IJGlobal Awards 2020

Winning deals

IJGlobal Awards 2020

Europe winners

Winners in the Europe transaction category are:

- Editor's Choice Europe – **Wavemaster Horizon**

- European offshore wind – **Dogger Bank Wind Farm A and B**
- European digital infrastructure (fibre) – **G.Network fundraising**
- European digital infrastructure refi for transport comms – **Synerail – GSM-R**
- European social infra (health) – **Ankara Etlik Integrated Health**
- European social infrastructure education – **Espoo Schools**
- European Transport Mass Transit – **XMU**
- European Transport – **A465 PPP**
- European Telecoms Towers – **Phoenix Tower**
- European telecoms – **Project Astérix**
- European Hydro Refinancing – **HS Orka**
- European waste-to-energy portfolio refinancing – **Biogen**
- European energy storage refinancing – **Enerjisa Enerji Üretim**
- European solar refinancing CSP – **Project Helios**
- European digital infrastructure refinancing smart meter – **Calisen Refinancing**
- European digital infrastructure refinancing fibre – **Open Fiber**
- European solar refinancing – **Renovalia – SIX**
- European Port Refinancing – **Antwerp Gateway**
- European renewables portfolio refinancing – **Iberwind Portuguese wind farm**
- European Transport Motorway Refinancing – **A88 Refinancing**
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- European Waste-to-Energy – **Protos**
- European Solar – **Kaposvár Solar PV Project**
- European onshore wind – **Zeewolde Wind Farm**
- European oil and gas – **Amur Gas Processing Plant**
- European Export Finance – **Northvolt**
- European Mining – **Project Taishet**
- European Digital Infrastructure FttH – **THD Loire-Atlantique**
- European battery storage – Northvolt

IJGlobal Awards 2020

Editor's Choice Europe – Wavemaster Horizon

Editorial director **Angus Leslie Melville** singles out a peach of a deal – Wavemaster Horizon – for the inaugural winner of the *IJGlobal* Editor's Choice Award for Europe

Wavemaster Horizon is a deal that brings to mind Dublin Convention Centre PPP of 2007 vintage. Now, those of you who know Wavemaster are likely wondering how on earth a rather drab Irish deal (that got into a spot of bother a few years back, losing quite a few folk quite a lot of money) is in any way similar to a shipping finance deal.

Well, it's not so much the convention centre itself but the fact that it won the *IJGlobal* European Infrastructure Award for 2007 while I furiously championed a far more interesting deal that had all the hallmarks of a winner – the UK MoD Future Provision of Marine Services (FPMS) PFI, which sources tell me is performing nicely to this day.

When announcing the European shortlist from the podium at London's Natural History Museum in March 2008 (fortunately people paid for tables before reality landed with a crash) a cheer went up for FPMS. Agreeing with the sentiment, I had then to announce the damp squib that was the convention centre.

FPMS was a particularly interesting transaction that involved a fleet of some 110 vessels, procurement of 31 new vessels, and marine support at major UK naval bases in Portsmouth, Devonport and The Clyde. The key part of the deal was that the lenders' risk rested on the residual value of the assets at the end of the contract.

And so to Wavemaster Horizon, this is a ship finance deal that's been on our radar for some time since discussing it over a pint with an old chum at a time when that was a far simpler affair. Now an infra purist might pet lip at this deal winning such accolade. I agree it dwells in the realms of core plus… but it's terribly interesting and no mean feat to have brought to financial close.

Bibby Marine – via its subsidiary Wavemaster Horizon Ltd (WM2Ltd) – entered into a €40 million ($48m) shipbuilding contract with BV Sheepswerf Damen Gorinchem for a service operations vessel (SOV). The vessel was built at the Damen Galati shipyard in Romania and was delivered in autumn 2019.

Horizon is a new class of purpose-built SOV with walk-to-work (W2W) capability developed by Damen in consultation with the offshore renewable energy industry and designed to meet the increasing demand for vessels capable of operating in ever further off-shore locations.

Bibby entered into a 10 plus 5-year charter party with Siemens Gamesa Renewable Energy (SGRE). It will use the vessel to meet service obligations on the Hohe See and Albatros offshore wind farms some 145km and 150km from the German coastline.

JF Dusch

"We love to mix up and diversify our portfolios by taking on innovative investments such as Wavemaster."

Horizon is a new class of purpose-built SOV with walk-to-work (W2W) capability

Chris Hayes

"We are delighted with this award which reflects the hard work and innovation that went into the Horizon deal."

Hohe See and Albatros are co-owned by majority shareholder Energie Baden-Württemberg (EnBW) with 50.1%, alongside Enbridge with 25.4% and Canada Pension Plan Investment Board on 24.5%. The wind farms operate with 77x SWT-7.0 154 turbines supplied by Siemens Gamesa, providing electricity to some 710,000 households. WM2 is the only vessel servicing these assets.

The vessel was originally financed under a 60/40 gearing structure with debt arranged by ABN Amro. Chris Hayes, Peter Rowe and Rees Sutton of Centrus Asset Management (CAM) refinanced the vessel via an innovative 100%, 10-year debt finance structure.

The refinancing was achieved via a sale and leaseback whereby a CAM-owned SPC – Centrus Marine One (CM1) – raised fixed-rate finance to acquire the vessel from Bibby comprising:

- 80% senior debt – 10-year, fixed rate loan from SMBC Leasing
- 20% junior debt – 10-year structured bond from funds managed by Edmond de Rothschild Asset Management

This was essentially stretch infrastructure financed using hybrid project/asset finance techniques, and the transaction stands out due to its unusual capital structure which employs a combination of bank and bond finance (with embedded derivatives courtesy of Peter Rowe) to provide 100% debt finance secured against the vessel and charter party revenues.

The structure was conceived and structured by Centrus' Hayes, Rowe and Sutton at CAM with legal support from Greenberg Traurig's Graeme McLellan and Richard Hughes.

The Bibby Team comprised Jonathan Lewis (ex-FD now chief executive of Bibby Group); Alexei Calendar, Bibby Group; and Stephen Bolton (MD) and Sue Worden (FD) from Bibby Marine who were supported by Norton Rose Fulbright's Andrew Williams and Richard Howley.

The SMBC Team comprised Nori Kawachi, Jason Frank and Marina Bride-Soares with legal support from Andrew Baird and Charlotte Knight from the Watson Farley & Williams Dubai office.

Meanwhile, the Edmond de Rothschild team was led by Jean-Francis Dusch with central roles played by Gurjit Orjela and Robbie McColl with legal support from Richard Smith at WFW in London.

A word from those who do

At *IJGlobal* we are only too happy to raise a glass to a deal of such significance, hopefully cleansing the palate from the memory of a certain Irish convention centre.

Centrus managing director Chris Hayes said: "Peter and I are delighted with this award which reflects the hard work and innovation that went into the Horizon deal and we'd like to thank the team at *IJGlobal* for the recognition.

"From the outset, old shipping and infrastructure lags told us that 100% debt financing 'for a ship' wasn't possible, but Horizon isn't any old ship and I realised this when we started to receive fan mail from German ship spotters! We try to reply to them all.

"Around us, we see that the UK and northern Europe is going through a period of energy transformation and offshore wind is playing a key role in this process. Deep offshore wind turbines do not maintain themselves, however. This is done by brave men and women who leave their families for weeks at a time to crew vessels like Horizon. To have played some part in that process has been an honour."

Chris continues: "I don't want to say too much about the capital structure, but this was probably one of the most complex deals we have worked on and executing a transaction of this complexity without being allowed to meet anyone involved presented its own set of challenges, but these were eventually overcome at 3am on 23 December when the documents were signed."

Then, clearly wiping a tear from his eye, Chris seemed to think he was at the Oscars as he went on to give credit to everyone he had met virtually in the last year.

He says: "As with all deals, this was a team effort and special mention goes to Rees Sutton – for all his involvement in the deal until he very sensibly went on paternity leave – Jonathan Lewis, Alexei Callender and Stephen Bolton from Bibby; Galya Petkova and Dorota Chmielewska from Siemens Gamesa Renewable Energy; Nori Kawachi, Jason Frank and Lawrence Butcher at SMBC Leasing; Gurjit Orjela, Robbie McColl, Lizzie Lutley and Jean-Francis Dusch from Edmond de Rothschild Asset Management; and our lawyers Graeme McLellan and Richard Hughes from Greenberg Traurig; Andrew Baird and Charlotte Knight from WFW Dubai; Andy Williams from Norton Rose Fulbright; and Richard Smith and the team at WFW London.

Graeme McLellan

"We are very pleased to have advised the Centrus team on this novel and challenging financing."

Fortunately for JF Dusch, he did not have to follow honours roll call as the audience would have been decidedly restless after enduring the last paragraph which I refuse to believe Chris could have delivered in one breath.

JF embraced brevity saying: "As an infra debt asset manager with up to three decades of experience in the field, we love to mix up and diversify our portfolios by taking on innovative investments such as Wavemaster. It is one of these transactions we enjoyed working on and feel very attached to."

Greenberg Traurig's Graeme McLellan added: "We are very pleased to have advised the Centrus team on this novel and challenging financing. The deal had its moments and required creative legal solutions to a number of issues – we were able to draw on our experience of complex cross-border financings in a range of sectors to devise bankable proposals. It is particularly pleasing that the innovation, creativity and hard work involved are being recognised with this award and we'd like to add our thanks to the team at *IJGlobal*."

European offshore wind

Dogger Bank Wind Farm A and B

DOGGER BANK WIND FARM

The Dogger Bank Wind Farm A and B has won the award for Europe Renewables Offshore Wind deal of the year.

Project sponsors SSE Renewables and Equinor in November (2020) reached FC on the first two phases of what is to become the world's largest offshore wind farm, more than 130km off the north east coast of England.

Despite economic uncertainty brought about by the coronavirus pandemic, the wind farm development attracted strong interest from lenders and secured competitive terms at financial close.

The £7.6 billion ($10.7bn) project stands out for being – in aggregate – the largest offshore wind project financing to date globally.

Total senior debt facilities across the two phases came in at £4.8 billion, with 29 experienced commercial banks lending on the deal alongside 3 export credit agencies. Ancillary facilities on the project reached some £700 million.

Following FC, the project developers then sold off a 20% equity stake each in the two phases to Italian energy giant Eni for £405 million.

The project is due to be delivered in 3x 1.2GW phases, which will reach 3.6GW when complete.

For ease, Dogger Bank A and B are being constructed simultaneously while making use of common technology and contactors. The two phases are also being financed concurrently.

The wind farm will also be the first to feature GE Renewable Energy's 13MW GE Haliade-X turbines – at the time of close, the largest commercially available turbines.

When fully complete in 2026, each phase of the wind farm will be capable of producing 6TWh of renewable electricity, totalling 18TWh annually – enough to supply 5% of the UK's demand and equivalent to powering 6 million UK homes each year.

Investment in the first 2 phases of the project has seen the creation of 320 new skilled jobs for the north east of England, with more expected as construction ramps up.

First power on Dogger Bank A is expected in the summer of 2023 and in 2024 for Dogger Bank B.

Advisers:
- BNP Paribas
- Linklaters
- Norton Rose Fulbright
- K2 Management Baringa
- Baringa
- Benatar & Co
- Operis

European digital infrastructure (fibre)
G.Network fundraising

The award for European Digital Infrastructure in the fibre category has gone to London-focused fibre company G.Network for its successful fundraise of £1 billion to support its rollout of full fibre broadband in the capital over the next 5 years.

Cube Infrastructure Managers-backed G.Network is in the process of rolling out fibre broadband to 1.4 million premises in underserved areas in 13 London boroughs, as many people continue to work from home in response to Covid-19 and require improved connectivity.

The fibre provider announced its plans for an equity raise last summer (2020), seeking to boost its funding to carry out the rollout through the on-boarding of new investors.

Financial close on what came in at a £1 billion fundraise was reached in December (2020) when Universities Superannuation Scheme (USS) came on board with a £295 million equity investment in G.Network over 6 years.

The deal secured USS – the UK's largest private pension scheme by way of assets – as a joint controlling shareholder of G.Network, alongside Cube Infrastructure Managers which acquired a majority shareholding in the broadband provider in 2018.

A debt facility was also secured from four banks of up to £745 million, paving the way for G.Network to proceed with working on 4,500km of London streets to install new full fibre broadband infrastructure.

The rollout is expected to create more than 1,250 new jobs, while G.Network is working with 8 local authorities to install fibre broadband with plans to cover a further five local areas. It is aiming to connect at least 80% of premises in each.

The £1 billion raise makes the deal one of the largest among alternative network providers since Cityfibre announced its £2.5 billion FTTP rollout plan in 2018.

The Mayor of London, Sadiq Khan, said of the deal last year: "At a time when so many are reliant on good connectivity, we're encouraging more investment in full fibre by working with London's 32 boroughs and TfL to provide better access across the capital."

Advisers
- DC Advisory
- Rothschild & Co
- DLA Piper
- Linklaters
- Clifford Chance
- Solon Management Consultancy
- Hardiman Telecommunication
- BDO

European digital infrastructure refi for transport comms
Synerail – GSM-R

The award for European digital infrastructure refinancing in transport communications division has been won by Synerail for the GSM-R transaction in France.

Synerail which holds the GSM-R contract – a PPP between the company and France's national state-owned railway Société Nationale des Chemins de Fer Français (SNCF) – last May refinanced its senior debt raising €54 million from three commercial banks.

The financing was arranged by Crédit Agricole, SMBC Europe and Intesa San Paolo across two tranches both with a tenor of four years.

GSM-R – the Global System for Mobile Communications, Railway – is a global mobile telecoms system dedicated to the railways that is compatible with European inter-operability standards.

The project replaced the RST analogue telecoms network to ensure uniformity in the exchange of information within the framework of operational rail networks.

GSM-R technology has been installed across more than 12,000km of rail network in France replacing 35 separate telecoms systems to create a single network.

Synerail along with SNCF is working towards modernising the France's railway network and the successful refinancing of its senior debt is seen as an endorsement of the PPP model of which the GSM-R was the first rail PPP in France.

This greenfield project was awarded in 2010 and has a 15-year concession ending in 2025. At the end of the concession, the French government will take over management of the network but the decision on future management remains to be made.

A PPP model was chosen for this project as the government sought to mobilise capital quickly by utilising private sector support for major strategic investments in the country.

The refinancing last year allows Synerail to optimise its financing plan and cash management over the remaining term of the partnership contract.

This is a pathfinder project and its successful completion could make it the template for future PPP rail projects in France.

Synerail is majority owned by Vinci Concessions (70%) with a minority share held by France's second largest mobile service operator SFR which has been rebranded Xp Fiber.

Advisers:
- Eight Advisory
- White & Case
- Allen & Overy
- Clifford Chance
- De Pardieu Brocas Maffei

European social infra (health)

Ankara Etlik Integrated Health

This transaction was a serious contender for the European Editor's Choice Award, pipped only by the novelty of a shipping finance transaction… which seems unfair given the effort that went in to getting this Turkish deal over the line.

EY played a hugely significant role as SPV adviser on Ankara Etlik Integrated Health and – above any other party involved in the deal – it warrants being singled out for having revived a deal that was destroying the reputation of PPP in Turkey and shepherding it to financial close.

This project was submitted in the refinance category and identified in the submission as a restructure… but warrants recognition as a greenfield deal in its own right, given the effort that went in to closing it.

Ankara Etlik is one of the largest PPP hospital projects in Turkey, with a project size of €1.3 billion and a campus that will comprise 11 different buildings with total capacity of 3,566 beds. It is located in Ankara and replaces six existing hospitals.

The project sponsors – Türkerler and Astaldi – in September successfully closed the financial restructuring of €883 million project finance loans.

The project faced significant operational and financial challenges leading – understandably – to broken trust among various stakeholders and the lenders.

This ultimately resulted in a draw-stop of the existing €883 million loan facilities provided by global financial institutions, including EBRD, IFC, Black Sea Trade and Development Bank, Credit Agricole, Deutsche Bank and UniCredit and Turkish banks including Isbank, Akbank and TSKB among others.

Following a significant restructuring process the deal with a large number of stakeholders was successfully closed, making it the first restructuring in the Turkish Healthcare PPP space.

Orcun Makal, head of capital and debt advisory at EY, says: "Etlik is one of the most remarkable restructuring infrastructure projects ever in our market, appreciated not only by the client and lenders but also by government. Beyond that, successful close helped the Turkish economy in many ways."

Advisers:
- Yapi Kredit
- Citigroup
- EY
- KPMG
- Herguner Bilgen Ozeke
- Fidan & Fidan
- Clifford Chance
- Freshfields Bruckhaus Deringer
- OGB Attorney Partnership
- Mott MacDonald

European social infrastructure education
Espoo Schools

It is nigh on impossible to ignore a market first when it comes to selecting winners for awards, and so it was for the Espoo Schools PPP in Finland which made it to financial close in June.

This is a really interesting deal with Meridiam taking the lead role (80%) working alongside local construction company YIT (through the SPV Kumppanuuskoulut Oy) for the DBFM of five schools and three day care centres that will transform education facilities for more than 4,000 pupils in Espoo, Finland's second largest city.

This project is part of Espoo's social infrastructure investment programme – Schools in Shape – and will contribute around 15% of the identified needs to guarantee healthy and functional premises for schools and day care centres in the city.

As the nation's first social infrastructure PPP it involved an innovative financing structure that forced a re-draft of Finland's tax legislation and now potentially serves as a pathfinder for a pipeline of similar deals.

The city of Espoo was seeking a new model for it to deliver smaller, more localised projects and – after considering the "lifecycle model" – it identified PPP as the best option. Historically, Finnish tax law only allowed for transport PPP projects – rail and road – and to benefit from tax exemption clauses.

The campaign to change tax laws to allow wider use of the PPP model started in the autumn of 2016 with the support of Espoo alongside the cities of Helsinki, Oulu, Turku, Tampere and Oulu, and was backed by the Association of Finnish Municipalities, real estate body Rakli and construction association RT.

This eventually led to a change in tax law that took effect in early 2018, allowing the PPP model to be applied to a wider range of sectors.

Espoo Schools is the first project to be delivered at the municipal level and has the full support of residents, particularly because they would have met the cost of the upgrades through municipal taxes under the previous system.

Advisers:
- Capex Advisers
- PwC
- Bryan Cave Leighton Paisner
- Hannes Snellman
- Merilampi
- Roschier
- Ramboll
- Aecom
- Operis
- Marsh

European transport mass transit
XMU

For the European mass transit award in the transport, *IJGlobal* has selected an interesting project – led by Allianz Global Investors – to finance 55 battery-electric-powered trains to be operated in the state of Schleswig-Holstein, northern Germany.

These trains can operate on non-electrified and on electrified routes and have a range of 80km at a driving speed of up to 160km/h while on pure battery mode. The trains can operate on 80% of non-electrified routes in Germany and can be charged while driving, at train stations and with the energy generated during braking.

It gets a green thumbs up as these trains will replace 46 diesel-powered units transforming Schleswig-Holstein's current network that is currently 70% reliant on diesel-powered trains which compares poorly to the German average of 43%.

The trains – with higher energy-efficiency and an innovative battery drive concept – also play a significant role in both the state's and Germany's long-term goal of net zero emissions.

For passengers, they will enjoy more comfortable trains paired with an increased regularity of services providing an essential service to travellers in the region. The goal also is to incentivise travellers and commuters to use public transport over individual car journeys and therefore contribute to a significant reduction in CO_2 emissions.

The XMU transaction finances a Lessor SPV to purchase the trains throughout a 4-year construction period, with the trains then leased to several train operating companies. The state of Schleswig-Holstein will pay the train operating companies for the services provided, thereafter the train operating companies will make lease payments to the Lessor SPV.

To support the procurement of innovative battery-powered trains and encourage the shift from diesel to much cleaner electric power, the Schleswig-Holstein is providing a debt service guarantee from commencement of construction up until the end of the planned operations period.

The total debt raised for the XMU transaction amounts to between €150 million and €200 million and demonstrates Allianz Global Investors' structuring capability by packaging the full 32-year financing package into one simple and stable fixed-rate instrument. AllianzGI set constant monthly annuity repayments during the full 28-year operations phase.

Advisers:
- Ashurst
- K&L Gates
- Mazars

European transport
A465 PPP

The A465 PPP – Heads of the Valleys Road Project – sees Meridiam take the limelight once again for social infrastructure in Europe for a pathfinder deal that made it to financial close last October in Wales.

It's a long time since the UK boasted a pipeline of PPP transactions so any deal of significance making it over the line in the country warrants consideration for an award, but the pathfinder nature of this Welsh deal makes it a dead cert.

When choosing awards, it stresses the *IJGlobal* editorial team to choose an obvious winner, scanning the other submissions to see if there is anything there that gives them the edge against a deal that is likely to sweep the board with other titles.

However, when you stack up the pros for the A465 and take into account that this is the first deployment of the Welsh mutual investment model (MIM) which it evolved from the Scottish NPD alternative to England's PFI/PF2.

Through the MIM model, the Welsh government can invest up to 20% of the project's equity. It also allows the government to nominate a director to sit on the board, thereby giving it greater control.

After years in the making, this deal was pushed through to financial close in a challenging environment with the sponsor – a JV of FCC and Meridiam – closed the deal in just three months from award… testament to their combined industry experience and the resilience of infrastructure projects.

The A465 runs from Dowlais Top to Hirwaun and was initially brought to market in 2014 as a PPP to expand a 17.7km stretch of road from a 3-lane single carriageway to a 2-lane dual carriageway, along with the construction of a 2.2km stretch of new road.

The project has an associated cost of £644.5 million with debt arranged across three tranches, £593 million in senior debt and an equity bridge loan of £51.5 million. The £235 million senior debt was secured with a 28 year 11 month tenor.

Advisers:
- Societe Generale
- PwC
- DLA Piper
- Ashurst
- Herbert Smith Freehills
- Eversheds Sutherland
- Pinsent Masons
- Leigh Fisher
- Mott MacDonald
- Steer
- Willis
- AON
- Marsh Insurance

European telecoms towers

Phoenix Tower

Given deal flow in the telecoms and digital infrastructure space, this year proved challenging to identify distinct winners of awards across Europe, but the Phoenix Tower deal leapt off the page during the editorial judging sessions.

Blackstone portfolio company Phoenix Tower International in March (2020) closed an agreement with Bouygues Telecom to develop some 4,000 newly-constructed wireless towers over 12 years across France outside the Very Dense Area.

This transaction is one of the largest deals closed by Phoenix and significantly expands its footprint in France, while also solidifying the company's strong position in Europe, the US, Latin America and the Caribbean.

Phoenix and Bouygues Telecom established a long-term partnership in the form of a Phoenix-controlled joint venture that will own and operate the sites. Some of the sites will be deployed as part of Bouygues Telecom's "New Deal Mobile" regulatory obligations of targeted mobile radio coverage improvements, accelerated mobile radio rollouts alongside transportation routes. With attractive size and coverage, the JV is very well positioned as an infrastructure operator of choice in the market.

At the time of financial close, Phoenix Tower International chief executive Dagan Kasavana said: "We are quite enthusiastic to partner with Bouygues Telecom on such an important and exciting project. We believe the French market is well positioned for significant wireless growth throughout the country as further 4G and 5G deployments are made over the coming years and we are proud of our participation in these deployments."

Phoenix Tower International owns and manages more than 8,000 towers, 986km of fiber and in excess of 80,000 other wireless infrastructure and related sites throughout the US, including Puerto Rico and the US Virgin Islands, Costa Rica, Panama, El Salvador, Guatemala, Colombia, Peru, Mexico, the Dominican Republic, France, Jamaica, Argentina, Ecuador, and Bolivia.

Phoenix was founded in 2013 with a mission to be a premier site provider to wireless operators in high-growth markets. Investors include funds managed by Blackstone Tactical Opportunities and John Hancock, as well as members of the management team.

Advisers:
- Natixis
- ING
- Allen & Overy
- White & Case
- Freshfields Bruckaus Deringer
- Orrick Rambaud Martel

European telecoms

Project Astérix

The European telecoms award goes to a major French transaction that saw Vauban Infrastructure Partners and Bouygues Telecom join forces to invest €1.5 billion to roll out fibre-to-the-home (FTTH) to medium density areas around France.

Working through the Société de Développement pour l'Accès à l'Infrastructure Fibre (SDAIF), the vehicle purchased and access rights to FTTH lines from Orange in certain areas in France – around 30% of French premises – through the co-financing of Indefeasible Rights of Use (IRU) and the related financing.

Bouygues Telecom selected Vauban as a majority partner allowing it to take 51% shareholding in the SPV, having won the call for tenders at the end of 2019.

In turn, Bouygues entered into a 30-year wholesale commercial agreement with the SPV to rent access to the FTTH lines within the SPV's perimeter. The SPV also offers rental access to the FTTH lines to third-party operators.

As part of the transaction, SDAIF acquired Bouygues Telecom's existing long term FTTH access rights of optical fibre bought from Orange and will acquire additional long-term FTTH access rights of optical fibre from Orange through co-financing arrangements.

To finance the acquisition of such rights, SDAIF has raised €1.11 billion. The debt was underwritten at 100% by Credit Agricole at the time Vauban was selected preferred bidder, just before the entry into force of the first national lockdown in France.

Bouygues Telecom retains such long-term FTTH access rights access rights as a client to SDAIF pursuant to a 30 years master services agreement which will back debt service.

More than €1 billion will be invested in FTTH lines over the next for years by the JV, enabling Bouygues Telecom to secure infrastructure access at attractive conditions and provide coverage to its fast-growing FTTH client base in the Orange AMII area.

For Vauban, the JV represents the next step in a longstanding strategy to provide digital infra access to commercial operators, adding Orange AMII area to a strong presence in less dense areas (PIN networks, Axione Infrastructure) and high density areas (Cityfast partnership).

Advisers:
- Credit Agricole
- Rothschild
- Goldman Sachs
- Clifford Chance
- White & Case
- Wilkie Farr & Gallagher

European hydro refinancing

HS Orka

Ancala's HS Orka refinance deal is one that regular readers of *IJGlobal* will be well acquainted with as it won a trophy in the IJInvestor Awards in a rare cross-over between our two ceremonies. This is a fascinating deal that crops up here again for *IJGlobal* as European hydro refinancing winner given that it's such an interesting transaction.

HS Orka is the Icelandic renewable energy and utility company in which Ancala Partners owns 50%, and this award is to reflect it securing a $210 million financing package with a group of leading European commercial lenders in February 2020.

The national renewables leader owns and operates more than 174MW of geothermal power production capacity in addition to a 10MW hydro plant that was recently commissioned… and this award is to recognise the hydro element (and because we like the deal so much).

Ancala in partnership with Jarðvarmi – a consortium of 14 Icelandic pension plans – acquired the business in May 2019. Immediately after the acquisition, Ancala worked with HS Orka to explore options to structure a flexible financing platform that would enable the company to deliver its growth projects.

The financing comprised a term loan, capex facility and a revolving credit facility. HS Orka is using the facilities to pursue attractive development projects and strengthen its position as Iceland's leading privately-owned power producer.

The new financing enabled HS Orka to address several key objectives – primary among them the capacity to raise USD-denominated debt to match the company's currency exposure while also implementing a cost-efficient capital structure through the establishment of a platform. This enabled HS Orka lenders (both current and future) to lend under a structured framework.

Beyond that, the transaction achieved reduced all-in rates and generous covenants to establish further operational flexibility, and established a significant revolving capex facility to support further investment in generation infrastructure in Iceland.

The refinancing package has given HS Orka the ability to fund attractive development projects and further de-risk its operations making it a stand-out deal for Europe.

Advisers:
- DC Advisory
- Latham & Watkins
- Shearman & Sterling
- Logo Law

European waste-to-energy portfolio refinancing
Biogen

The winner of the European waste-to-energy portfolio refinancing award is the £50 million deal focused on a leading UK owner/operator in the anaerobic digestion (AD) market – Biogen.

This Ancala transaction deals with the refi – led by AIB and NatWest – of a diversified portfolio of 14 renewable energy from waste plants and six composting sites that provide cost-effective, low carbon, food waste management solutions.

The Biogen AD facilities have an installed generation capacity of around 26MW and works with supermarkets, the hospitality industry, food manufacturers and local authorities across the UK. The plants recycle some 500,000 tonnes of waste each year and produce enough green energy to power over 55,000 homes.

The structure of the financing was unique in that it was the first portfolio-based financing for the AD sector in the UK. It is based on the operational track-record of Biogen, which allowed the lenders to approach the financing on a corporate basis rather than individual asset financings which have been the traditional approach in the sector.

This required detailed due diligence and meetings with the management team for the lenders to appreciate how Biogen's leading and in-house operating model across its diversified portfolio was differentiated from the rest of the market.

This structure is now being used as a template by lenders when assessing other portfolios seeking debt finance in the AD sector.

During the refi process, there was also a change in the senior management team with Biogen's chief executive departing for a career change. This spooked the lenders, but Ancala was able to demonstrate how its active asset management strategy worked in practice, including day-to-day involvement through its industry partners and asset management team.

The refi enabled the standalone financing of a leading energy-from-waste renewables platform. It also provides Biogen with funding to pursue further investments into the sector, including renewable heat and private wires to export renewable electricity directly to nearby businesses and communities.

The portfolio is now outperforming returns for similar assets in the same sector making it a worthy winner of this award.

Advisers:
- Rubicon Infrastructure Advisers
- Burges Salmon
- Osborne Clarke
- Mott MacDonald
- Eunomia

European energy storage refinancing
Enerjisa Enerji Üretim

The winner of the *IJGlobal* Award 2020 for refinance in the energy storage category for Europe is Enerjisa Enerji Üretim in Turkey, the largest financing to make it over the line in the country in the 2020 calendar year.

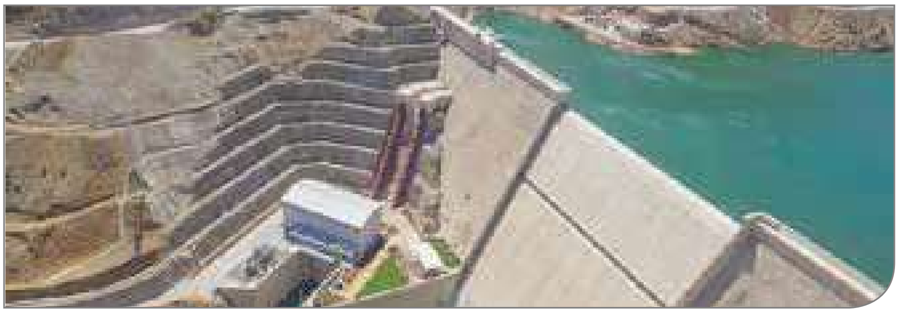
Furthermore, it is the single largest sustainability-linked (ESG) financing ever to have completed in this sector in Turkey.

The transaction was initiated towards the end of March 2020 at the peak of Covid-19 uncertainty and reached financial close in September firmly in the teeth of the second coronavirus wave.

The complexity of the process required sponsors and advisers to coordinate among multiple stakeholders – more than 20 incumbent lenders, across several regions – and due diligence of the full portfolio of 20 power plants.

The company needed to put corporate-style financing in place to prepare for its next phase of development given that Enerjisa has become a mature company showing a significant track record in every aspect of its business.

With this transaction, Enerjisa was able to align its capital structure with its long-term strategic objectives, including being relieved from sponsor support in place in the legacy financing, switching to no security/sponsor support structure



Furthermore, additional indebtedness and investments was allowed within a corporate-style covenant structure for renewables, enabling the company to distribute dividends to its shareholders by reducing restrictions on such distributions – so long as covenants are not breached.

As a final benefit, the refi allowed a reduction in the number of lenders from a fragmented group of 20, down to just six – greatly simplifying governance of the loan.

Enerjisa – an (indirect) subsidiary of Sabancı Holding and E.ON – has an installed capacity of around 3,607MW generated by 12 hydroelectric plants, three CCGTs, three wind farms, two solar parks and one lignite power plant.

It is a leading primary dealer in over-the-counter market and derivatives exchange with its trading volume exceeding 20TWh and it is the largest private sector power generation company in Turkey.

Advisers:
- Cranmore Partners
- GKC Partners
- White & Case
- Selvi Ertekin Attorney Partnership
- MRC Turkey
- Aplus Enerji
- ACE Consulting & Engineering

European solar refinancing CSP
Project Helios

You don't see many European financings of concentrated solar power let alone a refinancing of CSP and – as such – this deal warrants being singled out.

The €326 million refi by Atlantica Yield also stands testament to the skills of primary deal leaders – Cantor Fitzgerald and Assured Guaranty.

Cantor Fitzgerald wore several hats on this Spanish refi as financial adviser, sole placement agent, ratings adviser and structuring agent; while Assured Guaranty brought its wrapping capabilities.

This was first transaction globally that AG wrapped in the CSP sector, and – even more significant – it is understood to be the first monoline wrapped CSP… ever.

It impacts two concentrated solar power assets – Helios I and II – that have a combined generating capacity of 100MW and are built on 220 hectares in Ecija, southern Spain. The projects were initially owned on a 50:50 basis by E.ON and Atlantica Yield – previously Abengoa Yield – but are now 100% owned by Atlantica Yield.

The portfolio refi using Assured Guaranty's credit enhancement product enabled the debt product to be rated AA by S&P. The investors in the bond are Barings and Ampega.

The financial cost for the transaction (all-in) was sub 2% a result of the AA treatment and guarantee provided by Assured Guaranty, while also providing Atlantica Yield with improved tenors and leverage to comparable existing financings.

The Assured Guaranty refi came in at roughly 100bp less than other non-wrapped deals in the market with a shorter regulatory tail (six months) than comparable financings that require tails of up to two years.

Beyond that, the new structure also enabled Atlantica Yield to increase its CAFD (distributions) from the project while enabling a simultaneous dividend recap for itself against the existing structure.

Project Helios is also the first rated CSP transaction globally following Solaben 1&6 in Spain of the 2015 vintage.

Francisco Martinez-Davis, chief financial officer of Atlantica, said at the time of financial close: "With this financing, Atlantica is able to continue to diversify its financing sources."

Advisers:
- Cantor Fitzgerald
- Clifford Chance
- Watson Farley & Williams
- BDO
- Altermia
- PwC

European digital infrastructure refinancing smart meter

Calisen Refinancing

The £1.1 billion refinance of Calisen – the UK smart metering asset provider – in July (2020) caused ripples in the market as one of the few (and first) large, multi-creditor financings to achieve financial close in the London loan market at the height of the pandemic.

The refi impacted part of Calisen's existing portfolio of smart meters and other metering equipment, alongside the raising of capital expenditure and working capital debt to support the supply of metering equipment under contracts with the Big 6 and other energy suppliers.

The transaction first commenced in late 2019 and continued past the commencement of the Covid-19 outbreak in the UK, to close in July with the support of around 20 bank and institutional lenders.

Among its achievements, the Calisen deal heralded the entrance of institutional lenders – at scale – into the smart metering market which had hitherto been dominated by bank lenders supporting infrastructure fund investors.

Two existing bank facilities were refinanced – £400 million, maturing October 2022, and £730 million, maturing September 2029.

> *"The support that the refinancing has generated from both our existing lenders and new institutional debt providers is testament to the underlying credit strength of our business."*

These meter funding facilities were replaced by a fixed-rate institutional tranche of £290 million which amortises from June 2025; and an amortising bank loan of £192.5 million.

Additionally, the following committed but undrawn facilities are available as part of the new structure to fund the continued roll-out of smart meters from the group's pipeline: an amortising capex facility of £115 million; a revolving credit facility (Platform RCF) of £400 million; and a standby facility of £70 million.

Calisen CFO Sean Latus said at the time of financial close: "The refinancing extends the weighted average life of the facilities we have refinanced as well as fixing their cost while interest rates are at historic lows.

"The support that the refinancing has generated from both our existing lenders and new institutional debt providers is testament to the underlying credit strength of our business, allowing us to fund the continued smart meter roll-out more efficiently and deliver on our pipeline of opportunities."

Advisers:
- Evercore Partners
- Santander
- Allen & Overy
- Clifford Chance
- BDO

European digital infrastructure refinancing fibre

Open Fiber

The winner of the digital infrastructure refinance award in the fibre category goes to Open Fiber – a landmark transaction in the infra sector in both Italy and Europe.

BNP Paribas played a leading role in this transaction, acting in an advisory capacity while also serving as structuring bank, modelling bank, global coordinator, global bookrunner, underwriter, initial mandated lead arranger and hedge coordinator.

The execution timing for the A&E was particular as it was running in parallel with ongoing M&A discussions on ENEL exiting to Macquarie and Cassa Depositi e Prestiti taking a leading role in the future consolidation of the broadband market in Italy, therefore securing the financing of the business plan of Open Fiber was of critical importance for both shareholders.

Open Fiber was created to roll out a national FTTH network impacting 19.4 million households in Italy under a concession regime benefiting from public grants from Infratel. When complete, OF's network will be the largest in Europe. BNPP, Societe Generale and Unicredit in July 2017 provided a €510 million bridge loan to OF, which was still at development phase, achieving close in October 2018.

> *Open Fiber – a landmark transaction in the infra sector in both Italy and Europe.*

In early 2020, following an update of the original business plan, BNPP, SG and Unicredit started discussions with OF on the best way to address additional financing needs.

This translated into a structuring and advisory mandate whereby, through an amend and restate process, a €675 million top-up, non-recourse facility was added to the existing debt package as a complement to the €450 million additional equity commitments brought by the sponsors.

The three banks were also mandated to each underwrite one third of the €675 million top-up facility, and backstop one third of €694 million of potential existing lenders non-consenting to the amendment and reinstatement.

Following a first successful process with the existing lenders, only one bank exited the transaction, reducing the backstop underwriting to €70 million, while the other existing lenders increased their commitments by some €279 million.

Advisers:
- BNP Paribas
- Societe Generale
- Unicredit
- Gianni Origoni Grippo & Partners
- White & Case
- Artur D Little
- EY
- Analysis Mason

European solar refinancing – **Renovalia – SIX**

Renovalia wins the award for European solar refinancing with Project Six, a €210 million deal in Spain that was led by BNP Paribas.

This is one of the most recent developments for the major Spanish independent renewable energy producer. Over 20 years, the company has built up a diversified portfolio of renewable assets totaling 808MW in operation, including onshore wind (82%) and solar PV (18%). Of these assets, 66% are located in Spain (66%).

