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INSIDE THIS ISSUE...

AMERICAS Biden buoys green hopes • AMLO expands infra plan

ASIA PACIFIC Telestra/Optus sales due • WestConnex road in refi

EMEA Telco infra in vogue • Rv 555 currency risk outstanding

LEGAL SURVEY Top firms boost deal numbers





ESG CAPITAL MARKETS WEBCAST

The IFR ESG Capital Markets Webcast takes place on the afternoon of Thursday December 3 2020.

Moderated by **Keith Mullin**, Founder & Director of KM Capital Markets, this timely webcast will bring together a panel of senior market participants to assess current themes in the ESG market.

DATES

DECEMBER 3 2020

TIME

2:00 - 3:15PM

FORMAT

WEBCAST

Topics covered will include:

- An update on current ESG capital markets activity
- Discerning driving themes and trends in green and social finance and how capital markets are reacting to them
- Social finance themes came to the fore as the Covid-19 crisis emerged. How will the interplay between the 'E', the 'S' and the 'G' in ESG capital markets develop?
- How are investors influencing the behaviour and performance of issuers in the environmental/sustainability capital markets?
- What impacts are the various data transparency standards (e.g. Taskforce on Climate-related Financial Disclosures, Task Force for Nature-Related Financial Disclosures, Science-based Targets Initiative) having on the quality of corporate ESG reporting and disclosure?
- How is the ESG scoring, ratings and evaluations industry evolving with developments?

The webcast is free to join - all you need to do is register at https://tinyurl.com/y3yl7uj7.

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PEOPLE & MARKETS

3 Enel scouts for green hydrogen

Enel is looking at a number of renewable hydrogen opportunities in Spain, Italy, the US, and Chile

4 Fortescue launches into global green energy Australian mining company Fortescue is targeting the build-out of 235GW of renewables capacity

NEWS

AMERICAS

10 Renewables sector cheers Biden win Biden's victory in the US election is expected to add rocket fuel to the sector's growth prospects

17 AMLO to expand infra programme

Mexico will unveil a second package of infra projects following last month's US\$14bn programme

ASIA PACIFIC

25 Towers sales loom large in Australia
Both Telestra and Optus are due to divest their towers portfolios, with both deals expected next year

31 WestConnex set for refi

A\$4bn of debt on the WestConnex road project is coming up for refi with UBS running the process

EUROPE, MIDDLE EAST AND AFRICA

39 Fibre and 5G rule telco market

Numerous telco deals are underway as investors and companies vie for a slice of the digital goldrush

44 FX risk open on Rv 555 road PPP

Who will take the currency risk remains open as Vegvesen pushes for the deal to be done in kroner

FEATURES

56 Top firms boost deal numbers

Covid-19 may have caused a wash-out for much of the world's economy but lawyers of the infrastructure industry have been kept busy regardless, with deals continuing to close at a good clip. PFI's Legal Report 2020 charts the leading legal practices in the space and the deals they've been working on

PEOPLE & MARKETS

ROD MORRISON

Seeking friends for warm thermals

Growing numbers of infrastructure investors have been on the hunt for investments for more than a decade now and the search has become ever more elaborate – from core to non-core with core+, core++ etc in between. But now they can go back to basics – thermals. The trading houses are putting unloved coal-fired assets on the block but perhaps more interestingly the oil and gas companies are seeking new partners.

For the Japanese trading houses their coal-fired power stations present a problem. They have pledged to reduce their involvement in the sector over the next decade but how? Asset sales are the most obvious answer but the buyers are not queuing up in the same way they would have done five or 10 years ago. That said, the assets themselves are performing well enough economically in many markets, producing decent cashflows etc, so selling creates an issue for shareholder-based companies.

Marubeni's chief executive officer Masumi Kakinoki said last week it is increasingly difficult to sell stakes in coal-fired power plants due to growing criticism of the power stations, which emit high levels of carbon dioxide.

"To sum up, it is becoming harder to sell stakes in coal power plants as coal has run into a lot of flak. . . The best solution is to stop and scrap the plants, but we need to sell our stakes to parties with an interest in owning

them as there are many power stations that are still valuable and needed for regions or countries," Kakinoki said. However, he added that the company needed to avoid selling the stakes at a large loss, or to buyers who may resell them quickly.

Companies such as Marubeni, Mitsui and Sumitomo are labelled as trading houses but they are, in effect, long-term investors – particularly in the energy markets. So selling assets is not in their nature. The coal-fired sales will not happen quickly, Mitsui said, it aims to sell its stakes by the end of decade.

Many of these assets are not only strategic for the investors but for the host countries as well – say Mitsui's Paiton stake in Indonesia. Not only is a good price required but the most governments will want reliable partners bought in. Indonesia, for example, is still committed to coal deals having signed the Jawa 9&10 deal with Kepco last week.

Warren Buffett can no doubt be called upon to give some Sage of Omaha advice. He has just invested US\$7bn in five of the biggest trading houses – Itochu, Marubeni, Mitsubishi, Mitsui and Sumitomo – by taking 5% stakes in each, The investment comes at an interesting time as the companies' energy portfolios have been hit by Covid-19 but Japan as a country is performing better than many in 2020. His foray into energy investment last year was just as interesting, US\$10bn in Occidental at 8% to back its Anadarko deal. Oxy's shares have tumbled this year during Covid.

For the international oil companies (IOCs), whoops, now international energy companies (IECs), the search for friendly investors is as important. Until very recently, IECs could farm down their exposures on schemes to other

IECs. Indeed, that was the traditional model for developing large energy projects to diversify risk – a model that is now being used by offshore wind farm developers.

Financial investors were not really into the farm-down model. IECs were, during the last decade, starting to offload some infrastructure-style assets within their portfolios but it was not standard practice. That is, until ADNOC transacted its mega-scale infrastructure oil and then gas pipelines sales. Those two deals seems to have heightened interest in the concept. But the main factor in financial investors being invited in is the economic climate this year. Farm-downs to other IECs are not attracting much interest. IECs' shares have been hit by Covid-19 and maybe general climate change weariness.

