shares from a one-year credit facility line of no more than Bt41.5 billion from SCB and KTB. KTB is also providing a Bt3 billion loan, out of a Bt3.5 billion credit line agreed in May 2018.

GPSC's major shareholders are providing no more than Bt35 billion, with PTTGC's contribution capped at Bt8 billion. Debt restructuring will entail refinancing from short to long-dated debenture issue anticipated to be no more than Bt68.5 billion.

Advisers

Advisers on the transaction included: Bank of America (Engie's financial); Citi (Engie's financial); HSBC (Engie's financial); Allen & Overy (Engie's legal); Phatra Securities (GPSC's financial adviser); Siam Commercial Bank (GPSC's financial adviser); AvantGarde Capital (Glow buyer's independent financial); Weerawong C&P (Glow buyer's legal); Norton Rose Fulbright (lenders' legal); Chandler MHM (B Grimm's legal on SPP1); and Hunton & Williams (Glow's legal on SPP1).

Timeline

- **20 June 2018** — Engie and GPSC agree Glow Energy deal
- **October 2018** — ERC blocks the deal
- **22 February 2019** — Glow Energy agrees SPA with B Grimm Power
- **13 March 2019** — B Grimm Power closes on acquisition of SPP1
- **22 March 2019** — GPSC submits tender for remaining shares

DEAL ANALYSIS: The innovative debt structure makes this deal a pathfinder PPP in the Australian infrastructure market. By Alexandra Dockreay.

NSW Regional Rail, Australia

The Momentum Trains consortium achieved financial close on 15 February for the Regional Rail PPP in New South Wales, with a group of international banks providing debt with a novel amortisation schedule, while the NSW government has given itself the option to terminate or extend the O&M concession at year 15.

The deal continues innovation for Australian project finance, which since the financial crisis had been dominated by mini-perms and the big four Australian banks.

The PPP concession involves the design, build, financing and maintenance of a new fleet of 117 rail cars and a new maintenance depot in Dubbo, in order to replace the ageing 110-passenger car NSW XPT, XPLORER and Endeavour regional fleet.

Keeping its options open

The last Australian rolling stock PPP procurement was the High Capacity Metro Trains (HCTM) in Victoria, which reached financial close in November 2016.

But while this project was a standard 35-years plus construction availability payments DBFM concession, the RFP issued to three shortlisted bidder consortia for the Regional Rail PPP in December 2017 called for a different structure.

The state government has given itself increased optionality in a key aspect.

At the end of the 15-year O&M concession period, the grantor may end the concession and make a large expiry payment to the project company to reimburse all its outstanding debt.

Alternatively, the grantor enjoys the discretion to extend the concession (in five-year increments out to 35 years) if that offers better value than returning the project to the market at the time.

The state has gained flexibility on the concession term and the structure may appear on new PPPs, sources involved say – and not just for rolling stock.

The debt structure in this project rose to the challenge. The senior term loan, from an entirely international bank club, was structured on a 35-year amortisation curve, though with a seven-year maturity. This serves to lower the bidder's net present value, albeit creditors had some concerns around the limited debt amortisation to get comfortable with.

> The state has gained flexibility on the concession term and the structure may appear on new PPPs – and not just for rolling stock

As a more standard aspect of PPPs for rolling stock, meanwhile, the government will be able request more than the order of 117 new carriages from the train manufacturer.

The first trains should be delivered from 2023.

David Donnelly, partner at Allens, says: "It has become standard in Australian rolling stock PPPs for the state governments to seek an option allowing them the flexibility to order more trains. For efficiency the option trigger date is usually around the end of the manufacturing slot for the original fleet as the manufacturer is already running the specific configuration on the line.

Typically, it is a unilateral option, so very favourable for the government, who can order trains outside the concession or through the option. We have seen these options actually starting to be exercised. For example as part of the Gold Coast Light Rail Stage 2, additional rolling stock was procured through the Stage 1 option."

The tender

After the December 2017 RFP to three shortlisted bidder consortia, the procurement process continued through toward the final bid deadline of late June (2018), though the three-strong shortlist did suffer a drop out in May.

Bombardier and Itochu's consortium advised by Macquarie Capital exited, *IJGlobal* heard due to a change in Bombardier's global strategy.

That left two teams:

Momentum Trains, comprising Construcciones y Auxiliar de Ferrocarriles (CAF), Pacific Partnerships, DIF and UGL, and advised by MUFG Bank.