The refi impacts a 53MW portfolio of seven solar PV plants owned by Renovalia and spread across Spain with an operating life of around 10 years and what the award submitter classes (not exactly glowingly) as "satisfactory performance to date".

As a plus point for this portfolio, all the assets benefit in full from the Spanish regulatory framework applicable to renewable plants built prior to the 2013 regulatory reform.

Project Six is a landmark transaction for the BNP Paribas Spanish franchise, in which the French bank demonstrated its leadership and capacity to deliver a global and coordinated solution to the client involving advisory services and a tailor-made financing package with full commitment and following successful syndication.

This transaction also strengthens BNPP's long-standing relationship with Renovalia.

In the context of Cerberus sale of Renovalia to F2i, BNP Paribas provided a fully committed refinancing package that created substantial additional value to the sponsor, by optimizing financing terms and smoothing the financing execution.

The new financing was structured as one single, non-recourse, long-term financing at HoldCo level. The financing includes a 17-year senior term loan for €202.1 million, and an €8.7 million debt service reserve facility.

In addition, Global Markets structured and executed the blend-and-extend of the existing swaps (c. €23 million mark to market).

The financing was 40% oversubscribed, highlighting the portfolio's intrinsic quality and the strong investors' interest in this asset type, as well as the overall financing structure's soundness. The financing made it possible for Renovalia to improve financial conditions by extending the repayment period and adjusting financial costs.

Advisers:
- KPMG
- Watson Farley & Williams
- Gomez-Acebo y Pombo
- Bird & Bird
- G. Advisory
- Willis

European port refinancing – **Antwerp Gateway**

The refinance of Antwerp Gateway – known to those involved in the transaction as Project Brialmont – wins in this category for having arranged long-term financing to support ambitious expansion plans.

Antwerp Gateway secured a 20-year, €258 million refi package as part of its plans to increase automation and container capacity with Citi acting as sole and exclusive financial adviser and placement agent.

This financing package not only refinances the debt of Antwerp Gateway with an attractively priced, long-dated private placement facility, but it includes a bank facility to support the terminal's capacity expansion plan.

With these facilities in place, the joint venture has secured funding to increase the capacity of the terminal in line with growing market demand. It was the first European terminal asset to price in the private market since the outbreak of Covid-19.

Antwerp Gateway is a container terminal in Deurganckdok in the Port of Antwerp, Belgium. DP World manages and operates the terminal under a 40-year concession granted by the Antwerp Port Authority, and which expires December 2046. The other JV partners are COSCO Shipping Ports, Terminal Link and Duisburger Hafen.

The refi achieved an A- investment-grade rating from a major rating agency reflecting the robustness of the underlying business and the conservative debt structure. Moreover, the financing package provides Antwerp Gateway access to attractively priced, long-dated funding that is better aligned with its concession-based business model.

The senior secured notes include a two-year delayed draw feature with no additional commitment fees paid to investors. A bank capex facility is available to support the terminal's expansion plan, allowing Antwerp Gateway flexibility to manage the timing and funding of its expansion capex in response to the broader market environment.

Rob Harrison, VP of DP World Inland & Logistics said at the time of financial close: "The excellent terms and structuring reflect the institution's positive view of Antwerp Gateway as both an asset and an investment. This issuance will enable us to increase capacity to serve customers better and further improve efficiency across the terminal."

Advisers:
- Citigroup
- Allen & Overy
- Linklaters
- White & Case
- BDO

European renewables portfolio refinancing – **Iberwind Portuguese wind farm**

Ventient Energy's refinance of the 726MW portfolio of the Iberwind Wind Portfolio – one of the largest wind portfolios in Portugal – is the winner of the European award in this category. Ventient acquired the portfolio in October 2020 from Cheung Kong Infrastructure (CKI) and Power Assets Holding (PAH). It holds 31 operational wind farms in Portugal, comprising 320 wind turbines and the refi reached financial close on 25 November 2020.

The portfolio operates under a two-phase feed-in-tariff (FiT) regime with an initial 15-year fixed tariff followed by a seven-year cap and floor price protection.

With an installed capacity of 726MW, this represents around 15% of electricity produced by wind power in Portugal and about 3% of the electricity consumed. On a consumer level, this is equivalent to the energy consumption of more than 600,000 average households.

Two of the wind farms in the portfolio – Candeeiros and Pampilhosa – are regarded regionally to be among the largest in terms of on-shore installed capacity account for more than 100MW each.

The total value of the transaction is €745.5 million, comprising €682 million of senior debt and €55 million in additional funds. The lenders are: Allied Irish Banks, BBVA, Banco Comercial Português, Santander, Bankinter, BNP Paribas, Crédit Agricole, Intesa Sanpaolo, National Australia Bank and Novo Banco.

At the time of the Iberwind acquisition, Ventient owned and operated assets across Belgium, France, Germany, Portugal, Spain and the UK, including four wind farms in Portugal. The addition of Iberwind brought its installed capacity to 2,556MW, cementing its position as a leading European onshore wind company.

Ventient Energy chief executive Mark Jones said at the time of the acquisition: "Iberwind is one of Portugal's leading wind energy companies, and a clear strategic fit with our existing business across Europe. We are excited to welcome the highly experienced Iberwind team to Ventient. We believe the combined team will form a powerful organisation while extending our sustainable growth ambitions and our mission to help secure the planet's future through renewable energy."

Advisers:
- Allen & Overy
- Cuatrecasus
- Linklaters
- Gonçalves Pereira & Associados
- Sociedade de Advogados
- BDO

European transport motorway refinancing
A88 Refinancing

The refinance of a major French motorway PPP with Allianz Global Investors playing a significant role is the winner of the European transport refi award.

AllianzGI fully refinanced, on behalf of its investors, the existing debt of Alicorne – concessionaire on the A88 that is owned by APG, Ardian and NGE Autoroutes.

The A88 is a 44km tolled road connecting Falaise and Sées in Normandy, and is an essential piece of infrastructure serving local commuters as well as long-distance travellers. It facilitates the flow of goods by linking key cities and ports in Normandy to the south west of France and Iberia.

The refi was launched in early 2019 with several potential debt providers – including AllianzGI – and was initially expected to close in the first quarter of 2020. However, the Covid-19 pandemic impacted progress and it didn't close until late December.

Government measures to stem the circulation of the virus severely restricted mobility, which led to a sharp drop in traffic and eventually dampened sentiment on road assets. A full lockdown was implemented in France between mid-March and mid-May, and was then gradually removed as things improved.

The shareholders, financial adviser Societe Generale and AllianzGI's deal team closely monitored the performance of A88 which revealed that – after a severe drop in usage during full lockdown – traffic recovered quickly to almost reach 2019 levels.

This allowed AllianzGI's deal team to strengthen its conviction on the resilience of the asset and to offer a funding solution that addressed the total refinancing needs of Alicorne, allowing it to repay the loans initially granted by the EIB, Depfa-FMS and Dexia, and to unwind the interest rate hedges put in place by Depfa-FMS and Dexia.

The refinancing is split between 30-year and 35-year bonds.

The bonds were structured with improved terms compared to the original proposal prior to Covid, notably higher margin, strengthened covenants, more stringent dividend distribution tests and increased liquidity. The 35-year funding allowed reduced annual debt service, increasing the cover ratios.

Advisers:
- Societe Generale
- Ester
- Allen & Overy
- Gide Loyrette Nouel
- Mott MacDonald
- H3P
- Aether Financial Services

European social infrastructure refinancing district heating
Coriance

The €100 million refinance of Coriance is the winner of the *IJGlobal* award for refi in the district heating sub-sector of the European social infrastructure category – a deal with a healthy sustainability angle.

As the third largest district heating business in France, Coriance operates a network of district heating and energy assets via long-term concessions serving 215,000 household-equivalents. It caters for a diverse range of customers including public and private housing managers, schools, universities, hospitals, municipal buildings and industrial customers.

Its portfolio consists of 34 concessions under the Délégation de Service Public (DSP) framework and one private contract. In total, it has an installed heat capacity of 1.3GW and an installed power capacity of 150MW.

In 2020 Coriance supplied 2TWh of heat, of which 68% was generated from renewable energy sources, making Coriance the greenest district heating operator in France.

Coriance supplied 2TWh of heat, of which 68% was generated from renewable energy sources, making Coriance the greenest district heating operator in France.

It generates the majority of its revenues from these long-term DSP contracts, typically with a duration of 20-30 years, with an average remaining contract life of 15 years.

It has been jointly owned by First Sentier Investors' EDIF I, EDIF II and GDIF unlisted infrastructure funds since August 2016.

Coriance in March 2020 successfully closed the refinancing of €100 million of senior facilities – capex and term debt – with existing lenders NAB and Westpac.

Both the capex facility and term loan were structured as sustainability improvement facilities that link the pricing on the loans with the company's performance across a number of sustainability KPIs. Under this innovative sustainable finance structure, the facilities provide a further €100 million of funding for Coriance's growth over the next five years.

Committed growth projects include network expansions for a number of concessions, and further increasing the proportion of renewable energy in the production mix.

DC Advisory played a key role as financial adviser on this refi, building in clever sustainability elements that are becoming increasingly common in transactions across the globe and will feature a great deal more regularly in *IJGlobal* awards in years to come.

Advisers:
- DC Advisory
- Latham & Watkins
- Allen & Overy
- BDO
- Sustainalytics

European offshore wind refinancing
London Array

The winner of the European offshore wind refinance award is London Array for Masdar's refi in March of its 20% stake in the farm – the third-largest fully commissioned offshore wind farm in the UK.

While many submissions have made a fuss about the impact of Covid-19 which made their efforts exemplary by having closed a deal over Zoom… this one warrants special mention as it closed on 26 March – when many were struggling to set up home offices and fend off children/pets/ coronavirus.

The project stake is owned by sponsors via a HoldCo and through an unincorporated joint venture structure, both of which can be considered challenging from a senior lender / bankability perspective.

However, the structuring of the operating agreements, operational track record of the asset and the constructive working relationships between the owners act to mitigate risks in the long term.

Masdar refinanced its 20% stake in the 630MW London Array with three original lenders returning and four new banks coming in. The Abu Dhabi-based renewable energy developer financed its portion of the construction costs with project finance debt that signed in 2011, which it refinanced in 2013 once the offshore wind farm came online.

Masdar then returned to the market in March 2020 to refinance the debt on the project with a club of seven banks: BNP Paribas, MUFG Bank, Santander, Siemens Bank, SMBC, Societe Generale and Standard Chartered.

The debt priced on market at Libor +130bp, and the deal was 6 months in the making with Societe Generale acting as financial adviser to the lenders. The debt was arranged across three tranches: a £395 million term loan; £50 million working credit facility; and a £21 million debt service reserve facility.

The wind farm is located off the coast of Kent, England, and has been fully operational since 2013. It powers more than 500,000 homes, displacing almost one million tonnes of CO_2 yearly.

The other owners are RWE with 30%, Orsted at 25%, and CDPQ with 25%.

Advisers:
- Societe Generale
- Baringa
- Allen & Overy
- Norton Rose Fulbright
- Wood Group
- BDO
- Willis Towers Watson

European waste-to-energy **Protos**

The winner of the European waste-to-energy award is the 49MW Protos project in Cheshire, England, a deal that saw Biffa, Covanta and Macquarie's Green Investment Group reach financial close on the £355 million project financing in early December.

The total project construction cost is estimated to be between £345 million and £355 million to provide 400,000 tonnes of annual treatment capacity for non-recyclable waste, further enabling the UK to achieve national self-sufficiency in managing waste and compliance with landfill diversion targets.

In processing non-recyclable residual waste, the Protos Energy Recovery Facility will generate up to 49MW of electricity – enough to power 90,000 UK homes.

The facility will be located near Ellesmere Port in Cheshire within the Protos energy and resource hub. It is being developed by Peel L&P Environmental and the site clusters together innovative technologies, connecting energy-intensive businesses with sources of low-carbon energy.

The sponsor consortium achieved a gearing of 60:40, providing around £140 million in equity with the remainder provided by four banks: Allied Irish Bank, ABN Amro, MUFG and Siemens Bank. The tenor and pricing matched that reached on the 42MW Newhurst WtE project in Lincolnshire, which the same consortium brought to financial close in February 2020 – 23 years, pricing at Libor +225bp.

The £140 million of equity on the Protos plant is split among the three firms, whose shareholding is: Biffa with 25%; while Covanta and GIG each have 37.5% in equity. Construction of the facility is led by a joint venture between Mytilineos and Standardkessel Baumgarte, both established players in the UK waste sector.

Covanta is supplying technical oversight during construction and operation of the facility for an initial 20-year term, while Biffa will provide the majority of the waste-supply through a long-term agreement.

The plant is construction-ready and is expected to reach full operations in Q1 2024.

Projects like Protos are particularly important in the UK in the run up to the re-scheduled COP26 this year, and efforts continue to improve the UK's waste infrastructure and progress towards a low-carbon economy.

Advisers:
- Macquarie
- Ashurst
- Linklaters
- CMS
- Gowling WLG
- Hogan Lovells
- Mazars

European solar – **Kaposvár Solar PV Project**

The winner of the solar award is Kaposvár PV project in south west Hungary – a project that reached financial close in June 2020 and is the largest facility in central Europe, now that it is operational.

The sponsor – China National Machinery Import and Export (CMC) – secured financing from the Bank of China to build the 100MW project in Hungary, raising Ft23.23 billion ($74 million) of debt while providing Ft10 billion in equity to finance the construction and operation of the wind farm.

The debt was entirely provided by the Bank of China which acted as mandated lead arranger as well as facility and security agent. The loan was arranged across two tranches, both Ft11.6 billion in size with a tenor of 15 years.

CMC began construction on the asset after the project reached financial close on 22 June (2020) and it is just the start of its ambitious plans. The Chinese firm is planning to create a regional centre in Hungary, from which it will manage further development in the 16 central and eastern European (CEE) countries.

The 100MW power plant has been built in Kaposvár and consists of two 49.28MW projects.

This deal wins the award based on the impact it is already having on the national market as well as the knock-on effect for neighbouring nations. It is also to recognise the efforts being made by CMC to drive the green agenda as it has plans to invest up to €1 billion in Hungary alone.

The investment in Kaposvár boosts Hungary's solar power capacity of 2,300MW currently installed by 5%. The increase in PV capacity is roughly equivalent to the annual energy demand of 65,000 people and will eliminate 120,000 tonnes of carbon dioxide emissions.

The Hungarian solar market is trending up with capacity from this renewable source having quadrupled from 2015-20. This is set to continue up to 2030 when the national goal is to have 6GW installed.

The modules were provided by Chinese manufacturers JA Solar and JinkoSolar, both of which secured a 50MW supply contracts.

Advisers:
- Allen & Overy
- Ashurst
- Kinsteller

European onshore wind **Zeewolde Wind Farm**

The winner of the European onshore wind award is Zeewolde Wind Farm – Windpark Zeewolde (WPZ) – a 322MW facility with deep roots in the community and a unique ownership structure that should be used as a template for future deals.

This transaction in the Netherlands closed in June 2020 and has so many positive features that it is a feather in the cap to all parties involved in its delivery – a veritable ESG pathfinder. The WPZ team started in the right way by discussing the project with the local communities and built from solid foundations of support.

The ownership model shares the economic interest indirectly with more than 200 local residents, turbine owners and agricultural entrepreneurs. Solidarity within the group is cemented by emphasis on local benefits and equal profit sharing.

Beyond that, there is the sheer size of the project which covers and area of more than 300 square km. It is also crucial for Dutch sustainability targets as it will supply green electricity to some 280,000 households.

And then there is the decommissioning and repowering assignment with permits to require decommission of more than 200 old turbines (around 170MW) in the area over multiple years, replaced by new and larger turbines.

A nearby airport and military radar station resulted in permitting of four turbine ranges and consequently four different turbine types will be built. WPZ will also construct and operate its own substation and export cable, placed in a separate SPV (GridCo) to which Raedthuys and Eneco will also connect 4 turbines each. Everyone in the vicinity was eligible to participate financially and around 90% did so. Once construction is complete, participation possibilities will be opened up to a wider group.

The many specific features and resulting bankability items were mitigated in agreements with stakeholders and carefully detailed in extensive due diligence reports. Success of the strategy was underlined by the project reaching FC within tight timelines.

Advisers:
- Green Giraffe
- Incredible World
- Clifford Chance
- Norton Rose Fulbright
- Mott MacDonald
- Benatar & Co
- Baringa
- Mazars
- AON
- Chatham Financial
- HVK Stevens

European oil and gas
Amur Gas Processing Plant

The winner of the European O&G award is Amur Gas Processing Plant (AGPP) in Russia, a project that plays a key role in the transition from coal-fuelled power and heat generation in the region.

AGPP is Russia's largest natural gas processing enterprises and indeed one of the largest such facilities in the world. This project is of huge strategic importance for the Asia-Pacific region and it is one of the largest project financings ever with total debt financing of €11.4 billion.

The transaction itself involved three ECAs, 14 international commercial banks, three Chinese and five Russian banks. It achieved a 15-year door-to-door tenor on uncovered tranches – unprecedented for a downstream O&G project in Russia.

The Amur plant is an important part of the state-sponsored development of Russia's O&G reserves in eastern Siberia and the expansion of major export routes into China and the APAC region. It forms an integral component of the process chain of natural gas supply to China via the Eastern Gas Route under the SPA signed between Gazprom and CNPC in 2014.

More than 25,000 people are engaged in the construction of the project and about 3,000 jobs will be created during operations, which will process some 42bcm of natural gas each year. The Eastern Gas Route will provide significant environmental benefits to the region by supplying natural gas to China's historically coal-burning north east.

The project company – Gazprom Pererabotka Blagoveshchensk (GPPB) – is wholly owned by Gazprom through subsidiaries and is responsible for the DBFOM. A long-term gas processing agreement between Gazprom and GPPB ring-fences the project company and its lenders from supply, offtake and market risks.

Multi-component feed gas will be delivered to the project via the Power of Siberia gas pipeline system from the Yakutia and Irkutsk gas production centres within the Eastern Gas Programme. AGPP is designed to produce sales gas, sales helium, ethane, and liquefied hydrocarbon gases.

Advisers:
Gazprombank, ING, China Development Bank, Freshfields Bruckhaus Deringer, Herbert Smith Freehills, Linklaters, Norton Rose Fulbright, Ramboll, RINA Group, Advisian, PwC, BMS Group, Bankserve

European Export Finance
Northvolt

Northvolt has won the European export finance award for the financing of two lithium-ion battery cell gigafactories in Sweden and the significant involvement of development finance institutions.

The project is valued at $3 billion and the $1.6 billion debt financing package was provided by a large group of commercial banks and pension funds as well bringing in considerable support from the European Investment Bank, the Nordic Investment Bank and the Export-Import Bank of Korea (KEXIM).

The loan is structured with guarantees from Euler Hermes, Nippon Export and Investment Insurance (NEXI) and Bpifrance.

The combined roles of the EIB, NIB, KEXIM, Euler Hermes, NEXI and Bpifrance secured this deal the export finance award.

Northvolt is a European supplier of sustainable, high-quality battery cells and systems. It was founded to enable the European transition to a decarbonized future, and the company has made swift progress on its mission to deliver the world's greenest lithium-ion battery with a minimal CO2 footprint. Among the Northvolt industrial partners and customers are ABB, BMW Group, Scania, Siemens, Vattenfall, Vestas and the Volkswagen Group.

The debt and equity of more than $3 billion support the development gigafactories and investments in R&D, industrialization and recycling. It targets a 25% market share in Europe by 2030 with 50% of raw material secured from recycled batteries.

Northvolt Ett, with a potential annual output of 40GWh, is under construction and scheduled for start of production this year (2021). The financing is underpinned by world-class financial institutions supporting a new industry in Europe – a clear sign of where the market is headed.

This new industrial landscape will need significant investment over the coming years and will bring more opportunities for financing sustainable projects – with Northvolt now serving as a pathfinder.

This transaction also supports the regional economy by allowing European electric vehicle manufacturers to source their batteries locally, thereby protecting a large number of qualified jobs in the regional automotive industry in the face of increasing global competition.

Advisers:
BNP Paribas, Morgan Stanley, Milbank, Linklaters, Mannheimer Swartling, Latham & Watkins, White & Case, Allen & Overy, Advokatfirman Cederquist, Wistrand, Arup, BMI

European mining
Project Taishet

The winner of the European mining award is the Taishet Aluminium Smelter (TaAZ), a deal that marks a significant achievement for Russian and global aluminium players and showcases further steps towards reducing the level of greenhouse gas emissions from production.

The financing will be used for the design, construction, development and operation of the start-up phase of TaAZ and the partial refinancing of investments made in 2020.

Following commissioning, TaAZ will become one of the most environmentally friendly and high-tech enterprises in the global aluminium industry. The plant will have an annual production capacity of 428,500 tonnes.

TaAZ is owned by Russian aluminium producer RUSAL and a syndicate of Russian banks – VTB and Gazprombank – provided a RUB45 billion ($603.2 million) syndicated financing for the completion of the first start-up complex of the smelter.

The new smelter will be one of the RUSAL's key assets in Siberia and also be one of the largest non-ferrous smelters in Russia. It will be equipped with energy efficient RA-400 "T" modification electrolysers. Today RA-400 is one of the most powerful electrolysers in the world and can produce about 3 tons of aluminium daily.

Upon start-up of the first series, the production complex of the Taishet smelter will include 2 electrolysis units, a foundry, anodic and energy units, as well as infrastructure facilities.

The site was chosen to minimize the impact of the plant on the regional environment and the plant will be equipped with modern dry gas cleaning systems with a capture efficiency of more than 98.5%.

Oleg Mukhamedshin, RUSAL's director of strategy, BD and financial markets, said at the time of financial close: "The construction of the Taishet aluminium smelter is one of the priority development projects for the company, a significant part of the costs of which RUSAL has provided at its own expense.

"The funds raised under the agreement with VTB and Gazprombank, will be used to finance the completion of the construction of the smelter, which after commissioning will become one of the most environmentally friendly and high-tech enterprise in the global aluminium industry."

Advisers:
White & Case

European digital infrastructure FttH
THD Loire-Atlantique

The winner of the digital infrastructure award in the FttH category for Europe is the THD Loire-Atlantique – a significantly impactful deal to improve connectivity across rural areas of France.

The Loire-Atlantique department launched a competitive tender for the fibre-to-the-home (FttH) project that was won after a fiercely competitive process by Vauban Infrastructure Partners and its partner Axione, the largest French wholesale independent operator in the sector.

The FIBRE44 consortium was awarded the 30-year concession contract for the roll-out, commercialisation and operation of an ultra-fast broadband public initiative network (PIN) in the Loire-Atlantique department.

The project covers the rural areas of the department, and is a mixed concession and affermage contract, with around 200,000 lines to be built on a DBFOMT basis over the course of four-and-a-half years, as well as some 113,000 lines, currently deployed by Orange under a CREM scheme, that will be provided to the concessionaire on a lease and operate basis.

The consortium, through its FIBRE44 special purpose vehicle that was established for this project, signed the concession agreement with the Loire-Atlantique department on 7 July 2020.

The project, which is part of France's €20 billion high speed network plan – Plan France Très Haut Débit – that launched in 2015. This is one of the biggest and the last PINs to be awarded and was the largest greenfield project closings in 2020 under a concession scheme in France.

It will enable the department to reach its objective to provide 100% of department households with ultra-fast broadband access by 2025.

For Vauban Infrastructure Partners, this project strengthens its reputation as a pioneer in the FttH sector, obtained through its 10 years partnership with Axione, and confirms its longstanding strategy to provide ultra-fast broadband connection to all French households.

The process of labialization of the financing as a green and social loan by a third-party adviser is now achieved, reflecting the tremendous benefits provided by the project in terms of equality, improvement of access for rural territory, integration, employment and training.

Advisers:
- Societe Generale
- Linklaters
- Clifford Chance
- White & Case
- Mazars
- Natixis

European battery storage
Northvolt

The first ever project financing to develop a greenfield lithium-ion battery manufacturing plant project – what else could win the European battery storage award other than the $3 billion Northvolt deal?

Northvolt is Europe's first home-grown gigafactory for lithium-ion battery cells and will supply batteries for a wide selection of end markets that range from electric vehicles through to energy storage systems, portable and industrial applications.

Basically, this deal feeds into Europe's ambitions to enable some of the most exciting projects on the radar… many of which are still faint blips. This is very much a project of its day as the momentum for "green" solutions builds relentlessly.

Northvolt's customers need large volumes of high-quality batteries with a low CO2 footprint, and these gigafactories are a solution to the challenge Europe faces to build a fully regionalised value chain to support this industry. As such, the project has strong support from more industrial partners than you can shake an electrode at.

The financing is underpinned by world-class financial institutions supporting a new industry in Europe – a clear sign of where the market is headed. This new industrial landscape will need significant investment over the coming years and will bring more

opportunities for financing sustainable projects – with Northvolt now serving as the perfect pathfinder. This transaction also supports the regional economy by allowing European electric vehicle manufacturers to source their batteries locally, thereby protecting a large number of qualified jobs in the regional automotive industry in the face of increasing global competition.

The $1.6 billion debt financing package was provided by a large group of commercial banks and pension funds as well bringing in considerable support from the European Investment Bank, the Nordic Investment Bank and the Export-Import Bank of Korea (KEXIM). The loan is structured with certain guarantees from Euler Hermes, Nippon Export and Investment Insurance (NEXI) and Bpifrance.

Advisers:
- BNP Paribas
- Morgan Stanley
- Milbank
- Linklaters
- Mannheimer Swartling
- Latham & Watkins
- White & Case
- Allen & Overy
- Advokatfirman Cederquist
- Wistrand
- Arup
- BMI

IJGlobal Awards 2020

North America winners

Winners in the North America transaction category are:

- Editor's Choice North America – **Prince George's County Schools**

- North American digital infra – **MBTA AFC 2.0 Project Reset**
- North American digital infra acquisition – **Zcolo Acquisition Financing**
- North American oil & gas – **Whistler Gas Pipeline**
- North American battery storage – **Bolt Battery Storage**
- North American export finance – **Verizon Communications**
- North America power – **Canada 900MW Cascade Power Project**
- North American oil & gas – **Canada Coastal Gaslink Pipeline**
- North American petrochemicals – **Alberta Propane Dehydrogenation/ Polypropylene project**
- North American power, US – **CPV Three Rivers Energy Centre**
- North American refinancing, oil & gas – **Freeport LNG Train 3 Refinancing**
- North American refinancing, power – **Linden Cogeneration**
- North American refinancing, renewables – **Project Arcadia**
- North American renewables, solar – **Highlander**
- North American renewables, geothermal – **Geysers Facilities Project**
- North American renewables M&A – **Sunrun acquisition of Vivint Solar**
- North American renewables tax equity – **ENGIE Jupiter Wind and Solar Portfolio Tax Equity Raise**
- North American renewables, onshore wind – **Western Spirit**
- North American social infrastructure, energy – **University of Iowa Utility System P3**
- North American social infrastructure, education – **Prince George's County Schools**
- North American transport, brownfield – **Iowa Interstate Railroad**
- North American transport, greenfield – **Highway 104**
- North American water – **San Antonio Water Vista Ridge P3 Refinancing**

IJGlobal Awards 2020

Editor's Choice North America - Prince George's County Schools

The pathfinder Prince George's County Schools project in Maryland has been singled out by Editor **Ila Patel** for the *IJGlobal* Editor's Choice Award for North America.

Over the last 10 years, while transport projects have continued to be procured in dribs and drabs, social infrastructure deals have begun to emerge slowly as the next hotspots for investment. They include universities (and their utility systems), courthouses, student accommodation and waste.

But there is one sub-sector that has the potential to grow - and that is elementary schools. Numerous US municipal and state budgets are bearing the burden of the global pandemic which is why P3s can provide a solution to repairing and rebuilding aged infrastructure. P3s also provide budget certainty, and with any luck, more and more districts will realise this and consider the benefits to support the education of students while saving millions of dollars.

In 2020, Maryland's Prince George's County became the first district in the US to finance the construction of 5 new middle schools and one K-8 school using the P3 model, despite the negative publicity surrounding another P3 deal in the state which was embroiled in legal troubles. So it came as no surprise when there was public opposition against the schools project and it was deemed too risky and not having the interests of children's education as its priority.

Maryland's controversial Purple Line P3 project saw disputes arise between concessionaires Meridiam and Star America (and at the time construction partner Fluor) and the Maryland Transit Administration (MTA) in 2020 due to an estimated $800 million in cost overruns and delays in construction. Fluor is no longer part of the concession with a new construction partner currently being sought.

The MTA sought a restraining order as part of a lawsuit filed on 10 August 2020 against the companies in the Circuit Court for Baltimore City. The lawsuit accused Purple Line Transit Partners of breach of contract.

By the end of 2020, an amicable resolution was reached with the State of Maryland agreeing to pay P3 partners Meridiam and Star America $100 million by 31 December with the remaining amount to be paid this year (2021).

Maryland's Prince George's County became the first district in the US to finance the construction of 5 new middle schools and one K-8 school using the P3 model

However this litigation process left a bad impression so it came as no surprise when public opposition against the schools project increased with town halls being held in Q3 2020, with complainants raising concerns over the private sector's financial motivation not being in line with that of the populace.

Prince George's County Public Schools (PGCPS) said it had made a robust contract taking all concerns into account and protecting the interest of the public, money and its timeline. The procurer also outlined as to why the P3 method was more beneficial to the state than a traditional construction method. The deal made it to financial close in December 2020.

The board of education of Prince George's County operates 240 facilities with an annual operating budget of $2 billion. PGCPS is currently facing acute overcrowding in its schools with a vast majority of the county's school portfolio at or near the end of its useful life-cycle and in need of significant repair and renovation.

The financing comprised $479 million in senior secured notes issued by borrower Prince George's County Education & Community Partners in a private placement for the project to DBFM 6 new schools. The note purchasers were Banner Life Insurance Company, Legal and General Assurance Society, The Canada Life Assurance Company, The Canada Life Insurance Company of Canada, Massachusetts Mutual Life Insurance Company, The Lincoln National Life Insurance Company, The Northwestern Mutual Life Insurance Company, Metropolitan Tower Life Insurance Company, MetLife Insurance, MetLife Insurance Company of Korea, Swiss re Life & Heath America and Aviva Life & Pensions.

MetLife Investment Management (MIM) was the lead investor with a circa $200 million allocation, representing 42.5% of total debt to be drawn through June 2023.

Deutsche Bank Trust Company Americas acted as collateral agent with National Bank of Canada as account bank.

The equity sponsors on the deal were Fengate (75%) and Gilbane (25%).

Bob Hunt, managing director, public institutions at JLL, said: "This P3 is so special because it is a major step forward in delivering equal opportunities to the students and families of Prince George's County. Without this agreement in place, it would take more than 15 years for these schools to get funded and built. Of the many learnings uncovered from this year's pandemic, I think we can all agree on the pivotal role our schools and their faculties play in the lives of our children."

Advisers:
- JLL
- Winston & Strawn
- Torys
- Altus Group
- Operis Group
- INTECH Risk Management

Best digital infrastructure award, North America

MBTA AFC 2.0 Project Reset

John laing
making infrastructure happen

The Massachusetts Bay Transportation Authority's (MBTA) automated fare collection system services project (AFC 2.0) has been selected as the winner of the digital infrastructure award for North America.

The project, which was awarded to a John Laing tie-up with Cubic Transportation Systems in 2017, has been lauded as the first fare collection P3 in the US. It originally closed in 2018 and in 2020 the project's scope was amended and expanded, and a refinancing was carried out.

The project encompasses the design, implementation, operations, management and financing of a next-generation fare payment system to serve the MBTA's multi-modal regional transit system.

AFC 2.0 will streamline payments across the transit network, speed up the boarding process for passengers, reduce fare evasion, and reduce operational costs by $65 million over the life of the contract. It will also allow for more flexible payments, with the ability to offer benefits such as zone and distance-based fares, time-of-day fares, and fare capping.

Additionally, the project's scope includes the digitisation of the Orange Line's signalling system, reducing manual labour, time and money spent on maintenance, and improving service reliability.

By delivering the project using a P3 structure, the MBTA was able to reduce its risk exposure to technology and installation.

"This isn't just the next generation of fare collection, but an entirely new way that our customers will interact with the MBTA," says Luis Manuel Ramirez, MBTA general manager.

John Laing provided $24.3 million – 90% – of the equity and Cubic provided the remainder. The debt had a 12-year tenor and was provided by CIBC, MUFG, SMBC, National Bank of Canada, Metropolitan Life Insurance Company, Metropolitan Tower Life Insurance Company, Pensionkasse des Bundes Publica. CIBC also acted as administrative agent and MUFG as collateral agent.

David Wylie, asset director, North America at John Laing, said: "We are delighted with this award from *IJGlobal*. The importance of this MBTA project to the greater Boston area is significant as it will have a positive impact on the lives of millions of riders in Massachusetts. It is the first P3 in New England, the first P3 for the MBTA and the first P3 for an Automated Fare Collection system.

"The timing of the deal was especially challenging in light of the pandemic, with financial close achieved on 15 June 2020. The team faced financial market liquidity constraints, financial market uncertainties, resourcing constraints, government imposed lock-downs and travel restrictions. The deal team had to pull together to show commercial agility, creativity and count on the strength of their client relationships. It is great to have this hard work recognised with this prestigious award."

Adviser to the sponsors:
- Torys
- Winston & Strawn
- Altus
- BFIN

North America - digital infrastructure acquisition

zColo Acquisition Financing

The financing package backing DataBank's $1.4 billion acquisition of zColo's data centre assets has been selected as the winner of the awards for best digital infrastructure, North America.

The debt package consisted of several components:

- $450 million first lien term loan A
- $500 million first lien revolver
- $100 million second-lien term loan

The deal involved the acquisition of zColo's 44 data center facilities across 23 markets, adding to DataBank's existing portfolio of 20 assets.

This "transformative transaction puts DataBank at the forefront of the edge infrastructure wave," enabling clients to move their services closer to end-user populations in second-tier markets, says DataBank.

Given the scope and nature of the acquired assets, the financing required a unique level of collateral review and diligence. The deal also involved staged closing, with the first involving US and UK assets occurring in December 2020 and a second closing involving French assets occurring at a later date to allow for approvals to be processed.

The transaction was funded by an investor group led by Colony Capital, DataBank's controlling shareholder. In addition to leading a consortium of world-class institutional investors to support the acquisition, Colony Capital invested $145 million from its balance sheet to maintain its 20% stake in DataBank.

Market players involved in the debt package included TD Securities, Société Générale and Truist Bank, TD, Société Générale, CoBank, Regions Bank and Natixis.

With the acquisition of zColo's assets, DataBank offers its customers access to:

- 65 data centres in 29 markets (up from 20 data centres and 9 markets)
- 1.1 million raised square feet of data centre space
- 141MW of installed UPS capacity
- Over 30,000 network cross connects
- 20 major network interconnection points
- 13 cloud nodes

Advisers:

- DH Capital
- Jones Day
- JP Morgan
- Skadden Arps

North America oil & gas deal of the year, US

Whistler Gas Pipeline

The Whistler Pipeline is jointly owned by WhiteWater Midstream, MPLX and a joint venture of West Texas Gas and Stonepeak Infrastructure Partners. The project is for the construction and operation of a 500-mile greenfield natural gas pipeline Texas, connecting the Permian Basin to the Agua Dulce hub, providing direct access to the South Texas markets as well as LNG and Mexican exports.

It was the largest hybrid greenfield project financing on record and the first ever greenfield pipeline project to obtain a Baa3 investment-grade (private) rating from Moody's. It was funded through a combination of equity, term loan, and private placement proceeds.

The unique bank-bond hybrid comprised an $820 million term loan A, $110 million in DSR LC facilities, and a dual-tranche $824 million US private placement.

The majority of the project's 2.0 Bcf/d capacity is contracted through 10 to 12-year transport service agreements with contracted volumes from primarily investment grade counterparties. The Whistler Pipeline has unmatched connectivity to the Delaware Basin with 10 connections in Waha, including indirect connections to 16 gas processing plants through the Agua Blanca system, and to the Midland Basin, via a 51-mile, 36 inch lateral connecting directly to Midland Basin gas processors.

The project's construction schedule necessitated launching the financing at the height of the pandemic with market dislocation exacerbated by the Russia-Saudi Arabia standoff, which generated a negative oil futures environment during the transaction.

Advisers:

- Milbank
- Latham & Watkins
- Sidley Austin
- Lummus Consultants International
- Moore McNeil
- Wood Mackenzie

North American battery storage deal of the year

Bolt Battery Storage

In September 2020, financial close was reached on Bolt Energy Finance's senior secured credit facilities. Bolt is a special purpose entity established by LS Power for the construction and operation of a 490MW battery energy storage system portfolio comprising 3 projects located in California.

LS Power wrapped $300 million in senior-secured credit facilities and secured the non-recourse funds from a lending quartet comprising BNP Paribas, ING Bank, MUFG and RBC Capital Markets.

The senior-secured credit facilities comprised a 3.3-year $260 million construction to term loan and a $40 million revolver credit/letter of credit facility.

The portfolio is made up of the 250MW Gateway, 200MW Diablo, and 40MW Vista projects.

The main drivers for building battery storage are California's aggressive renewable portfolio standards, emission goals, and abundance of solar power available in the CAISO market. As renewable generators continue to increase as a percentage of California's generation base, increased deployment of battery storage technology is critical to balancing electricity from intermittent resources to ensure grid reliability.

Advisers:

- Shearman & Sterling
- Latham & Watkins
- Lummus Consultants International
- PA Consulting
- Stance Renewable Risk Partners

North American export finance deal of the year

Verizon Communications

Global telecommunications company Verizon Communications closed on 2 corporate financings with Deutsche Bank in June 2020 which included a $1.5 billion EKN guaranteed (and SEK funded) financing and a $500m Finnvera guaranteed financing.

Verizon used the financing to purchase equipment in connection with the build out of the 5G network. Verizon had not accessed the ECA supported financing market for several years as it was able to obtain better pricing in the bond market.

However, with the instability in the markets created by the COVID-19 pandemic, Verizon returned to the ECA market with 2 big-ticket financings. These financings demonstrate the importance agency lenders play in the rebound of the financial markets even for investment grade borrowers like Verizon.