Woodside chief executive Peter Coleman spelt it out last week. Last year the Australian company sounded out IECs to buy part of its 75% stake in the US\$11bn Scarborough gas field to raise funds, but due to the oil and gas price crash this year "that no longer makes sense", Coleman said.

"It's just simply not a good time in the market to sell that," he said. Instead, it now wants to sell around a 50% stake in Pluto Train 2, which is served by Scarborough, to infrastructure investors.

In Uganda, Total is seeking a similar approach on its US\$3.5bn 1,500km East African Crude Oil Pipeline (EACOP) from the Lake Albert oilfields to the Tanzania coast. Tullow is now out and bringing in new IECs could be tricky, however attractive the asset.

The infra investors have piled into the ADNOC deals so why not into deals such as these? One difference is construction risk.

BANKS & ADVISERS

) JEFFERIES AUSTRALIA HIRES CHALHOUB

JEFFERIES AUSTRALIA has hired M&A adviser Joel Chalhoub in Sydney from Lazard. Chalhoub advises across a broad spectrum of sectors, including energy, telecoms and transport. As vice-president, he has been with Lazard in Sydney for nearly five years, after 2.5 years with Rothschild in the utilities, transport and infrastructure M&A and debt advisory team. He has worked at NAB and SQM Research.

CRANMORE HIRES IN ISTANBUL

Orhan Tanriverdi has joined the Istanbul office of financial advisory boutique CRANMORE PARTNERS as a director and Emre Bildirci has joined as an associate director. Tanriverdi has joined from Garanti Bank where he was for 10 years in the projects team. Bildirci has joined from Enerjisa and before that Garanti.

Abu Dhabi-based Cranmore, headed by Yusuf Macun, has recently advised Enerjisa on its corporate €650m refinancing. The Istanbul team will be supporting the origination and execution efforts in the wider Middle East and Europe, while closely monitoring financing and M&A opportunities in Turkey. Current teams

members are Haili Ersu, Gorkem Mutsu and Kaan Basaran.

) PATT TO TRIBE INFRA

Christopher Patt has joined Abu Dhabi-based adviser TRIBE INFRASTRUCTURE GROUP as a director to be based in London and Abu Dhabi. Patt has joined from the power and advisory team of Mizuho in London. Before that he worked for AMEA Power, HSBC and GDF Suez. Tribe has worked on a range of deals and has specialised in waste-to-energy (WtE) projects.

) PF TRAINING FIRM LAUNCHED

Project financiers Steve Mills, Audrey Caulliez-Louis, Ian Cogswell and projects lawyer Calvin Walker have launched CCC TRAINING LIMITED, a new training company that is focused on the energy, infrastructure and sustainable finance market,

Mills has been in the training market for more than 12 years, while Caulliez-Louis, Cogswell and Walker maintain an active involvement as project finance practitioners alongside their training practice.

CCC Training says it offers both public and in-house courses that may be delivered either as live interactive webinars or in a traditional classroom format once the Covid restrictions are lifted. Each of the four has been with variety of institutions, with Mills ending up at RBS, Caulliez-Louis at MUFG, Cogswell at Natixis, and Walker at Baker & McKenzie.

DEVELOPERS

ECUADOR OIL GROUP HEADS RESIGN

The chief executive officers of state-owned PETROECUADOR and PETROAMAZONAS have resigned ahead of the planned merger of the two units. The Energy Ministry said in a statement that Petroecuador CEO Ricardo Merino and Petroamazonas CEO Juan Carlos Bermeo will remain in their positions until their respective boards select replacements.

The merger is still expected to go through before year-end and will now look more like an absorption, according to Energy Minister Rene Ortiz. The process began with executive decree 723 on April 24 2019, but the impacts of Covid-19 and lower oil prices have hit the companies particularly hard.

Ortiz said the optimisation process for the combined entity would be carried out in 2021 and the Inter-American Development Bank (IDB) is expected to provide a loan to aid the process. The companies have combined assets of roughly US\$22bn and a workforce of more than 10,000.

) ENEL LATAM ASSETS VALUED BEFORE MERGER

ENEL GREEN POWER'S Latin American assets have been valued at up to US\$7bn by a set of independent auditors at the request of ENEL AMERICAS. The move is a precursor to the potential merger of the two entities, subsidiaries of Italian giant Enel. Enel Americas held an investor call on Friday November 13 as part of the talks.

The transaction allows for further simplification of the group corporate structure and aligns Enel Americas' business set-up with the rest of the group. The company is accelerating its decarbonisation plans in the region with its exit from its coal business. It is aiming to have all its generation come from renewables by 2040.

The corporate reorganisation foresees the integration in Enel Americas of the current non-conventional renewable assets of the Enel Group in Argentina, Brazil, Colombia, Costa Rica, Guatemala, Panama, and Peru, through a series of transactions culminating in a merger into Enel Americas.

Such a merger, resulting in an increase of Enel's stake in Enel Americas, will require an amendment of the by-laws of the latter by the shareholders' meeting to remove the existing limitations whereby a single shareholder may not hold more than 65% of the voting rights. The shareholders' meeting will be required to approve the merger as a transaction with related parties in compliance with the applicable laws and regulations.

Enel recently increased its stake in Chilean subsidiary Enel Chile to 64.9% as it looks to lift stakes in its South America-based subsidiaries by buying out minority shareholders. The company achieved the 3 percentage points increase in its stake by settling two share swap transactions entered into in December 2019 with an unnamed financial institution. The deal cost Enel US\$174m.

) SOLARIS TAPS WOLAHAN

Canada-listed miner SOLARIS RESOURCES has appointed *Chad Wolahan* as vice-president of projects. He will now lead technical and economic studies for the company's Warintza copper-gold project.

Wolahan has worked with Ivanhoe Mines for the past seven years in various senior capacities and was responsible for project planning and management at the Kakula project in the Democratic Republic of the Congo. Prior to Ivanhoe Mines, Wolahan worked at Stantec Consulting leading a team to produce the mining design, schedule, and cost estimates for various projects.