Regional Futures consortium bringing together Downer, Plenary and CRRC, and advised by Plenary.

The financing

The NSW government allocated a total budget of A$2.8 billion ($1.99 billion) for the project, based on a stated capital cost of A$1.26 billion.

Momentum Trains signed the concession agreement on 14 February (2019) and reached financial close the following day (15 February).

The leverage is between 85% and 90%, sources say. The sponsors' equity commitment is around A$114 million, *IJGlobal* understands.

The state government has been able to keep its availability payments per month at a similar size to a much longer concession.

To accommodate financial adviser MUFG, Momentum Trains has structured debt with 35-year notional amortisation period.

Debt is split between: A$1.025 billion senior term loan, with a seven-year maturity, priced at a fixed margin of 150-200bp above BBSY; and A$29 million debt service reserve facility.

MUFG Bank provided the largest ticket, with the other lenders including CaixaBank, HSBC, Korea Development Bank and Société Générale.

Banks started a syndication in late February.

Equity repays before debt

The innovative debt structure may make this a pathfinder PPP for the infrastructure market in Australia.

Firstly, the seven-year tenor is assuming a refinancing will take place to get the debt out to the end of the 15-year operations. Meanwhile the debt amortisation schedule is based on a curve out to 35 years of operations.

The government, if it chooses to wrap up the concession after 15 years, would make a very significant payment on this occasion as its expiry payment, to cover the reimbursement of all the principal outstanding on the debt which would feasibly be more than half the A$1 billion.

This heavy reliance on the one-off expiry payment to repay their debt puts creditors ill at ease. The public sector could make deductions if the condition of the trains is not up to muster. And as much as terms tightening the ability of the state to make deductions was somewhat reassuring to lenders, more stringent contract modifications were needed.

Particularly raising creditors' nerves was the disparity with the equity repayment schedule, by which all equity principal and the associated returns would be repaid by the end of the 15-year minimum operating period.

There is a lock-up to keep equity distributions in the project company for the 12-months leading up to that point.

Meanwhile, as is customary for PPPs, independent certifiers will make an assessment of the fleet two or three years out from the handback, assessing any defects and devising a programme of remedies for the train subcontractors to address beforehand. The responsibility to put up a bond for the state to hold of around 120% of the value of outstanding works is passed down from the project company through to the subcontractor. This will serve as a buffer, designed to avoid deductions from the expiry payment.

> "It has become standard in Australian rolling stock PPPs for the state governments to seek an option allowing them the flexibility to order more trains."

Momentum Trains

The Momentum Trains consortium's equity investor split is roughly: Pacific Partnerships (48%); CAF Investment Projects (26%); and DIF Infrastructure V (26%).

Donnelly of Allens says: "For CAF, this is their first time as an equity participant in an Australian rolling stock PPP. There has been a global trend towards manufacturers investing equity, for better alignment during delivery…"

Spain-based CAF will manufacture the train fleet.

Meanwhile, Pacific Partnerships' parent – the CIMIC Group – has subsidiary UGL on the project as the contractor for the operation of the trains and maintenance of the depot, and another subsidiary CPB Contractors sub-contracted to design and construct the depot alongside CAF.

The project has procured 117 carriages (29 trains) which will be CAF diesel/electric hybrids featuring reversible seats, window blinds, charging points and better overhead storage.

They will form 10 regional intercity trains, nine short regional trains and 10 long regional trains.

NSW Minister for Transport and Infrastructure Andrew Constance says: "Building the new maintenance facility in Dubbo is a major boost for regional economies. Some 200 jobs will be created during the construction phase, around 60 jobs during train completion works, and around 50 permanent jobs during ongoing operations, including a number of apprenticeships and traineeships."

Advisers

The team advising Momentum Trains on the deal included MUFG Bank (financial adviser), Herbert Smith Freehills (legal adviser), Advision (technical adviser), KPMG (tax adviser) and Aon (insurance adviser).

Meanwhile, Allens acted as legal adviser to CAF Investment Projects, DLA Piper advised Transport for NSW and the lenders were advised by King & Wood Mallesons.

Timeline

RFP issued	**December 2017**
Final bids due	**June 2018**
Concession agreement signed	**14 February 2019**
Financial close	**15 February 2019**
Delivery of new trains starts	**2023**