At the time of financial close, Joseph Stefano, banking and finance partner in A&O's New York office, said: "These financings illustrate how key ECA backed financings will be to prop up economic recovery following months of instability in the market. Our team has long supported the quick and seamless execution of unique financings across industries, and foresees this trend to continue as companies react to the fall out of the pandemic."

Advisers:

- Allen & Overy
- DLA Piper
- Vinge

North America power deal of the year, Canada

900MW Cascade Power Project

Alberta based developer Kineticor Resource Corp with joint development sponsors, Macquarie Capital and Ontario-based pension fund OPTrust and project sponsors OPTrust, Axium Infrastructure and DIF Capital Partners successfully closed financing on the C$1.5 billion Cascade Power Project in 2020.

Cascade is a 900MW combined cycle natural gas-fired generating facility to be located near Edson, Alberta. Siemens Energy will provide two highly efficient single shaft SCC6-8000H power trains and provide maintenance support under a long-term service agreement. Cascade is strategically situated in proximity to significant gas production as well as the NGTL System and high voltage electrical transmission lines, an important competitive advantage for Cascade.

The project will interconnect to the Alberta Electric System Operator grid via 2 pipelines currently under construction. The transaction featured a C$834.4 million construction loan and C$75.6 million of LC facilities that convert to a term loan upon project completion. The financing has a tenor of 7.5 years.

The loan priced at 350bp over CDOR with banks involved including National Bank of Canada, Alberta Treasury Branches, Nomura, MUFG, ING, Siemens, Natixis, Canadian Western and Fiera Infrastructure private debt fund.

Cascade will lead the transition to a lower carbon intensive power grid in Alberta by supporting the province's transition off coal-fired power, generating low emissions electricity that is expected to supply over 8% of the province's average demand.

The transaction is the first gas-fired quasi-merchant power project in Canada, and will be the most efficient gas-fired power project in Alberta.

Cascade was a unique and challenging financing, requiring the combined analysis of the Alberta merchant energy market, three Gas Netback Supply Agreements, and intricately complex term loan repayment mechanics - including fixed principal payments and cash sweeps to meet a target debt balance schedule, as well as an excess cash flow sweep mechanism in later years to mitigate the refinance risk posed by a C$910 million financing. The project also included involvement from a total of 6 Alberta First Nations groups which agreed to invest C$93 million for an equity stake in the project.

While remarkable for its long list of 'firsts' and creative solutions to challenging credit nuances, Cascade's closing was perhaps even more exceptional when scrutinised against the backdrop of a global pandemic, and the market uncertainty that came with it.

Advisers:
- Macquarie Capital Markets Canada
- McCarthy Tétrault
- E3 Consulting Services
- EDC Associates
- Marsh LLC
- Bennett Jones
- Torys
- Osler Hoskin & Harcourt
- Stikeman Elliott
- Davies Ward Phillips & Vineberg
- DLA Piper (Canada)
- Miller Thomson (Calgary)
- Duncan Craig (Edmonton)
- Witten
- Biamonte
- Bailey & Wadden

North American oil & gas deal of the year, Canada

Coastal GasLink Pipeline

Financial close was reached on Coastal GasLink Pipeline's (wholly owned by TC Energy) 7-year C$6.6 billion senior secured credit facilities in April 2020, representing the most advanced West Coast LNG project in North America.

Concurrent with this, TC Energy sold a 65% equity interest in CGL to affiliates of AIMCo and KKR.

CGL is a 670km pipeline being developed by TC Energy that will, upon completion, have the capacity to transport 6.4 Bcf/d of natural gas from Dawson Creek to an LNG facility in Kitimat, British Columbia.

TransCanada Pipeline, another wholly-owned subsidiary of TC Energy, was mandated by Shell Canada and its partners to design, build, own and operate the project. The project is expected to be in service in 2023, with the capacity fully-contracted to several investment grade shippers.

The transaction involved a widely syndicated lending group consisting 27 banks participating from North America,

Europe and Asia with sufficient 'dry powder' to support the potential Phase II project expansion. The financing also included a C$200 million letter of credit.

The construction facility is the largest project finance facility and second largest syndicated facility in Canadian loan market history. Additionally, the interest rate swap executed for the project was the largest in Canadian market history.

Under the deal terms, TC Energy is also committed to working with the 20 First Nations that have executed agreements with CGL to provide them with an opportunity to acquire a 10% equity interest in the CGL.

CGL is a critical Canadian-based infrastructure asset that will provide feed gas to the country's first west coast LNG export facility. It also represents a critical component of Western Canada's ability to meaningfully realize the value of its vast natural gas resources, while supporting the coal-to-gas energy transition currently underway globally.

Advisers:
- Norton Rose Fulbright
- RBC Capital Markets
- Blakes, Cassels & Graydon
- Lummus Consultants International
- Moore McNeil
- ERM
- Wood MacKenzie
- Operis
- Osler Hoskin Harcourt
- Stikeman Elliott

North American petrochemicals deal of the year – **Alberta Propane Dehydrogenation/ Polypropylene project**

The Alberta Propane Dehydrogenation/ Polypropylene project is one of the largest petrochemical deals to take place in North America. Pembina Pipeline Corporation, in partnership with the Canada Kuwait Petrochemical Corporation, is developing the integrated propane dehydrogenation plant and polypropylene upgrading facility to be operational by mid-2023.

Lenders on the deal were National Bank of Canada, National Bank of Kuwait, The Bank of Nova Scotia, Bank of Montreal, CIBC, Export Development Canada, MUFG, Union Bank and TD Bank.

The project will see the development of a world-scale propane dehydrogenation facility with capacity for the conversion of an estimated 23kbpd of propane into around 550kTa of 99% polymer grade propylene

It would process 23,000 of Alberta propane per day to produce more than 550,000 tonnes of recyclable plastics pellets each year, which would be used for a variety of finished products such as automobiles, medical devices, food packing, and home electronic appliances.

Advisers:
- Latham & Watkins
- White & Case
- Dentons Canada
- Stikeman Elliott

North American power deal of the year, US – **CPV Three Rivers Energy Centre**

Competitive Power Ventures, a developer, owner, and operator of utility-scale power projects, reached financial close on its 1,250MW Three Rivers combined-cycle gas-fired project in Illinois with equity from 4 co-investors and a combination of floating- and fixed-rate debt.

CPV Three Rivers was the first quasi-merchant gas-fired financing to close during COVID-19. The equity investors for the $1.3 billion project were GE Energy Financial Services, Osaka Gas USA, Axium Infrastructure and Harrison Street. BNP Paribas, Crédit Agricole and MUFG led on the $875 million construction-plus-5-year debt package, which closed in August 2020.

The project was financed on the basis of several gas-netbacks with undisclosed Canadian gas producers, with tenors of up to 10 years. Once completed, the project's capacity and energy will be sold into the PJM ComEd Zone.

Even though CPV Three Rivers' debt quantum pushed against the size constraints of the bank market, the deal was able to achieve competitive loan pricing initially targeted, without needing to flex, a remarkable achievement given the size of the transaction and the pandemic.

At transaction closing, PJM and the FERC had not yet agreed to rule changes for the annual PJM capacity auctions, which caused the 2 auctions to be postponed. This delay reduced near-term visibility for a significant component of the project's cash flow and raised the question about future auctions. The structuring banks addressed this by requiring contingent equity and accelerated repayment mechanisms if auction prices fall short of forecast.

Advisers:
- Milbank
- Latham & Watkins
- Leidos
- Moore-McNeil
- ESAI
- Riverside
- King & Spalding
- Sidley Austin
- Hunton Andrews Kurth
- Bracewell
- Shearman & Sterling

North American refinancing deal of the year, oil & gas – **Freeport LNG Train 3 Refinancing**

The $3.4 billion refinancing for Train 3 of the Freeport LNG facility to refinance the existing construction and operation debt, closed in May 2020.

Proceeds of the financing were used to pay down the existing bank debt for Train 3 and hedge termination costs, pay for transaction costs and remaining costs for the completion, ownership, operation and maintenance of the Train 3 facility, and the payment of dividends to the sponsors.

The financing included $2.4 billion in term loan facilities, a $750 million future bond tranche term loan facility, $181 million DSR letter of credit facility and a $50 million working capital loan. Eighteen banks participated in the financing.

The transaction reduced the project's cost of debt and improved the overall credit profile for lenders. It was executed and closed during the height of COVID-19 market disruption and was only possible due to the strength of banking relationships, high quality sponsorship and conservative financing structure.

Freeport 3 LNG is a 5 MTPA liquefaction facility that is part of the Freeport LNG Development in Quintana Island, Texas. The Freeport LNG Development was originally developed in 2002 and later expanded in 2014 into a liquefaction facility capable of exporting LNG.

The transaction replaced the existing holdco-level debt from May 2018 with opco-level debt in order to optimise the sponsor's financing strategy.

Construction of the project was 99% complete before the transaction closed.

Advisers:
- Kirkland & Ellis
- White & Case
- Societe Generale
- CIBC
- MUFG
- Natixis

North American refinancing of the year, power – **Linden Cogeneration**

The Linden Cogeneration facility in Linden, New Jersey is a 974MW natural gas cogeneration plant made up of 6 units. The first 5 units became operational in 1992, while the sixth came online in 2002. Of the unit, 5 sell their output spot into Zone J of New York-ISO, and the other is contracted with Phillips 66 Co's Bayway oil refinery until 2032 and sells excess output spot into PJM Interconnection.

The company is owned by a consortium of JERA Co, Ares Management Corp, Oaktree Capital, the Development Bank of Japan, and HPJV1 – itself a joint venture between GS EPS and a fund managed by Hana Alternative Asset Management on behalf of Mirae Asset Daewoo.

The owners reached a $1.1 billion deal with 6 banks (Jefferies, Barclays, Citi, MUFG, BMO Capital Markets, and Investec) to refinance an existing term loan B and pay a dividend to the owners. Jefferies served as the left lead on the transaction, which reached financial close on 1 October.

The term loan will be portable in the event the asset is sold, as long as the buyer already owns gas-fired generation facilities totalling at least 500MW. In addition to the term loan, the refinancing also included a $100 million 5-year super senior revolving credit facility.

The 7-year term loan B was priced at Libor+350bps (with a 1% Libor floor) and received strong interest from investors during syndication; as such, it was resized from $950 million to $1 billion. The deal benefited from being one of the few new infrastructure term loan Bs at the time, meaning the sponsors had the demand for themselves.

Moody's Investors Service and S&P Global Ratings assigned Ba3/BB- ratings to the term loan and Ba2/BB- ratings to the revolver.

Advisers:
- White & Case
- Latham & Watkins

North American refinancing of the year, renewables – **Project Arcadia**

In 2020, TerraForm Power refinanced a portion of a loan through a new senior secured note issuance lent at a 3.38% rate with a tenor of 23 years and 4 months and 9.6 year weighted average life.

TerraForm Power acquired 322MW of commercial and industrial rooftop solar, residential rooftop solar, and fuel cells in the US from subsidiaries of AltaGas in September 2019, paying $720 million for the assets. The portfolio is among the largest distributed generation portfolios in the US, with a strong presence in core markets and a high level of diversification across 19 states and Washington DC. The deal brought TerraForm's distributed generation portfolio to 750MW.

To fund the initial acquisition of the portfolio in 2019, TerraForm secured a $475 million non-recourse bridge loan with a 364-day maturity and the option to extend for up to an additional 12 months.

The company raised $296 million from this refinancing. This transaction was underpinned by operating projects with long-term PPAs extending until 2044 with predominantly investment-grade (or equivalent) federal, municipal or utility counterparties. The 23.3-year maturity took advantage of the full life of the contracted cash flows and enabled the sponsor to lock in interest expenses at current low rates for the long term.

Natixis and the Royal Bank of Canada served as the joint placement agents on the bond financing. The deal closed in September 2020 and was rated BBB- by Fitch.

Advisers:
- Milbank – legal
- Skadden – legal

North American renewables deal of the year, solar – **Highlander**

In July 2020, sPower reached financial close on the $704 million Highlander Solar, a 620MWdc/485MWac solar project located in Spotsylvania County, Virginia - one of the largest solar projects on the East Coast and the fifth largest in the US.

Highlander Solar consists of 4 staggered project phases with the site located 67 miles from Washington DC and more than 50 miles away from Northern Virginia's 'Data Centre Alley' in the Dulles Technology Corridor, home to the world's largest concentration of data centres.

The non-recourse debt financing consisted of a $325 million tax equity bridge loan, $256 million construction to term loan facility, $61 million term loan facility and a $62 million letter of credit facility. The financing incorporated a unique strategy focused on pre-development collaboration between off takers and the sponsor.

The deal was executed on a club basis with a group of project finance banks. In the end, 9 banks committed to the transaction. It was one of the first broadly syndicated renewable transactions to be circled post COVID-19 after 2 years of delays and unexpected obstacles - a testament to the company's experience, the quality of the underlying asset, and the support of financing partners.

The project is located within the PJM Interconnection and is supported by seven 15-year PPAs with high-profile, well-rated counterparties including Apple, Etsy and Microsoft, highlighting the growth of data centre and tech demand for sustainable sources of energy.

Once complete, the project will offset about 825,000 tonnes of carbon dioxide emissions per year. In fact, ESG corporate goals were taken into consideration throughout the transaction.

PV modules will be supplied by Jinko, the world's largest module manufacturer, and inverters will be provided by SMA, the world's third largest inverter manufacturer.

Advisers:
- Sheppard Mullin Richter & Hamilton
- Milbank
- DNV GL
- nFront Consulting
- Moore McNeil

North American renewables deal of the year, geothermal
Geysers Facilities Project

This $1.1 billion Geysers Facilities Project was a Climate Bond Certified deal that saw the refinancing of assets owned by Geysers Power Company – 13 geothermal power plants in the Mayacamas Mountains region, 75 miles north of San Francisco.

The projects went online between 1971 and 1989, and together the assets are the largest complex of geothermal power plants in the US – responsible for providing almost one-tenth of the renewable power produced in California every year. Its steam resources, interconnected fields and water reinjection capabilities make the Geysers a unique geothermal facility with the capacity to produce 725MW of electricity around the clock.

Calpine Corporation, of which Geysers is a subsidiary, sought to refinance the portfolio to reimburse itself for its equity investment, secure funds for O&M and capital expenditure, and repay corporate and project-level debt. It agreed a refinancing arrangement with 12 banks: MUFG, BNP Paribas, Crédit Agricole, Natixis, Mizuho, National Bank of Canada, Sumitomo Mitsui, SunTrust Robinson Humphrey, CoBank, Rabobank, ING Capital, and DZ Bank.

The financing comprised a $900 million, senior secured 7-year term loan, a $130 million RCF and a $70 million letter of credit. The loan was priced at Libor +200 bps, with pricing scheduled to step up by 12.5 bps every 3 years.

Calpine's attempts to refinance the project were delayed by the Kincade wildfires in the Geysers geothermal field, which broke out in October 2019, and resultant investor uncertainty. Calpine had initially aimed for a $2.07 billion, 4-tranche senior secured transaction led by Barclays, but the fire led initial plans to be shelved. Nonetheless, Calpine's pedigree allowed it to maintain investor confidence and secure the new refinancing on a slimmer, simpler basis than the initial proposal.

Advisers:
- White & Case
- Leidos
- Latham & Watkins
- DNV GL

North American renewables M&A deal of the year – **Sunrun acquisition of Vivint Solar**

Vivint Solar acquired Sunrun, a leading home solar, battery storage and energy services company, in an all-stock transaction valued at $9.2 billion - the second largest solar deal in 2020.

Founded in 2007, Sunrun pioneered home solar service plans to make local clean energy more accessible to everyone for little to no upfront cost. Sunrun's innovative home battery solution, Brightbox, brings families affordable, resilient and reliable energy.

Sunrun pioneered home solar service plans to make local clean energy more accessible to everyone

Vivint Solar stockholders received 0.55 shares of Sunrun common stock for each share of Vivint Solar common stock they owned immediately prior to the completion of the acquisition. Post-closing, Sunrun had a market capitalisation of around $17 billion based on the closing prices of Sunrun common stock and an enterprise value of circa $22 billion on a fully-diluted basis pro-forma. The combined company continues to trade on the Nasdaq Global Select Market under the ticker symbol RUN.

At the time of closing, Lynn Jurich, Sunrun's CEO and co-founder, said: "Together, we will provide affordable, reliable and clean electricity at an exciting new scale. With our compelling services, millions of homeowners will rewire their homes with solar and batteries to enjoy enhanced comfort and affordability. The combined company benefits from broad market reach and differentiated consumer offerings. A lower cost structure from greater scale will accelerate the transition away from polluting and unreliable fossil fuels."

Advisers:
- Simpson Thacher
- Wilson Sonsini Goodrich & Rosati
- Cooley
- Weil Gotshal & Manges
- Gibson Dunn & Crutcher
- Fried Frank Harris Shriver & Jacobson
- Credit Suisse Securities
- Morgan Stanley
- BofA Securities
- Black & Veatch
- Axinn Veltrop & Harkrider

North American renewables tax equity deal of the year – **ENGIE Jupiter Wind and Solar Portfolio Tax Equity Raise**

The deal saw ENGIE North America negotiate the sale of a 49% stake in its 2.3GW renewables portfolio (Project Jupiter) to Hannon Armstrong Sustainable Infrastructure Capital. The portfolio covers 9 wind projects (totalling 1.8GW) and 4 solar projects (500GW) across ERCOT, MISO, PJM Interconnection, and the Southwest Power Pool. The projects have a wide range of corporate offtakers including Amazon, Microsoft, and Walmart.

The deal will represent a major milestone in achieving ENGIE's goal of 9GW of additional renewable capacity by 2021.

Upon signing the deal, Hannon immediately took its 49% stake in the 4 wind projects that had already come online. The other projects were transferred into the portfolio upon commissioning. When the project is fully complete, it will represent a major milestone in achieving ENGIE's goal of 9GW of additional renewable capacity by 2021.

ENGIE retains a controlling stake in the portfolio and will continue to manage the assets. In April 2020, the company had secured US$1.6 billion tax equity commitments, bringing the total tax equity commitments for the portfolio to almost US$2 billion. The size of the portfolio and the magnitude of its tax equity financing demonstrates ENGIE's successful development in this market.

The financing was notable for its single tax equity structure. Financing wind and solar projects together is an unusual step, as the 2 project types typically benefit from different forms of tax credit. This helped make the deal one of the largest portfolio financings of wind and solar projects ever publicly reported.

Gwenaelle Avice-Huet, CEO of ENGIE North America, said: "This is an important step in our zero-carbon energy transition in the United States, and we are excited to have the support of our strong partners, Bank of America and HSBC in this tax equity financing."

Advisers:
- Bank of America

North American renewables deal of the year, onshore wind

Western Spirit

Pattern Energy's $1.8bn financing for the Western Spirit Wind was the largest project in New Mexico and the largest single-phase wind projects ever in the Western Hemisphere. Western Spirit was also one of the leading renewable financings to come to the bank market.

The project is comprised of 2 elements, 4 wind projects located in New Mexico with a combined capacity of 1,050MW and a 150-mile transmission line.

The $1.2 billion construction loan and $437 million LC facilities were successfully underwritten by 6 financial institutions, with 6 additional lenders joining in an oversubscribed secondary syndication. There was also an $80 million term loan.

The financing was structured to integrate the transmission line and all the wind generation using the line, which was critical for addressing lender concerns about project-on-project risk.

The project saw innovative strategies employed to overcome a key challenge faced by renewable developers - the lack of existing transmission capacity and the project-on-project risk that often hinders the development of new transmission with generation.

Pattern Energy first acquired the development rights to the Western Sprit transmission line from Clean Line Energy

Partners in 2018. Pattern then negotiated a build-transfer agreement to sell the transmission line to the Public Service Company of New Mexico (PNM) at commercial operation.

The transaction with PNM was the first time that a build-transfer agreement was used for the construction and sale of a transmission line, introducing a structure which could also be replicated for the construction and sale of transmission lines for offshore wind projects in the US. PNM's purchase of the transmission line provided proceeds to repay the construction loans used to build the transmission portion of the Western Spirit project.

The success of the project served as validation of New Mexico's commitment to become a leader in renewable energy - and the state's recognition that the development of transmission is a key component of that policy goal.

The projects have 2 long-term PPAs, one 20-year PPA with the Southern California Public Power Authority on behalf of the Los Angeles Department of Water and Power and a 15-year fixed-price PPA with San Jose Clean Energy.

Advisers:
- Winston & Strawn
- Skadden
- Milbank

North American social infrastructure deal of the year, energy

University of Iowa Utility System P3

The University of Iowa Utility System P3 is indicative of the growing trend for universities which are looking for ways to raise funds and monetise existing assets to make much-needed energy infrastructure improvements. This deal was the second campus-scale university P3 in the US - following Ohio State University - and one of the largest projects in the entire sector.

The $1.165 billion P3 project will rebuild the university utility system to provide more efficient steam, cooling, water and electricity over a 50-year concession. The concessionaire will be responsible for the O&M of the electrical systems, steam, domestic water, chilled water, sanitary and storm sewer, high-quality water, utility network maintenance, energy control centre, environmental compliance and related distribution systems serving two campuses.

The O&M component also includes the procurement of the utility systems' required fuel and energy needs to optimise plant operation, ensure reliability and meet campus demand. This project aligns with the university's goal of being coal-free by 2025.

The concessionaire (ENGIE and Meridiam) issued an A- rated (Fitch) 30-year $613 million private placement note along with sponsor equity. Banks also provided a $259.7 million capex facility structured alongside the long-term debt that will be drawn to finance the capex works associated with the capital improvement plan.

The concession at the University of Iowa is particularly significant because it is being driven not only by economic efficiency but also by the University's strongly-held commitment to sustainability and energy conservation. It is a market-leading example of how an injection of private capital and expertise can assist public institutions in achieving their wider organisational priorities (beyond mere profitability) on time and on budget.

Advisers:
- Allen & Overy
- Shearman & Sterling
- Jones Day
- Hunton & Williams
- Allen & Overy
- Lane & Waterman
- Wells Fargo
- Jacobs
- Barclays
- Norton Rose Fulbright
- E3 Consulting
- Mazars

North American social infrastructure deal of the year, education – **Prince George's County Schools**

Prince George's County in Maryland became the first district in the US to finance the construction of 5 new middle schools and one K-8 school through a P3, successfully closing the deal through a private placement in December 2020.

The deal is expected to pave the way for future school deals in North America and is designed to accelerate the delivery of critical school facilities, cutting the delivery time in half with lower construction costs and preventative maintenance, while advancing economic inclusion goals through diverse and local business utilisation.

The winning consortium made up of Fengate Asset Management and Gilbane and Prince George's County Education & Community issued $476 million in senior secured notes, rated an initial A2 by Moody's with a stable outlook.

Following commercial and financial close, PGCPS and PGCECP together announced the creation of a $1 million endowed fund supporting scholarships, student internships, mentoring opportunities and apprenticeships valued at $4.7 million, as part of the school system's Alternative Construction Finance Programme.

PGCPS has the second-largest school system in the state and is among the 20 largest school districts in the US. More than half of the 208 schools are over 50 years old. A large percentage of its buildings need replacement or complete renovation.

Bob Hunt, managing director, public institutions at JLL, said: "This P3 is so special because it is a major step forward in delivering equal opportunities to the students and families of Prince George's County. Without this agreement in place, it would take more than 15 years for these schools to get funded and built. Of the many learnings uncovered from this year's pandemic, I think we can all agree on the pivotal role our schools and their faculties play in the lives of our children."

Advisers:
- JLL
- Altus Group
- Operis Group
- INTECH Risk Management
- Winston & Strawn
- Torys

North American transport deal of the year, brownfield – **Iowa Interstate Railroad**

iCON V completed the acquisition of a 40% interest in Iowa Interstate Railroad (IAIS) from Henry Posner III in 2020 for $812.5 million.

Henry Posner III retains a 60% interest in the company, a leading regional freight railroad which owns 412 miles of the 572 miles of track on which it operates between Iowa and Illinois.

Rory Hunter, director at iCON Infrastructure, commented at the time of final signing: "Over the years we have known RDC, we have been continually impressed with their commitment to driving growth at their investments, whilst requiring the highest safety standards and customer service levels. Through this partnership we are excited to support Joe, Henry and the broader team in achieving our shared objective of continuing the strong growth trajectory of IAIS."

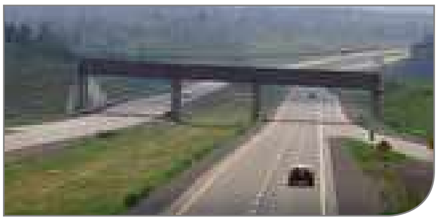
Advisers:
- McKinsey
- Sidney Austin
- KPMG
- Arup
- Ramboll
- Marsh
- Ryan Ratledge
- Convington

North American transport deal of the year, greenfield – **Highway 104**

Nova Scotia's Highway 104 Sutherlands River to Antigonish Twinning project was the first highway P3 project in Nova Scotia in over 20 years and the first P3 project to reach financial close in the midst of highly volatile financial market conditions caused by the pandemic.

The 63km long highway was procured by the Nova Scotia Ministry of Transport and Infrastructure Renewal as a long-term DBFOM project. The twinning of this stretch of Nova Scotian highway, from the boundary with New Brunswick to Antigonish, has been a significant community concern for years to help reduce fatal collisions.

The project closed during the peak of the first wave of the COVID-19 pandemic at a time when bond markets were in turmoil. However, due to cooperation and flexibility from all parties including government, bank lenders and bond underwriters/purchasers to close the project, the financing closed with a senior construction facility from CIBC, National Bank of Canada and Royal Bank of Canada and an offering of both medium-term and long-term bonds undertaken by National Bank Financial and HSBC Securities (Canada).



The debt financing included 2 long-term bond tranches, which took advantage of a flat yield curve to provide maximum value for money to the authority. The consortium building the highway is Dexter Nova Alliance GP and is made up of BBGI (50%), Dexter Construction (30%) and Nova Construction (20%).

In light of the COVID-19 pandemic, the project agreement included customised force majeure relief for epidemics and pandemics during the construction period.

Advisers:
- Blake, Cassels & Graydon
- Aird & Berlis
- BoyneClarke
- Stewart McKelvey
- Farris
- BTY Group
- National Bank Financial
- EY

North American water deal of the year

San Antonio Water Vista Ridge P3 Refinancing

Ridgewood Infrastructure

Vista Ridge refinanced its existing $875 million senior secured bank construction debt facility incurred following completion of the Vista Ridge Regional Water Supply Project. The refinancing of the project's construction debt took the form of a private placement.

Vista Ridge together with its co-issuer, Central Texas Regional Water Supply Corporation (CTRWSC), issued over $1billion of senior secured fixed rate notes. The amortizing notes have a final maturity date of October 2049, leaving a tail of 6 months until expiry of the term.

In addition to the private placement, the companies entered into a working capital facility with Societe Generale to fund the noteholders' debt service account and to provide an additional source of working capital for the project.

The transaction was rated A by Fitch with around 30 investors participating in the offering, which was over 6x oversubscribed. JP Morgan was the lead placement agent while SMBC, ING, and Societe Generale served as placement agents.

Vista Ridge together with its co-issuer, Central Texas Regional Water Supply Corporation (CTRWSC), issued over $1billion of senior secured fixed rate notes

The project is majority owned (75%) by an investment vehicle managed by Ridgewood Infrastructure. Majority ownership occurred in August 2020 when Ridgewood acquired Garney P3, the majority equity stakeholder at 51%. San Antonio is located in an arid area of Texas, with much of the city residing in a drought prone area. The Vista Ridge Regional Supply Project provides an essential water resource to this growing, previously water-constrained city.

The project consists of a 142-mile water transmission system that gathers and transports perpetually leased raw groundwater from Burleson County, Texas to deliver up to 53,000 acre-feet of water per year to the City of San Antonio (the City).

Advisers:
- White & Case
- Winston & Strawn
- Hawkins Delafield & Wood
- Jones Day
- Mazars
- Milbank
- Marsh

IJGlobal Awards 2020

Latin America winners

Early in 2020 as the coronavirus pandemic was building a head of steam, few people would have believed that so many infrastructure and energy deals could have been driven on to financial close – but that's what happened.

Latin America was no exception to this trend as working form home made some wonder whether we ever need to return to the office!

Our thanks go out to those who made the effort to submit for the *IJGlobal* Awards this year as we raise an editorial hat to the industry.

Congratulations all…

Winners in the Latin America transaction category are:

- Editor's Choice Latin America – **EnfraGen**

- Latin American airport – **Lima Airport**
- Latin American digital infrastructure – **Scala Data Centers**
- Latin American export finance – **Amadeus JV**
- Latin American highway – **Autopista Urbana Norte**
- Latin American LNG-to-Power – **Marlim Azul Financing**
- Latin American mining – **Project Serrote**
- Latin American oil & gas – **Cakua Offshore Gas Compression Station**
- Latin American power – **Enfragen refinancing**
- Latin American power refinancing – **AES Panama refinancing**
- Latin American power transmission – **Alupar Transmission Line**
- Latin American renewables refinancing – **INTI**
- Latin American social infrastructure – **Infraestructura Educativa II**
- Latin American transport refinancing – **Project Alma**
- Latin American water – **Sabesp**

Editor's Choice Latin America - EnfraGen

Editor **Ila Patel** selected the refinancing of EnfraGen's existing debt for the Editor's Choice Award for Latin America

The refinancing of EnfraGen's existing asset-level debt for its project companies in Chile, Colombia and Panama represented a landmark multi-jurisdictional transaction for Latin America due to the sheer size and complexity of it. The financing also represented the largest debt deal in the power sector in the region which will allow for future acquisitions of operating assets.

EnfraGen – a developer, owner, and operator of grid stability and renewable energy infrastructure businesses in Latin America – is jointly controlled by Glenfarne Group (50%) and Partners Group (50%), with operational and in-construction assets totalling over 1.8GW of installed capacity.

The deal was submitted numerous times in the refinance category and warrants special recognition not just for the refinancing, but for EnfraGen's mission to support zero-carbon emission electric grids, while stabilising electricity pricing and access in Colombia, Chile, and Panama, delivering both environmental and social benefits.

When discussing the company awards with *IJGlobal*'s independent panel of judges, this transaction was highlighted on numerous occasions as part of company submissions with many commenting that they "wished they'd had the opportunity to work on such a complex, multi-jurisdictional transaction".

It also marks EnfraGen's largest financing to date and official debut in the capital markets, allowing the sponsor to meet short to medium term objectives of refinancing its entire portfolio and further support its growth strategy in Latin America.

The refinancing took place in December 2020 and comprised a $710 million 144A/Reg S 10-year project bond offering and an oversubscribed 5-year $1.05 billion bank debt package with 8 joint lead arrangers. The banks and their roles were Societe Generale (JLA and joint bookrunner), JP Morgan (JLA), BNP Paribas (JLA and joint bookrunner), Scotiabank (JLA), Mizuho (JLA and joint bookrunner), Intesa Sanpaolo (JLA and joint bookrunner), SMBC (JLA and joint bookrunner) and MUFG (JLA and joint bookrunner).

Following the refinancing, the portfolio will be expanded through the acquisition of a 152MW solar portfolio in Chile and a 241MW brownfield CCGT in Colombia

JP Morgan and Scotiabank also acted as global coordinators on the senior secured notes.

BNY Mellon was mandated as trustee, registrar, and paying agent for the bonds, as well as offshore collateral agent and account bank for the entirety of the issued debt.

The 144A/RegS project bonds were the first in the market to be done in parallel to a bank financing which required extensive coordination across multiple business lines. The bonds received a split rating (BA3/BBB-) with a coupon of 5.375%.

Assets owned by EnfraGen are:

- a 610MW gas-fired plant (CCGT) in Colombia
- 4 operating thermal plants (309MW), 5 thermal plants under construction (475MW), and 1 solar plant (9MW) in Chile
- 3 operating hydro power plants (30MW) in run-of-river hydro assets in Panama

Following the refinancing, the portfolio will be expanded through the acquisition of a 152MW solar portfolio in Chile and a 241MW brownfield CCGT in Colombia.

The cash flows for the portfolio are secured by stable capacity payments from regulators in Chile and Colombia and from PPAs with local utilities in Panama. In Colombia, the company expects to earn energy revenues during times of low hydrology which peak during El Nino cycles.

Efficient preparation and coordination allowed the sponsors to take advantage of the strong credit market conditions after the US elections and promising developments after the roll-out of the Covid-19 vaccine.

Advisers:

- Paul Hastings
- Hogan Lovells
- Millbank
- Millbank
- Gómez-Pinzón Abogados
- Claro
- Arias Fábrega & Fábrega (Arifa)
- Philippi Prietocarrizosa Ferrero DU & Uría (PPU)
- Sigma
- Mazars

Latin American airport

Lima Airport

The refinancing of Jorge Chávez International Airport in Lima was chosen as the winner of the Latin American airport deal of the year to refinance its existing debt and complete the final stage of its expansion programme.

The airport is operated by Lima Airport Partners (LAP) with a 30-year concession that began in 2001. LAP is a consortium majority-owned by Fraport, with the IFC holding a minority stake.

The refinancing saw LAP acquire a $450 million bridge loan from a consortium of 4 banks – BBVA, KfW IPEX-Bank, Scotiabank and SMBC – with financial close on 11 September 2020. The tenor of the bridge loan was 1 year. Scotiabank Peru acted as the administrative agent and SMBC served as the mandated lead arranger.

The loan allowed the airport to avoid further delays to its ongoing expansion programme, which has proceeded despite the uncertainties caused by the pandemic. Lima Airport is a vital strategic hub in both Peru and Latin America, serving more than 50 overseas cities through 15 airlines.

The funding supported the construction of a second runway and a new air traffic control tower, which are scheduled for completion in July 2022. These works are part of the airport's long-term expansion plan, which will eventually see it open a second terminal and accompanying apron by January 2025.

Matthias Zieschang, CFO at Fraport, said after the deal was signed in September 2020: "This excellent transaction is of paramount significance for the development of Lima Airport. Secured in a very challenging environment, this financing agreement sends out a strong and positive signal about Lima Airport Partners and the entire Fraport Group.

"Furthermore, the transaction underscores the strong interest and demand from capital markets for financing well-managed airports that have a long-term and positive perspective – such as Lima Airport Partners with its major South American hub airport."

Lenders, advisers:

- Garrigues Peru – legal (local)
- Milbank – legal (NY)

LAP advisers:

- Rodrigo Elías Medrano – legal (local)
- Paul Hastings – legal (NY)
- SMBC – financial

Latin American digital infrastructure

Scala Data Centers

In 2020, Digital Colony expanded its presence in Latin America by launching Scala Data Centres and winning Latin American digital infrastructure deal of the year.

Digital Colony established Scala Data Centers in April 2020, following the acquisition of assets from UOL Diveo. The hyperscale data centre platform in São Paulo is amongst the largest in the country. Shortly after acquiring its initial assets from UOL Diveo, Scala began construction of a third data centre in São Paulo which, when combined with existing facilities, will bring the company's total data centre capacity to 50MW.

Through this transaction, Digital Colony seeks to build a digital infrastructure platform in Brazil that can scale efficiently through organic development and acquisitions. UOL Diveo will continue to partner with Scala to scale its own digital infrastructure requirements.

Cloud growth, IT outsourcing and the adoption of new technologies such as 5G are all projected to drive continued growth in demand for quality data centres that can support the next generation of mobile and internet connectivity. This has created a multibillion-dollar digital infrastructure opportunity in the region for companies which can support these trends and meet the demands of global customers.

The launch of Scala is part of Digital Colony's broader efforts to expand its presence in Latin America, an underserved market for outsourced data centres. Digital Colony previously acquired Highline do Brazil from Patria Investments in December 2019, and the deal was its fourth investment in Latin America. The company also owns Andean Telecom Partners, active in Peru, Chile and Colombia; and Mexico Telecom Partners, one of the country's largest private tower companies.

Marcus Piego, CEO of Scala, said at the time of announcement: "Scala's Latin American investment strategy is highly compelling, and its quality data centres will enable the next generation of mobile and internet connectivity throughout the region."

Advisers to UOL Diveo:

- DH Capital – financial

Latin American export finance

Amadeus JV

The US$1.8 billion Amadeus project in Brazil was an excellent example of client delivery in the midst of a global pandemic, winning it export finance deal of the year in Latin America.

The $1.8 billion project in Minas Gerais, Brazil involves the construction of one of the world's largest dissolving wood pulp (DWP) plants, with a production capacity of up to 500,000 tons of dissolved wood per year. It also includes a 144MW cogeneration plant and the management of 70,000ha of eucalyptus plantations. The project will reduce greenhouse gas emissions by about 0.65 million tCO2 per year.

The Amadeus project is being developed by LD Celulose (LDC), a joint venture between Lenzing and Duratex. LDC agreed a $1.1 billion financing package with IDB Invest, the IFC, and 7 international commercial banks guaranteed by Finnvera (Banco Santander, BNP Paribas, Commerzbank, Erste Group, HSBC, KfW IPEX-Bank, and Raiffeisen Bank). The funds cover the remaining financial needs of the industrial plant and 63% of the total capex, with the sponsors providing the balance.

IDB Invest and the IFC each provided loans of $500 million with maturities of 9 and 11 years, whilst international banks provided around $147 million with maturities of 13 years.

The transaction was one of the largest in Latin America this year and will raise sustainability standards for the Brazilian pulp industry and the forest management sector. The cogeneration plant will produce bioelectricity from byproducts of the industrial process, in turn increasing the share of sustainable biofuels and renewable energy in the Brazilian energy matrix. Around 40% of the excess bioelectricity generated can be used to supply the local public energy system.

The project has been responsible for the creation of thousands of jobs and the development of the region, reinforcing the prominent position of Brazilian industry in the cellulose sector. Construction began in May 2020, with the project expected to come online in 2022.

LDC advisers:

- Machado Meyer Advogados – legal
- Linklaters – legal

IDB, IFC and Finnvera advisers:

- Allen & Overy – legal
- PGA – legal
- Pinheiro Guimarães – legal

Latin American highway

Autopista Urbana Norte

The refinancing of existing debt for the Autopista Urbana Norte project was selected as the winner the Latin American highway deal of the year.