The 26,777 hectare Warintza property is in south-eastern Ecuador, in the same belt as the Fruta del Norte gold mine and Mirador copper-gold mine, 40km to the south, and adjacent to the San Carlos-Panantza copper deposits. The studies should clarify how much resources the mine has and what the costs of development will be.

) VESTAS INKS MASSIVE LATAM ORDER

Turbine maker VESTAS has signed a conditional agreement for a project in Latin America with a capacity above its defined announcement threshold, the company said in a statement. Vestas will supply more than 500MW of turbines to a yet unspecified wind farm in the region.

If and when the project translates into a firm and unconditional order according to Vestas' definition, the company will make an announcement, it added. The company is active in almost all countries in the region, with a particular focus on Brazil, Chile, Mexico, and Argentina.

) ENEL SCOUTS FOR GREEN HYDROGEN

ENEL is "scouting several development opportunities" for green hydrogen plants in Spain, Italy, the US and Chile.

"We are looking at some of the opportunities, and we are trying to find the best possible combination of certain variables that include offtake availability, water feed, [and energy prices] to try to find a way to make this kind of business accretive for our renewable development and also useful for the decarbonisation effort of the world," Alberto de Paoli, Enel's CFO, said on the third-quarter earnings call.

Enel reported a 19% drop in revenues to €48bn in the first nine months of 2020, down from €59bn for the same period last year. Ebitda dropped to €12.7bn from €13.2bn previously. Lower revenues were primarily a result of the decline in the volume of gas and electricity sold in Italy and Spain as a result of the Covid-19 pandemic as well as adverse exchange rates in Latin America.

Power sold in Italy slipped by 5% against the same period last year, and the amount fell by 11% in Spain. The company saw a 30% decline in volumes in April as a result of the lockdown. Since then there has been a progressive consumption recovery, with the decline partially offset by higher consumption from residential customers.

"The vast majority of impacts in volumes is the contraction of the industrial activities associated with lockdown and we see that this is mainly concentrated in the lockdown period," Paoli said. The company projects demand in Italy and Spain for the last quarter of the year will be down by 2% against the previous year "and we will see if new measures of lockdown will affect or not this progressing rise of power demand", he said.

Enel's forward sales for 2021 have been hedged to 85% in Italy, and almost 96% in Iberia (Spain) with prices of ϵ 51.7/MWh and ϵ 71.6/MWh, respectively. That compares with hedging of 70% and 90% in the first half. Sales for both markets were hedged 100% in 2020, achieving a price of ϵ 56.9/MWh in Italy and ϵ 73.9/MWh in Iberia.

Enel also reported figures for the wider macro environment with a spot price in Italy of ≤ 35.61 /MWh in the first nine months against ≤ 53.71 /MWh for the same period in 2019. Iberia's spot price was ≤ 31.90 /MWh against ≤ 49.90 /MWh previously.

) FORTESCUE LAUNCHES INTO GLOBAL GREEN ENERGY

Australian mining giant Fortescue Metals Group announced ambitions to become a renewable energy developer on a global scale at its annual general meeting last week. Under a new FORTESCUE FUTURE INDUSTRIES (FFI) division, the group is targeting to build an enormous 235GW of renewable energy.

Preliminary deals FFI is making are with governments in Papua New Guinea and Africa. Fortescue has committed A\$1bn (US\$732m) to FFI out to 2023 and plans to use off-balance sheet funding for projects. Fortescue signed a deal last quarter with the Papua New Guinea government and state-owned Kumul Consolidated Holdings to assess the feasibility of hydropower projects in the country.

FFI is studying 47 countries' renewable energy potential and the governments' interest and capability. It aims to shortlist countries to pursue initiatives in. Already, Fortescue executives have visited 23 of those 47 countries. The group is committed to only working in countries that do not tolerate modern slavery and plans to engage local workforces across all projects.

Though Fortescue has not set a timeframe to get to 235GW, that target capacity far exceeds the stated 2030 renewable energy generation targets set by various global oil and gas and energy giants. BP and EDF have targets to reach 50GW of renewable energy by 2030. Iberdrola is targeting 95GW by 2030 and Orsted 30GW by 2030, while Total has set an aim to reach 25GW by 2025.

As announced in June, Fortescue Metals Group will target net zero operational emissions by 2040, and by 2030 is aiming for a 26% reduction in Scope 1 and Scope 2 emissions compared with 2020 levels.

The company has started with renewable energy projects at home, to power its Western Australian mining operations.

Fortescue is investing US\$450m in the Pilbara Energy Connect project, a solargas hybrid with battery energy storage and transmission infrastructure. It will feature 150MW of solar PV and battery storage, and 150MW gas-fired capacity. Pacific Energy's subsidiary Contract Power Australia is contracted for the lowemission gas plant.

The Chichester Solar-Gas Hybrid will also power Fortescue's operations in Western Australia, under a PPA. Alinta is building and will own the project. The project should provide 25%–30% of the stationary energy requirements from solar. Design and procurement of the solar and battery component will continue in FY21. Fortescue's capex on this project in FY20 was US\$17m. The solar component is 60MW and the battery 35MW, while a 60km transmission line will link to Alinta Energy's Newman gas-fired plant.

Fortescue is investing in building transmission infrastructure to link both new energy sources with its Pilbara mining operations, at a cost of US\$250m. Fortescue's US\$700m of expenditure on this and Pilbara Energy Connect is spread over FY20 to FY22.

Green hydrogen is central to Fortescue's new strategy and the company is investigating battery electric vehicle mobility too.

Within a week of announcing its ambitious renewable energy generation target, FFI has unveiled plans for developing a 250,000 tonnes per year, 250MW green ammonia production facility in Tasmania. The group is targeting a final investment decision in 2021.

The group already has a A\$32m project to build a green hydrogen refuelling facility at its Christmas Creek mine in the Pilbara and deploy a fleet of hydrogen fuel cell passenger coaches from mid-2021. The miner has also partnered with CSIRO for research into hydrogen technologies, and with ATCO Australia to explore potential for a hydrogen production and refuelling facility in Perth.