The Autopista Urbana Norte is a special purpose vehicle for Aleatica, which won the 30-year concession to operate the toll road linking the Mexico City Periferico with the Viaducto Bicentenario in 2010. Aleatica, owned by the IFM Global Infrastructure Fund, has a broad portfolio of transport infrastructure in Mexico, Peru, Colombia, Chile, Spain, and Italy.

Aleatica refinanced its existing debt on the Autopista Urbana Norte through a project finance agreement with Banco Santander, Banobras and Banorte, which reached financial close on 27 March 2020. Santander acted as the mandated lead arranger and as the collateral agent for the deal.

The MXN 7.05 billion ($293.8m at the time of negotiation) deal was structured into two tranches: Banobras and Banorte participated in the first tranche (given in MXN for two thirds of the total cost), whilst Santander took part in the second (given in UDI for the remaining third). The tenor of the new loan is 5 years, lasting until March 2025.

For Aleatica, the deal allowed the company to reduce its financing costs whilst waiting for bond markets to improve. The refinancing allowed it to reach an early payment with its existing creditors (BBVA Bancomer, Banobras, and Fonadin) and provided a cashout opportunity for Aleatica.

The deal positively impacted both Urbana Norte's financing costs and Aleatica's asset portfolio, which includes over 300km of roads in Mexico alone. It was also received positively by the lenders, being one of Santander Mexico's most profitable structured finance operations.

Autopista Urbana Norte advisers:

- Mijares, Angoitia, Cortes y Fuentes – legal
- ADS Financial Planning – financial

Banco Santander, Banobras and Banorte advisers:

- Greenberg Traurig – legal
- EY – financial
- Idom – technical

Latin American LNG-to-Power

Marlim Azul Financing

A financial investment decision was announced in January 2020 for the Marlim Azul natural gas-fired thermoelectric power project.

BNDES provided non-recourse long-term financing for Vale Azul II, a 565MW combined cycle power plant in Macaé, Rio de Janeiro. The total value of the deal is around R$2.6 billion ($515m), with debt and equity of about R$2 billion ($396m). The loan serves both to finance construction costs and to repay a bridge loan of R$97 million ($19m) provided by SMBC.

The project is sponsored by Marlim Azul, a consortium of Patria Investments (50.1%), Shell (29.9%), and MHPS (20%). It is Shell's first foray into the Brazilian energy sector, having initially joined the project as a gas provider.

The plant will be the first thermal power plant to consume natural gas from the pre-salt fields in Brazil and is expected to commence operations in 2022. The total cost of the project is estimated at $700 million.

BNDES agreed to provide R$2 billion ($490m) to the project over 24 years. The financing is secured in several ways: the fiduciary assignment of the project's credit rights; equity support obligations granted by the borrower's shareholders; mortgage of real estate owned by the borrower; pledge of the borrower's shares; pledge of the project's equipment; and letters of credit issued by the bank guarantee providers (Bradesco, Banco do Brasil, Votorantim and SMBC).

At the time of the agreement, Marlim Azul Energia CEO Bruno Chevalier said: "The contract with BNDES is an important step in the development of a project that will make a decisive contribution to the consolidation of the new gas market, making the market and prices more competitive. We are making energy generation from Brazilian pre-salt gas a reality."

Advisers to Marlim Azul Energia:

- Machado Meyer Advogados – legal

Advisers to the banks:

- Stocche Forbes – legal
- Mattos Filho, Veiga Filho, Marrey Jr e Quiroga Advogados – legal

Financial advisers:

- SMBC
- Bradesco

Latin American mining

Project Serrote

The Serrote copper-gold project is an advanced stage, de-risked greenfield open-pit copper-gold asset with financing successfully executed despite challenges that arose during the height of the pandemic.

The project is owned by Mineração Vale Verde (MVV) and sponsored by Appian Capital Advisory, an investment fund focused on mining. MVV secured a $140 million debt financing from a consortium of 4 banks – ING Capital, Natixis and Societe Generale – for the development, construction, completion, ownership, and operation of the open pit copper mining project in Alagoas, Brazil.

The refinancing will cover all remaining development costs for the project, which will eventually produce around 20,000 tonnes per annum of copper equivalent over a projected 14-year lifetime. This will supply a processing plant with an annual capacity of 4.1 million tonnes of copper concentrate. First production is expected in the second half of 2021.

This deal was one of the largest greenfield mining project finance transactions since the beginning of the pandemic and reached financial close on 1 February 2021. As part of the overall package, Appian Capital will acquire a royalty over a portion of the project's gold by-product production.

Paulo Castellari, CEO of MVV said once the project reached financial close: "I am pleased that we have been able to secure this financing for Serrote, which finalises the overall funding package and will support completion of project development and delivery of first production. It is an important development which recognises the continued progress and key milestones achieved to date and highlights the attractiveness of this high-quality copper-gold deposit.

"The tremendous progress we have made during the pandemic is also testament to the hard work and determination of our employees, and I look forward to bringing Serrote into production on schedule and in line with budget."

Mineração Vale Verde advisers:

- Fialho Salles – legal (local)
- Norton Rose – legal (foreign)
- Endeavour Financial – financial

Lender advisers:

- Mattos Filho Advogados – legal (local)
- White & Case – legal (foreign)

Latin American oil & gas

Cakua Offshore Gas Compression Station

The Cakua Offshore Gas Compression Station is a strategic project for the Mexican government and increasing oil production is a key objective for President Lopez Obrador's government.

The project, located in the Ku-Maloob-Zaap oil field in Campeche, Mexico, is being delivered by Cakua – a special purpose vehicle majority-owned by subsidiaries of the ACS Group (Dragados Offshore de México, Dragados Offshore, Cobra Instalaciones y Servicios, Dragados Industrial and Avanzia Instalaciones) with a 95% stake. The remaining 5% share is owned by CKA1 Holdings, a fully owned entity of Atlantica Yield.

Cakua reached an agreement with 110 banks – Bancomext, Bank of China, Banobras, Intesa Sanpaolo, ING, Mizuho, MUFG Bank, Nacional Financiera, Norinchukin Bank, and Societe Generale – for the $404 million 10-year senior secured financing. The funds will partially refund Cakua's development costs, refinance existing bridge loans, and fund the remaining costs of the project. The total value of the deal is $630 million, and the total equity is $146 million.

The project involves the construction of 4 turbo compressor units and 3 turbo generators with a daily processing capacity of 450MMCF. The mechanical and process design for the gas compression station was designed to compress sour gas to be reinjected to assist oil and gas extraction.

The Ku-Maloob-Zaap field currently produces around 750,000 barrels of oil per day and represents around 50% of the country's crude oil production. The current Mexican government under President López Obrador has pledged to increase oil production by 1.0MMbpd by 2024, after Pemex's production halved between 2004 and 2019.

The field itself is owned by PEP, which fully contracted the project under an 11-year take-or-pay Compression Services Agreement. Dragados Offshore México is responsible for engineering, procurement, construction, installation, operations, and maintenance.

Advisers to Cakua:
- Garrigues – legal

Advisers to the lenders:
- Allen & Overy LLP – legal
- Ritch Mueller – legal

Other advisers:
- Black & Veatch Management Consulting - independent engineer
- AON - insurance adviser
- PwC - model auditor
- Netherland Sewell & Associates - reserves report

Latin American power transmission

Alupar Transmission Line

The groundbreaking Alupar Transmission Line was the first international project financing of a transmission line in Colombia, winning power transmission deal of the year.

The deal supported Transmisora Colombiana de Energía (TCE) – a subsidiary of Alupar – in the development of a new 235km, 500kV transmission line which will expand the company's generation capacity by 30MW, bringing it to a total installed capacity of 460MW.

Alupar reached a $163.5 million mini-perm with 2 banks for the project. MUFG provided $138.5 million, whilst the remaining $25 million came from Banco Sabadell. The tenor of the loan is 7 years, and the total equity for the deal is $250 million. This transaction was the first international project financing of a Colombian transmission line, and it was negotiated almost entirely virtually.

The new line, which includes 2 connection terminals, will run between La Virginia and Nueva Esperanza, crossing the departments of Risaralda, Cundinamarca, Tolima, Quindío and Valle del Cauca. When complete, the project will provide electricity to over 2 million households.

Alupar won the contract to build the project in November 2016 after a tender organised by the country's Mines and Energy Planning Unit (UPME); the company bid $182.7 million and projected an opening date of 30 September 2020. Alupar beat rival bids from Interconexión Eléctrica and Empresa Energía de Bogotá, both Colombian companies.

The new transmission line is part of Alupar's widening portfolio in Colombia. The company's existing assets include Risaralda Energía – operator of the 19.9 MW Morro Azul hydro project, which was brought online in September 2016. The La Virginia – Nueva Esperanza line is the company's first transmission asset in Colombia, complementing its existing transmission assets in Brazil.

Advisers to Alupar:
- Norton Rose Fulbright – legal
- Leite, Tosto e Barros – legal
- Brigard Urrutia – legal

Advisers to the lenders:
- Holland & Knight – legal
- Milbank – legal
- Structure Banca de Inversión – financial

Latin American renewables refinancing – **INTI**

INTI was selected as renewables financing deal of the year in Latin America, a transaction that successfully closed in the midst of the pandemic. The 3 Peruvian solar assets – Tacna, Panamericana, and Moquegua – were originally financed by the Development Finance Corporation and were among the first solar projects awarded PPAs in the country in the early 2010s, with a generation capacity of 68MW. Each project has a 20-year, dollar-denominated PPA with the Peruvian government for 100% of the project's electricity generation.

The $225 million refinancing was negotiated with BNP Paribas, SMBC, and Societe Generale. The 3 assets were refinanced simultaneously with the 3 banks, having originally been financed through separate financing lines due to local legal constraints. Structured on a club deal basis, the refinancing amounted to $225 million across a 12- to 14-year fully amortising term loan and a 7-year DSRA LC.

The refinancing improved considerably on the initial terms reached with DFC. This work resulted in a lower DSCR, extension of tenors, lower pricing and replacement of cash funded debt reserves with DSCR Letters of Credit. The 12-year tenor of the new financing also matches the remaining lifetime of the PPAs signed with the Peruvian government. At the time of the deal, Solarpack said that the refinancing freed up $29 million, to be reinvested into the company.

The deal allowed the 2 companies to refinance the original debt to DFC entirely with private sector funding, taking advantage of banks' increased appetite for PPAs in the country. In this regard, the transaction is a concrete example of the development of the project finance market in Latin America since the project was first developed a decade ago.

Advisers to Solarpack and Ardian:
- Rodrigo Elias & Medrano Abogados – legal (local)
- Clifford Chance – legal (international)
- Astris Finance – financial

Advisers to the lenders:
- Garrigues Peru – legal (local)
- Milbank – legal (international)

Advisers to the collateral agents:
- Estudio Echecopar/Baker McKenzie – legal (local)
- Hinckley Allen – legal (international)

Technical advisers:
- DNV GL
- Grupo Mercados Energeticos Consultores

Latin American social infrastructure

Infraestructura Educativa II

IDB Invest supported Uruguay's education sector by providing a loan to help upgrade a schools package at a time when these types of projects are experiencing credit restrictions due to the pandemic..

IDB Invest provided a $25 million loan to Infraestructura Educativa II, a consortium comprised of Berkes, Saceem, and Stiler, to support the design and construction of new educational and sporting facilities in Uruguay. The company previously received loans from the CAF, both directly and through its CAF AM II Debt Fund.

The total cost of the deal, including the participation of other co-financing banks, was $97 million. Both loans were provided in indexed units and the first disbursement was made on 26 March 2021.

In 2018, Infraestructura Educative II won a 22-year concession – jointly awarded by the National Administration of Public Education (ANEP) and the Uruguayan Institute for Children and Adolescents (INAU) – for the design, construction, and maintenance of 42 public educational and sports centres in Uruguay. This includes 23 schools, 9 technology centres, and 10 sports centres, with construction to be completed within 36 months. The project will provide educational facilities and research services for a total of 4,500 children across 16 of the country's 19 departments.

The concession is part of the country's wider strategic plan to develop its educational infrastructure, which will eventually involve 4 PPPs. The programme aims to promote full-time education in unfavourable socio-economic contexts, improve school conditions, and provide a greater selection of technical and polytechnic schools. Moreover, the construction of new sporting infrastructure will benefit adult communities in the vicinity of the new facilities. Many of the new centres also incorporate the necessary infrastructure to generate their own hot water through solar energy.

Advisers to Infraestructura Educativa II:
- Guyer & Regules – legal

Advisers to IDB Invest:
- Allen & Overy – legal
- Ferrere Abogados – legal
- TA Europe – technical

Latin American power refinancing

AES Panama refinancing

AES Panama used the proceeds of term loans and notes to fund back-to-back loans to various operating companies in Panama. These funds were then used to repay and refinance existing debt to free up financing for new projects.

AES Panama was created for the purpose of refinancing the AES Corporation's diverse portfolio of power generation assets in the country, which includes technologies such as hydro, wind, solar, and LNG. The portfolio stands under several separate legal vehicles, each of which has a different partner, creating challenges in refinancing.

The deal met these challenges by refinancing $1.5 billion of existing debt and capital expenditures through the creation of the Panamanian finance affiliate, which issued $1.38 billion of 10-year notes at 4.375% and obtained both a $105 million 3-year loan and a $50 million revolving credit facility. 5 banks took part in the refinancing: Citigroup, JP Morgan and Scotiabank (as global coordinators) plus Banco General and Credit Suisse (as joint bookrunners).

This creative refinancing created a funding vehicle that acted as an issuer of debt, passing downstream proceeds of the issuance to each of the operating companies through intercompany loans. The loans provide limited guarantees as to the amount of debt allocated, thus respecting the different ownership structures. Nonetheless, AES pledged its equity interest in the form of dividends from each of the operating companies, allowing investors to participate in a structure that provided them with a mix of technologies and a natural hedge in their exposure by combining renewables and LNG.

The strength of the structure, together with the high quality of the assets within the portfolio, led to a rating of BBB- from Fitch and Baa3 from Moodys.

The transaction allowed AES in Panama to simplify its capital structure, positioning itself to respond more efficiently to market demands and serving client needs more rapidly whilst reducing costs by almost 200bps per year. The deal was a historic one for Panama, as the largest bond issuance made by a private entity in the country and indeed the whole of Central America.

Miguel Bolinaga, CEO of AES Panama, said: "We feel very pleased with the results obtained with the refinancing; and for the benefits it presents to our company; this billion dollar transaction reaffirms our commitment to the country and highlights the important position of Panama in the world as a country for investments"

Jeff Mackay, CFO of AES Mexico Central America & Caribbean, said: "This transaction used innovative structuring to aggregate a number of very diverse AES operating businesses and to create a synthetic portfolio that enabled us simplify our balance sheet across all our Panamanian subsidiaries and to capture financial efficiencies that were not otherwise available."

"This refinancing enabled us to create a more flexible capital structure in our businesses that will support our continuous growth strategy on renewables and LNG for the AES portfolio in Panama. We worked together with the banks and counsels on this transaction for several months to ensure that the final product of the financing captured the needs of our on-going operations while providing the necessary protection to investors"

Oscar Batres, AES Mexico Central America & Caribbean Treasurer, said: "Our portfolio proved to be an attractive alternative for investors, at it showed how resilient our operations are despite the Covid effect. We were able to attract more than US$5 billion from high quality investors across the globe. In addition, the element of having the issuance registered in the Panama Stock Exchange, enabled us to capture local demand in the order of around US$500 millon."

Advisers to AES Panama:
- Alcogal – legal (local)
- Clifford Chance – legal (international)

Advisers to the lenders:
- Arifa – legal (local)
- Shearman & Sterling – legal (international)




AES in Panamá placed the largest Corporate Bond Issuance in the Central American and Caribbean region

AES in Panama has achieved a historical milestone by placing USD $1,380 Million in Senior Secured Notes with a coupon rate of 4.375% for a period of 10 years; making this transaction the largest issuance in the international capital markets by a private entity in the Central American and the Caribbean region.

With the help of local and international banks, along with the support of the Superintendencia del Mercado de Valores de Panamá, the transaction was incorporated and placed through the Bolsa de Valores de Panamá and the Singapore Stock Exchange. This transaction helps to dynamize the local market, positioning Panama as a hub for this kind of international operations

Latin American power

Enfragen refinancing

The EnfraGen refinancing marked the first energy transition portfolio in Latin America which used a bank and bond debt financing package.

EnfraGen – a developer, owner, and operator of grid stability and value-added renewable energy infrastructure businesses across Latin America – secured a $1 billion debt package and issued a $710 million bond offering to refinance existing debt and fund near-term growth opportunities.

The debt package was issued by 8 banks: BNP Paribas, Intesa Sanpaolo, Mizuho, MUFG, SMBC, Societe Generale, JP Morgan and Scotiabank. JP Morgan and Scotiabank served as global coordinators and Mizuho acted as the administrative agent.

EnfraGen is jointly controlled by Glenfarne Group and Partners Group, with operational and in-construction assets totalling over 1.4GW of installed capacity. Its portfolio includes the Termoflores gas-fired power plant in Colombia, 784MW of diesel gensets in Chile, and 30MW of hydro assets in Panama. These assets are arranged under 2 of EnfraGen's subsidiaries (Prime Energia and Fontus Hydro).

The cash flows for the portfolio are anchored by stable capacity payments from regulators in Chile and Colombia and from PPAs with local utilities in Panama. In Colombia, the company expects to earn energy revenues during times of low hydrology which peak during El Nino cycles.

The refinancing of EnfraGen was a landmark deal for the region because of its size and complexity: the transaction financed a multi-jurisdictional pool of assets across varying classes, including limited construction risk. Moreover, the financing was one of the first ever 144A/RegS project bonds to be done in parallel to a bank financing, which required extensive coordination across multiple business lines.

The financing is a transitional facility for EnfraGen, including traditional project financing terms whilst providing for capital in support of potential future acquisitions. As such, it provides an ongoing opportunity for increased portfolio diversification and scale.

Advisers to EnfraGen:
- Paul Hastings – legal
- Claro & Cia – legal
- Gomez-Pinzon Abogados – legal
- Sigma – legal
- Hogan Lovells – legal

Advisers to the lenders:
- Milbank – legal
- Garrigues – legal
- Philippi Prietocarrizosa Ferrero DU & Uria – legal
- Arifa – legal

Other advisers:
- Black & Veatch – Independent engineer
- PHC Servicios Integrados Group – Colombian market consultant
- Mercados Energéticos – Panama market consultant
- Systep Ingeniería y Diseños – Chile market consultant
- Mazars – model auditor

Latin American transport refinancing

Alto Magdalena (Project Alma)

The current credit environment provides unique opportunities for sponsors and developers in Latin America to refinance their existing debt at much lower rates. More 4G projects are expected to complete construction resulting in sponsors seeking liquidity in preparation of upcoming 5G projects.

Project Alma consists of the construction, rehabilitation, improvement, and operation of the 190km Honda - Puerto Salgar - Girardot corridor. The concessionaire is a consortium made up of Constructora MECO (30%), MHC Ingenieria y Construccion de Obras Civiles (30%), Pavimentos Colombia (30%), and Ingeniería de Vias (10%). As part of the contract, the company improved 167km of existing toll roads and constructed an additional 23km of new highways.

Initial construction was financed through a $314 million deal consisting of three tranches of debt (a COP tranche, a UVR indexed tranche and a USD tranche provided by Grupo Aval banks and Cabei respectively).

After the project became operational

in July 2020, the company secured refinancing with 5 banks: Ashmore Debt Fund – CAF, Banco de Bogotá, BlackRock, Financiera de Desarrollo Nacional, and SMBC (participating in association with MUFG). The deal was valued at $510 million.

This refinancing consisted of a US$164.5 million senior dollar credit facility, a COP 1.2 trillion senior Colombian peso facility, and a COP 115 billion subordinated Colombian peso facility.

This deal was an important first for the Colombian transport sector in several ways. In 2014, Concesión Alto Magdalena became the first concessionaire to win a contract in Colombia's 4G highway programme – the largest infrastructure initiative in Colombian history. Likewise, this project was the first of the 4G contracts to reach the refinancing stage.

Luis Maria Clouet of Clifford Chance, who advised on the deal, said: "The refinancing of Alto Magdalena […] will likely open the door to similar corporate M&A and refinancing opportunities in Colombia. The current credit environment provides unique opportunities to sponsors and developers in Latin America to refinance their existing debt at much lower rates."

Advisers to Project Alma:
- Milbank – legal (local)
- Castro Leiva – legal (international)
- Structure Banca de Inversión – financial
- Arup – technical

Advisers to the lenders:
- Philippi Prietocarrizosa Ferrero DU & Uria – legal (local)
- Clifford Chance – legal (international)

Latin American water

Sabesp

The Companhia de Saneamento Básico do Estado de São Paulo (Sabesp) refinancing deal contributes to 4 of the United Nations Sustainable Development Goals; good health and well-being, gender equality, sustainable cities and communities and climate action.

Sabesp, the largest water and sanitation company in Latin America, provides services throughout the state of São Paulo. It sought refinancing to build 5 water quality restoration units in informal areas in the Pinheiros River basin and to install of up to 73MW of distributed solar capacity in 33 of its water treatment plants. This electricity self-generation capacity is the first non-conventional renewable energy source built and operated by Sabesp and establishes a model which can be reused elsewhere.

IDB Invest provided local currency financing of R$950 million ($184m) in 2 tranches. The first tranche, with a 14-year tenor, will support Sabesp´s capital expenditures for the works and the incorporation of solar distributed technology in Sabesp's existing treatment plants. The second tranche, with a 10-year tenor, will refinance a portion of Sabesp's debt denominated in foreign currency, and accordingly reduce its global exposure to forex.

This structure of this transaction is highly replicable, especially in the context of a significant surge in water and sanitation PPPs being issued in Brazil – all of which will require long-term financing. Achieving this in local currency will allow Sabesp to continue developing its capital investment plan for the coming years whilst also reducing its exchange rate exposure.

Moreover, the incorporation of distributed generation solar technology within Sabesp's existing plants is an innovative tool that can reduce the company's carbon footprint whilst simultaneously bolstering its operational efficiency.

The new water restoration units will support ongoing efforts to depollute the basin, which receives effluents for over 290 industries and waste and wastewater for over 400,000 households. The treatment plants will add a cumulative water treatment capacity of 1,560 litres per second, contributing to a target of 85% of sewage treated by 2025.

Advisers to Sabesp:

- Cescon Barrieu – legal
- Davis Polk & Wardwell – legal

Advisers to IDB Invest:

- Mattos Filho – legal
- Clifford Chance – legal

IJGlobal Awards 2020

Asia Pacific winners

Winners in the Asia Pacific transaction category are:

- Editor's Choice Asia Pacific – **Clifford Capital's corporate restructuring and ADB's investment**

- Asia Pacific project finance & export finance – **Changfang, Xidao Offshore Wind Farms**
- Asia Pacific regional refinancing & oil & gas refinancing – **Ichthys LNG Refinancing**
- Asia Pacific DFI – **Mazar-e-Sharif Gas-Fired Power Plant IPP Phase 1**
- Asia Pacific LNG primary financing – **Hong Kong LNG Offshore Terminal**
- Asia Pacific midstream Oil & Gas – **Acquisition of Daesung Industrial Gases**
- Asia Pacific upstream oil & gas – **Acquisition of Chevron's 45% in Malampaya Gas Field**
- Asia Pacific energy storage – **Wandoan BESS**
- Asia Pacific floating solar – **Changhua Lundong Floating Solar PV Plant**
- Asia Pacific geotherma – **Gunung Salak-Darajat Geothermal Plant Portfolio Refinancing**
- Asia Pacific offshore wind – **Akita Port and Noshiro Port Offshore Wind Farms**
- Asia Pacific onshore wind primary financing – **Murra Warra Wind Farm Phase 2**
- Asia Pacific onshore wind refinancing – **Sidrap Wind Farm**
- Asia Pacific solar in a frontier market – **Navoi Region Solar PV Plant IPP**
- Asia Pacific renewables portfolio financing – **SB Energy Rajasthan Solar PV Portfolio IPP**
- Asia Pacific solar refinancing – **Leader Energy Kuala Muda Solar PV Portfolio Refinancing**
- Asia Pacific coal-fired power – **Java 9 and Java 10 Coal-Fired Power Plants**
- Asia Pacific cogeneration power – **Rayong Cogeneration Power Plant**
- Asia Pacific power transmission – **North Phnom Penh-Kampong Cham Transmission Line**
- Asia Pacific social infrastructure primary financing – **South Australian Health and Medical Research Institute Second Building**
- Asia Pacific social infrastructure refinancing – **ACT Law Courts PPP Refinancing 2020**
- Asia Pacific data centre – **Acquisition of 88% in AirTrunk**
- Asia Pacific telecoms – **Acquisition of Jio Platforms**
- Asia Pacific transport primary financing – **Almaty Ring Road PPP**
- Asia Pacific transport refinancing – **WestConnex Toll Road Refinancing**
- Asia Pacific wate – **Binh Duong Water Treatment Expansion**
- Asia Pacific mining – **Okvau Gold Mine**

Asia Pacific Editor's Choice

Clifford Capital's corporate restructuring and ADB's investment

Clifford Capital, which has been operating since 2012, restructured its entities under a holding company (CCH). The Singapore-based specialist financing and distribution platform also recruited Asian Development Bank (ADB) and Japan International Cooperation Agency's (JICA) Leading Asia's Private Infrastructure Fund (LEAP) to invest $95 million of equity into CCH. ADB manages LEAP.

"It was a herculean effort, achieved at the peak of the pandemic when the market was volatile and investor sentiment was weak," says Christine Chan, ADB's co-leader of the project team and now senior adviser to vice-president for private sector operations and PPPs.

"ADB's equity investment in CCH will have a ripple effect across the sustainable infrastructure finance market. ADB's equity will expand CCH's capital base to fuel its next stage of growth and unleash new innovations across the infrastructure financing continuum."

CCH is the umbrella company for:

- Bayfront Infrastructure Management – project finance collateralised loan securitisation
- Clifford Capital (CCPL) – debt for infrastructure, offshore marine and shipping
- Pierfront Capital – mezzanine and private credit
- possible supply chain financing (SCF) entity that CCH is evaluating

"The rationale for the restructuring was to bring our complimentary platforms under a holding company and help us to move us to our next phase of growth. Bringing in ADB as a shareholder is an important part of this story," says Clive Kerner, group chief executive of CCH. "We're delighted that ADB is a shareholder. Our remits are aligned in a number of areas."

Christine adds: "There is tremendous scope and potential to further expand these businesses and leverage these new asset classes to mobilize institutional capital towards sustainable infrastructure in Asia.

"It will also open up new co-financing and co-investment opportunities for the market, which is especially valuable given that investor confidence and market sentiment have been shaken by the Covid-19 pandemic. As we support the region's recovery, ADB looks forward to leveraging its public and private sector resources and to building back smarter with CCH, its shareholders, and the broader infrastructure market."

ADB's financing package comprised $50 million investment from the Manila-headquartered multilateral and $45 million by LEAP. ADB's investment in CCH is its first investment in a Singapore entity since the opening of ADB's new office in Singapore in March 2020. The office now has 11 staff.

"We are delighted that JICA, through its investment from LEAP, was able to co-invest alongside ADB as part of this landmark partnership," says Christine.

ADB has a longstanding relationship with CCPL in in Asia's infrastructure finance market. The multilateral first cofinanced with CCPL in 2015. It also shares Temasek's vision and work to mainstream sustainability throughout its investments. The Singaporean sovereign wealth fund is CCH's largest shareholder.

"ADB has high regard for CCPL's senior management and board of directors," emphasises Christine. "When ADB was first approached in the fall of 2019, we recognized the tremendous synergy between ADB's and CCH's infrastructure financing platforms. We also clearly saw the opportunities to further leverage the capital, innovation, knowledge, and partnerships from Singapore's infrastructure ecosystem to address Asia's infrastructure gap."

Clive adds: "We are very focused on how our existing businesses need to evolve to reflect where new market opportunities lie. Part of that evolution is adapting to the way the world is changing around sustainability, which is a very important theme for us across all our platforms. ADB's expertise on ESG was a big attraction."

"The strategic investment by ADB is a sign of ADB's confidence in CCH's future growth plans, including in sustainable infrastructure financing in developing Asia and is expected to boost the consolidation of Singapore's position as the leading infrastructure financing hub in Asia," says Milbank partner and ADB legal adviser Jacqueline Chan.

"This complex strategic investment was a huge undertaking," says Christine. Teams conducted due diligence across CCH's business lines. "The ADB transaction was complex because we had to conduct significant industry due diligence across nearly the entire debt value chain from project finance loans to private and mezzanine credit to derivatives," adds Jacqueline.

"The due diligence helped us appreciate the scale of the market across multiple geographies and the increasing need for new financing innovations," notes Christine. "These innovations include Pierfront Capital's mezzanine financing and structured solutions in the infrastructure market, and Bayfront Infrastructure Management's securitization of project finance assets—a ground-breaking way to originate, structure, and distribute the securitization to different financial investors."

"Moreover, the project team working with 'OneADB' teamwork adopted a cross-cutting approach encompassing governance, development effectiveness, safeguards, and gender to conduct due diligence and structure this landmark equity investment," she says.

"Another challenge was working through the impact of ADB's governance requirements on the governance structures of CCH and its subsidiaries," says Jacqueline. "ADB brings with it as investor its breadth of international governance and ESG policies and reporting accountability, which further cements and buttresses CCH's position as a world-class provider of infrastructure finance in all aspects."

Christine stresses the important work of the private sector to close Asia's infrastructure financing gap, which has widened due to the pandemic. "The private sector is needed more than ever as governments are diverting already strained fiscal resources to finance recovery."

"We are thinking very carefully about how our platforms can move towards delivering more sustainable products. We are also mapping out our portfolio of assets and thinking how we can transition over time," notes Clive.

"Through a sustainability lens, we are seeing opportunities. Renewables hold the most immediate opportunities," CCH's chief executive says. "More broadly, the definition of infrastructure itself is expanding and we'll focus on where we can make a difference."

Asia Pacific project finance & export finance – **Changfang, Xidao Offshore Wind Farms**

The 552MW Changfang and 48MW Xidao offshore wind farms in the Taiwan Strait, better known as the CFXD project, are the Asia Pacific Regional Project Finance and Best Export Finance deals of the year.

This is the first year *IJGlobal* has recognised 2 APAC regional winners. The other is a large refinancing. CFXD was chosen from among the top project finance transactions that closed in 2020 around the region.

Sponsors, led by Copenhagen Infrastructure Partners (87.5%) with Taiwan Life and TransGlobe Life, reached financial close in February 2020 through a near NT$120 billion ($3.94 billion) financing package. The participation of local Taiwan life insurers as equity investors and involvement of a Japanese export credit agency were innovative features of the transaction.

"This transaction is a significant milestone as it is the first of its kind to enable local life insurance companies to make a direct investment in a Taiwanese offshore wind farm," CIP partner Michael Hannibal said at the equity closing.

MUFG Bank had the joint mandate on CFXD's roughly NT$90 billion, three-currency debt package, comprising 23 lenders including Taiwan Life and TransGlobe Life. CFXD's uncovered, commercial tranche pricing was 240bp above 3-month Taibor, stepping down to "just slightly above" 200bp at commercial operations date, according to a market commentator.

Lenders on CFXD had a sweet-and-sour mix of 55/45. The following 7 Asian and European institutions provided about NT$49.5 billion in coverage (in order of exposure): Atradius, EKF, NEXI, K-Sure, GIEK, KfW and UKEF.

"The real story of the transaction is this is NEXI's first time participating [in the Taiwan offshore wind]," said another market commentator. "They came in at a very meaningful level, given the Japanese content from the turbine supply agreement." The Japanese ECA covered NT$10.2 billion (¥37 billion) financing by 10 lenders.

Participants: ABN Amro, Baker McKenzie, Bech-Bruun, Crédit Agricole, CTBC, DBS, Deutsche, E Sun, En Tie Commercial, FIH Partners, HSBC, JP Morgan, KfW IPEX-Bank, KGI, Korea Development Bank, Kromann Reumert, Lautec, Lee & Li, Linklaters, Marsh, Mizuho, Mott MacDonald, MUFG, Natixis, OCBC, Orrick, PEAK Wind, Ramboll, Santander, Sinotech Engineering, SMBC, Société Générale, Standard Chartered, Taipei, Fubon, Tsar & Tsai, White & Case, Wood Group

Asia Pacific regional refinancing & oil & gas refinancing – **Ichthys LNG Refinancing**

The Ichthys LNG Refinancing 2020 is the Asia Pacific Regional Refinancing and Best Oil & Gas Refinancing deals of the year.

This is the first year *IJGlobal* has recognised APAC regional winners. Ichthys was chosen from among the top refinancing transactions that closed in 2020 around the region.

In June 2020, lead sponsors Inpex Corporation and Total refinanced the issuer's existing uncovered commercial loan and KEXIM direct loan with a new uncovered commercial facility at lower margin. The $11.9 billion transaction also involved the re-pricing of its existing ECA covered loans from 6 ECAs, EFA direct loan and senior sponsor debt at lower margins.

"The innovative and first of its kind refinancing and re-pricing plan revolved around a strategy to most efficiently reduce the project's cost of debt, combined with a revised repayment profile that was both robust and value accretive to the project and sponsors which ultimately needed to be successfully executed at a time of unparalleled market volatility," said a deal insider.

Liquidity from a global blend of commercial banks was surprisingly strong, given the timing amid the Covid-19 pandemic and a crisis where Brent was below breakeven, with uncovered debt's pricing significantly reduced. Financial advisers Citi and Mizuho delivered the massive refinancing spot on the sponsors' deadline.

This transaction highlights the resilience of the sector and the bankability of Australian LNG assets. With a total of 28 lenders and 7 Asia Pacific and European ECAs on the transaction it is also a testament to the bank's capabilities in large and complex infrastructure financing transactions and ongoing support even in challenging market conditions.

CPC, Osaka Gas, Toho Gas, Tokyo Gas, JERA, and Kansai Electric are also Ichthys LNG's shareholders.

Participants: Allen & Overy, Allens, ANZ, Atradius, Bank of Communication, Bank Serve, Bayern LB, Bayfront Capital Partners, BNP Paribas, Bpifrance, Caixa, CBA, Chiba, Citigroup, Crédit Agricole, DZ, Euler Hermes, Export Finance & Insurance Corp Australia, Export Finance Australia, Gas Strategies, Herbert Smith Freehills, HSBC, ICBC, ING, KEXIM, KfW IPEX-Bank, K-Sure, Latham & Watkins, Lummus Consultants International, Mizuho, MUFG, NAB, NautaDutilh, NEXI, Resona, Santander, SMBC, SMTB, Société Générale, Westpac

Asia Pacific DFI – **Mazar-e-Sharif Gas-Fired Power Plant IPP Phase 1**

The 59MW Mazar-e-Sharif gas-fired power plant IPP phase 1 is the Asia Pacific DFI deal of the year.

Much of Afghanistan's infrastructure has been destroyed due to nearly 3 decades of conflict. The country has significant need for power and private sector investment. Two-thirds of Afghanistan's 37 million people do not have access to grid-connected electricity. Of the remaining third, more than 75% of the power is imported. Even those connected to the grid have frequent blackouts, at times lasting some 15 hours a day.

Against this backdrop, the financing of Mazar independent power producer (IPP) – Afghanistan's first long-term IPP – was a consequential achievement. The $90 million Mazar-e-Sharif power plant will generate 400GWh of electricity annually for the residents of Mazar-e-Sharif, Kabul and Jalalabad, boosting the country's electricity generation by up to 30%.

At closing, Afghan banking, construction, energy and transport conglomerate Ghazanfar Group and Egyptian construction company Hassan Allam Holdings owned Afghan Power Plant Company, the project's special purpose vehicle.

The transaction was also Afghanistan's first private sector gas-fired power plant to be funded by development finance institutions (DFIs). "The project will have a significant demonstration effect for private sector participation in Afghanistan's energy sector," said a deal insider.

IFC was MLA on the nearly $65 million debt package. The World Bank Group member provided an A loan and mobilised funding from Asian Development Bank, Japan International Cooperation Agency's Leading Asia's Private Infrastructure Fund and DEG.

IDA also provided a guarantee to support short-term liquidity for ongoing payment obligations to power utility DABS, which is the offer. MIGA also provided investment guarantees.

IDA Private Sector Window's (PSW) Risk Mitigation Facility and MIGA Guarantee Facility covered IFC's financing and MIGA's political risk guarantees. Mazar was World Bank's first time to deploy PSW's Risk Mitigation Facility.

World Bank is also helping to build a natural-gas pipeline from Sheberghan to Mazar-e-Sharif to supply gas to the plant.

Participants: Aon, EY, Fichtner, Hagler Bailley, Hogan Lovells, Kakar, Marsh, OWL Group, RIAA Barker Gillette, White & Case

Asia Pacific LNG primary financing – **Hong Kong LNG Offshore Terminal**

The Hong Kong LNG offshore terminal is the Asia Pacific Best LNG Primary Financing deal of the year.

The financing of Hong Kong's first offshore LNG import terminal project was a critical step to support the government of Hong Kong's carbon reduction targets in the HK Climate Action Plan 2030+.

The project involves an offshore LNG receiving terminal, jetty topsides facilities, 2 new subsea pipelines connecting the FSRU with 2 power stations, and gas receiving facilities to transport gas to power generating facilities in Hong Kong.

At closing, Castle Peak Power (Capco) and HK Electric were the 50/50 owners of project company Hong Kong LNG Terminal. Indirect owners were CLP Holdings subsidiary CLP Power Hong Kong and China Southern Power Grid subsidiary China Southern Power Grid International (HK) through Capco.

HSBC had the joint mandate on the HK$6 billion ($773 million) financing solution, joined by ANZ, BNP Paribas, China Development Bank, Credit Agricole and Standard Chartered as MLAs.

A commendable aspect of the package was the 15-year HK$1.96 billion credit buyer term loan facility, covered at 95% by Sinosure in favour of Capco. It supported the EPC contract from Offshore Oil Engineering China, the supplier of a gas subsea transportation pipeline to, and a gas receiving station at, Capco's Black Point power station in Hong Kong.

This was Sinosure's first long-term buyer credit transaction for a Hong Kong-based borrower. The Chinese ECA also deviated from its policy requiring a corporate guarantee due to the borrower's strong financials and the project's strategic role.

Other features of the transaction included $350 million senior 10-year Energy Transaction bond and HK$3.3 billion Energy Transition 1- and 3-year revolving facilities.

"The deal was the first ECA-covered deal with Capco and Asia's first export finance Energy Transition loan," said a deal insider. "The energy transition facilities were aligned with CLP's Climate Action Finance Framework."

Participants: DNV GL, ERM, Worley

Asia Pacific midstream oil & gas – **Acquisition of Daesung Industrial Gases**

The acquisition of Daesung Industrial Gases is the Asia Pacific Best Midstream Oil & Gas deal of the year.

Divine Industrial Gas through Divine Korea Holdings – a Macquarie Asia Infrastructure Fund 2-led consortium with a Singaporean sovereign wealth fund and Canadian pension fund – acquired 100% equity interest in Daesung Industrial Gases from Korean private equity firm MBK Partners for W2.8 trillion ($2.48 billion).

At closing, Daesung was South Korea's largest industrial gas supplier and only nationwide supplier of industrial gases, with annual production capacity of more than 16 million tons.

For more than a year, MIRA reviewed opportunities in the gas industry and gathered sector knowledge in the industrial gas market. Four companies that together hold more than 90% of the market dominate Korea's industrial gas business. High entry barriers feature prominently in the industry.

MIRA exclusively sourced the opportunity from MBK Partners due to the real assets investment manager's prior investments in Korea. The Macquarie subsidiary drew from a team of industry and functional specialists in Korea, China and Singapore to complete due diligence and documentation process within a short period of time.

"MIRA considered Daesung in particular as a prime investment opportunity given its market leader position … with 40 years of operation that enabled it to establish longstanding relationships with Korea's leading blue-chip customers and record a near-complete renewal rate since 1990s," a deal insider said.

The industrial gas supplier's cash flows bolstered by long-term volume guarantee contracts and cost pass through mechanisms, further attracted MIRA.

MIRA also recruited GIC and Alberta Investment Management to join the multinational consortium.

MIRA conducted a comprehensive post-merger integration process to transition smoothly and maintain momentum during the Covid-19 pandemic since the transaction closed in February 2020. The on-the-ground asset management team in Korea was extremely valuable.

Participants: Allen & Overy, Cleary Gottlieb Steen & Hamilton, Kim & Chang, KSFC, Lazard, Lee & Ko, Mirae Asset Daewoo, Morgan Stanley, NH I&S, Shin & Kim, Shinhan Bank

Asia Pacific upstream oil & gas **Acquisition of Chevron's 45% in Malampaya Gas Field**

Filipino conglomerate Udenna's acquisition of US-based Chevron's 45% stake in Malampaya gas field is the Asia Pacific Best Upstream Oil & Gas deal of the year.

The transaction is significant for the Philippines' oil and gas industry, as Filipino companies eye replacing large global incumbents. Malampaya is the country's largest and only commercially producing gas field, where it supplies up to 20% of the country's total power generation.

Shell Philippines Exploration, which holds the Service Contract 38, develops and operates the gas field under the JV comprising Netherlands-headquartered Royal Dutch Shell (45%), Chevron (45%), and state-owned Philippines National Oil Exploration (10%).

In 2019, Udenna revealed that it was in talks with Chevron to acquire the significant minority interest. Both sides later sealed the deal for around $565 million, paid through a $400 million debt facility with ANZ and ING.

Despite facing concerns that the gas field would plummet to a third by 2024 and deplete by 2027 to 2029, the consortium was confident that the gas field could sustain beyond 2024. The acquisition allowed Udenna to become a prominent oil and gas player in the market, which aligns with the company's long-term vision to develop a sustainable clean energy business in Philippines.

Besides, the transaction also signalled Chevron's exit on its first and largest natural gas development project in Philippines. Malampaya has an estimated total investment cost of about $4.5 billion and has contributed as much as $12 billion in revenue.

Since Malampaya began operation in 2002, its production reached up to 429 million cubic feet of gas per day and 15,000 barrels of condensate per day over the two decades.

"At Udenna, we believe in the benefit of promoting natural gas as an essential fuel to support the country's growing energy needs and economic growth," said the Filipino conglomerate.

Participant: ANZ, Ashurst, Freshfields Bruckhaus Deringer, Herbert Smith Freehills, ING, Morgan Stanley

Asia Pacific energy storage

Wandoan BESS

The primary financing of the 100MW / 150MWh Wandoan battery energy storage system is the Asia Pacific Best Energy Storage deal of the year.

Vena Energy's BESS in the Darling Downs region of Queensland was Australia's first utility scale battery project to be privately financed without the need for state or federal government assistance.

"This landmark transaction also marks Australia's first ever non-recourse project financing of a utility scale battery energy storage project," said a deal insider.

BNP Paribas, DBS and ING were MLAs on the debt financing of the A$120 million ($82 million) project, which is also instrumental in Queensland's transition towards renewable energy and a low carbon economy.

"The financing was also among the first of Vena Energy's renewable energy portfolio in the Australian market, and the first battery project internationally, to meet the criteria for Vena Energy's Green Financing Framework," said a project adviser.

Pierre Floriat from BNP Paribas noted: "As green loan coordinator for the financing, BNP Paribas strongly believe the Wandoan South BESS provides a template for more battery projects to be commercially financed and will enable further renewable penetration into Australia's National Energy Market."

At closing, the 150MWh Wandoan BESS was the largest battery in Queensland and second largest in Australia capable of powering up to 57,000 households. It will provide ancillary services and help maintain grid stability as growing shares of variable renewable energy join the local grid.

The battery was the first part of Vena Energy's Wandoan South Project in Queensland and represented the first large-scale battery project globally by the Singapore-headquartered renewable developer.

Australian utility AGL Energy procured the dispatch rights for the battery under a 15-year contract. The procurement allows AGL to leverage excess solar generation in Queensland and provide capacity when other renewable power sources are not generating.

The BESS is near the town of Wandoan about 400km north-west of Brisbane. The battery will connect to Powerlink's Wandoan South substation, just south of the project site. Vena Energy is a Global Infrastructure Partners portfolio company.

Participants: Ashurst, ClayMatter, DLA Piper, Doosan GridTech, Herbert Smith Freehills, RINA Consulting

Asia Pacific floating solar

Changhua Lundong Floating Solar PV Plant

The 180MW Changhua Lundong floating solar PV plant is the Asia Pacific Best Floating Solar deal of the year.

Floating solar is an increasingly attractive option for large-scale PV deployment at reservoirs and alongside hydropower facilities, especially where land use is constrained.

"With the financing group comprising 3 international banks and 4 local banks, the financing structure of this pioneering project opens more possibilities to bolster the burgeoning large-scale floating solar projects in Asia Pacific during the coming years," said a deal insider.

At closing, Marubeni acquired the project in Changbin Lunwei East's Changhua Coastal Industrial Park from Chenya Energy, held by I Squared Capital's renewable energy platform Asia Cube Energy.

The transaction, which has a 20-year power purchase agreement and feed-in-tariff with Taipower, was one of the largest floating solar projects in the world. It was also the first project financing in Taiwan's floating solar industry.

Singapore-headquartered DBS had the joint mandate on the NT$9 billion ($322 million) financing. Debt comprised a single senior facility of about NT$7.2 billion. The MLAs were DBS, KGI, SinoPac, SMBC and Société Générale, while lead arrangers were E Sun and First Commercial. Banks structured a 6-year mini-perm with a notional maturity of 18 years.

Changhua Lundong was the first "standard international style" non-recourse loan for a large-scale floating solar power plant in Taiwan. It will also be the world's largest built in an inter-tidal zone.

This landmark transaction supported the Taiwanese government's directive in achieving 20% renewables in the country's energy mix by 2025.

"Through Changhua Solar, Marubeni plans to expand the floating solar power business in Taiwan as well as in other regions," said a project participant.

"This project's success would certainly help spur more of such projects in land-constrained Taiwan and other jurisdictions in Asia facing the dilemma of accelerating renewable energy adoption and competing land uses," added another participant.

Participants: Aon, KPMG, Lee & Li, Mott MacDonald, Russin & Vecchi, Sinotech Engineering

Asia Pacific geothermal – **Gunung**

Salak-Darajat Geothermal Plant Portfolio Refinancing

The 2020 refinancing of the 550MW Gunung Salak-Darajat geothermal plant portfolio is the Asia Pacific Best Geothermal deal of the year.

The portfolio refinancing – $1.1 billion senior green bonds issued by Indonesia-based Barito Pacific subsidiary Star Energy Geothermal – was 3.5x oversubscribed. It was Indonesia's first US dollar project bond and one of its largest non-sovereign deals. It was also Indonesia's longest dated green bond at 18 years.

"It was Asia's first dollar-denominated project bond of the year in 2020," said a deal participant.

SEG Darajat II and SEG Salak co-issued the green bonds to refinance the $1.25 billion loan acquisition of 350MW Gunung Salak and 200MW Darajat, following the acquisition in 2017 of the geothermal assets Star Energy, Philippines-based Ayala, and Thailand-based EGCO, from energy giant Chevron.

The issuance was the first investment-grade green project bond from the private sector in Indonesia.

The co-issuer, multi-jurisdictional, dual-tranche structure was among the first of its kind in the region. The transaction included 2 tranches – $320 million with a 3.25% coupon rate due 2029 and $790 million with a 4.85% coupon rate due 2038. The transaction set a precedent for other issuers in the region to arrange the complex structure.

Star Energy is one of the Indonesia's largest geothermal producers that operates and owns 875MW of assets. It issued the bonds in structure with upstream, cross-stream and downstream guarantees and had a security package with assets in several jurisdictions. The deal signified the private sector's increased interests in renewable projects and enhanced focus in the ESG sector.

"This successful green bond offering indicates that investors in the region and across the world are eager to invest in geothermal and renewable energy projects amid challenging economic circumstances," said a deal adviser.

Participants: Bank of the Philippine Islands, Barclays, Clifford Chance, Credit Suisse, DBS, Deutsche, King & Spalding, Mayer Brown, Milbank, Walkers

Asia Pacific offshore wind

Akita Port and Noshiro Port Offshore Wind Farms

The 145MW Akita Port and Noshiro Port offshore wind farm portfolio is the Asia Pacific Best Offshore Wind deal of the year.

The ¥100 billion ($921 million) transaction financed Japan's first large-scale commercial offshore wind project. This was one of Japan's most consequential deals in recent years as the first large offshore wind power project by project financing. It foreshadows major growth in offshore wind financing as the government targets 30-45GW by 2040.

At closing, Marubeni was Akita Offshore Wind Corporation's largest shareholder, joined by 12 other Japanese companies, including Obayashi and Chubu Electric Power.

This project was the first of a series of what the market in Japan is calling "ports and harbour" offshore wind projects, supported by the Japanese feed-in tariff for renewable energy projects.

Mizuho, MUFG and SMBC were the MLAs, joined by other domestic and foreign lenders, including senior lender Société Générale. Marubeni's funding plan had variable and fixed rate facilities. Bankers and advisers encountered many firsts, including project risk allocation, permitting, financing structure and supply chains.

"The financing proved successful for the sponsors, thanks among others to the quality of the project's risk profile and its highly visibility on the Japanese market," said a deal insider. "The debt raising was consequently over-subscribed."

An interesting facet was that Japanese law did not clearly define ownership over the ocean. "Structuring the security packages over offshore wind turbines, therefore, proved quite challenging," a project participant said.

"This was the first time this type of security has been undertaken in Japan. Also notable was that it was a syndication of both domestic and international banks which are not commonly done in Japan."

The transaction accelerated Marubeni's decision to transform its power portfolio, aiming to expand the ratio of power generated by renewable energy sources from 10% to 20% by 2023. The development of Japan's offshore wind market is crucial for Marubeni to achieve its power transformation.

Participants: Tohoku Sustainable & Renewable Energy, Cosmo Eco Power, Kansai Electric Power, Akita Bank, Ohmori, Sawakigumi, Kyowa Oil, Katokensetsu, Kanpu, Sankyo, Linklatersm, Mori Hamada & Matsumoto, Mott MacDonald, Nishimura & Asahi, Tokyo Kyodo, Willis Towers Watson

Asia Pacific onshore wind primary financing – **Murra Warra Wind Farm Phase 2**

The 209MW phase 2 of the Murra Warra wind farm is the Asia Pacific Best Onshore Wind Primary Financing deal of the year.

Near closing, Partners Group acquired 100% equity interest in Murra Warra 2 in western Victoria from Macquarie's Green Investment Group and RES for A$180 million ($128.5 million). In 2018, the Swiss fund manager also bought 100% equity of the adjacent operational 226MW Murra Warra 1 for A$200 million. The Murra Warra complex is one of the largest wind farms in the Southern Hemisphere.

Murra Warra 2's primary financing closed last July amid the coronavirus pandemic showcasing the resilience of the Australian renewables market. The pandemic presented a series of challenges, across supply chain, access to site and rising capital costs. The former owners were able to navigate the project through these issues and close the parallel equity and debt transactions.

Six commercial banks lent on the project finance debt. The debt package involved a green loan making it the first time such a facility was used to fund the construction of a wind farm in Australia. The green loan, raised in accordance with the Asia Pacific Loan Market Association's Green Loan Principles, was subject to an independent second party opinion from Sustainalytics.

The financing's timing was not ideal. Grid connectivity issues forced a few investors to divest local assets. The former sponsors mitigated market uncertainty by conducting grid due diligence and sweetening the financing package with security mechanisms. These included a cost overrun facility to provide liquidity in the event of unforeseen grid related issues.

"We continue to believe the Australian renewable energy sector is benefiting from a transformative trend, with a significant amount of coal-fired generation retirements expected in the coming decade," said Andrew Kwok, Partners Group head private infrastructure for Asia.

"Investing into Murra Warra 2 at the construction phase and successfully delivering the project through to its operational phase is consistent with both our 'platform expansion' and 'building core' strategies in infrastructure."

Participants: Ashurst, Clifford Chance, ICBC, ING, King & Wood Mallesons, KPMG, Macquarie Capital, Mizuho, MUFG, SMBC, Snowy Hydro, Société Générale

Asia Pacific onshore wind refinancing – **Sidrap Wind Farm**

The 2020 refinancing of the 75MW Sidrap wind farm is the Asia Pacific Best Onshore Wind Refinancing deal of the year.

The transaction was a refinancing of a greenfield loan for Indonesia's first wind power project. The project itself was the country's first utility-scale wind power project, signifying the transition towards renewable energy. The $150 million wind farm, which went online in 2018, was a pioneering model for future wind power projects in the country.

A consortium, comprising APAC-focused UPC Renewables, Indonesia-based Binatek Energi Terbarukan, and Philippines-based AC Energy, is the onshore wind farm's owner and operator.

The consortium had a 30-year power purchase agreement with state-owned utility company Perusahaan Listrik Negara (PLN). The US dollar linked PPA had a levelised tariff of $0.1141/kWh, providing a hedge to the sponsors against potential volatility in Indonesia rupiah.

The $114 million refinancing to the existing loan, extended by US International Development Finance Corporation's predecessor, represented a landmark transaction and milestone of Indonesia's transition to renewables. The loan facility attracted a diverse lender club consisting of German DFI DEG, SMBC's BTPN, Indonesia Infrastructure Finance, and Sarana Multi Infrastructure.

The MLAs were able to close the refinancing in 3 months, when the transaction closed on the same day as signing. That is a relatively short timeframe in the market. The lenders performed their strong track record and their readiness to support the country's renewable goals.

"This project is particularly significant because it's one of the ways that PLN is going to develop its knowledge about wind power and the opportunities and challenges it brings. It will definitely help with the political traction for renewables in Indonesia overall," said a deal adviser.

Participants:

- Assegaf Hamzah and Partners
- Baker McKenzie / Hadiputranto Hadinoto & Partners
- Shearman & Sterling
- SMBC / BTPN

Asia Pacific solar in a frontier market – **Navoi Region Solar PV Plant IPP**

The financing of the 100MW Nur Navoi solar power project is the Asia Pacific Best Solar in a Frontier Market deal of the year.

"The first IPP - and PPP - in Uzbekistan with a massively ambitious modernisation programme across the power and infrastructure space," said a deal insider.

At closing, the Masdar owned project company Nur Navoi Solar Foreign Enterprise. The Abu Dhabi-based sponsor reached commercial close with the lowest tariff for solar energy in Central Asia to date. Nur Navoi was also Uzbekistan's first competitively tendered project in the renewable energy sector.

The transaction was the first solar project under the IFC Scaling Solar programme outside Africa. "It was the fastest ever bid to close cycle even during the Covid-19 pandemic, closing in 12-13 months, compared with 1.5-2 years in other Scaling Solar deals," a source noted.

Cranmore Partners was financial adviser on the financing package. IFC, Canada-IFC Blended Climate Finance Program, ADB and Canadian Climate Fund for the Private Sector in Asia II provided long-term senior debt.

EBRD extended an equity bridge loan. Masdar's use of an equity bridge loan was not surprising. Investment-grade sponsors in the Middle East tend to lever up their equity contributions, noted a banker.

The IBRD guarantee was equivalent to the PPA payments by National Electric Grid of Uzbekistan, the off-taker, under the 25-year PPA during the 6-month peak (April to October). The 20-year payment guarantee backstopped a letter of credit by Natixis in case the government or the off-taker does not reimbursed a draw on the L/C within 12 months.

"The IBRD guarantee is quite new and innovative," said a deal insider. "It's a way to get commercial banks into the L/C on a covered basis, providing liquidity support at the project level."

"It is easy to look towards large renewable projects in the Asia region such as the offshore wind transactions in Taiwan to win," argued a project participant. "But it is much more challenging and important to successfully develop projects like Nur Navoi in a BB- and emerging economy country such as Uzbekistan than it is an AA- and liquidity rich jurisdiction such as Taiwan."

Participants: Aecom, Ashurst, Clifford Chance, DNV GL, Lockton, Norton Rose Fulbright, SEPCO III, TYPSA, Worley

Asia Pacific renewables portfolio financing – **SB Energy Rajasthan Solar PV Portfolio IPP**

The portfolio financing of the 600MW SB Energy Rajasthan Solar PV project is the Asia Pacific Best Renewables Portfolio Financing deal of the year.

At closing, Softbank (80%) and Bharti Enterprises (20%) owned the 2x 300MW greenfield solar PV project in Rajasthan, India. The portfolio developed under National Thermal Power Corporation's Solar Park Scheme. It benefited from a 25-year PPA with NTPC at fixed tariff.

"With seven international banks in the financing group, the successfully implemented financing structure opens future possibilities to support upcoming projects for the sponsor across different regions," said a deal insider.

BNP Paribas, MUFG, SMBC, Société Générale, SinoPac, Standard Chartered and Taipei Fubon Commercial punched tickets on the nearly $330 million debt package.

The complex financing structure comprised US dollar and Japan yen external commercial borrowing facilities. The transaction also had a letter of credit facility. Drawdowns by SB Energy Six Private, the borrower, under the L/C facility will be taken out by the ECB loan.

The borrower raised a 5-year, mini-perm project finance. Four-fifths were denominated in USD while the remaining 20% was in yen. Cross currency swaps and FX forwards for the tenor of the loan hedged the USD tranche.

SB Energy Six also raised a L/C facility to pay for the modules and other equipment, a performance bank guarantee required under the PPA, and a working capital facility.

"The transaction utilised an innovative hedging structure, comprising a combination of cross currency swaps and FX forwards, thereby reducing the number of hedges that are required to be executed by the borrower," said a market participant.

Participants:
- Allen & Overy
- Cyril Amarchand Mangaldas
- KPMG
- Luthra & Luthra
- Mahindra Susten
- Marsh
- Sterling & Wilson
- Tractebel

Asia Pacific solar refinancing **Leader Energy Kuala Muda Solar PV Portfolio Refinancing**

Leader Energy's 49MW Kuala Muda solar PV portfolio in Malaysia is the Asia Pacific Best Solar Refinancing deal of the year.

The issuer is the renewable energy unit of Penang-based HNG Capital. The transaction is Leader Energy's debut sukuk – a Shariah-compliant bond issuance – that refinanced 2 operational solar power projects in Kuala Muda, Kedah.

The deal further promoted and enhanced Malaysia's value proposition as a centre for Islamic finance and sustainable investments. HSBC's Malaysia affiliate HSBC Amanah was the lead arranger on what it described as the first Asean green sustainable and responsible investment sukuk in 2020. The deal was also the Malaysia ringgit bond market's first project financing sukuk in 2020. The transaction also signalled the market's appetite for renewable energy, bolstered by the sponsor's ability to issue an attractive and competitive bond.

Leader Energy raised M$260 million ($62 million) through the bonds, structured with multiple tranches spanning 1 to 18-year maturities. At issuance, the sukuk had the lowest ever coupon and weighted average financing cost for AA3/AA- rated solar power project financing issuances in the ringgit market.

The issuance also received a gold sustainability bond rating, the highest grade of MARC's Impact Bond Assessment methodology. The rating showed that the sukuk's standards aligned with international practice, opening further opportunities. The deal attracted 12 investors from insurance companies, asset managers, and financial institutions.

Kuala Muda 1 (29MW) and 2 (20MW) are the projects awarded by Malaysia's Energy Commission under the Large-Scale Solar 1 and 2 procurement programmes. Both projects have a 21-year power purchase agreement with state-owned electricity utility company Tenaga Nasional.

HNG Capital has more than 20 years of experience in Asean's power market, including Cambodia, Malaysia, and Vietnam. The solar farms, which began operations in October 2018 and February 2020, showed the company's commitment to push forward the country's renewable sector.

"This deal shows tremendous appetite for sustainable and green-focused offerings in the market … and our commitment and ability to develop the landscape of sustainable banking products available in Malaysia," said a deal adviser.

Participants: Adnan Sundra & Low HSBC, Malaysian Rating Corporation

Asia Pacific coal-fired power **Java 9 and Java 10 Coal-Fired Power Plants**

The 2GW Java 9 and Java 10 coal-fired power plant complex is the Asia Pacific Best Coal-fired Power deal of the year.

A Perusahaan Listrik Negara (PLN) subsidiary, Barito Pacific, and Korean developer Kepco were the sponsors of one of Indonesia's largest project financings in 2020. The deal package comprised 2 tranches – ECA-covered and commercial – amounting to about $2.5 billion.

The sponsors raised $1.1 billion from commercial banks, one of the country's largest commercial tranches for greenfield IPP financing. A subsidiary of Indonesian state-owned utility PLN held a majority in the project company. The deal required a bespoke corporate governance solution to satisfy lender concerns because PLN was also the offtaker. It's a possible model for future Indonesian IPPs.

"This was the first deal closed with a PLN subsidiary as majority shareholder," said DBS global head of project finance and project financial adviser Subash Narayanan. "Indonesia adapted the shareholder/offtaker model from the Middle East… Here, the PLN subsidiary was a BBB first time risk. The commercial banks and the long-term debt providers, the Korean ECAs, had to work towards quite a different funding plan."

The project financing was under financial close when banks had begun slowly stepping away from coal financing. Sponsors had to manage a much-reduced pool of potential participants. Nevertheless, the project achieved financial close with 11 financiers.

The deal also showcased cooperation between South Korea and Indonesia as South Korean sponsor Kepco participated in the project, bringing in development institutions, commercial banks, ECA guarantor, EPC contractors, and advisers.

"The project is a priority project for the government and is part of the country's 35GW programme. Once completed, the power station will become the biggest power complex connected to the Jawa Bali grid," said a deal adviser.

Participants: ABNR, Afry, Aon, Assegaf Hamzah & Partners, Bangkok Bank, Bank Mandiri, Bank Negara Indonesia, Bank of China, Bank Rakyat Indonesia, Black & Veatch, CIMB, Connusa Energindo, DBS, DLA Piper, Hana Financial Group, Hogan Lovells, Indonesia Eximbank, KEXIM, Kim & Chang, Korea Development Bank, KPMG, K-Sure, Lee & Lee, Malayan Bank, Milbank, Norton Rose Fulbright, Tokyo Electric Power Services, UMBRA

Asia Pacific cogeneration power

Rayong Cogeneration Power Plant

The 92MW Rayong Cogeneration power plant in Thailand's strategically important Eastern Economic Corridor is the Asia Pacific Best Cogeneration Power of the year.

A local affiliate of Singapore-based Nexif Energy and Thai developer Ratch were sponsors at financial close. Nexif Energy is a partnership between Singapore-based independent power management company Nexif and Denham Capital, an energy and resources-focused private equity firm.

The primary financing indicated the maturity and volatility of Thailand's power market, with the international independent power producer initiating the project and the participation of local power developer. Thailand authorities welcomed the project without much interference, allowing the project to negotiate a more competitive loan facility and power purchase agreements.

The deal showcased the sponsor's commitment to the development of an IPP project in Thailand. Project initiator Nexif Energy is an IPP backed by US-based financial investors. At the initial stage, Nexif Energy was solely developing the project. Ratch, one of Thailand's largest IPPs, later joined, leveraging expertise and experience between the international and local markets.

Besides, a good mix of international and local lenders on the deal represented the appetite for Thailand's power market. The club comprised Kasikornbank, SMBC and Standard Chartered. The transaction further showed that the capital mobility in the market is sufficiently strong to push forward a deal without the involvement of DFIs and ECAs.

The sponsors also negotiated a favourable PPA for the project, illustrating the developers' ability to execute the project. The project has 2 PPAs – a 25-year PPA with state-owned Electricity Generating Authority of Thailand for 90MW and a gas supply agreement with state-owned PTT. The PPA tenor runs longer than the debt tenor, providing a significant PPA tail for the project.

"The joint investment in the Rayong co-generation project with Nexif Energy represents a strategic move for Ratch in establishing a generation base in the eastern region which will help secure national power supply to the industrial sector," said a project sponsor.

Participants: Baker McKenzie, Kasikornbank, Mott MacDonald, Norton Rose Fulbright, SMBC, Standard Chartered

Asia Pacific social infrastructure primary financing – **South Australian Health and Medical Research Institute Second Building**

The financing of the South Australian Health and Medical Research Institute Second Building is the Asia Pacific Best Social Infrastructure Primary Financing deal of the year.

SAHMRI's second building is now known as the Australian Bragg Centre for Proton Therapy and Research. Australian Bragg Centre is part of Adelaide's BioMed City – the Southern Hemisphere's largest health and biomedical precinct.

"The asset is unique in Australia, incorporating the country's first proton therapy unit specialising in next generation cancer treatment," said a deal insider.

At closing, Commercial & General, and the governments of South Australia and Australia were financial backers of the development of the more than A$500 million, 15-storey medical development. The governments provided a combined A$112 million.

Australian Bragg Centre represented a "landmark collaboration between the private sector and the State and Federal governments," said a project participant. Parties negotiated the project financing against a backdrop of financial and construction uncertainty arising from the Covid-19 pandemic.

Parties target a LEED Gold Rating under the US Green Building Council's LEED building certification system recognising best-in-class green building strategies and practices.

After financial close on construction funding in June 2020, Dexus funds acquired ownership of the project for A$446.2 million. It was one of Australia's largest ever single-asset private healthcare acquisitions. The centre will treat about 600-700 patients per year once patients arrive in Q2 2025.

"By combining research, education, clinical care, business development and innovation, The Australian Bragg Centre will facilitate an unparalleled opportunity to network, collaborate and advance research," said SAHMRI.

Participants:
- King & Wood Mallesons
- Minter Ellison
- Norton Rose Fulbright

Asia Pacific social infrastructure refinancing – **ACT Law Courts PPP Refinancing 2020**

The 2020 refinancing of the ACT Law Courts PPP is the Asia Pacific Best Social Infrastructure Refinancing deal of the year.

The ACT Law Courts project was ACT's first PPP. The PPP is under a 25-year design, build, finance and maintain concession. The project revamped Canberra's existing court facilities by developing a 4-storey building with 110KW solar PV array near Vernon Circle.

The complex connects the Magistrates and Supreme Court buildings. The new ACT Law Courts building, which has been operating since 2020, accommodates the Court of Appeal, Supreme Court, Magistrates Court, Coroners Court and Children's Court.

"The new precinct will meet the territory's needs for the next 50 years in a more functional, flexible and sustainable way," said a deal insider. "Being the first refinancing post-completion, this successful transaction set up the project for the long-term operational phase."

Macquarie Capital was financial adviser on the A$159 million debt package. It comprised a A$156 million term loan and a A$3 million debt service reserve facility. Both had a 5-year tenor. The deal closed in December 2020.

Sponsors built a new public entrance and registration area in the open space to connect the Supreme Court and Magistrates Court. The configuration provided access to common facilities for members of the public and the legal community.

"The Supreme Court building was fully refurbished to accommodate Supreme Court and other judicial functions and is now fully integrated into the completed facility in a way that respects and retains its unique heritage value," said a project participant.

Participants:
- King & Wood Mallesons
- Maddocks
- NAB
- SMBC

Asia Pacific power transmission

North Phnom Penh-Kampong Cham Transmission Line

HNG Capital's 100km North Phnom Penh-Kampong Cham transmission line has won the Asia Pacific Best Power Transmission deal of the year.

The transmission line was Cambodia's first foreign build-own-transfer power transmission project. The $55 million refinancing was also the first project finance in Cambodia for ING and Mizuho. The deal encouraged diversified capital raising from international financial markets for the emerging energy sector in Cambodia.

The loan replaced financing by Export-Import Bank of Malaysia. The World Bank Group's MIGA provided a 10-year extended protection against transfer restriction, expropriation, war and civil disturbance and arbitral award default.

The tenor was 10 years on debt pricing of about 3.82% per year, *IJGlobal* understands. The government of Cambodia had yet to issue a 10-year sovereign bond to reference, planned for 2022.

"The deal represents the lenders' and MIGA's first transaction in Cambodia… demonstrating their commitment to supporting power generation and transmission in the region notwithstanding the challenges faced by the global Covid-19 pandemic," said a deal adviser.

The transaction showed the international market's readiness to step into a market with an increasing need for a stable power supply.

The deal also contributed to Cambodia's social and economic development. The refinancing facility allowed the sponsors including HNG Capital to continue to provide reliable electricity supply to the capital region. The operational 230kV overhead transmission line has a length of about 100km and connects 2 substations.

Founded as a cable and wire company, HNG Capital was the first private investor that state-owned Électricité du Cambodge had awarded a BOT project. Prior to that, HNG Capital had developed a few IPP projects in the country. Japan-based Marubeni later acquired a 20% equity stake, marking Japan's first foray into the country's power market.

HNG Capital wholly owns the project company through a Singapore-based holdco called Leader Infrastructure. A market observer said that Marubeni in 2019 sold back its 20% LIL equity stake to HNG Capital, since the holdco had exposure to coal assets. "Marubeni started to rationalise their portfolio, trying to get rid of coal assets," said the source.

Participants:
- Afry
- Allen & Gledhill
- Aon
- Clifford Chance
- DFDL
- EY
- ING
- Mizuho

Asia Pacific transport primary financing

Almaty Ring Road PPP

The 66km Almaty Ring Road PPP is the Asia Pacific Best Transport Primary Financing deal of the year.

Almaty Ring Road is a massive project for the 18-plus million people in the world's largest landlocked country. The road in Kazakhstan is part of the transcontinental highway linking Western Europe to Western China.

EBRD president Suma Chakrabarti described the PPP project as "the region's first proper PPP and, not surprisingly, the project finance world has been following its progress very closely".

At closing, the equity holders of BAKAD Investment and Operation LLP, the project's SPV, were Alsim Alarko, Makyol, SK Engineering and Construction and Korea Expressway.

The $742.6 million road PPP project had 79% gearing. DFIs dominated the $585 million limited recourse project financing – with a full pass-through of EPC and O&M risks to the relevant contractors.

"A bespoke hedging structure involving interest rate swaps forwards and interest rate caps to accommodate project needs was the most innovative feature of the financing structure," an EBRD spokesperson told *IJGlobal*.

EBRD led with a $225 million A loan and B loans totalling $125 million from Bank of China and PGGM. Eurasian Development Bank provided $135 million and Islamic Development Bank (IsDB) punched a ticket for $100 million.

Lenders designed a "bespoke installment sale structure developed to meet Islamic Development Bank's specific shariah requirements within local law and transaction constraints", according to a deal insider.

"The negotiations to conclude the financing for this high-profile project took enormous efforts from the joint teams of the senior lenders, and their legal and technical advisers," noted head of IsDB's PPP division Noman Siddiqui.

Himmatilla Boriev, IsDB's Almaty Ring Road portfolio manager added: "The project is the first of its kind in the CIS and will serve as an excellent benchmark for international investors to exploit PPP models for infrastructure projects in the region in the near future."

Participants:
- Aequitas
- Allen & Overy
- Aon
- Arup
- Colibri Law
- Gide Loyrette Nouel
- Intesa Sanpaolo
- Kazdor Innovatsiaya
- Kim & Chang
- PwC
- Seco International
- White & Case
- Wiilis Towers Watson

Asia Pacific data centre
Acquisition of 88% in AirTrunk

The Macquarie Infrastructure and Real Assets-led acquisition of an 88% equity interest in AirTrunk is the Asia Pacific Best Data Centre deal of the year.

MIRA led the investor consortium, including Canadian pension fund PSP Investments, that acquired its controlling stake from Goldman Sachs, Sixth Street Partners and AirTrunk's founder Robin Khuda.

The strategic acquisition was one of Asia Pacific's largest data centre transactions at more than A$3 billion ($1.84 billion). The deal signified the rapid growth of the data centre industry in the region and allowed AirTrunk to accelerate its ambitious expansion. Deutsche Bank was lead debt arranger.

APAC-focused AirTrunk is a hyper-scale data centre platform for large cloud, content, and enterprise customers. At closing, AirTrunk owned 5 data centres with a combined capacity of 450MW in Australia, Hong Kong and Singapore.

The North Sydney company ran a private sales process that received interest from several potential buyers. Infrastructure funds, pension funds, and strategic investors bid on the acquisition. AirTrunk also negotiated with Australia's Foreign Investment Review Board to ensure restrictions on bidders were minimised to optimise competitive tension.

The MIRA-led consortium submitted an inventive plan and investment structure for the AirTrunk founder and CEO. MIRA had negotiated with the founder that he would maintain a "material stake in the business" and would remain as chief executive under a long-term arrangement, supported by the existing executive management team.

The deal featured a financing package promoted by AirTrunk as part of the sales process. The asset-level financing package also contained market-leading features, allowing the company access to more financing to continue their regional expansion.

"AirTrunk's established APAC footprint and a clear path to expansion in other markets was important to the success of the transaction," said a deal adviser. "This is due to the region's emerging economies and growing populations, leading to substantial growth in data, a shift to the cloud and greater need for in-country workloads and storage."

Participants: Baker McKenzie, Deutsche Bank, DLA Piper, Gilbert & Tobin, Goldman Sachs, Grant Samuel, Hogan Lovells, King & Wood Mallesons, KPMG, Macquarie Capital, Norton Rose Fulbright, PwC

Asia Pacific telecoms
Acquisition of Jio Platforms

The acquisition of Jio Platforms is the Asia Pacific Best Telecoms deal of the year.

Thirteen financial and strategic investors acquired about 33% equity interest in Reliance Industries' Indian mobile communications operator Jio Platforms for more than Rs1.52 trillion ($21 billion).

Investors were Facebook, Google, Silver Lake, Vista Equity Partners, General Atlantic, KKR, Mubadala, ADIA, TPG, L Catterton, Public Investment Fund of Saudi Arabia, Intel Capital and Qualcomm Ventures.

Google took a 7.73% equity stake on fully diluted basis for Rs337.37 billion.

Morgan Stanley was Reliance's financial adviser on this series of consequential transactions.

"Jio started with a vision of connecting everything by building a robust and secure wireless and digital network."

The Jio Platforms management team had brought "extraordinary engineering capabilities to bear on bringing the power of low-cost digital services to a mass consumer and small business population," said Silver Lake co-chief executive and managing partner Egon Durban.

In 2016, Mukesh Ambani, chairman and managing director of Reliance Industries, launched Jio Platforms subsidiary Reliance Jio Infocomm. Reliance crushed competition from more established mobile telecoms players, including Bharti Airtel Telecom and Vodafone India, by offering free voice calls throughout India.

Jio also swallowed younger brother Anil's Reliance Communications the following year and pushed Vodafone into a merger with another local player Idea Cellular Today. At closing, Jio Platforms' customer base was 398.3 million.

"Jio started with a vision of connecting everything by building a robust and secure wireless and digital network and extending the benefits of digital connectivity to everyone in India," Mukesh Ambani said. "Thirteen investors, which include the largest technology companies and investors globally, now share a common vision with us."

Participants
- AZB & Partners
- Davis Polk & Wardwell

Asia Pacific water – **Binh Duong**
Water Treatment Expansion

The Binh Duong water treatment expansion is the Asia Pacific Best Water deal of the year.

Binh Duong Water Environment (BIWASE) – established by the Vietnamese government in 1975, privatised in 2016 and listed in Ho Chi Minh a year later – is a water and waste management company providing services to Binh Duong province in southern Vietnam. The company, however, has faced multiple challenges due to insufficient creditworthiness and slow transformation.

The project entailed corporate loans to support BIWASE's investment to expand Tan Hiep water treatment plant's production capacity by 100,000 m3 per day, construct a new raw-water transmission pipeline and serve the growing water demands from domestic customers and industrial zones.

"The company is the leading privatised company in Vietnam's water sector and operates with lowest level of non-revenue water in the country," said a deal insider.

Asian Development Bank and Japan International Cooperation Agency loaned BIWASE a combined $16 million. The transaction was ADB's first viable private sector financing in Vietnam's water sector. The project represented the collaboration between local and international organisations to support the province in satisfying its rapidly growing water needs.

The financing package, including 2 parallel loans and technical assistance on a grant basis, strengthened BIWASE's creditworthiness and institutional capacity to provide water supply services. Besides, the one-stop solution loan facility supported BIWASE's transition from reliance on sovereign financing to private sector financing.

Binh Duong is one of the country's fastest developing provinces and has attracted $5.7 billion of foreign direct investments since 2016. The region has the fastest-growing population in the country, putting pressure on water treatment, supply and distribution. Water demand annually grew 20% from 2016-2019. BIWASE projected that the water demand will exceed its capacity by 2021. The expansion will allow BIWASE to increase its water treatment capacity by 80%.