FY20 was a strong year for Fortescue financially. Revenues of US\$12.82bn marked a 29% rise on the previous 12 months. The volume shipped at 178.2m tonnes was also 6% higher than in FY19. Profit after tax was 49% higher at US\$4.74bn. The company managed to cut costs to US\$12.94 per wet metric tonne including a US\$0.22/wmt cost associated with Covid-19 impacts.

Fortescue's iron ore mining hubs, all located in WA, are the Pilbara Hub; the Solomon Hub; the Western Hub, which features the up to US\$1.38bn 30mtpa

Eliwana mine due for completion in December; and the US\$2.6bn, 22mtpa Iron Bridge Magnetite Project in development.

The company is pursuing major international expansion into mining outside of WA.

"We are focused on early stage exploration of commodities that support decarbonisation and the electrification of the transport sector, and continue to assess copper, gold and lithium opportunities throughout Australia, South America and Europe," chief executive Elizabeth Gaines said at the AGM.

Fortescue's exploration activities are taking place in New South Wales and South Australia in its home country, and overseas in Argentina and Ecuador. Preliminary exploration is taking place at tenements in Colombia, Peru, Portugal and Kazakhstan.

) EQUIS DEVELOPMENT SECURES US\$1.25bn

EQUIS DEVELOPMENT, the Singapore renewable energy and waste infrastructure developer, has secured US\$1.25bn of funds from the Abu Dhabi Investment Authority (ADIA), Ontario Teachers' Pension Plan Board (OTPP) and the Equis management team. The proceeds will finance its investments in Australia, Japan and South Korea.

The company is developing or constructing 40 assets across its target markets and will finance and be responsible for every stage of an asset's lifecycle, it said in a statement. Credit Suisse was the financial adviser to the ADIA and OTPP consortium on the deal.

The company was behind the setting up of Equis Energy, renamed as Vena Energy, the US\$5bn renewable energy platform that was sold to a consortium comprising Global Infrastructure Partnerships, PSP Investments and CIC Capital.

) GIC ACQUIRES 17.5% IN AC ENERGY

Singapore sovereign wealth fund GIC is acquiring a 17.5% stake in ACENERGY, the power arm of the Ayala Corp group in the Philippines.

AC Energy Philippines said its board had approved the acquisition of the stake valued at about Ps20bn (US\$413m) by the Singapore fund via its affiliate Arran Investment. It will be implemented through a combination of private placement and purchase of secondary shares from AC Energy at Ps2.97 per share, which is 25% premium to the board-approved rights offering price of Ps2.37 per share.

AC Energy is one of the leading and fast-growing energy companies in the Philippines. It has some US\$2bn of investments in renewables including solar farms and thermal energy projects in the country as well as in Indonesia, India and Vietnam.

) CEO ADDS ROLE OF CHAIR AT CIMIC

CIMIC GROUP has appointed current chief executive officer *Juan Santamaria* as executive chairman and CEO following the retirement of executive chairman *Marcelino Fernandez Verdes*.

Santamaria has been leading the company since February, after a promotion from managing director of CIMIC's subsidiary CPB Contractors. He had been CEO of Iridium from 2014 to 2015, after being CEO and chief operating officer of ACS Infrastructure North America and Canada between 2006 and 2013. Two alternate directors, *Adolfo Valderas* and *Angel Muriel*, have retired from the board at CIMIC Group.

) JAPANESE TRADERS STRUGGLE WITH COAL IPP STAKES

MARUBENI'S chief executive officer Masumi Kakinoki says it is increasingly difficult to sell stakes in coal-fired power plants due to growing criticism of the power stations, which emit high levels of carbon dioxide, Reuters reported. "It is becoming harder to sell stakes in coal power plants as coal has run into a lot of flak," he told an analyst meeting.

In March 2020, Marubeni had 2.7GW of net coal power capacity.

"The best solution is to stop and scrap the plants, but we need to sell our stakes to parties with an interest in owning them as there are many power stations that are still valuable and needed for regions or countries," Kakinoki said. However, he added that the company needed to avoid selling the stakes at a large loss, or to buyers who might resell them quickly.

Last week, SUMITOMO booked a ¥25bn (US\$241m) loss in its April to September half year on its stake and lending in the 400MW Bluewaters coal power station in Australia. MITSUI has announced it is selling all its coal-fired IPP stakes by 2030.

) TOSHIBA INTO OFFSHORE WIND

TOSHIBA is developing a state-of-the-art wind turbine, it said during its secondquarter results call last week. The company gave no details of the machine or whether it would be an onshore or offshore turbine, but said it is "preparing a bid for offshore wind power".

It will stop bidding for new coal-fired power projects and aims to increase its sales in renewables from ¥190bn (US\$1.8bn) in the 2019/20 financial year to ¥650bn in 2030 with a third in solar and wind power.

"Clearly, there will be a paradigm shift in the energy sector globally. As a result, we have decided to stop receiving orders for coal-fired thermal power plants that emit large amounts of carbon dioxide," Toshiba CEO Nobuaki Kurumatani told a press briefing.

) POWER PRICES TRIM ACCIONA REVENUES

ACCIONA reported a 13.9% drop in revenues over the first nine months of 2020, due to a drop in Spanish energy prices and the effects of the Covid-19 pandemic. Revenues fell to €4.554bn from €5.287bn. The drop was due to 15.3% lower energy revenues mainly down to a reduction in Spanish electricity pool prices, which dropped to €31.90 per MWh from €49.90/MWh in 2019.

Acciona's energy business installed 392MW in the period and had 682MW under construction at the end of the quarter. The company will begin construction of 2.491GW by 2021.

Its infrastructure business revenues also fell 13.9% mainly due to the effect the Sydney settlement had on 2019 sales, and the consequences of the pandemic in various markets and business areas − but particularly in construction and services. Revenues from other activities increased by 4.1%. Ebitda was down 23.8% to €760m over the nine months.

Acciona's next disposal will be its portfolio of Spanish concessions, which have €127m in debt. CDPQ, Dutch infra fund DIF, and French investor Meridiam have made bids for the portfolio of Spanish PPPs, worth €300m, according to a report.