"BIWASE supplies water to this fast-growing province and has a total water production capacity of 311,300 m3/day, a total distribution pipe length of 4,276 kilometres, and more than 269,000 connections with service coverage of 78% of the province's population," said a project participant.

Participants
- IBIS Consulting
- Mayer Brown

Asia Pacific transport refinancing

WestConnex Toll Road Refinancing

The 2020 refinancing of the 33km WestConnex toll road is the Asia Pacific Best Transport Refinancing deal of the year.

WestConnex (WCX) is a critical part of the government of New South Wales' integrated transport plan, to connect Sydney's west and south-west to the commercial business district and the corridor to Sydney Airport and Port Botany.

Australia's largest road infrastructure project comprises 3 long-term concessions to 2060 – stage 1 (M4 motorway), stage 2 (M5 motorway) and stage 3 (M4-M5 link). Stage 3 is the only stage that remains under construction. Sections along Stage 1 and 2 have more than 20 years traffic history.

At closing, a consortium of Transurban, CPP Investments, Australian Super, and Abu Dhabi Investment Authority held 51% of the project company, while NSW government held the remainder.

UBS was financial adviser on the transaction that raised senior debt at the WCX group level to refinance existing debt in 100% owned M4 toll road. The financing vehicle behind WCX refinanced debt to raise A$4.25 billion ($3.22 billion), comprising A$3 billion term loan facilities with tenors of 3, 5 and 7 years and a A$1.25 billion 2-year bridge facility.

Twenty local and international banks arranged the debt package. "The success of the transaction paves the way for WCX to implement its desired long-term capital structure," said a project participant. "The refinancing … introduced a flexible group funding platform to which other WestConnex assets could be added in future."

The transaction represented one of the largest refinancing transactions in the Australian infrastructure sector in 2020. It also demonstrated the strength of the WCX project in getting a significant reduction in funding costs despite impacted traffic volumes and market conditions due to Covid-19.

"Tapping into the success and market appetite of the bank debt refinance, WCX is seeking to term out the bridge facility through an inaugural debt capital markets issuance," said a deal insider.

Participants: Agricultural Bank of China, Allens, ANZ, Bank of China, Bank of Communications, CBA, CIBC, CIC Bank, Clifford Chance, Crédit Agricole, Export Development Canada, ICBC, ING, King & Wood Mallesons, Korea Development Bank, Mizuho, MUFG, NAB, Scotiabank, SMBC, Société Générale, Westpac, White & Case

Asia Pacific mining

Okvau Gold Mine

Cambodia's Okvau Gold Mine, developed by Australia-listed Emerald Resources, won the Asia Pacific Best mining deal of the year.

The transaction was Cambodia's first-ever project financing of a mining project. The project is significant as it opens further opportunities in the region alongside establishing Emerald as a key player in the market. The financing agreement showcased the investors' commitment and financiers' confidence in the project.

The deal represented a unique funding arrangement between the lenders' requirements and the sponsor's objectives. Apart from the $60 million debt facility provided by Canadian mining-focused asset manager Sprott Private Resource Lending II, Emerald also signed a $100 million additional funding under an acquisition and development facility for future opportunities. The financing allowed Emerald to mobilise capital for the project development and pipeline.

Emerald, in addition, had placed $3.5 million of its shares to Sprott. The subscription allowed Emerald to expand its footprint in Cambodia. The ASX-listed company is using the proceeds from this, and a $75 million share placement on Okvau and regional exploration programme on Emerald's 1,426km^2 exploration footprint in Cambodia.

The subscription allowed Emerald to expand its footprint in Cambodia. In return, Sprott will have the exclusive right to fund future acquisition or development project opportunities.

The Okvau deposit, about 275km northeast of Phnom Penh, is one of the most advanced gold mines in Southeast Asia. The single open-pit mine has a 7-year mine life and an estimated capacity of 106,000 ounces of gold production per year. The gold mine has an 84% recovery rate and a head grade of 1.98 gram per tonnes.

The deal involved extensive negotiations between the lenders, sponsors, and Cambodian mining authorities. The advisers were able to accommodate the needs of all sides to obtain the mining license and financings, setting a precedent for an emerging market.

"Our team was required to engage heavily with Cambodian counsel in regard to the local law security and worked to overcome a number of jurisdictional and logistical hurdles to ensure perfection of the security in-country," said a deal adviser.

Participants:
- Renaissance Minerals
- Norton Rose Fulbright
- Sprott
- Euroz Securities

IJGlobal Awards 2020

MENA winners

The Middle East and North Africa dished up a fascinating array of infrastructure and energy transactions to have made it to financial close over the course of the judging period – the 2020 calendar year.

Here we have done our best to identify the most challenging and interesting to have made it over the line, singling out for praise the fruits of your (home-grown) labour in a very curious year to have been doing business.

Congratulations to all the winners.

Winners in the MENA transaction category are:

- Editor's Choice MENA – **Umm al Quwain IWP**

- MENA export finance – **Euler Hermes covered facility**
- MENA oil & gas – **Project Galaxy**
- MENA power – **Fujairah F3 Independent Power Project**
- MENA refinancing water – **Al Dur phase II IWPP refinancing**
- MENA refinancing O&G – **ADNOC Gas Pipelines Acquisition Refinancing**
- MENA refinancing Mining – **Ma'aden Wa'ad Al Shamal Phosphate Company refinancing**
- MENA renewables – **DEWA V**
- MENA renewables solar – **Al Dhafra Solar PV**
- MENA transport – **Cairo Monorail PPP**
- MENA renewables wind – **Genesis Wind Farm**
- MENA water desalination – **Jubail 3A**
- MENA social infrastructure – **Noor Abu Dhabi LED Streetlighting Phase 1 PPP**
- MENA water wastewater – **Umm al Hayman**

Editor's Choice MENA – Umm al Quwain IWP

IJGlobal editorial director **Angus Leslie Melville** taps MEA reporter **James Hebert**'s wisdom to choose the inaugural winner of the Editor's Choice Award for the MENA region…

This year we ploughed through 1,400 submissions for *IJGlobal* Awards 2020 – the highest entry level for many years thanks to ramped up marketing – and we raced to put company awards in front of our independent judging team while tackling deal entries ourselves.

Every year it's a relief to see entries for "the right transactions" – the ones you were hoping to see submitted… then holding them up for investigation to see if they look quite so good when compared with rivals. However, when it comes to the Editor's Choice Award… that's our prerogative.

James Hebert, resident *IJGlobal* MEA hand, was quick to identify the $800 million Umm al Quwain IWP (UAQ) in the Emirate of Umm Al Quwain, United Arab Emirates, as a stand-out deal for the region that warrants recognition as the winner of the inaugural Editor's Choice Award for MENA.

This transaction primarily wins based on it being one of the first in the UAE to be backed by a federal sovereign guarantee rather than any of the individual Emirates.

Further, as part of the boom in regional water deals that has been linked with soft mini-perms, UAQ bucks the trend in that the $688 million of senior financing was settled on a 24.5-year, partially-amortising term facility with an average debt pricing of 200bp.

And there's more. UAQ is the first IWP non-recourse project financing structure to have been procured by the awarding authority – Federal Electricity and Water Authority (FEWA) – and it is the largest desalination project in the Northern Emirates.

All those factors combine to make it the inaugural winner of the *IJGlobal* Editor's Choice for the Middle East and North Africa.

Umm al Quwain IWP

The UAQ project has been procured to deliver a 150 million imperial gallon per day (MIGD) greenfield seawater reverse-osmosis desalination plant that is being developed by ACWA Power, Mubadala and FEWA.

It is due to be commissioned in 2022 and, once completed, it will benefit from a 35-year water purchase agreement (WPA) with FEWA.

IWPPs in the UAE have historically been procured by EWEC, which has primarily been active in the Emirate of Abu Dhabi as well as Fujairah. More recently, new IWPP programmes were fostered in the neighbouring emirates of Dubai and Sharjah, under the remit of DEWA and FEWA. Each programme was supported by strong sovereign support and investment grade offtake wraps.

Suhail Mohamed Al Mazrouei

"This project is FEWA's first asset in partnership with the private sector. Its implementation will reinforce UAE's Water Security Strategy 2036 as well as bolster its core programmes."

FEWA launched its maiden IWP project under an international competitive tender in 2016 alongside a range of other power and water plants

Paddy Padmanathan

"This project is another example of our commitment to supply affordable potable water."

The IWP – without the added P for power – is a more recent development in the local market. FEWA launched its maiden IWP project under an international competitive tender in 2016 alongside a range of other power and water plants.

Despite benefiting from typical BOO features generally observed on comparable projects, the lack of procurement track record, the absence of investment-grade credit support and the unprecedented nature of the federal credit led to a comprehensive due diligence and project document negotiation process around the offtake structure. This was led by a core group of experienced international lenders that had been involved in the deal since bid submission.

The project was initially tendered in 2016 as a 45 MIGD IWP, subsequently awarded to ACWA Power. In parallel, Mubadala secured a pipeline of 135 MIGD of projects in the Northern Emirates. At the end of 2018, in the wake of competitive bids placed in the GCC for other IWPs, FEWA amended the process and merged the various projects into a single plant to allow for further optimisation of the tariff.

The new project, with total capacity of 150 MIGD, was re-developed in an accelerated timeline, including negotiations for a new land lease, EPC and O&M arrangements – which led to substantial economies of scale, making it more comparable to the benchmarked IWPs developed in parallel.

The offtake structure is based on a water purchase agreement contracted with FEWA, providing for a bankable risk allocation, availability-based cash flows and credit support issued by a strong investment-grade sovereign entity.

While this all appears in line with previous IWPs developed in the GCC, the length of the offtake is unprecedented with 35 years of operational life contracted to FEWA and 35 years of credit support provided by the UAE Ministry of Finance.

This landmark achievement supported the structuring of a long-term debt package, with a 24.5-year term loan partially amortising down to a residual balloon of 18%.

With an equivalent notional tenor of 28 years, this is one of the longest IWP project finance schemes to have closed in the Middle East without tenor-reducing cash sweeps.

This truly sets apart this financing structure from other greenfield financing funded on a soft mini-perm or hard mini-perm basis, making it a stellar winner of the Editor's Choice Award for the MENA region.

From those who made it happen

The consortium of ACWA Power, a global leader in water desalination and power generation, and MDC Power Holding Company, an entity fully owned by Mubadala Investment Company PJSC (Mubadala) worked with an international team of lenders and advisers to bring the deal to a successful conclusion in March (2020).

Under the terms of the agreement, FEWA holds a 20% of the stake, while ACWA Power and Mubadala each own 40%. The government of Umm Al Quwain will join as a partner in the project and will own a stake at a later date.

The gearing in Umm al Quwain IWP was 85:15 and the $680 million debt package was signed on 7 November 2019 with the senior debt drawn in March 2020. A club of seven banks participated on the senior debt package: Standard Chartered (lead), First Abu Dhabi Bank, Korea Development Bank, MUFG Bank, Samba Bank, Siemens Bank and SMBC.

Standard Chartered Bank played a pivotal role in the financing while First Abu Dhabi Bank was the facility agent, security trustee and account bank. The lenders were advised by Norton Rose Fulbright on legal aspects and by Atkins on technical. Mazars was model auditor.

FEWA was advised by KPMG in a financial advisory role, working alongside Al Maqtari Auditing. Watson Farley & Williams was on legal with ILF Consulting Engineers providing technical advisory.

The principal adviser to the sponsor was Clifford Chance and much of the consulting element was provided by internal functions.

Laughlan – head of corporate and project finance at SMBC's Middle East department based in Dubai – said: "We were pleased to support this vitally important project for the Northern Emirates, not only the largest desalination plant in the Northern Emirates but one of the most advanced in the region, using highly efficient seawater RO technology to produce nearly 700,000 cubic metres per day of competitively priced clean water for local businesses and residents. This is a role model for future desalination projects to follow."

Rajit Nanda

"We are delighted to have shown FEWA that we are a partner of choice through the timely financial close of this project."

Suhail Mohamed Al Mazrouei, UAE Minister of Energy & Industry and chair of FEWA, said: "This project is FEWA's first asset in partnership with the private sector. Its implementation will reinforce UAE's Water Security Strategy 2036 as well as bolster its core programmes."

Paddy Padmanathan, president and chief executive of ACWA Power, also speaking at the time of financial close said: "Successfully achieving financial closure at this stage is testament to the readiness of the market for private-public partnerships.

"It also reflects ACWA Power's strong financial standing and reliability as well as the credence we have gained from global and financial institutions that has been developed over years of successful operations and partnerships.

"This project is another example of our commitment to supply affordable potable water to more people by developing efficient water infrastructure that will cater for the growing demand in the country."

Rajit Nanda, ACWA Power chief investment officer, added at the time: "Umm Al Quwain IWP marks a special moment for us, not only because it is the largest desalination project in Northern Emirates but also due to its role in the development of the first IWP non-recourse project financing structure for FEWA that will deliver value for years to come.

"We are delighted to have shown FEWA that we are a partner of choice through the timely financial close of this project and our contribution to securing cost-effective and energy efficient potable water supply for the Northern Emirates.

"This project is a strong indicator of how ACWA Power has developed a stronghold in the United Arab Emirates. We look forward to capitalising on this opportunity and supporting the envisioned growth for the country."

MENA export finance – **Euler Hermes covered facility**

The *IJGlobal* export finance award for the Middle East and North Africa has this year been won by HSBC and Euler Hermes for the role they played on a major transaction in the Kingdom of Saudi Arabia.

HSBC acted as a mandated lead arranger, an original lender and the agent bank in regards to the $258 million export credit facility supported by Euler Hermes, the official ECA of Germany. Credit Agricole is structuring bank.

The facility was extended to the Saudi Arabian Ministry of Finance to finance the purchase of buses from MAN Truck & Bus SE and EvoBus GmbH – a subsidiary of Daimler AG – for the new Riyadh public transport network.

The buses will help reduce greenhouse gas emissions and air pollution as well as alleviate traffic congestion in the metropolitan Riyadh area through a shift towards public transportation.

The bus fleet will integrate with a new metro system that is currently under construction in Riyadh, with the entire project estimated to remove 250,000 car trips from the city every day.

Particularly of interest is that this facility was structured to be compliant with the Green Loan Principles, as outlined by the Loan Market Association in 2018. The loan documentation confirms a commitment to report on positive environmental impacts of the underlying project.

This is the first such ECA-covered transaction in the kingdom and is understood to be the first "Green" ECA facility in the Middle East. It is also the first ECA facility raised by the kingdom's finance ministry.

This transport deal forms part of the Saudi finance ministry's strategy to support the completion of major development projects in the kingdom with increased contributions from the private sector. To this end, it is encouraging project owners in the public and private sector to adopt similar sources of finance.

Given the pace at which Saudi Vision 2030 – a comprehensive programme to reduce Saudi Arabia's dependence on oil, diversify its economy, and develop public service sectors – moves is likely that transactions of this nature will become increasingly common on the ground.

MENA Refinancing Water – **Al Dur phase II IWPP refinancing**

The award for MENA water refinancing deal of the year has been won by ACWA Power for the refi of the Al Dur Phase II IWPP located in Bahrain.

This transaction consisted of the replacement of around 44% of the senior financing which is of particular note as this pioneering deal was brought to conclusion within the construction period. This is a first in the annals of project financing across the entire GCC/MENA region.

The refinancing had to be affected without triggering any defaults within the existing project financing. This involved close interactions with all stakeholders including inter alia the offtaker, the offtaker's advisers, the existing lenders and the lenders, legal, technical and insurance advisers.

Due to these constraints, the replacement of SFD had to be put in place within a tight six-month period.

The sense of urgency as to limiting any negative impact on the project schedule and the project economics also rose due to the occurrence of the Covid-19 pandemic.

The project sponsors looked for a solution which had to be structured accordingly, as the credit markets shifted to tighter commercial terms and more stringent due-diligence requirements, such as banks requiring additional diligence on Covid-19 preparedness.

Given that SFD facility was a tightly priced financing and was being replaced with commercial debt; and the lender requirements in terms of coverage ratios had to be met – a mezzanine tranche was introduced. This is the first instance of a project recourse mezzanine structure for any IPP/IWPP in Bahrain and only the second instance of fully project recourse mezzanine in GCC IPP/IWPP space.

The refinancing was oversubscribed to the extent of 1.3 times, with additional financing committed by 3 existing senior lenders (APICORP, Bank Saudi Fransi, Riyad Bank) and 3 new lenders (Al Rajhi Bank – both senior and mezzanine, Arab National Bank, National Bank of Bahrain).

The refinancing was given effect through an innovative two-step process. This was done to ensure that the project was not under-funded at any point of time and that the construction schedule was not negatively impacted.

Advisers
- Shearman & Sterling
- Deloitte

MENA refinancing O&G – **ADNOC Gas Pipelines Acquisition Refinancing**

The award for MENA Oil and Gas Refinancing deal of the year has been won by Galaxy Pipeline Assets BidCo for the refinancing of its participation in Abu Dhabi National Oil Company's (ADNOC) natural gas pipeline business.

The project won thanks to its significance to the UAE oil and gas sector and the sponsors' recurrence to capital markets.

The project centres on the $4 billion bond refinancing secured by Galaxy Pipeline Assets BidCo that follows an even more significant deal from earlier in 2020 – a transaction that also features in these pages.

In 2020, the Global Infrastructure Partners-led consortium bought a 49% stake in Abu Dhabi National Oil Company's natural gas pipeline business for $10 billion, including $8 billion of debt.

The fresh bonds refinance half of the loans raised by the consortium, which also includes Brookfield Asset Management, Snam, OTPP, GIC and South Korean investor NH Investment & Securities.

A $320 million debt service reserve facility was also put in place alongside the bond, provided by a 12-strong bank lending club.

The transaction was reportedly the largest single global energy infrastructure deal in 2020 and the MENA region's biggest. It will unlock $10.1 billion in foreign direct investment into the Unite Arab Emirates.

ADNOC's gas network is a core piece of midstream infrastructure in the UAE and serves as a strategic pipeline system, which acts as the critical link between UAE low-cost natural gas supply and robust in-country demand.

This agreement is the largest transaction since ADNOC announced the expansion of its partnership and investment model in 2017, which aims to unlock value for ADNOC.

Since then, ADNOC has entered the debt capital markets for the first time, issuing a $3 billion bond backed by the Abu Dhabi Crude Oil Pipeline; partially floated ADNOC Distribution, the first-ever IPO of an ADNOC Group company; and entered into several strategic partnerships in its drilling, refining, fertilizer and trading businesses, among others.

This is the latest development on the ground that exemplifies ADNOC's pioneering spirit.

Advisers
- Citigroup
- HSBC
- Clifford Chance
- Latham & Watkins
- Mazars

MENA power

Fujairah F3 Independent Power Project

When it comes to power projects, *IJGlobal* rarely has to look far in the Middle East and North Africa for inspiration when it comes to picking a winner for an award. And so it was this year when Fujairah F3 IPP stood out as the obvious winner.

This project is to deliver a 2-2.4GW combined-cycle gas-fired power plant at Qidfa in the Emirate of Fujairah, on the Gulf of Oman. This will be the third of the three power/water installations at the Qidfa complex, adding to the operational F1 and F2 IWPP.

The project was tendered by Emirates Water & Electricity Company (EWEC) with Marubeni declared the first-ranked shortlisted bidder and going on to sign the PPA in February 2020 and progressing to reach financial close mid-June.

This was achieved in the midst of the Covid-19 pandemic, despite travel lockdowns imposed across multiple jurisdictions, and while working with a large and geographically wide-spread financing group that ranged from Japan to the UK.

The total project cost is $1.2 billion and financing was provided through $900 million

of non-recourse senior debt, a $200 million equity bridge loan, and a VAT facility. The senior debt corresponds to 80% of the total funding that was delivered via a long-dated, soft mini-perm structure provided by JBIC and a group of commercial banks.

In addition to the typical project costs, a VAT facility was secured from Standard Chartered Bank to fund VAT cash flows during construction.

One of the stand-out data points from this transaction is that it marked the first time that JBIC had provided a soft mini-perm financing.

The project will be critical to ensuring security of supply for the UAE grid in the coming era of significant intermittent renewable generation coming online, providing flexibility to the UAE's power grid, setting a significant example for others in the GCC to follow.

Advisers
- Alderbrook
- Cranmore Partners
- PwC
- White & Case
- Herbert Smith Freehills
- Norton Rose Fulbright
- Clifford Chance
- Afridi & Angell
- Al Tamimi
- Fichtner
- Lummus Consultants International
- Operis
- Willis Towers Watson

MENA oil & gas

Project Galaxy

It will come as little surprise to regular readers of *IJGlobal* that a mammoth deal like Project Galaxy should win the oil and gas award for the Middle East and North Africa given its size and implications for the market.

Project Galaxy involves the sale of 49% of non-operated interest in the Abu Dhabi National Oil Company (ADNOC) sales gas and natural gas liquids (NGL) transportation pipelines network. The newly-formed ADNOC Gas Pipeline Assets LLC has lease rights to 38 pipelines covering 982.3km.

ADNOC – the state-owned oil company of the UAE – will pay ADNOC Gas Pipelines a volume-based tariff for the use of pipelines that transport sales gas and NGL from upstream assets to Abu Dhabi's key outlets and terminals.

A consortium group composed of Brookfield Asset Management, GIC, Global Infrastructure Partners, NH Investment & Securities, Ontario Teachers' Pension Plan and SNAM was selected to participate in Project Galaxy The largest brownfield acquisition in 2020 was financed through mix of equity and bank debt provided by 17 international and regional banks. It was all

the more impressive for being able to raise $7.96 billion of loans during the pandemic, and at a time of low oil and gas prices.

The almost $10 billion acquisition price for the stake was financed by a bridge-to-bond facility and the transaction represents the largest energy infrastructure related financing in the Middle East.

The financing and hedging transactions were implemented on a fast track basis in line with the acquisition timeline. The signing of finance documents occurred on 23 June and financial close was completed by 15 July.

This innovative transaction structure allows ADNOC to tap new pools of global institutional investment capital, while maintaining full operating control over the assets included as part of the investment.

It also signals continued strong interest in ADNOC's low-risk, income-generating assets, and sets another benchmark for large-scale energy infrastructure investments and monetisation in the UAE and the wider region.

Advisers
- Bank of America
- First Abu Dhabi Bank
- Mizuho Securities
- Moelis & Company
- Morgan Stanley
- Linklaters
- DLA Piper
- Dentons
- Latham & Watkins
- Clifford Chance
- Simpson Thacher & Bartlett
- Arup

MENA refinancing mining

Ma'aden Wa'ad Al Shamal Phosphate Company refinancing

The award for Middle East and North Africa mining refinance deal of the year has been won by Ma'aden Wa'ad Al Shamal Phosphate Company (MWSPC) for its corporate refinancing.

The project won thanks to the Saudi Arabian Mining Company's (Ma'aden) subsidiary Ma'aden Wa'ad Al Shamal Phosphate Company – ably assisted by financial advisers BNP Paribas and Samba Capital – combining debt transfer and refinancing in an effective manner.

The transaction consisted of the rescheduling of its SAR6.7 billion ($1.8 billion) indebtedness owed to the Public Investment Fund. The company further transferred the indebtedness owed to the Public Investment Fund to the Public Pension Agency.

MWSPC also secured the refinancing of its indebtedness owed to a syndicate of commercial banks and other financial institutions using the proceeds of new indebtedness provided by a syndicate of nine commercial banks.

The entire value of refinancing is SAR8.6 billion ($2.3 billion) and the new financing facilities provide attractive and flexible corporate loan terms and conditions in place of the more restrictive project financing terms and conditions originally put in place.

The "covenant-lite" terms of the refinancing arrangements, combined with an extended debt repayment schedule, are a step towards significantly strengthening the long-term cash flow position for Ma'aden as part of its strategy to pursue new growth and development projects.

The transactions included simultaneous negotiation with two Saudi government entities and a group of commercial banks. It was closed during early part of Covid-19 lockdown in the Kingdom of Saudi Arabia.

The financial institutions to have supported this deal are Alinma Bank, the National Commercial Bank, Al-Rajhi Bank, Bank Albilad, Riyad Bank, Saudi British Bank, Bank AlJazira, Samba Bank, Saudi Fransi Bank.

The MWSPC integrated phosphate fertiliser production complex operates out of the Wa'ad Al Shamal Minerals Industrial City and is understood to be one of the largest in the world. It comprises a $8 billion joint venture investment between Ma'aden (60%), The Mosaic Company (25%) and SABIC (15%).

Ma'aden chief executive Abdulaziz Al Harbi said: "The refinancing of Ma'aden Wa'ad Al Shamal Phosphate Company was a strategic move for Ma'aden that significantly strengthened our long-term cash flow position and enabled us to pursue new growth and development projects. It is good to see such strong appetite from banks to lend to MWSPC despite the market challenging conditions.

"We are pleased to see that the market recognises this as the winning deal. It gives us an extra boost to continue our success growth story. As Saudi Arabia's national mining champion, we continue to play a key contributing role in the economic diversification under Vision 2030."

Advisers

- BNP Paribas
- Samba Capital
- Allen & Overy
- White & Case

MENA Renewables – **DEWA V**

When it comes to renewable energy projects in the Middle East and North Africa, few can hold a candle to the glorious 900MW DEWA Phase V IPP in Dubai which reached financial close in October in the midst of the Covid-19 outbreak.

This project stands out for many reasons, one of them being that it achieved one of the world's lowest solar PV tariffs at $1.6953 cents per kWh and successfully preserved the tariff to achieve financially close in spite of turmoil in the financial markets caused by the pandemic.

The EPC contractor is Shanghai Electric while the O&M partner is NOMAC, ACWA Power's wholly-owned subsidiary specialised in operating power and water projects across multiple technologies.

The sponsor team leveraged its experience and expertise from previous DEWA projects and factored in the potential impact of Covid-19 in the construction schedule to further facilitate project execution.

The senior debt amounted to $419.5 million including both base commitment and standby commitment from a group of nine regional, international and Chinese banks. Meanwhile the junior debt amounted to $112.5 million, provided by three lenders to improve project economics and further increase tariff competitiveness.

ACWA Power – as lead sponsor – received commitment from several international and regional lenders during the tender process, but these were whittled back on the basis of price competitiveness and adherence to terms.

The debt has a 27-year door to door tenor – project completion plus 24 years – with one-year tail against a 25 year PPA, all on a soft mini-perm basis.

The deal represents one of the few projects in the region that managed to retain Chinese bank participation as the banks drastically scaled back their long-term overseas lending during the year.

Also noteworthy for this transaction, this was the first time for any IPP in UAE that there was no government guarantee to backstop termination payment obligations of the offtaker, leaving sole recourse to the offtaker.

Advisers
- EY
- ACWA Power
- Trowers & Hamlins
- Norton Rose Fulbright
- Covington & Burling
- GOPA - International Energy Consultants
- Mercado Aries
- WSP
- INDECS
- Deloitte
- Lockton
- 5 Capital

MENA Renewables Solar
Al Dhafra Solar PV

When it comes to solar projects in the Middle East and North Africa region, big is beautiful… and on that front alone the 2GW Al Dhafra solar PV development in the UAE ticks a very significant box.

This mega solar park is a strategic project for the UAE and comes with strong support from the government as part of its commitment to source 50% of its energy from clean resources by 2050. Al Dhafra goes a long way to meeting these targets as it will generate electricity equivalent to the consumption of 160,000 households.

An interesting point is that this is the first plant of such scale to deploy bifacial module technology, capturing as such light on both sides of the PV modules and thus benefitting from the reflection of light from the ground in order to yield higher generation.

And this deal set new records with the sponsors at financial close claiming to have achieved the worldwide lowest electricity cost.

The solar park itself spans more than 20 square kilometres featuring 4 million PV modules and the project sponsors – EDF Renouvelables (EDFR), Jinko Power, TAQA and Masdar – are working in partnership with EPC contractor China Machinery Engineering Corporation.

Construction started in October 2020 and the project has a 30-year PPA with EWEC for 100% of produced electricity, as of completion.

Olivier Bordes, chief executive of EDF Renewables Middle East, said: "This project clearly demonstrates our ambitions to deliver competitive, innovative, and low-carbon energy solutions and to support the United Arab Emirates clean energy vision towards a sustainable future. EDF's CAP 2030 strategy is in line with the regional ambitions aiming to reduce the middle eastern countries' carbon footprint. We are thriving to expand renewable energies in the region to fight together the global climate change, and above all are looking forward to successfully reaching, with our partners and contractors, the full commissioning of Al Dhafra PV project."

Advisers
Alderbrook, Synergy Consulting, Clifford Chance, Norton Rose Fulbright, King & Spalding, Linklaters, Shearman & Sterling, White & Case, ILF Engineers, Mercados Aries International, DWPF, AON, INDECS

MENA transport
Cairo Monorail PPP

The lure of a monorail project is too much for the *IJGlobal* editorial team not to give this fantastic deal an award… and being the longest mass transit solution of this format in the world, it is a worthy winner of MENA transport accolade.

The $4.5 billion Cairo Monorail PPP is the first of its kind in the MENA region and it will have a significant impact on the ground once it opens for service in 2023, offering a fast connection between Cairo and its neighbouring cities, slashing commute times and reducing congestion.

The transport ministry division National Authority for Tunnels (NAT) put out the tender for the PPP in 2018 as a priority public services project, mandated by the Egyptian government. Bombardier won the contract the following year (2019) to develop the monorail system alongside 2 Egyptian companies – Arab Contractors (construction) and Orascom Construction (EPC).

The two-line project will be the first mass transit links between Greater Cairo, the new capital and 6th of October City. Work includes building 34 stations, maintenance facilities, depots and an operations control centre.

Cairo Monorail will have the capacity to transport around 45,000 passengers an hour in each direction at full capacity and – once complete – it will cover almost 100km.

The €1.9 billion financing was provided by commercial banks with JP Morgan acting as facility agent alongside eight other lenders, and UK Export Finance (UKEF) guaranteeing the largest amount of financing it has ever provided for an overseas infrastructure project. The loan has a 14-year tenor and a maturity date of 18 December 2034.

Bombardier will design, supply and install rolling stock as well as the electrical and mechanical equipment for the project. The rolling stock will be manufactured in Derby, UK. Bombardier will also provide project management, systems engineering and integration, and test and commissioning for the trains and signalling. Orascom's work includes the design and construction of all infrastructure and civil works. The consortium will operate and maintain both lines for 30 years.

Advisers
- Ashurst
- White & Case
- Zaki Hashem & Partners
- Khatib & Alami
- SACE
- CESCE

MENA renewables wind

Genesis Wind Farm

Israeli power developer Enlight Renewable Energies overcame numerous delays, global economic turmoil, the Covid-19 pandemic and issues with the ministry of defence to win this year's *IJGlobal* award for wind energy in the Middle East and North Africa.

Enlight reached financial close on its NIS1.2 billion ($333.5 million), 189MW Genesis Wind Farm in mid-April (2020) marking a crucial milestone for a project that started life as a 50MW project in 2011.

It had to contend with more than its fair share of challenges that included delays prompted by the Israeli Ministry of Defence (MoD) over disruption concerns for a nearby radar system.

The shareholders of the SPV are Enlight Renewable Energies (60%) and Aviram Group (40%) and the project financing is heavily geared towards the debt-side with a gearing of 87:13. Lenders on the NIS1.05 billion ($291 million) debt package are Bank Hapoalim (mandated lead arranger), Migdal Insurance Company and Amitim Pension Fund.

The tenor on the debt is 19 years plus two years for construction. Energy will be

sold through a 20-year PPA to the Israel Electric Corporation (IEC) and sponsor revenues are expected to be as high as NIS160 million ($44.5 million) annually.

The Bank Hapoalim-led lender team signed MoUs with the sponsors in July 2019, not long after the High Court of Justice rejected a petition from the Society for the Protection of Nature in Israel to delay the project due to wildlife concerns.

The project required further approvals and despite receiving approval from the National Infrastructure Committee in July 2018, Enlight said in a December 2018 release – at this stage awaiting approval from the National Housing Cabinet – that "there is no certainty that the project will be completed". Finally, financial close was achieved in April.

While enduring these numerous hurdles, the installed power capacity of the project was increased – partly by necessity from interventions by the MoD – from 50MW to 130MW and finally to 189MW.

Genesis wind farm is expected to begin commercial operations by the end of 2022.

Advisers
- Herzog Fox & Neeman
- Meiter
- Tractebel

MENA water desalination

Jubail 3A

The Middle East and North African water desalination award has been won by Jubail 3A – a significant IWP project in the eastern province of Saudi Arabia with a 600,000 metres per day reverse osmosis capacity.

The IWP split from Jubail 3 IWP in May 2019 and the sponsors signed with Saudi Water Partnership Company (SWPC) a 25-year water purchase agreement (WPA) with a tariff of SR1.54861/m3 ($0.412963) in April (2020), following project award the month before.

The project is the first to be awarded under SWPC's seven-year statement plan that aims to reduce the level of water stress in the kingdom through the development of an additional 5.5 m^3/day of desalination capacity up to 2024. It will be one of the largest privately-owned desalination plants in the world and will greatly contribute to Saudi water security efforts.

The 25-year WPA was signed with SWPC by a consortium led by ACWA Power, working in partnership with Gulf Investment Corporation (GIC) and Al Bawani Water & Power Company (AWP).

Under the terms of the partnership, the consortium will design, construct,

commission, operate and maintain the desalination plant as well as associated potable water storage and electrical special facilities.

Beyond achieving the lowest tariff level for closed water projects in the region, the project set a benchmark for procurement timeline, successfully navigating challenges imposed by the Covid-19 lockdown.

The project secured debt funding commitments from a diverse group of lenders – Al Rajhi Bank, Riyad Bank, Abu Dhabi Islamic Bank and Mizuho Bank. In addition to securing the total debt and equity bridge loan commitments for the project during challenging times, sponsors also placed hedges for both senior debt and equity bridge loan. The senior debt was arranged in the form of Istisnaa-Ijara Islamic structure for $95 million, Wakala-Ijara Islamic structure of $220 million, conventional soft mini-perm structure of $166 million. The $66 million EBL was also structured on an Islamic basis.

Advisers
- Alderbrook
- Banque Saudi Fransi
- Synergy Consulting
- KPMG
- DLA Piper
- Covington & Burling
- Norton Rose Fulbright
- Hogan Lovells
- Fichtner
- Atkins
- Afry
- Indecs Consulting
- Deloitte
- Marsh

MENA social infrastructure

Noor Abu Dhabi LED Streetlighting Phase 1 PPP

When it comes to social infrastructure transactions, there are few that can boast the simplicity of street lighting projects while concurrently celebrating immediate environmental and financial gains.

To this end, it was a shoo-in for Abu Dhabi to win the social infrastructure award for having brought to market and closed the first phase of Noor Abu Dhabi LED Streetlighting PPP.

Abu Dhabi City Municipality (ADM) in August 2020 reached financial close with local developer Tatweer on the DBFOM contract for a street lighting replacement project for traffic assets and systems operation and management. The tender was conducted by the Abu Dhabi Investments Office (ADIO).

Tatweer is charged with replacing at least 43,000 streetlights in Abu Dhabi with energy-efficient LEDs, which are being supplied by Italian lighting firm AEC Illuminazione.

ADM launched the project procurement process in January 2018. ADIO says it was structured as a public-private partnership through its Dh10 billion ($2.7 billion) PPP

model to support and invest in new infra in the emirate.

The project is financed with a gearing of 80:20 as per requirements in the project documents.

Tatweer will install and maintain a smart central system to control the new LEDs throughout the 12-year concession period of the DBFOM contract with energy saving targets set by the ADM, which in turn will pay the concessionaire on a formula based on actual energy use as measured by the smart central system.

ADM is expecting cost savings of up to Dh264 million ($71.9 million) and at least enough energy savings to power 8,000 homes.

The project was so successful that in October (2020), the Department of Municipalities and Transport (DMT) through Abu Dhabi City Municipality (ADM) and the Abu Dhabi Investment Office launched Phase 2 of Noor Abu Dhabi.

The new PPP project is more than three times the size of Phase 1 and will result in significant electricity savings of almost 2,400 million kWh, a reduction of some 76% in power consumption… which is equivalent to cost savings of AED705 million, throughout the 12-year concession agreement.

Advisers
- Allen & Overy
- Synergy Consulting
- Parsons Corporation

MENA Water Wastewater

Umm al Hayman

Every bit as important as the provision of potable water in the Middle East and North Africa is the treatment of wastewater and Umm al Hayman (UAH) is an excellent example of this.

UAH reached financial close in July 2020 and involves the construction of the plant within the boundaries of the current Umm Al Hayman purification plant located 50km south of Kuwait City.

The plant will treat wastewater with an initial capacity of 500,000 cubic meters of average daily flow. It also includes the construction of sewage and treated water lines from Egailah pumping station to the new station, 300 sewage rising mains and 68 ground reservoirs, together with a major power transformer station.

The new sewage treatment plant can further expand by 200,000 cubic meters per day, ultimately reaching a final capacity of 700,000 cubic meters per day. The project is split into two parts, one developed on a BOT basis and the second is DBO.

UAH is one of the world's largest wastewater projects and is being built to dispose of the wastewater from southern

Kuwait and to supply agriculture and industry with process water. WTE will deliver a complete package from wastewater collection, treatment, and distribution to energy generation, composting and plant operation – as a one-stop solution.

WTE is the general contractor responsible for design and construction of UAH with a contract value of around €600 million as well as – together with partners – a sewer network with pumping stations (contract value €950 million). With a construction volume of just under €1.6 billion (excluding financing and operating costs), this is considered one of the world's most complex water projects.

It involves a complex financing structure and is one of the largest PPP projects in the Middle East. The consortium of International Financial Advisors (IFA) and WTE Wassertechnik on behalf of the Ministry of Public Works Kuwait ensures the expansion of advanced infrastructure and sustainability-oriented areas in the region.

Advisers
- HSBC
- KPMG
- Norton Rose Fulbright
- Hogan Lovells
- Covington & Burling
- ASAR Legal
- Al Bader Law Office
- Al Tamini
- Fichtner
- Mazars

IJGlobal Awards 2020

Africa winners

This last year – 2020 – saw perhaps the most diverse range of infrastructure and energy awards to win prizes ever in the *IJGlobal* Awards' history.

Sadly we were not able to include Mozambique LNG as it did not actually reach financial close until spring 2021 – though it was entered by many companies – but we are confident it will make an appearance in our next award! The breadth of projects closed demonstrates something many in the infra know well – Africa is open for business.

Congratulations to all the winners.

Winners in the African transaction category are:

- Editor's Choice Africa – **Atinkou CCG**

- African mining – **Tasiast Gold Mine Financing**
- African oil & gas – **Nigeria LNG Train 7**
- African transport – **BeitBridge Border Post Modernisation Project**
- African refinancing renewables – **Bokpoort CSP**
- African power – **Azito Phase IV Project**
- African renewables portfolio – **Financing of 7 Solar Projects in Angola/ Angola Solar PV**
- African battery storage – **Golomoti Solar PV and Battery Energy Storage Project**
- African digital infrastructure – **Project Lightning**
- African social infrastructure – **Cote d'Ivoire Hospital & Medical Units Portfolio**
- African export finance – **SGR Financing**
- African Refinancing Mining – **Resolute**

Editor's Choice Africa – Atinkou CCGT

IJGlobal editorial director **Angus Leslie Melville** joins forces with MEA reporter **James Hebert** to single out the Editor's Choice Award for Africa – the 390MW Atinkou CCGT in Côte d'Ivoire

There are few developments in the global infrastructure and energy sector that get the juices of an infra hack flowing more than financial closes in Africa. For years people have been hailing the continent as one of the true regions for growth – on a country-by-country basis, they caveat – with an exciting array of developments and ambitions on the drawing board.

Energy (in all its many guises) tends to top most folks' lists when it comes to Sub Saharan Africa and *IJGlobal* MEA hand – James Hebert – is very much of that mind in choosing the regional *IJGlobal* Editor's Choice Award, singling out for honours the Atinkou combined-cycle, gas-fired power plant in Jacqueville some 40km west of Abidjan, Côte d'Ivoire.

This project relates to the development and operation for 20 years of a 390MW natural gas-fired power plant using highly efficient combined-cycle turbine technology, increasing production and improving energy supply in Côte d'Ivoire.

The sponsor of the project is Eranove – a pan-African company active in the management of public services and production of electricity and drinking water – created the Atinkou company for the implementation of this important development project.

The new Atinkou power plant will boost power generation and supply in a country where only 66% of the population have access to electricity (2017 stats). By using combined-cycle turbine technology, the plant will substantially contribute to reducing Côte d'Ivoire's generation costs and GHG emissions, in part, through the displacement of older generation units.

This is a key development for the nation, beyond providing baseload energy, it helps set Côte d'Ivoire on the path to transitioning its energy sources – ticking a nice ESG box – by providing stability in electricity generation as more intermittent renewable energy sources are developed in the nation.

IFC to the fore

As lead arranger and overall coordinator, the IFC negotiated all the debt financing. Atinkou worked closely with the IFC to pull together an impressive line-up of DFIs to finance this greenfield power project.

This work proved so successful that the World Bank member was able to scale back its ticket from the €120 million it had committed, to the €91 million it contributed to the overall €303 million debt package.

The IFC's success was so complete that by the time this deal made it to financial close – 26 March 2020 – it was not even the biggest ticket holder as the African Development Bank came in for €100 million. The remaining debt was provided by The Emerging Africa Infrastructure Fund, DEG, FMO, the OPEC Fund for International Development and Attijariwafa Bank.


François-Guilhem Vaissier

"I was very proud to advise Eranove and Atinkou on this landmark transaction that will generate more than 350MW following completion of the works."

Eranove is majority-owned by ECP Power and Water Holding (France) with a 53% shareholding; followed by AXA with 18%; Eranove employees with 15%; a group of African private investors holding 9%; and the Caisse Nationale de Prévoyance Sociale (CNPS) of Côte d'Ivoire on 5%. It deployed €101 million in equity to give the financing a very respectable 75:25 gearing.

There was a highly-respected line-up of advisers on this deal with White & Case acting as Atinkou's international legal counsel led by partners François-Guilhem Vaissier (project documentation) and Paule Biensan (financing documentation). Atinkou's Ivorian legal counsel was C2A, led by Pierre Djédjé.

Vincent Le Guennou, co-chief executive of Emerging Capital Partners (left) and Marc Albérola MD of Eranove

Clifford Chance acted as the lenders' international legal counsel, fronted by Paris-based partner Delphine Siino Courtin, while their local law firm was Cabinet Chauveau & Associés with Tanneguy Cazin d'Honincthun taking the lead. Willis was insurance adviser to the lenders while WSP supported it on technical issues.

The contractor is TSK Electronica y Electricidad while Siemens is supplying the turbine and long-term service function. Ramboll was environmental and social adviser, supported by Deloitte as financial model auditor.

A project with impact

This power plant will provide Côte d'Ivoire with stable base load electricity to support economic growth and the development of intermittent renewable energy generation – playing a key role in the national energy transition.

On the clean energy front, it is a clear step in the right direction as it replaces older, less efficient power plants in Côte d'Ivoire which will now be retired. Further, it is roughly 50% more efficient than the older plants.

Siemens Energy's scope of supply includes one SGT5-4000F gas turbine and one SST5-3000 steam turbine, each along with a generator, condenser and an SPPA-T3000 control system. Additionally, a comprehensive 12-year long-term service agreement (LTSA) has been signed between Atinkou and Siemens Energy.

The SGT5-4000F gas turbine provides high performance, low power generation costs, long intervals between inspections, and a service-friendly design. Optimized flow and cooling add up to high gas turbine efficiency and economical power generation in combined cycle applications.

Karim Amin, executive vice president of Siemens Energy's generation division said: "Supported by our state-of-the-art technology and services, this power plant will be the most efficient natural gas fired power plant in Côte d'Ivoire and in the region. It will help to reduce the area's carbon footprint from power generation and support Côte d'Ivoire in its efforts to become a regional energy hub."

For Eranove's side, this deal cements its position as the key player in Ivorian energy generation as it also owns and operates the 544MW CIPREL project in Vridi, near the town of Port-Bouët. It is the largest power plant in Côte d'Ivoire.

Marc Albérola, chief executive of the pan-African industrial group Eranove, said: "The Atinkou power plant will produce electricity for thousands of homes and industries to meet national and regional electricity needs generated by strong economic growth."

As is the case with many deals in Africa the involvement of DFIs was essential to get it over the line – though hopefully we will soon be moving to a position where the role of such organisations morphs into playing the role of "crowding in" rather than dominating the market.

Linda Rudo Munyengeterwa, IFC's regional industry director for infrastructure and natural resources (MEA), said at financial close: "Once built, Atinkou will provide affordable power to thousands of homes and businesses, while helping Côte d'Ivoire meet its goal of transitioning to greener electricity production.

"IFC's investment in the project is a testimony to IFC's longstanding commitment to Côte d'Ivoire's power sector, which began in 1994, when our partnership with CIPREL began."

Siemens Energy's scope of supply includes one SGT5-4000F gas turbine and one SST5-3000 steam turbine

Linda Rudo Munyengeterwa

"Once built, Atinkou will provide affordable power to thousands of homes and businesses, while helping Côte d'Ivoire meet its goal of transitioning to greener electricity production."

Given the strong market position that Eranove has established in Côte d'Ivoire, it is likely that the power company will continue to build on this in years to come in a nation that is keen to evolve its grid connectivity.

Marc Albérola adds: "The Atinkou plant demonstrates the strength of Eranove's industrial model based on African skills and public and private partnerships involving the state and local players. Atinkou also confirms Eranove's leading position as an independent producer and delegated manager of public services."

François-Guilhem Vaissier, White & Case partner, says: "I was very proud to advise Eranove and Atinkou on this landmark transaction that will generate more than 350MW following completion of the works.

"On the basis of CIPREL numerous successes, we started back in 2016 with the negotiation of a MoU with the state of Côte d'Ivoire. Then the Convention de Production was executed in December 2018. Following this initial phase, we assisted Eranove and Atinkou's dedicated teams on all related agreements including the financing, construction and technical services ones."

And all that hard work came to a successful conclusion when it reached financial close on 26 March 2020 and is a feather in the cap to all parties involved.

African mining

Tasiast Gold Mine Financing

Kinross Gold Corporation achieved financial close on the expansion of its open-pit Tasiast Gold Mine asset in north-western Mauritania on the back of a multi-source project financing featuring both state-backed lenders and commercial banks.

The debt financing was led by International Finance Corporation (IFC) and the Export Development Canada (EDC). On the back of this DFI and ECA support (the original senior lenders), two commercial banks joined the fray – ING Group and Societe Generale.

The loan facilities carry an eight-year tenor and are non-recourse to Kinross and have a weighted average floating interest rate – the debt pricing is 438bp above Libor. It also features an extended availability period and permits an unlimited number of drawdowns to provide the Tasiast SPV with flexibility to meet its operational funding needs.

These conditions were set out in a Common Terms Agreement that states the terms common to all senior debt, all of which ranks equally and shares pari passu in a multi-jurisdictional common security package that was developed with local counsel in response to the unique legal and regulatory challenges associated with the creation, perfection and enforcement of collateral security in Mauritania.

The deal also represents the IFC's largest ever investment in Mauritania at $63 million A loan and a further $93 million through IFC trust loans. The World Bank Group member considers the project to be aligned with the government of Mauritania's development agenda.

ING and Societe Generale provided a combined $70 million through syndicated IFC B loans while the EDC was in the for the remaining $75 million. Overall, the $300 million debt package serves to part-fund a $822 million expansion of the mine.

The project financing will fund an expansion of the operations of the Tasiast gold mine, together with all associated facilities and infrastructure. The production-side is expected to incrementally increase throughput capacity to 21,000 tonnes per day by the end of 2021 and then 24,000 tonnes per day by mid-2023. Kinross says that based on the feasibility study, the expansion is expected to increase production, reduce costs, and extend mine life to 2033.

Advisers

- HCF International Advisers
- Milbank
- Sullivan & Cromwell
- Maître Yarba Ould Ahmed Saleh
- Avaconseil
- Herbert Smith Freehills
- De Pardieu Brocas Maffei
- Loyens & Loeff
- NautaDutilh
- Pestalozzi Attorneys at Law
- Homburger
- RPMGlobal USA

African oil & gas

Nigeria LNG Train 7

The $3 billion project financing of the Nigeria LNG Train 7 was one of the headline acts in 2020 in a year packed with multibillion-dollar African infrastructure deals.

Its complex financing marked the first time that the development of an LNG project was financed using a multi-sourced corporate loan structure. Overall, the financing of Train 7 demonstrated the will of international institutions to respond to the ever-growing global demand for LNG wherever it may be found.

The deal was structured as a hybrid corporate finance – it shares features of both corporate and project finance, even though it fits more towards the corporate end of the finance spectrum. Regardless of the classification, from a bankability perspective the overall risk assessment was similar. Lenders took a confident view of the deal from NLNG's operational and finance record and its robust credit history.

Half of the multi-tranche debt package is covered by ECAs including the Export-Import Bank of Korea (KEXIM), Korea Trade Insurance Corporation (KSURE), and SACE.

Train 7 demonstrated the will of international institutions to respond to the ever-growing global demand for LNG.

Pricing starts at 375bp above Libor and the nine-year tenor on the debt includes a four-year availability drawdown period and a five-year payback.

The asset will be financed by a combination of NLNG's internally generated cashflows and the $3 billion in debt raised from two development finance institutions (DFIs) including the Africa Finance Corporation (AFC) and 26 international and local banks, including Standard Chartered Bank.

The fact that the enormous deal closed in spite of the ongoing Covid-19 pandemic is not exclusive to Train 7 – as mentioned there were several other big deals such as in Cairo and Mozambique that achieved significant financing milestones during 2020. However, the EPC contract signed between the sponsors and the SCD Group included flexibility for NLNG to enable an accelerated works schedule.

Train 7 will expand the company's LNG production by 35%. Currently six LNG trains produce an annual total of 22 million tonnes, expected to rise to 30 million tonnes when Train 7 is in operation. The biggest shareholder in NLNG is the Nigerian National Petroleum Corporation, but the other sponsors are Shell, TotalEnergies, and Eni.

Advisers

- SMBC
- Guaranty Trust Bank
- Allen & Overy
- White & Case
- Olaniwan Ajayi
- Templars
- Operis

African refinancing renewables

Bokpoort CSP

ACWA Power reached financial close on a December 2020 refinancing of the 50MW Bokpoort concentrated solar power (CSP) project. It became the first REIPPP project in South Africa to be refinanced, thereby leading to a reduced tariff for the end-consumer.

Bokpoort CSP was a part of the South African government's early REIPPP programme that made it to financial close in July 2013. The Department of Mineral Resources and Energy (DMRE) launched a refinancing initiative in October 2019 as part of a wider goal to reduce the cost of energy in the country, thus reducing financial obligations for national utility Eskom.

In May 2020, the DMRE invited all IPPs that took part in rounds 1 to 3.5 of REIPPP to refinance their project debt. The approval for the refinancing was then granted by the government following a consultation with both IPPs and lenders. By this stage, the Covid-19 pandemic was causing severe volatility in the international financial markets.

Nonetheless, Bokpoort CSP became the first REIPPP project to carry out a successful refi, backed by a consortium of six lenders including Rand Merchant Bank which acted as co-MLA. The Jibar-linked and senior CPI-linked term facilities increase the overall debt package from R3.5 billion to R5.5 billion ($254 to $399 million).

The refinancing reinforces the success of IPPs under the REIPPP programme specifically and PPPs and concession projects more generally, in the South African market at a time when the government has constrained fiscal space, and therefore needs to crowd in the private sector through projects such as these in order to roll out new infrastructure and stimulate economic growth. The refi also reached financial close during the pandemic, thereby reinforcing the strength of the project financing.

The lowered tariff will result in savings, estimated at around R800 million over the remaining 13 years of the PPA. The reduction of the tariff charged to Eskom is 3.2%. Moreover, in October 2020 the project completed 13 days of continuous round-the-clock operation which set a continent-wide record for CSP.

Advisers
- Fasken
- Mott McDonald
- Deloitte

African power

Azito Phase IV Project

Globeleq managed to attract a total of nine DFIs for the debt financing of Azito Phase IV expansion in Côte d'Ivoire – enabling the addition of 253MW of installed power capacity at the 462MW Azito CCGT.

The 2020 financial close of the $331 million deal took place eight years after the last phased expansion of the asset. The new expansion not only saw every one of the lending DFIs from back then but also brought in a new multilateral. The DFI list was also complemented yet again by a local currency tranche from the West Africa Development Bank (BOAD) at CFAfr22.851 million ($42.6m).

The project was financed on a limited recourse basis. The overall size of the debt adds up to €264 million debt and the new lender to join the IFC and European DFIs is the African Development Bank (AfDB). There is a 15.5-year tenor and MIGA provided debt coverage for the Euro-denominated tranche.

DFIs also provide a strong backing on the equity-side, which injected a further €67 million into the project financing. Globeleq is majority owner of the Azito Energie SPV, alongside Industrial Promotion Services.

Globeleq is owned by CDC Group and Norfund, while IPS is owned by the Aga Khan Fund for Economic Development (AKFED) and IFC, alongside the government of Côte d'Ivoire. Both CDC and AKFED took lead roles in the fourth phase financing.

In line with the greatly extended shelf life, a new PPA was signed to amend the existing one in March 2019, putting it to 20 years. A source told IJGlobal at the time of the offtake signing that the new tariff is beaten only by hydropower in the West African region.

The fourth phase builds on the CCGT conversion resulting from the third phase, coupling gas turbines and stream turbines with a generator. At 715MW, Azito will provide at least 30% of Côte d'Ivoire's power generation, up from 25%. It will become one of the largest privately-run power projects in Sub-Saharan Africa.

Advisers
- Clifford Chance
- Orrick
- Fideis Legal
- Asafo & Co
- Chauveau
- WSP
- BDO
- FDKA
- Leue & Alesco
- Indecs Consulting

African renewables portfolio

Financing of 7 Solar Projects in Angola/Angola Solar PV

The award for African Renewables Portfolio Financing deal of the year has been won by a consortium of MCA Group, Hitachi ABB Power Grids and Sun Africa, among others, for their 370MW solar PV complex in Angola.

Comprised of seven generation facilities, the project will be located in the municipalities of Biópio, Benguela, Bailundo, Cuito, Lucapa, Luena and Saurimo.

The Angolan portfolio won for the overall impact it will have on electrification rates in the country, using a reliable and affordable clean energy source. The Angolan government took into consideration the lower cost of solar energy compared to diesel, which contributed to the project being considered a viable long-term investment for the country.

These seven assets in fact represent Angola's debut in the field of solar energy. They were made an integral part of the country's 2025 Energy Plan, which sets out to boost electricity access rates, especially in rural communities.

This portfolio is expected to be responsible for covering nearly 50% of Angola's 2025 target for installed renewable capacity. The expected generation capacity of each project ranges from 7MWdc to 189MWdc. Two of the plants will supply the national electricity grid, while the other five will directly serve rural areas.

"The solar power plants will be built within two-and-a-half years and 1 million panels will produce 370MW, enough to power 2.4 million people in areas without access to electricity" MCA Group said at the time of financial close.

The Ministry of Finance of Angola secured €647 million in financing for the development and construction of the portfolio. The transaction was majority-financed via a €567 million export credit facility by the Swedish Export Credit Corporation (SEK), with the Swedish Export Credit Agency (EKN) as guarantor.

A further €80 million was lent by the Development Bank of Southern Africa (DBSA). ING Bank acted as arranger on both tranches and as financial adviser. The loans extend over a long term – 18 years – and the estimated construction period is two years.

Advisers
- ING Bank
- Clifford Chance
- Norton Rose Fulbright

African transport

BeitBridge Border Post Modernisation Project

The $300 million BeitBridge Border Post Modernisation Project closed in November, concluding financing for the upgrade and rehabilitation of the Zimbabwean side of the border post, under a 17.5-year concession.

It is the busiest border post in southern Africa, connecting South Africa to Zimbabwe and providing a key access point for trade with countries further to the north.

Under the concession, La Frontiere is tasked with upgrading the ageing infrastructure, which for some time has caused significant waiting periods at the border, slowing trade and causing many haulage operators to use less-efficient alternative routes.

The concession also requires the delivery of social infrastructure to the adjacent town of Beitbridge, including a water treatment plant, housing and fire station.

RMB was financial adviser to the sponsor from 2018, helping structure a bankable project financing and bring in co-shareholders like the Pembani-Remgro Infrastructure Fund and the Pan African Infrastructure Development Fund.

The financing package includes a $130m commercial debt tranche from ABSA Bank, Nedbank, RMB and Standard Bank with political and commercial risk cover provided by the Export Credit Insurance Corporation of South Africa, alongside a $65m DFI tranche funded by Afreximbank and the Emerging Africa Infrastructure Fund and a US$22m loan from EAIF as well.

Daniel Zinman, RMB project lead for BeitBridge, says: "This project comes at a time when infrastructure development and PPPs are more critical than ever to stimulate economic growth, and further enhances RMB's reputation as the leading investment bank in the African concessions and PPP sector, through the provision of an end-to-end infrastructure finance solution which enables our client to deliver this landmark infrastructure development, despite a challenging jurisdiction and an unprecedented and uncertain global backdrop."

Judy Cobus, co-head RMB Infrastructure Sector Solutions, adds: "A truck moving through the border can currently take 2 days or more, with this project it will take a fraction of that time. It delivers infrastructure that makes a difference by not only stimulating sustainable economic growth and job creation but by also providing much-needed social infrastructure to the local community."

Advisers

- RMB
- EY
- Herbert Smith Freehills
- Bowman Gilfillan
- Mott MacDonald
- Aurecon
- AON
- Willis Towers Watson

African battery storage

Golomoti Solar PV and Battery Energy Storage Project

The award for African Battery Storage deal of the year has been won by JCM and InfraCo Africa for the 20MWac Golomoti project in Malawi.

Golomoti won for the storage component of this solar PV project which is billed as the first utility-scale grid-connected PV plant in sub-Saharan Africa to include a battery energy storage system (BESS).

JCM and InfraCo Africa were selected as preferred bidder for the Golomoti project in 2017 and accelerated development of the project through committing to an equity financing structure prior to construction. This significantly de-risked the project for lenders who were expected to provide financing after the project entered commercial operations.

Rather than engaging a single turnkey EPC contract, the project is being delivered through individual contracts with JCM managing contracts with equipment suppliers and works contractors. This structure allows for a much more localized delivery and provides flexibility to deliver the projects and was an ideal solution to Covid-19 restrictions.

Moreover, it reduced development timelines and costs, and introduced a high degree of flexibility in negotiating with equipment providers in a turbulent pricing and supply market. The operations will also be self-performed by the project.

The project incorporates a state-of-the-art 5MW/10MWh lithium-ion BESS which will enable the plant to provide reliable power and improve network stability, reducing reliance on hydro and diesel generation, while ensuring that grid stability is maintained.

This is of particular importance as Malawi currently has an islanded power network and the BESS will demonstrate the pathway for increasing the contribution of variable renewable energy on the network. Performance data from the BESS will inform similar systems elsewhere in the region.

InfraCo Africa chief executive Gilles Vaes said: "This key milestone has been made possible by the strong support the project has received from the Government of Malawi, regulators and the state utility, ESCOM. By generating additional power and pioneering energy storage, Golomoti Solar will ensure that homes and businesses in Malawi will have access to more reliable electricity to drive economic growth."

Advisers

- Innovate UK
- Norton Rose Fulbright
- Eversheds Sutherland
- Mott MacDonald
- RINA
- Zutari
- Power Engineers
- ERM

African digital infrastructure
Project Lightning

The transaction to have won the *IJGlobal* African Digital Infrastructure Award was Project Lightning – the financing of an acquisition of a stake in MetroFibre Networx (MFN), South Africa.

Having closed on 17 November 2020, this deal saw South African infra fund manager AIIM acquire a minority stake worth R980 million ($63.6m) in local open access fibre network operator MFN, as part of the company's R1.5 billion ($97.2m) equity funding round.

This deal stands out as despite material investment in recent years to the FTTH and FTTB sectors, there continues to be a significant deficit in last-mile fibre connectivity in second-tier towns across South Africa.

Fibre networks are increasingly important for fast and reliable home internet and to support the acceleration of learning-from-home and working-from-home, as well as the ongoing digital migration of transactional and enterprise environments.

MFN has an ambitious programme to address this shortfall, through a ZAR3 billion plan to connect an additional 300,000 homes across the country over the coming three years. It was in need of funding to execute the plan as the majority of existing shareholders were capped out from an investment perspective. In addition, it was essential that any new equity sourced, maintain or enhance required equity ownership for Historically Disadvantaged Groups (HDG).

MFN's high-growth stage of life provided funding challenges however, including the material near-term capital requirements, coupled with limited cashflows available for distribution in early years, thus limiting appetite for preference share funding from the more traditional lenders. Therefore, an innovative funding solution was required.

As a result, the rights issue was structured as an irrevocable undertaking for subscribers to provide funding when called upon by the MFN board, with the remaining shares held in trust and drawn down over a period of 2.5 years.

The structure provided full governance rights to shareholders for both the shares issued and those held in trust, but limits the cash drag for both MFN and investors by only drawing down capital as required, providing a material "war chest" for MFN to continue to rollout the network.

Advisers
- Bowmans
- Webber Wentzel
- Hardiman Telecoms
- PwC
- Camp Consult
- Marsh Insurance

African social infrastructure
Cote d'Ivoire Hospital & Medical Units Portfolio

The award for African Social Infrastructure Health deal of the year has been won by Agentis for its involvement in a Côte d'Ivoire hospital and medical units portfolio. The project won thanks to its positive impact on healthcare access in the country.

Following a long period of underinvestment, Cote d'Ivoire was facing significant infrastructure deficiencies in the health sector. Some 33% of the population was living more than 5km away from a healthcare facility and around 10% more than 15km away.

To alleviate this situation, the government devised a 2-year (2018-2020) €1.27 billion financing plan for the construction of regional hospitals and national healthcare facilities, as well as modernisation and re-equipment of existing ones.

Consisting of two hospitals, one located in Adzopé (105km north of Abidjan) and the other in Aboisso (120km east of Abidjan), the project initiated by the Côte d'Ivoire government with Moroccan company Agentis as EPC contractor, will have a total capacity of around 400 beds. It is expected to significantly improve the availability of healthcare services in each region using state-of-the-art equipment.

As an additional activity within the project's scope, five new medical units in five hospitals across the country will also receive funding. They include a radiotherapy centre in Abengourou, an emergency unit each in Daoukro and Séguéla, a traumatology centre in Toumodi, and a surgery and emergency unit in Bouna.

The project is part of the government's National Development Plan 2016-2020. It will also support the Republic's ongoing efforts to contain the Covid-19 pandemic. The two hospitals will employ around 600 local people and will foster the development of a micro-economy in the areas surrounding them. The project will facilitate intra-OIC trade of services and human capital between Côte d'Ivoire and Morocco, both Member Countries of OIC.

The project also received support from the Islamic Corporation for the Insurance of Investment and Export Credit (ICIEC). ICIEC's cover provided credit enhancement to Deutsche Bank which extended long-term financing to the project.

Advisers
- Ashurst

African export finance
SGR Financing

The winner of the *IJGlobal* Award for African Export Finance is the SRG Financing in Tanzania, a transaction for the standard gauge railway (SGR) Phases 1 and 2 that signed in early 2020.

This award is primarily to celebrate the largest syndicated transaction in Sub-Saharan Africa to date outside the oil and gas sector, but – more importantly – it has positively changed the accepted norms on how such deals are structured, how risks are managed effectively, and how to balance economic, social and environmental objectives.

Standard Chartered Bank acted as the sole global coordinator and structuring bank, MLA, bookrunner and facility agent to arrange a $1.6 billion financing package for the Government of United Republic of Tanzania, which was successfully signed on 13 February 2020

The ECA-led, long-term financing to fund the new SGR from Dar Es Salaam to Dodoma (Makutupora) helped attract investors from other liquidity pools, leading to the creation of a commercial bank tranche; and the development financial institution (DFI) tranche.

SCB implemented the re-insuring structure in which it identified EKN and EKF as the fronting ECA – and other ECAs: SERV (Switzerland), OeKB (Austria), SACE (Italy), CESCE (Spain), NEXI (Japan) reinsuring EKF.

The financing comprised a $992.9 million EKF covered term loan facility; a $270 million commercial term loan facility; a $200 million DFI facility; and a $178.2 EKN covered term loan facility. The EKF facility has a tenor of 14.5 years, as does the EKN facility. The DFI facility weighed in at 15 years, while the commercial facility was for 7 years.

The project brings enormous benefits to the people of Tanzania and its neighbours. Freight costs are to reduce by 40%, while every electric train takes 500 lorries off the roads, significantly cutting pollution and congestion.

The SGR is Tanzania's biggest infrastructure project and will provide essential, safe and reliable rail connectivity between capital Dodoma (Makutupora), Morogoro and Dar es Salaam. The lots 1 & 2 extend 550km, while subsequent lots will extend the SGR to 1,224kms, linking Tanzania with Rwanda, Uganda and the Democratic Republic of Congo.

Advisers
- Baker McKenzie
- Arup

African Refinancing Mining
Resolute

The award for African Mining Refinance deal of the year has been granted to Resolute Mining for the refi of the Mako gold mine in Senegal.

The project won thanks to the sponsor's involvement in a viable mining project with significant impact in Senegal and the region.

The Mako Gold Mine, located in eastern Senegal, West Africa, is a high quality, open pit mine with attractive scale and strong growth potential through near-mine exploration opportunities.

The first gold was poured at Mako in January 2018.

Mako is owned and operated by Resolute's Senegalese subsidiary, Petowal Mining Company SA. Resolute has a 90% interest in Petowal and the Government of Senegal holds the remaining 10%.

Mako is a conventional drill and blast, truck and shovel operation with mining services undertaken by an established contractor.

The carbon in each processing plant has 2.3Mtpa of capacity and comprises a crushing circuit, an 8.5MW SAG Mill and gold extraction circuit. The processing plant has achieved strong metallurgical recoveries – 95% in its first year of operation – and is expected to deliver average life of mine recoveries of 93.8%. Electricity is provided by a 14MW diesel-fuelled power station and water is extracted from the Gambia River.

Identified exploration targets have the potential to increase the mine life and exploration programmes are in progress focusing on pit extensions and satellite deposits within trucking distance of the mill.

Targets within the permit include the identification of potential ore shoots beneath the pit, extensions to the north east of the pit, and the Kerekonko area south of the Gambia River where multiple soil anomalies have been identified.

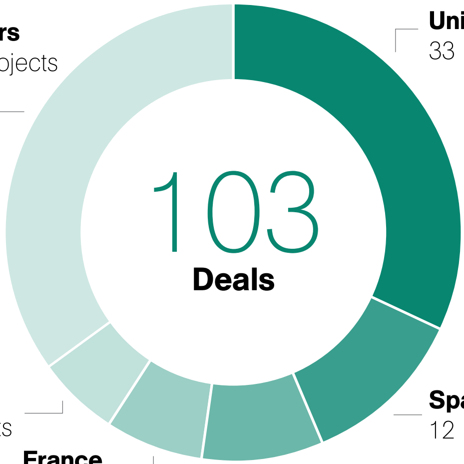
On 25 March 2020, Resolute refinanced its existing debt facilities with an increased $300 million facility. This new facility comprises a 3-year $150 million revolving credit facility and a 4-year $150 million term loan.

Two new banks joined the facility – Societe Generale and ING – in addition to the existing/returning lenders: BNP Paribas, Nedbank, Investec and Citibank.

Advisers
- Orimco
- Allens
- Wright Legal

Europe

Tenders launched



Projects with recent tender updates

1	Sines 4.0 Data Centre
2	South Kavala Gas Storage Facility PPP
3	Acquisition of 30% in ATC Europe
4	Crete Courthouses PPP
5	Heathrow Southern Rail Link PPP
6	Acquisition of Falbygdens Energi 2021
7	VindO Wind Energy Island (3GW)
8	Attica-Crete Interconnector (1GW)

Closed deals by country

	Transaction Country	Value ($m)	Count
1	**Italy**	13,023	12
2	**Spain**	9,341	25
3	**Germany**	8,083	13
4	**United Kingdom**	7,991	41
5	**Germany, Netherlands**	2,194	1
6	**Poland**	1,990	7
7	**Romania**	1,379	3
8	**France**	1,299	7
9	**Netherlands**	1,154	9
10	**Ireland**	1,079	4
11	**Czech Republic**	1,078	2
12	**Denmark, United Kingdom**	983	1
13	**Cyprus, Malta**	940	1
14	**Finland**	837	8
15	**Sweden**	682	7
16	**Belgium**	443	1
17	**Norway**	302	4
18	**Greece**	143	2
19	**Russia**	100	1
20	**Turkey**	77	2
21	**Latvia**	61	1
22	**Armenia**	53	1
23	**Ukraine**	30	1

Closed deal values by sector

Mining
Transaction count **1**
$100 ($m)

Oil & Gas
Transaction count **5**
$4,393 ($m)

Power
Transaction count **15**
$22,908 ($m)

Renewables
Transaction count **93**
$10,003 ($m)

Social & Defence
Transaction count **14**
$809 ($m)

Telecoms
Transaction count **19**
$10,871 ($m)

Transport
Transaction count **10**
$2,564 ($m)

Water
Transaction count **2**
$580 ($m)

Transactions that reached financial close

- 4 Mar — Hornsea I Offshore Transmission Link (120KM)
- 5 Mar — Enel Sustainability-Linked Facility 2021
- 10 Mar — Polimery Police Petrochemical Complex
- 15 Mar — Telefonica German Fiber Optic Network
- 30 Mar — Acquisition of T-Solar 2021
- 31 Mar — Vantage Towers Bond Facility 2021
- 29 Apr — D4 Haje–Mirotice Section (32KM) Reconstruction PPP
- 24 May — HICL Infrastructure ESG-Linked Refinancing

Mutkalampi Wind Farm
Finland

Mutkalampi Wind Farm has reached FC – 2 years after the project was developed and quickly snapped up for PPAs by the likes of Google. *IJGlobal* assistant editor **Anna Cole-Bailey** takes a look.

Neoen in April (2021) reached financial close on the €478 million ($577m) Mutkalampi Wind Farm – Finland's largest onshore wind project, with commissioning set for late 2022.

The 404MW wind farm is currently under construction and located on the border between the regions of Central and North Ostrobothnia, western Finland, and has been in the pipeline since 2019.

Vestas has been signed on to the project as sole turbine provider and EPC contractor. The wind farm will comprise 69x turbines:
- 63x turbines with capacity of 6MW
- 6x turbines with a capacity of 4.3MW

Once operational, the wind farm is expected to account for 2% of Finland's annual electricity production.

Energy produced at the farm is likely to be staggered with a first leg scheduled to open at the end of 2022 and the second in the third quarter of 2023.

Conception

French renewable energy giant Neoen in 2019 enlisted the services of local legal firm Borenius to acquire 80% of a 250MW wind farm from Prokon Finland. Prokon's Finnish branch had been planning the wind farm since 2016 when it applied for land use permits.

Its deal with Neoen included the formation of an 80/20 JV between the 2 developers – the duo's second collaboration after jointly producing the 81MW Finnish Hedet Wind Farm which came online last year (2020).

The shareholding on the Mutkalampi wind farm replicates this split:
- Neoen – 80%
- Prokon Finland – 20%

In the months ahead, the project sparked interest from Google from an offtake perspective. The tech giant had already bought all the power generation from Hedet, and in September 2019 entered into a 10-year PPA with Neoen to buy around one-third of Mutkalampi's output.

Goggle's contract to take 130MW of the wind farm's output starts in 2022 and the energy will be used to power Google's Finnish data centres.

Neoen chief executive and chairman, Xavier Barbaro, said in 2019: "Our energy is attractive to an increasingly large number and wide range of buyers, in particular large businesses belonging to the RE100 such as Google."

Xavier Barbaro

"Our energy is attractive to an increasingly large number and wide range of buyers, in particular large businesses belonging to the RE100 such as Google."

Vestas has been signed on to the project as sole turbine provider and EPC contractor

A year later, in December 2020, Neoen confirmed that a further roughly third – 126MW – of the wind farm's output will be sold under 10-year virtual PPAs with a consortium of Dutch offtakers:

- Heineken
- Nobian (previously Nouryon)
- Philips
- Signify

At this point Neoen extended the total capacity of the wind project to 404MW – securing its status as the largest onshore wind project in the country.

The electricity contracted to the consortium will be plugged in to the Finnish grid, with a guarantee of origin certificate for the consortium partners to certify that the power has been renewably produced.

According to the consortium, while the companies have signed PPAs for renewable electricity in the past, this is the first time a virtual PPA has been formed to drive "incremental" renewable electricity usage in Europe.

The remaining portion of the offtake is being sold on a merchant basis, Neoen has since confirmed.

Norton Rose Fulbright EMEA head of energy, Charles Whitney, called the signing of cross-border virtual PPAs "innovative".

"It is a trend that we expect to see more of in the European corporate PPA market, as corporates continue to make strides towards decarbonisation as part of the wider energy transition," he added.

Financing

Neoen confirmed in April (2021) that it had secured financing on the wind farm.
The lenders are:

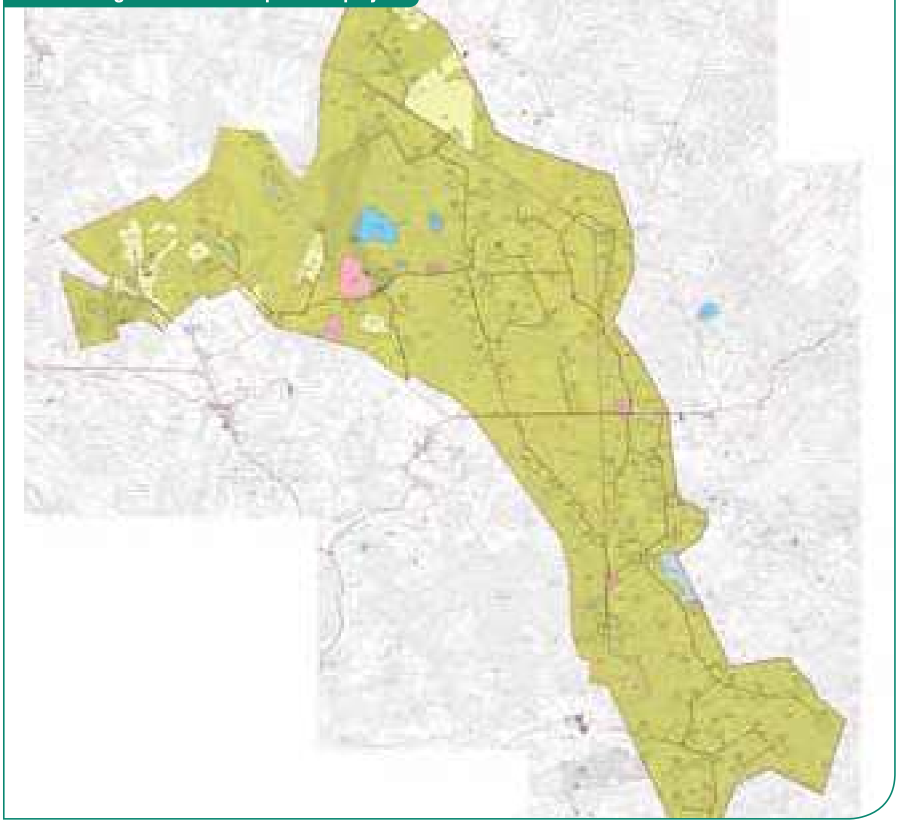
- MEAG – sole senior lender – €290 million
- SEB – providing the VAT facility – €38 million

MEAG is a Munich Re company acting on behalf of primary insurance companies of ERGO, institutional investors via MEAG and several investment funds managed by MEAG, including MEAG Infrastructure Debt Fund II.

As reported by *IJGlobal* at the time of financial close, Neoen would not disclose details of the tenor of the debt arranged, but a source within the organisation said it was longer than the PPA horizon – which is 10 years – as "lenders were comfortable with assuming merchant exposure in that region".

White & Case partner Carina Radford acted for Neoen on the deal. She said: "The deal moved swiftly and efficiently with all parties prepared to align commercially in short order and financiers showed their in-depth knowledge of delivering onshore wind farm financings."