The sale could take place in two ways, the report said, with Acciona selling the economic rights of the portfolio but no governance rights or by selling an 85% stake in the vehicle with both economic and governance rights – but with Acciona receiving an initial payment at signing.

The first option could make the process quicker as it would not trigger pre-emptive rights on the assets, or require lenders' approval. The portfolio includes hospital concessions expiring between 2035 and 2045, and stakes in motorways.

) GIC ACQUIRES 17.5% IN AC ENERGY

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AC Energy is one of the leading and fast-growing energy companies in the Philippines. It has some US\$2bn of investments in renewables including solar farms and thermal energy projects in the country as well as in Indonesia, India and Vietnam.

) CHRYSAOR INCREASES MEGA RBL

The CHRYSAOR seven-year reserve based lending (RBL) package has been amended and increased to US\$4.5bn from US\$3bn to cover the costs of the Premier Oil acquisition, reports Refinitiv LPC.

The loan has been fully underwritten by mandated lead arrangers and bookrunners Bank of Montreal, BNP Paribas, DNB and Lloyds. DNB and Bank of Montreal are sustainability structuring agents. DNB is facility agent, security trustee and account bank. The underwriters will look to reduce each of their participations in the facility down to a maximum of US\$325m.

The financing has a two-year grace period and includes up to US\$1.25bn of letter of credit sub-limits. There is a US\$750m accordion facility, allowing the financing to be increased up to US\$5.25bn. Margins on the financing, which are linked to carbon emission reductions, start at 325bp over Libor for the first four years, stepping up to 350bp until maturity. There is a ticking fee of 10% of the margin after 90 days from signing, rising to 20% of the margin after 120 days. The first annual RBL redetermination is scheduled for June 30.

) ENI/HITECVISION'S VAARGROENN EYES ACQUISITIONS

Italian oil major Eni and Norwegian private equity group HitecVision's renewable energy joint venture VAARGROENN will consider asset and corporate acquisitions as it looks to expand its portfolio to 1GW by 2030, a spokesperson said.

Vaargroenn will take part in Norway's upcoming offshore wind tender as well as other onshore and offshore wind auctions, and will target other low carbon infrastructure. It will seek to finance its investments with a combination of equity and debt, evaluating "both traditional project financing facilities and other structured finance/mezzanine debt to optimise both the projects' and company's capital structure", the spokesperson said.

Eni and HitecVision created the renewables JV with a focus on the Nordic region. Eni holds a 69.6% stake. Statkraft's former head of offshore wind, *Olav Hetland*, will lead Vaargroenn. The JV builds on the two companies' cooperation in the oil industry – in 2018 they created an oil and gas company, Vaar Energi, with an identical ownership structure. Vaar Energi operates several fields off Norway, including the Arctic Goliat oilfield.

) FINERGE RAISES €150m

Portuguese renewables investor FINERGE GROUP has raised €150m of debt from Japanese lender MUFG and Spanish banks BBVA, Santander and Bankinter, according to reports quoting Finerge CEO Pedro Norton. The financing will support Finerge's growth through further acquisitions. Finerge declined to comment.

Finerge's Iberian solar portfolio totals 55.7MW after the company this year added 47.6MW of Portuguese capacity through four acquisitions in March and a further six in September. The company already had 8.1MW of installed capacity across six plants in Spain.

Sydney-headquartered asset manager First Sentier Investors is an investor in and backer of Finerge, which operates 53 wind and 16 solar photovoltaic plants in more than 46 Portuguese municipalities and three Spanish provinces.

Finerge has a total 1.33GW of installed solar and wind capacity. In August, the company signed a sale and purchase agreement for the 242MW Murillo wind portfolio with EDP Renovaveis (EDPR) for €426m

) FORTUM REVIEWS DISTRICT HEATING

Finnish utility FORTUM is reviewing its Polish and Swedish district heating businesses and is considering further divestments, it said this week. Fortum's Ebitda fell to €132m in the third quarter from €295m a year earlier. Low Nordic power prices due to high hydrology and a seasonally weak third quarter for Fortum's Uniper segment weighed on the

results. Operating profit dropped to ϵ 60m from ϵ 124m.

The company has sold a number of its European district heating businesses this year. A sales process for Fortum's Baltic district heating business is ongoing, with bids submitted in October (see PFI 683).

A consortium of IFM Investors, PGNiG, Polska Grupa Energetyczna, and PFR Inwestycje FIZ has submitted an offer for the Baltic and Polish assets, which operate in the generation, distribution and sale of heat and electricity in Estonia, Lithuania, Latvia and Poland.

PGNiG this week modified its offer to only include Polish assets, it said. The other partners in the consortium will continue to work together to submit a binding offer, however. Rothschild and Porta Finance are advising Fortum on the sale.

"We continue to put focus on our balance sheet and securing our overall financial strength," Fortum said. "Equally, maintaining a credit rating of at least BBB continues to be a priority."

Fortum in August closed the sale of the Jarvenpaa district heating business in Finland, recording a capital gain of €291m

The company also sold its Joensuu district heating business in January. Fortum earlier this year sold its district heating business in Estonia, and increased its stake to 100% in the Tartu district heating business in June.

) WEBUILD COMPLETES ASTALDI TAKEOVER

Italian construction group webulld, formerly Salini Impregilo, has completed its acquisition of 65% of ASTALDI via a €225m capital increase. Proceeds will finance Astaldi as a going concern and also pay off privileged and pre-deductible creditors, Webuild said.

The company's participation was financed via a fully subscribed capital increase in November 2019. Participants included Salini Costruttori, CDP Equity, Banco BPM, Intesa Sanpaolo, UniCredit and other institutional investors.

The deal is part of Webuild's "Progetto Italia", or Project Italy, strategy. The company is acquiring a number of its peers, including Seli Overseas and Grandi Lavori

The resulting group will be specialised in large infrastructure projects in sustainable mobility, hydropower, water and green buildings with combined engineering, procurement and construction orders of more than €40bn.

FUNDS

ECOFIN US GREEN FUND SEEKS 7-7.25%

London-based fund manager Ecofin is launching a US\$250m London IPO for its ECOFIN US RENEWABLES INFRASTRUCTURE TRUST via Stifel Nicolaus Europe. The fund is targeting a net total return of 7%–7.5% pa with a dividend yield of 5.25%–5.75% pa.