Prokon's original land use map for the project



Carina Radford

"Notwithstanding the impressive size of the deal and the dynamic commercial arrangements underpinning the financing, the process to financial close was pretty smooth."

She added: "Notwithstanding the impressive size of the deal and the dynamic commercial arrangements underpinning the financing, the process to financial close was pretty smooth."

Aside from the financing costs, total investment in the project now stands at an estimated €478 million.

Holger Kerzel, member of the board of management at MEAG, said: "This project fulfills our high expectations for sustainable and successful investments. Private sector financing by MEAG is an important contribution for the maintenance and modernisation of infrastructure as well as for the expansion of renewables."

Advisers

Advisers to Neoen:

- Voltiq – financial adviser
- White & Case – legal
- Borenius – local legal
- Natural Power – technical
- PwC – tax and model reviewer

Advisers to lenders:

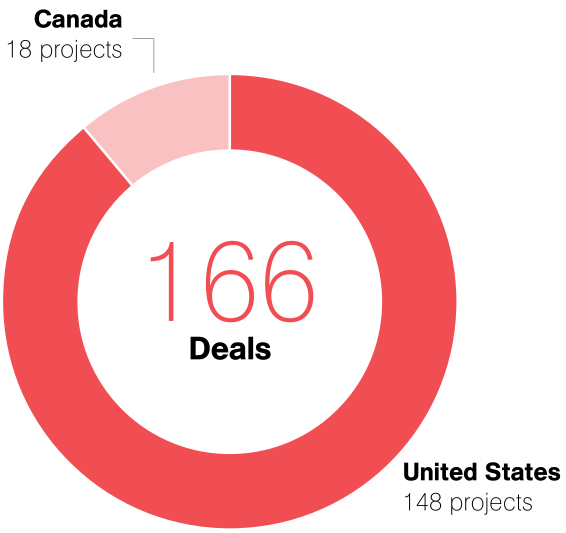
- Norton Rose Fulbright – legal
- Hartford Steam Boiler – technical adviser to MEAG
- PwC – tax and model reviewer to MEAG

Adviser to Dutch consortium:

- Schneider Electric ■

North America

Tenders launched



Projects with recent tender updates

1	Acquisition of a Stake in First Transit and First Student
2	Contrecoeur New Container Terminal PPP
3	Vineyard Offshore Wind Farm (800MW)
4	AirTrain LaGuardia (3,22KM)
5	Eglinton Crosstown LRT West Extension PPP
6	Acquisition of Inter Pipeline (IPL)
7	Lake Erie Connector (117KM)
8	Scarborough Subway Extension PPP

Closed deal values by sector

Oil & Gas
Transaction count **10**
$4,897 ($m)

Power
Transaction count **25**
$17,364 ($m)

Renewables
Transaction count **37**
$4,504 ($m)

Oil & Gas & Power
Transaction count **1**
$2,180 ($m)

Social & Defence
Transaction count **3**
$1,220 ($m)

Transport
Transaction count **4**
$310 ($m)

Water
Transaction count **2**
$883 ($m)

Closed deals by country

	Transaction Country	Value ($m)	Count
1	**United States**	27,155	75
2	**Bermuda**	3,931	2
3	**Canada**	236	4
4	**Canada, United States**	37	1

Transactions that reached financial close

- 1 Mar – Traverse Wind Farm (999MW)
- 4 Mar – Bull Run Water Filtration Facility WIFIA Loan
- 11 Mar – AES Distributed Energy US Solar Portfolio (216MW)
- 11 Mar – One Gas Bond Facility 2021
- 30 Mar – New York Thruway Service Stations PPP
- 16 Apr – Acquisition of Hygo Energy Transitions
- 26 Apr – Lendlease Privatised Military Portfolio Renovation
- 27 Apr – Acquisition of Equinor's Bakken Field Assets

New York **Thruway Service Stations** P3 US

Applegreen reached FC in March on the on the project to develop 27 New York Service Areas on the New York State Thruway. *IJGlobal* editor **Ila Patel** takes a look at the project's journey.

Irish company Applegreen has been active in the US market since 2014, slowly expanding its foothold in the forecourt retail space through organic and acquisition-driven growth.

The New York Service Areas project is the second P3 project it has been involved in, the first being the Connecticut Highway Service Plazas P3 in which it acquired a 40% stake in 2019.

Applegreen appears to have a strategy – join an existing consortium already involved in a P3 and then take a majority stake.

The Irish company joined a consortium alongside IST3 Investment Foundation and TD Greystone Asset Management to acquire JLIF Holdings (Project Service) US, the owner of the Connecticut Highway Service Plazas P3, in August 2019.

It acquired its 40% stake for $38 million with the option to increase its share to 60% through a call option agreement with TD Greystone, exercisable 5 years after completion of the transaction and giving Applegreen majority control.

IST3 Investment Foundation holds 40% and TD Greystone Asset Management has 20% in the consortium.

JLIF Holdings (Project Service) was acquired by UK-based fund managers Equitix and Dalmore as part of its acquisition of John Laing Infrastructure Fund (JLIF) in September 2018.

JLIF had owned the asset since May 2016, paying $105 million in equity value to buy the project company.

Equitix and Dalmore Capital acquired JLIF in its entirety and the fund was de-listed in October 2018.

Similarly, Applegreen joined the Empire State Thruway Partners (ESTP) consortium in September 2020 which until then had included John Laing.

John Laing exited ESTP and Applegreen became sole investor and consortium lead, but retained the option to add another party to the team post-financial close.

Adding another company is subject to approval from the New York State Thruway Authority.

Procurement

The New York State Thruway Authority issued an RFP for a developer to DBFOM 27 service areas along the 570-mile system in October 2018.

Prior to that, the authority issued a request for expressions of interest in April 2018, inviting those in the hospitality, tourism, travel, freight transport and public sectors to provide input on operational, logistical and environmental components which could be used in the development of the RFP.

Governor Andrew Cuomo also backed the project and announced it in his 2018 State of the State address.

In November of the same year (2018), a pre-proposal conference was held drawing a great deal of interest from the industry, including from Applegreen.

In June 2019, 5 teams submitted bids:

- ESTP led by John Laing
- Oaktree Capital Management
- Macquarie Capital
- Liberty Infrastructure Partners
- Star America, Nexus and Drexel Hamilton

Development plans for the service area include:

- making the locations leadership in energy and environmental design (LEED) certified
- installing solar arrays and irrigation-free

The University of Idaho reached financial close on its steam plant and utility system in December 2020

landscaping

- increasing truck parking and commercial services
- modernising the entire service area to better serve motorists who travel the thruway

ESTP was selected as the winning bidder in September 2019.

Applegreen's financial plan for the project was approved in February 2021 with financial close agreed for 30 March.

The New York Office of the State Comptroller and the New York State attorney general have also given final approval to the project.

Financing

The deal was financed using $269.46 million of PABs rated BBB+ by Fitch Ratings. The rating outlook is stable. The financing package comprised:

- $6.88 million – 2.5% Series 2021 Term Bonds due 31 October 2021, yield 2.55%
- $8.365 million – 4% Series 2021 Term Bonds due 31 October 2021, yield 2.53%
- $40.49 million – 4% Series 2021 Term Bonds due 31 October 2021, yield 2.80%
- $64.265 million – 4% Series 2021 Term Bonds due 31 October 2021, yield 2.95%
- $149.455 million – 4% Series 2021 Term Bonds due 31 October 2021, yield 3%

The issuer is the New York Transportation Development Corporation with the underwriters comprising:

- Citigroup Global Markets
- Loop Capital Markets
- National Bank of Canada Financial
- Ramirez & Co
- Siebert Williams Shank & Co

Bank of New York Mellon acted as collateral agent and trustee.

The bonds are senior, fixed-rate and fully amortized over the term. They have a six-month cash-funded debt service reserve account (DSRA) with an equity lock up test of 1.2x.

The debt service profile escalates from $11 million and reaches $29 million by the end of the term, placing additional dependence on revenue growth over time.

The total construction price is $300.7 million with a security package consisting of:

- full parent guarantee from AECOM Technical Services
- 100% payment and performance (P&P) bonds
- 5% letter of credit and delay liquidated damages (LDs) for each site

ESTP will provide $40.3 million in equity. The contract with Empire State is for 33 years, with 2 phases of construction. Phase 1 includes 16 service areas with staged reconstruction expected to begin in 2021. Phase 2 includes 11 service areas with renovations expected to begin in January 2023.

To ensure continuity of services to Thruway customers during construction, no 2 consecutive service areas in the same direction of travel will be closed for renovations at the same time.

Conclusion

Service Area P3s are not a burgeoning sector in the US, so it cannot be said that this is a sub-sector that infrastructure practitioners should keep an eye out for. However, there are a few positive examples.

Connecticut was one of the first rest stop P3s, and it was deemed to be relatively low-key and low-risk. Another successful P3 was Maryland's 35-year lease with Areas USA to DBFOM 2 travel plazas on the I-95, signed in 2012. Other states like Georgia expressed an interest in procuring a similar type of deal but little came of that.

Of course for New York, this project makes absolute sense – NYSTA needed to upgrade 27 plazas and a private partner could do that while also consolidating all the assets to one single provider.

For now, there are currently no other planned service area P3s announced.

Advisers:

ESTP

- Citi – financial
- National Bank of Canada – financial
- Winston & Strawn – legal

Underwriters

- Altus Group – LTA
- Emerton – revenue consultant
- Mayer Brown – counsel

Bond

- Cozen O'Conner
- Hardwick Law

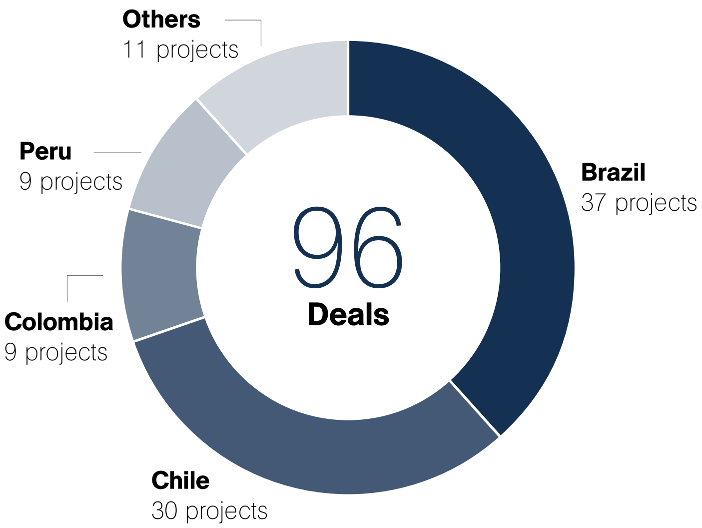
Disclosure counsel

- Drohan Lee

Another successful P3 was Maryland's 35-year lease with Areas USA to DBFOM 2 travel plazas on the I-95

Latin America

Tenders launched



Projects with recent tender updates

1	Ituango Hydropower Plant (2400MW)
2	Kimal - Lo Aguirre HVDC Transmission Line (1500KM)
3	Route 5 Talca - Chillan Highway Expansion (193KM) PPP
4	Privatisation of Eletrobras
5	Amapa's Water and Sewage Services Portfolio PPP
6	Kimal - Lo Aguirre HVDC Transmission Line (1500KM)
7	Acquisition of 96.04% in Compania General de Electricidad (CGE)
8	Sierra Gorda Solar PV Plant (400MW)

Closed deal values by sector

Oil & Gas
Transaction count **2**
$278 ($m)

Power
Transaction count **8**
$381 ($m)

Renewables
Transaction count **22**
$2,860 ($m)

Social & Defence
Transaction count **2**
$84 ($m)

Telecoms
Transaction count **3**
$1,625 ($m)

Transport
Transaction count **5**
$369 ($m)

Water
Transaction count **2**
$322 ($m)

Closed deals by country

	Transaction Country	Value ($m)	Count
1	**Brazil**	3,815	22
2	**Mexico**	779	3
3	**Chile**	643	7
4	**Colombia**	271	5
5	**Bolivia, Brazil**	150	1
6	**El Salvador**	128	1
7	**Paraguay**	94	1
8	**Peru**	39	3
9	**Uruguay**	0	1

Transactions that reached financial close

- 11 Mar — BW Tatiana FSRU
- 12 Mar — AT&T Comunicaciones Digitales Refinancing 2021
- 22 Mar — Acquisition of 45% in Igua Saneamento
- 31 Mar — FS Bioenergy Green Bond 2021
- 12 Apr — Equatorial Energia First Bond Facility
- 14 Apr — Ascenty Brazil Data Center Portfolio & Fiber-Optic Network Expansion
- 30 Apr — Port Acu Solar PV Plant (1.1GW)
- 19 May — Acquisition of Voltalia's Brazilian Wind Portfolio (373.7MW)

Gás Natural Açu, Brazil

Port of Açu, located in the municipality of São João da Barra in the North of Rio de Janeiro state, is on its way to becoming a grandiose industrial complex serving the oil & gas industry. **Juliana Ennes** reports.

The Port of Açu project was originally envisioned by Eike Batista, a Brazilian megalomaniac entrepreneur who in just a few years went from being the seventh richest man in the world to being arrested under corruption and market manipulation allegations.

The complex houses Gás Natural Açu (GNA), a joint venture currently building Latin America's largest gas-fired power park.

GNA has 4 power plants planned for Port of Açu.

- GNA I is already built and received its first supply of gas in December 2020
- GNA II closed financing at the start of the year (2021) and will start construction in H2 2021

The JV will now start to look at the 2 additional plants – GNA III and GNA IV – to increase the installed capacity by 3.5GW, taking the complex to a total of 6.5GW.

The financing

In January (2021), the JV reached financial close on the second LNG-to-power plant, the 1,673MW GNA II.

Brazilian development bank BNDES was the sole lender, providing R3.9 billion ($737 million) to fund the construction, which is slated to commence in H2 2021.

Stakeholders are said to be seeking additional debt to increase the project's leverage. It is mostly likely going to be financed through the issuance of infrastructure debentures – a type of bond that carries tax incentives for individual investors.

Santander acted as financial adviser on GNA II.

The asset followed in the footsteps of the first plant built in the complex, which reached FC in March 2019 and mostly raised debt with DFIs.

However, the second unit had a simpler financial structure as all the cash was provided by BNDES, eliminating the need to mitigate exchange rate risk.

The development bank split the financing into 4 tranches, with varying costs and tenors. The R3.92 billion was divided into:

- R1.833 billion 20-year tenor at a cost of TLP + 3% a year
- R313 million 6.5 year tenor at a cost of TLP +4% a year
- R854 million 20-year tenor at a cost of TLP +4% a year
- R930 million 14.6-year tenor at a cost of TLP +6% a year

TLP is a long-term pre-fixed interest rate established by the Central Bank.

For GNA I, the debt providers were BNDES and IFC.

KfW IPEX-Bank – with support from German ECA Euler Hermes Aktiengesellschaft – guaranteed BNDES' portion of the loan.

Traditionally, ECAs are not allowed to cover development banks loans. In this case, KfW backed the financing from BNDES, which in turn was supported by Euler Hermes.

Euler Hermes covered 95% of the risk, while KfW acted as an intermediary, covering the remaining 5% and structuring the guarantee scheme.

If all 4 power plants are built, total investment is expected at around $5 billion. This requires not only raising a huge amount of debt but also puts equity holders under pressure to invest large sums.

With that in mind, on 1 February (2021) Prumo, BP and Siemens concluded the sale of a 33% stake in GNA I and GNA II to China's State Power Investment Company (SPIC).

The transaction included a clause allowing SPIC to participate in future projects, such as the planned GNA III and GNA IV.

Advisers on the M&A transaction were:

- BofA Securities – financial to GNA and shareholders
- Lakeshore Partners – financial to GNA and shareholders
- Itaú BBA – financial to SPIC
- Mattos Filho – legal to the sponsors
- Trench Rossi Watanabe – legal to SPIC

All parties involved

Eike Batista's company LLX started the construction of Port of Açu in 2007, with the original goal of exporting iron ore produced by another of its subsidiaries, MMX.

Controlled by the American investment fund EIG Global Energy Partners in partnership with Mubadala Investment Company, Prumo took over the port in 2013

The Port of Açu project was originally envisioned by Eike Batista, a Brazilian megalomaniac entrepreneur

and launched it the next year focusing on port and industrial operations, and power generation.

Today, the port accommodates:

- iron ore terminal (a JV between Anglo American and Prumo)
- oil terminal (JV between Prumo and Oiltanking)
- marine fuel terminal (JV between Prumo and BP)
- multicargo terminal (JV between Prumo and Port of Antwerp)
- terminal for integrated oil & gas services (JV between Prumo and GranIHC)
- Edison Chouest terminal (offshore support base)
- NOV terminal (manufacture flexible pipes)
- Technip terminal (flexible pipes factory)
- InterMoor terminal (anchoring services for rigs and FPSOs)
- Wärtsilä plant (production and assembly for azimuth generators)

Port of Açu is also currently considering entering the newest wave of green hydrogen production.


LLX started the construction of Port of Açu in 2007

Prumo began planning the LNG-to-power complex due to the diversity of businesses in the industrial complex which presented an opportunity for power generation.

The complex could also easily receive LNG cargo and have heavy industries consume large quantities of energy. It then teamed up with GNA, which was originally a joint venture between BP and Siemens, but now includes SPIC as shareholder.

The JV built an LNG terminal including a fully dedicated floating storage and regasification unit (FSRU), with a total capacity of 21 million of cubic meters daily, in addition to pipelines connecting to the gigantic oil & gas fields in Brazil's pre-salt.

GNA III and IV will use both imported LNG and gas produced in the pre-salt. GNA I and II will work exclusively on LNG.

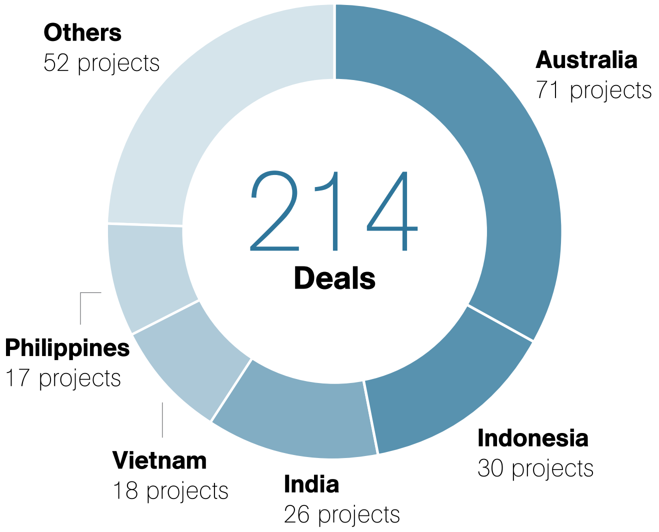
GNA has a long-term fuel supply agreement with BP. All turbines are supplied by Siemens Energy, including 3 gas turbines and 1 steam generator for each of the power plants.

The project also includes the construction of transmission lines to connect to the national grid. GNA I acquired a 23-year PPA from Bolognesi Group with 36 distribution companies in Brazil, awarded previously in a government-held power auction.

GNA II was one of the winners in the Aneel A-6 auction held in 2017, which offered 35-year PPAs for the power plant, starting in 2023. ■

Asia Pacific

Tenders launched



Closed deal values by sector

Sector	Transaction count	Value ($m)
Mining	6	$2,579
Oil & Gas	6	$3,935
Power	15	$7,741
Renewables	27	$4,884
Social & Defence	3	$1,636
Telecoms	2	$1,839
Transport	7	$1,863
Water	2	$496

Projects with recent tender updates

1	Makati Underground Railway System (10.1KM) PPP
2	Millennium Khanh Hoa Province LNG Terminal
3	Iron Bridge Iron Ore Mine
4	Ca Na Gas-Fired Power Plant Phase 1 (1.5GW)
5	Acquisition of 65.5% in Tilt Renewables
6	Australia-ASEAN Power Link (AAPL) Solar Plant (10GW)
7	Bangkok-Rayong High Speed Railway (220KM) PPP
8	PNG LNG Phase II

Closed deals by country

	Transaction Country	Value ($m)	Count
1	**Australia**	8,286	19
2	**India**	6,025	14
3	**Vietnam**	2,200	9
4	**Philippines**	1,738	5
5	**Pakistan**	1,463	2
6	**Japan**	1,288	6
7	**Uzbekistan**	1,150	3
8	**Indonesia**	1,064	3
9	**New Zealand**	438	2
10	**Kazakhstan**	415	1
11	**Timor-Leste (East Timor), Australia**	390	1
12	**Singapore**	374	1
13	**China - Mainland**	141	1

Transactions that reached financial close

- **5 Mar** – Adani Green Energy Rajastjan Solar PV and Onshore Wind Portfolio (1.69GW) 2021
- **11 Mar** – Footscray Hospital PPP
- **15 Mar** – Acquisition of 26.25% in Curtis Island LNG's Mixed-Use Infrastructure
- **25 Mar** – FMG Resources Bond Facility 2021
- **25 Mar** – Halmahera Nickel Laterite Ore Processing Plant
- **31 Mar** – Privatisation of 61.65% in Numaligarh Oil Refinery
- **13 Apr** – Shirin CCGT Power Plant (1.5GW) IPP
- **27 Apr** – NBN Co Refinancing 2021

Hybrid portfolio financing, Rajasthan

Adani Green Energy this year sealed a $1.35 billion senior debt facility to finance India's largest hybrid cluster development. *IJGlobal* APAC editor **David Doré** explores India's first large-scale cross-collateralisation project financing structure in the hybrid space, and examines the market's single largest diversified commercial bank project finance deal since the 1990s.

Adani Green Energy's (AGEL) earnings call with debt investors on 10th May (2021) highlighted one of the company's most consequential transactions to close in FY2021.

AGEL sealed a $1.35 billion senior debt facility with participation from 12 international banks to finance India's largest hybrid cluster development.

The facility will initially finance the 1.69GW hybrid portfolio of solar and wind energy projects under construction by 4 SPVs in India's north-western state of Rajasthan.

It is one of the largest revolving project finance deals to date in the Asian renewables sector.

The facility is also India's first Asia Pacific Loan Market Association-certified (APLMA) green hybrid project loan, although Soft Bank subsidiary SB Energy's 900MWdc solar farm in Phalodi-Pokhran Solar Park, Rajasthan, also claims to that distinction.

Financing

The $1.35 billion senior debt revolving project finance facility is funding India's largest hybrid cluster development, which is under construction strategically in the heart of the Thar Desert near Jaisalmer.

The 12 commercial banks and their roles are:

- Standard Chartered – lead underwriter, MLA, bookrunner, environmental due diligence adviser, co-documentation bank and co-green loan coordinator
- MUFG – bookrunner, technical bank and co-green loan coordinator
- BNP Paribas – bookrunner and co-documentation
- DBS – bookrunner and accounts bank
- Mizuho – bookrunner and financial modelling bank
- Barclays – bookrunner
- Deutsche – bookrunner
- ING – bookrunner
- Intesa Sanpaolo – bookrunner
- Rabobank – bookrunner
- Siemens Bank – bookrunner
- SMBC – bookrunner

The transaction involved several innovations in India's project-finance market.

"This is the first diversified hybrid project financing," says a project insider.

"We've seen cross-collateralisation structures in the renewables space, going as far back as 2012," the source added, "and some on the bond side with cross-collateralisation."

"This is India's first extremely large-scale cross-collateralisation project financing structure in renewables and in the hybrid space in particular."

The closest structuring model comparable is a restricted group (RG). Although not common in India's US dollar bond market, AGEL and ReNew are among half a dozen or more sponsors with RGs in the bond market.

In India's finance market, cross-collateralisation often pertains to cashflow capabilities of the underlying projects and not physical security.

Since the Securities and Exchange Board of India (Sebi) classifies AGEL's revolving project finance facility as an external commercial borrowing (ECB), the sponsor can't cross-collateralise using physical assets.

In a bond RG, "each SPV guarantees the note obligations of the other 2 SPVs, although the notes constitute each issuer's obligations only on a several basis," Fitch explained in October 2020, when rating AGEL Restricted Group 2's $362.5 million notes due 2039.

"It is sponsor-supported but the take-out is most similar to a bond refinancing take-out in particular," noted the project insider.

"It is the first time in many ways this quasi bond take-out structure with limited recourse has been structured in. The recourse is effectively for completion. However, the take-out has not been underwritten through the bond market, except an assurance of taking the projects to the bond market."


Vneet Jaain

"The banks that have committed to this strategic transaction are our key partners in ensuring seamless access to global capital for our underlying renewable asset portfolio."

The RG-like project finance structure places a premium on the banks getting comfortable with the quality of the assets, quality of the project cashflows, and the sponsor's – in this case Adani's – record of mitigating completion risk.

This project finance RG model can be replicated across infrastructure sectors, including roads and smaller project financings.

"It's India's first project finance RG," the project insider points out. "It boils down to the sponsor's capacity to deliver the cluster of projects."

From an outsider's perspective, it may be surprising that no Indian lenders participated in the transaction. However, this was an international borrowing programme from the very beginning, a source shares.

"The banks that have committed to this strategic transaction are our key partners in ensuring seamless access to global capital for our underlying renewable asset portfolio," AGEL chief executive Vneet Jaain said in March (2021). "The facility will also ensure capital recycling needs of the banks and make the same capital available for future projects of AGEL."

A market insider insists this was the single largest diversified commercial bank project finance transaction in India since the 1990s.

"I've not seen a larger portfolio of international commercial banks come together. That's a massive achievement."

A project insider confirmed that the transaction reached financial close in FY21, after one of the 4 project companies had its first drawdown. "Different entities need money at different points in time," they said. "At least one of those entities has borrowed under the consolidated structure."

India's largest hybrid cluster development

The financing transaction was mainly achieved during the outbreak of Covid-19. Activities included not only limited site visits, technical and legal due diligence, and land review but also a review of Adani's portfolio.

Adani's 50/50 JV with French energy and power developer Total has 2.353GW of operational solar. Adani's own operational assets include 620MW solar and 497MW wind including 150MW wind assets under acquisition from Inox.

Adani also has 2.87GW under execution, split among:

- hybrid – 1.69GW
- wind – 1.13GW
- solar – 50MW

A further 8.9GW are near construction as follows:

- solar – 8GW
- hybrid – 600MW
- wind – 300MW

That's a combined 15.24GW across Adani's renewables portfolio, for anyone counting.

Bottom line is that Adani has experience delivering projects.

The 1.69GW hybrid cluster development near Jaisalmer spreads across more than 10,000 acres of land.

Bankers were attracted to the metrics of India's largest hybrid cluster:

- high capacity utilisation factor of 46%
- 100% contracted
- 25-year PPAs

Adani detailed 3 stages of the cluster development. AGEL fully de-risked stage 1 – site origination – well in advance. "Perfect location for hybrid," said the company, with these characteristics:

- solar irradiation – 2,000 kWh/sqm – top 5 in India
- wind speed – 7 meters/second
- ample availability of non-agricultural barren land

The cluster also has well planned evacuation. It is connected to central grid distributing power across India through high capacity transmission lines including 765kV.

Adani mostly de-risked stage 2 – site development. It has completed 71% of the total 10,294 acres of land acquisition while keeping an eye on stakeholder management and construction approvals.

Stage 3 – execution in progress – involves detailed engineering, supply chain management, site execution and O&M readiness, including integration to Adani's Energy Network Operations Centre.

The hybrid cluster will power more than 1.3 million households and annually avoid 5.8 million tons of CO_2 emissions.

Advisers

Advisers to the sponsor were:

- Latham & Watkins – legal international
- Luthra & Luthra – legal local

Lenders' advisers comprised:

- Linklaters – legal international
- Cyril Amarchand Mangaldas – legal local
- Tractebel Engineering – technical
- UL – energy yield assessment consultant
- ERM – environmental & social
- Arcadis – environmental and social due diligence
- Deloitte – model audit
- Marsh – insurance

KPMG was the green loan's independent assurance provider.

Variability in renewable energy generation is a concern among power regulators, developers, bankers and advisers. As the share of renewable energy expands in the energy mix, the problem becomes more pronounced.

Hybrid wind and solar power plants help reduce variability in power generation. They also mitigate the intermittency challenge by having a higher capacity utilisation, as solar generation is higher during the day and wind generation can be higher at night.

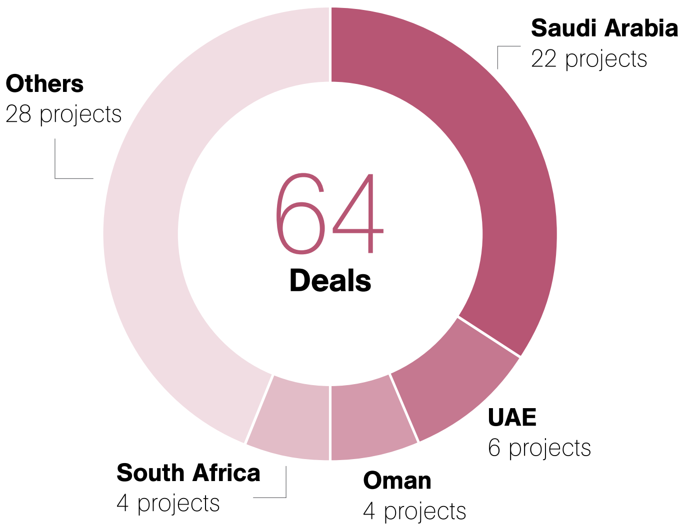
While energy storage may be the missing asset to optimise this power solution, hybrid power plants are likely to gain market share. ■

AGEL in April (2021) described the cluster as follows:

	Project 1	Project 2	Project 3	Total
PPA capacity (MWac)	390	600	700	**1,690**
Solar (MWac)	360	600	600	**1,560**
Wind (Mwac)	101	151	510	**762**
Counterparty	Seci	Seci	AEML	
Counterparty type	Sovereign	Sovereign	Sovereign equivalent rated	
Solar module maker	Longi	Longi and Jinko	Jinko	
Wind turbine generator maker	Suzlon	Suzlon	Siemens Gamesa and Suzlon	

Middle East & Africa

Tenders launched



Projects with recent tender updates

1	Abydos Solar PV Plant (500MW)
2	Bahrain Metro Phase 1 (109KM)
3	Sudair Solar PV Plant (1.5GW) IPP
4	Red Sea Tourism Megaproject Renewable Energy & Water Infrastructure PPP
5	Acquisition of 49% in Aramco Oil Pipelines Company
6	IGCC Jazan Power Plant (3800MW)
7	Mphanda Nkuwa Hydro Power Plant (1500MW) IPP
8	Zayed City Schools PPP

Closed deals by country

	Transaction Country	Value ($m)	Count
1	**Mozambique**	22,578	1
2	**Saudi Arabia**	21,534	7
3	**Israel**	2,500	1
4	**United Arab Emirates**	2,420	3
5	**Angola**	530	1
6	**Côte d'Ivoire**	468	1
7	**Egypt**	284	2
8	**Ghana**	273	3
9	**Uganda**	271	1
10	**Senegal**	250	1
11	**Morocco**	165	2
12	**Tanzania**	144	1
13	**South Africa**	75	1
14	**Benin**	37	1
15	**Madagascar**	15	1
16	**Rwanda**	13	1
17	**Nigeria**	5	2
18	**Malawi**	2	1

Closed deal values by sector

Sector	Transaction count	Value ($m)
Oil & Gas	2	$25,078
Power	5	$2,396
Renewables	7	$1,218
Water & Renewables	1	$1,333
Telecoms	4	$325
Transport	3	$805
Water	3	$1,030
Social & Defence	5	$4,214

Transactions that reached financial close

Date	Transaction
1 Mar	Area 1 Mozambique LNG
10 Mar	Public Investment Fund Revolving Credit Facility 2021
31 Mar	Jeddah and Makkah School Bundle PPP
12 Apr	Rabigh Solar PV Plant (300MW) IPP
28 Apr	Red Sea Tourism Megaproject Green Financing
5 May	Acquisition of a 20% Stake In Mirfa
17 May	ACWA Power Sukuk Additional Facility 2021
28 May	Malagarasi Hydro Power Plant (50MW)

Yanbu-4 IWP Saudi Arabia

An Engie-led consortium put the 450,000 cubic m3pd Yanbu-4 IWP project to FC in March – contributing to the strong flow of water project financing in Saudi Arabia. *IJGlobal* reporter **James Hebert** reports.

Saudi Arabia's water drive continues with the 450,000 cubic metres per day (m3pd) Yanbu-4 independent water producer (IWP) project which was bought to financial close by an Engie-led consortium in March (2021).

The $880 million project includes a 39km, 600,000 m3pd transmission pipeline – or water special facilities (WSF) – which will be the first such asset developed by the private sector in the Kingdom.

The sponsors were able to retain the pre-pandemic debt pricing for the $400 million soft-mini perm signed with 5 banks.

The other lender – the Export-Import Bank of Korea (KEXIM) – provided an extra W260 billion ($232.2 million) in debt which largely paid for the late addition of the WSF, and forms part of a strong Korean backing for the project.

The Saudi Water Partnership Company (SWPC) has successfully procured another major reverse osmosis desalination IWP, just 6 months after FC on Jubail 3A in September 2020.

Yanbu-4 will be located at Ar Rayyis within the Madinah Region on the Red Sea coast.

Tendering

The SWPC was not yet called that when Yanbu-4 was first launched alongside the slightly smaller Shuqaiq-3 IWP by the former Water & Electricity Company (WEC) on 24 October 2017.

The design capacity of Shuqaiq-3 was later increased from 380,000 to 450,000 m3pd by the time it had been signed to a Marubeni-led consortium in January 2019.

The change may have been due to the protracted tender process of its formerly bigger brother in Yanbu-4.

Over a year-and-a-half later, WEC re-issued a call for expressions of interest (EoIs) for Yanbu-4 in March 2019, despite the receipt of 51 such responses for the original October 2017 call.

Meanwhile, the $600 million Shuqaiq-3 went to financial close just a few months later on 8 May 2019.

WEC became SWPC by the time 6 RFP responses were received on 7 October 2019 for Yanbu-4, but only 5 were deemed compliant.

The bids were finally opened on 13 February 2020:

- Engie, Mowah – SR1.7446/m3 ($0.465227)
- FCC Aqualia, Haji Abdullah Alireza & Co, Alfanar – SR1.7775/m3
- ACWA Power, Gulf Investment Corporation, Al-Babtain Contracting – SR1.8435/m3
- Marubeni, Marafiq – SR1.9168/m3
- Veolia Middle East, Alkhorayef Group, Al Bawani Water & Power – SR2.0242/m3

The design capacity of Shuqaiq-3 was increased from 380,000 to 450,000 m3pd

A sixth bid from Utico was declared non-compliant. SWPC had chosen to delay announcing the bid prices at the time, but Utico's proposal was undermined by the financial instability of its chosen EPC partner Hyflux.

Utico's long-term partnership with the Singaporean EPC contractor also complicated the tender for the 545,000 m3pd Hassyan IWP in Dubai over the course of 2020 – but Utico nonetheless won the tender in November that year and set a world record for desalinated water tariff at $0.27762/m3.

The result in Dubai suggests that Utico may have also put in a highly competitive bid for Yanbu-4.

Nonetheless, back in Saudi Arabia the Yanbu-4 scheme was awarded to the Engie-led consortium. The members and equity stakes of the consortium are:

- Engie – 40%
- Mowah – 30%
- Nesma – 30%

Saudi Water Partnership Company (SWPC) signed with the sponsors the original 25-year PPA on 28 February 2020 using the winning tariff of 0.465227/m3.

However, due to the increased capex following to the addition of the WSF in February this year (2021), it means that the agreed tariff was raised accordingly in a new set of signed project documents from the same month.

Financing

Financial close was also an oft-delayed process, both due to the onset of the Covid-19 pandemic and the late addition of the WSF which amended the project documents.

The first target for FC was May 2020, however ensuing postponements were expected "given the impact of Covid-19 on some of the required local administrative CPs", a source close to the deal told *IJGlobal* in June 2020.

Even in April this year (2021), some deals in the MENA region are still being signed via virtual ceremonies rather than in person.

Nonetheless, the Engie-led consortium put Yanbu-4 to financial close on 21 March (2021) after a year-long wait from the award in February 2020.

The debt/equity ratio is 72:28. The commercial banks on the deal are:

- MUFG – global facility agent
- KDB
- NCB
- Riyadh Bank
- Standard Chartered

The lenders signed in December 2020 on a $400 million soft mini-perm using the same debt pricing agreed before the onset of the pandemic in March (2020).

Two lenders also provided equity bridge loans to the sponsors:

- Unicredit
- Riyad Bank

The project financing was reviewed by the second party opinion provider Viego Eiris, and thus was eligible for green loan principles. The green loan coordinator on the deal was MUFG Bank.

Yanbu-4 – a statement of intent

Yanbu-4 is emblematic of the Saudi intention to fulfill its national water objectives of the Vision 2030 initiative, while maintaining a primary role for the private sector.

The desal also features the ever-increasing local content requirements sought on new projects.

SWPC must be reeling. In spite of the pandemic, it has overseen the financial close of 2 major desalination schemes within 6 months, from the 600,000 m3pd Jubail 3A on 2 September 2020 to the 450,000 m3pd Yanbu 4 on 21 March (2021).

Like Jubail 3A, Yanbu-4 will include 20MW of solar PV to provide captive power and reduce the asset's burden on the national grid.

Moreover, the WSF will be transferred to the Saline Water Conversion Corporation (SWCC) upon construction.

The sponsor consortium signed with South Korean engineers Doosan Heavy Industries the $708 million EPC contract for the desal in January (2021). The signing disclosed the deepened Korean role on the project with the involvement of Kexim, while KDB was already attached to the deal some months prior.

The sponsors have said that they are committed to the local content requirements – a Saudization rate of 40% during construction, rising to 70% within 5 years of the start of commercial operations.

Yanbu-4 IWP is expected to begin commercial operations in Q4 2023.

Advisers

The advisers to SWPC were:

- SMBC – financial
- DLA Piper – legal
- ILF Consulting – technical

Deloitte advised local investor Mowah.

Engie was advised by:

- Covington & Burling – legal
- Mott MacDonald – technical
- Mazar – model auditor

The lenders were advised by:

- Herbert Smith Freehills – legal
- Atkins – technical ∎