The fund is due to buy a US\$61m seed portfolio consisting of four solar investments with a weighted average power purchase agreement (PPA) of 18.7 years. Two of the assets are operating, a third is expected to be operational by the end of 2020, and the fourth is expected to be operational by the end of 2020, or otherwise within the first quarter of 2021.

A fund managed by Capricorn Investment Group has agreed to subscribe for 5% of the IPO. The lead portfolio managers *Jerry Polacek*, *Matthew Ordway* and *Prashanth Prakash* joined Ecofin's private sustainable infrastructure investment team in late 2016.

Ecofin says it has an active pipeline of US\$3bn across 86 transactions with a longer-term pipeline totalling a further US\$1.6bn across 42 deals, predominantly sourced through off-market transactions as a result of the team's proprietary sourcing network and reputation in the middle market.

Within these pipeline assets, the team has identified a sub-set of 16 utility scale and commercial solar and wind investment opportunities, comprising 184 individual assets with an aggregate equity value of US\$694m. These targeted pipeline assets total approximately 95MW spread across 17 US states and Canada, contracted to predominantly investment-grade quality offtakers with an average PPA term exceeding 18 years.

) HARBOURVEST CLOSES INFRA FUND

Boston asset management firm HARBOURVEST PARTNERS has reached final close on Adelaide, its dedicated core infrastructure vehicle

The fund closed with US\$384m and will target long-term, low-risk, cash-generating core and core-plus infrastructure assets with a focus on North America, Western Europe and Australia. The fund received support from a global group of institutional investors.

HarbourVest has been investing in infrastructure since 2008 and created a dedicated infrastructure secondaries

team in 2014. The team has invested approximately US\$1.2bn across more than 20 infrastructure transactions over the last decade.

) INFRA PROMOTIONS AT FIRST SENTIER

Fund manager first sentier investors has announced several appointments within the direct infrastructure team. New York-based *John Ma* has been promoted to partner and head of North America. *Marcus Ayre* in London will be the head of Europe, having been co-head. *Danny Latham* and *Chris MacArthur* in Sydney retain their positions as co-heads of Australia and New Zealand

Also in Sydney, director *Gavin Kerr* has been promoted to head of transactions for Australia and New Zealand, and director *Daniel Timms* to head of asset management for Australia and New Zealand.

Three infrastructure managers based in the UK have been made partner: *Hamish Lea-Wilson, Gregor Kurth* and *Nick Grant. Niall Mills* has been head of global infrastructure since May.

First Sentier Investors has undergone a rebranding over the last year, after it was known as Colonial First State Global Asset Management in the home market of Australia and First State Investments overseas. The rebranding followed the arrival of new owner Mitsubishi UFJ Trust and Banking Corporation in August 2019. Commonwealth Bank of Australia sold the investment manager to the Japanese bank.

First Sentier Investor had US\$9.6bn in infrastructure assets under management as at September 30 2020. The group across all asset classes had A\$219bn (US\$160bn) in AUM on that date.

) SPRING LANE NAMES CFO/COO

Boston based sustainability-focused private equity firm SPRING LANE CAPITAL has appointed *Ann Leng* as chief financial officer and chief operating officer, effective immediately. Leng joins from AC Investment Management, where she was CFO for more than 10 years.

Spring Lane Capital's investment model provides project finance and growth capital for companies deploying distributed assets. Last year, the firm achieved final close on its inaugural fund, bringing total equity commitments to approximately US\$156.5m. The company has entered investment partnerships with Atlas Organics, Cambrian Innovation and Aries Clean Energy. It has invested US\$21.4m in landfill waste diversion company Atlas Organics and US\$18m

in distributed waste water provider Cambrian Innovation. Spring Lane provided project equity as part of the US\$65m financial close for the Aries Linden biosolids gasification facility in New Jersey.

) NEW PAKISTAN CREDIT ENHANCEMENT FUND LAUNCHED

Infraco Asia Investments and Karandaaz Pakistan have set up INFRAZAMIN PAKISTAN, a credit enhancement fund that aims to fill the gap in local markets.

The fund, an initiative of Private Infrastructure Development Group (PIDG), will provide guarantees to enhance the credit quality of local currency debt instruments intended to fund infrastructure development in the country. A shareholders' agreement was signed last week, setting off the start of its operations. *Allard Nooy*, the CEO of Infraco Asia, is expected to be appointed chair of the InfraZamin board.

) ENEX INFRA GETS FUND LOAN

ENEX INFRASTRUCTURE INVESTMENT CORP is set to raise a ¥27.9bn (US\$265m) debut syndicated loan, the Tokyo-listed infrastructure fund said last week, reports IPC

Shinsei Bank, Sumitomo Mitsui Banking Corp and Sumitomo Mitsui Trust Bank are among the arrangers of the secured term loan, which is split into a ¥12.25bn 10-year amortising tranche, a ¥12.25bn 10-year amortising portion and a ¥3.4bn one-year and four-month bullet tranche. The interest margins are 55bp, 55bp and 20bp over six-month Tibor, respectively.

Signing and funding are slated for November 26 and December 2, respectively. Funds are for the acquisition of assets and other ancillary costs. The fund, listed on the Tokyo Stock Exchange in February 2019, invests in renewable energy.

) LIGHTHOUSE INFRASTRUCTURE APPOINTS CFO

Melbourne-based fund manager LIGHTHOUSE INFRASTRUCTURE has appointed *Mark Murray* as chief financial officer and company secretary. He joins from developer Tilt Renewables, where he was financial controller. He has worked in finance roles at Sumo Power, Origin Energy and GE, and at UBS and Deloitte.

Lighthouse Infrastructure manages funds investing in sustainable infrastructure. Its funds are the openended Lighthouse Infrastructure Fund Trust and the closed-ended Lighthouse Solar Fund. Assets include the 68MW Emerald solar park and the 20MW Hughenden solar facility in Queensland. Earlier in 2020, *Alexandra O'Dea* joined from Willis Towers Watson as investment director.

TRUE INFRA FUND OF FUNDS LAUNCHED

Newly established, Australia-based TRUE INFRASTRUCTURE MANAGEMENT has launched to market its first fund, a wholesale investor fund of funds. The proceeds of the offer will be deployed with the institutional funds of two Australian infrastructure managers – Infrastructure Capital Group (ICG) and listed infrastructure investor Atlas Infrastructure. ICG's funds are the Australian Renewables Income Fund and Diversified Infrastructure Trust.

True's fund will have initial exposure to 11 of ICG's unlisted assets across renewables, power, utilities and transport, and around 30 assets globally. The fund of fund targets an 8% annual return after fees and a 4% gross dividend yield. Mike Fitzpatrick, who founded Hastings Funds Management in 1994 and is a major shareholder in ICG, has launched True. Peter McGregor is chief executive for the new wholesale fund of funds. McGregor was formerly CEO of the Australian Infrastructure Fund, and the head of infrastructure and utilities at Goldman Sachs [BWere.

) EX MIZUHO BANKERS IN GREEN FUND RAISING

Richard Lum, Eduardo Monteiro and Tony Catachanas are seeking to raise £400m via a London IPO for the VHGLOBAL SUSTAINABLE ENERGY OPPORTUNITIES fund, run by London-based Victory Hill Capital Advisors. Victory Hill was founded in May by the team of energy financiers that was spunout of Mizuho. They had been working together for five years at the bank.

The company will "seek stable returns, principally in the form of income distributions, by investing in a diversified portfolio of global sustainable energy infrastructure assets, predominantly in countries that are members of the EU, OECD, OECD key partner countries or OECD accession countries".

Lum was formerly global head of energy origination at Mizuho Bank in London. Monteiro helped build Mizuho Bank's natural resources corporate finance advisory unit, of which he was acting head for EMEA. Catachanas was responsible for business strategy and investment solutions for EMEA and led the creation and development of the real asset investment business of Asset Management One, the asset management arm of the Mizuho Financial Group.

Lum and Monterio are the co-chief investment officers and Catachanas is the chief executive officer (CEO). The fund is targeting a net asset value total return of 10% pa net of the company's costs and expenses. Numis is the sponsor and sole bookrunner on the IPO.

Michael Egan is the fund's chief financial officer. He joins from Steinhoff International, a global vertically integrated retail conglomerate. And Lawrence Bucknell, from Mizuho's legal department, is the chief general counsel.

RGREEN FUND IN €480M CLOSE

French asset manager RGREEN INVEST'S
Europe-focused Infragreen IV fund has
reached a €480m third close. Infragreen
IV targets liquid junior debt and equity
investments in infrastructure projects
linked to the energy transition, climate
change and CO₂ reduction.

The European Investment Bank has a €75m ticket with the fund. The subscription period ends in March 2021. Infragreen IV has an overall target of €500m and a hard cap of €650m. The fund has to-date invested more than €150m in European infrastructure projects, RGreen said. RGreen Invest is led by founder Nicolas Rochon and has €1bn of assets under management.

) DIF BOLSTERS TEAM

Dutch infrastructure fund manager DIF
CAPITAL PARTNERS has hired Caine Bouwmeester
as managing director in London, Marcel
Beverungen as senior director in Frankfurt,
and Pierre Boschin as senior director in Paris.

Bouwmeester joins from Macquarie's Green Infrastructure Group and has more than 13 years of experience in renewable energy with a track record of developing, acquiring, and financing more than 2GW of wind and solar projects.

Beverungen was previously a director in Rothschild's energy, power and infrastructure team in Germany. Prior to that he held roles at UBS and Dresdner Kleinwort in their energy and renewables teams, advising institutional investors on M&A

Boschin was managing director at French M&A boutique Messier Maris & Associes, where he advised French utilities, blue chips, and private equity houses on transactions in the energy and industrial segments in France and Southern Europe. He was previously an investment banker for Credit Suisse and Lazard.

GOVERNMENTS

DANLY NAMED FERC CHAIRMAN

President Donald Trump has named *James Danly* as chairman of the Federal Energy Regulatory Commission (FERC), replacing *Neil Chatterjee*, who will stay on as a commissioner until the end of his term in June. Danly has been a commissioner since March and general counsel to FERC since 2017.

Danly's appointment comes weeks after Chatterjee encouraged power grid operators to incorporate state carbon pricing policies, a controversial issue within the Trump administration. Chatterjee was appointed by Trump in 2017 and has been chairman twice, most recently since October 2018.

) INDONESIA APPOINTS NEW ENERGY DIRECTORS

Indonesia's MINISTRY OF ENERGY & MINERAL RESOURCES (MEMR) has appointed two new energy directors.

One is long-time ministry bureaucrat *Dadan Kusdiana*, who is the new renewables director general, and the other is engineering professor *Tutuka Ariadji*, who is the new oil and gas director general. They will oversee the country's renewable energy and oil and gas industries, as Indonesia aims to develop clean energy and ramp up oil production at the same time.

Dadan is tasked to push Indonesia's renewable energy mix to 23% by 2025.

Tutuka is tasked to raise Indonesia's oil production to 1m barrels of oil per day (bpd) by 2030 from 706,200 bpd as of September 30.

The appointments were made on November 6 by Energy and Mineral Resources Minister Arifin Tasrif. "The challenge ahead is not easy, especially because we are in the midst of trying to revive our economy following the pandemic," said the minister.

) AUCTION PLAN FOR 3.1GW RENEWABLES

Spain plans to auction at least 3.1GW of renewable capacity by the end of the year, the Energy & Environment Ministry said. Of the capacity to be auctioned, at least 1GW will be wind, with 1GW of solar photovoltaic (PV) and 80MW of biomass. The remainder of the capacity will be technology agnostic.

The following five years will see the amount of capacity available in the wind, PV, solar thermal, biomass and "other" categories rise over time. By 2025 the government plans to have auctioned 8.5GW of wind, 10GW of PV, 500MW of solar thermal, 380MW of biomass, and 60MW in the other category – including including biogas, hydraulic, and tidal.

Spain is targeting the installation of 60GW of renewables by 2030, with a total 19.4GW planned for auctions by the end of 2025, according to a directive from the Energy Ministry. If the directive is approved, the ministry will put in place a calendar for the

■ NOT PEOPLE & MARKETS

An old friend

Refinancing transport assets has been a steady stream of business this century but for obvious reasons the sector has come to a grinding halt this year as we all have had to stay at home. Exceptions to the rule? WestConnex in Australia is one. Is there ever a time when something financial is not happening on that road? Another is the Warnow Tunnel, an old counter-cyclical friend.

Twenty years ago when the infrastructure sector was largely made up of transport and PFI, the Warnow Tunnel in Germany stood out like a beacon of not success – along with the M6 in England. Both were held by Macquarie-linked vehicles. While the M6 was not a complete write-off, Warnow really was a challenge for its sponsors, Macquarie Atlas Roads and Bouygues, with traffic levels at an

unprecedented 25% of base case assumptions when it opened in 2004.

So it is reassuring to note that a) traffic levels are now two-thirds of the original assumptions and b) of all the transport assets around the world, it is one that is looking to be refinanced in 2020–21. Actually, the term refinancing is not strictly accurate. The loan was out to bed in 2000 so it has only five years to go. That said, the concession runs to 2053. The M6 has a similarly long-term concession so maybe in the long run these two assets will be real winners. Famed economist John Maynard Keynes said, when talking about investment horizons, in the long run we will all be dead. But its seems our children will be happily driven along these projects in their battery power vehicles for some time vet.

auctions over the coming five years. Participants will bid with the prices at which they would be willing to sell the energy.

LAWYERS

) MAYER BROWN HIRES RENEWABLES TEAM

MAYER BROWN has hired a four-lawyer renewable energy team from Hunton Andrews Kurth in the US. The team led by partners *Eric Pogue* and John Tormey has joined Mayer Brown's projects and infrastructure practice.

Pogue, formerly co-chair of Hunton's renewables practice, will be based in New York, and Tormey will be based in Washington DC. They are joined by associates Samantha Leavitt who will be based in New York and Addison Perkins who will be based in Washington DC. The firm hired *Henry Jin* as an

associate. Jin joins from EDF Renewables Distributed Solutions, where he served as in-house counsel.

Pogue brings to the firm more than two decades of experience in the energy sector. He represents financiers and investors in renewable energy projects, as well as other players in various aspects of the power and renewables industries. Tormey focuses on the development, acquisition and financing of various types of energy-related assets, including power, gas pipelines, liquefied natural gas facilities, transmission lines and compression facilities.

NORTON ROSE ADDS IN HOUSTON

ANORTON ROSE FULBRIGHT has hired *Luke Edney* as senior counsel in its Houston office. Edney is a project finance lawyer who joins from Vinson & Elkins. He has experience working with conventional and renewable energy project developers, petrochemical companies and contractors on the acquisition,

development and disposal of projects and drafting agreements.

Before moving to Houston, Edney was seconded to one of Japan's largest international oil and gas companies in Tokyo. During this assignment, he worked on the development and financing of the world's largest post-combustion carbon capture and storage project.

) ASHURST HIRES OZ PROJECTS PARTNER

ASHURST has appointed *Bree Miechel* as a partner in the projects practice. Based in Sydney, Miechel is a projects and construction lawyer. She has relocated from Singapore, where she worked for Reed Smith as partner. Miechel has acted for Asian, European and US clients on power, oil and gas, water and waste, and transport projects, and on commercial property developments across Australia, Asia, the Middle East, Africa, Europe and the Americas.

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NEWS AMERICAS

) Brazil 11) Canada 11) Chile 14) Colombia 15) Mexico 16) Panama 17) United States 18

■ FRONT STORY US - RENEWABLES

Renewables sector cheers Biden win

- New tax incentives for clean energy are widely expected under President-elect Biden
- Stricter permitting may offer a downside of the new administration's plan

BY ALISON HEALEY AND NIC STONE

Certain industry groups are salivating at the prospect of a Biden administration and the boost it will give to renewables, and the offshore wind sector in particular. "Under the Biden Administration, it is expected that offshore wind will experience substantial growth from projects, supply chain development, and job creation," according to a statement from the Business Network for Offshore Wind.

President-elect Biden has indicated he intends to provide a level playing field with tax policies for clean energy technologies – and hopefully with a multi-year extension of tax credits for all renewables projects and complementary standalone battery storage; and by reducing the country's substantial fossil-fuel subsidies.

The American Wind Energy Association (AWEA) thus updated its outlook for wind energy across the United States in the coming decade. Forecasters expect about 60GW of new wind power in the next five years, with 94GW over the coming decade in total. Offshore wind is slated to have 20GW of operational projects by 2029.

Biden's stance on gas-fired generation is not as clear, however. Then-nominee Biden, speaking during a town hall meeting, said he would not ban fracking if elected. But the US\$2trn clean-energy plan he is pushing aims to edge natural gas out of the power generation matrix within 15 years.

"While Biden's plan pushes for major investments in clean energy, it does not call for divestment of fossil fuels or a carbon tax," Moody's pointed out. "It also does not call for a ban on hydraulic fracturing, which has driven the surge in domestic oil and gas production for more than a decade."

The market is expecting a very broad infrastructure plan including clean energy to be introduced in Q1 by the Biden administration, according to panelists on a K&L Gates town hall Webinar entitled, "Election 2020: What just happened and what does it mean for energy and environmental policy and regulation?"

Biden will pursue a goal of net zero emissions by 2050 that will be accomplished by a combination of executive orders and legislative efforts, panelists said, with zero emissions by 2035 for the utility sector as a mid-step.

In "The Biden Plan to Build a Modern, Sustainable Infrastructure and an Equitable Clean Energy Future," the President-elect proposes a technology-neutral Energy Efficiency & Clean Electricity Standard (EECES) for utilities and grid operators.

"Paired with his historic, front-loaded investments in the power sector, Biden's EECES will cut electricity bills and cut electricity pollution, increase competition in the market and incentivize higher utilization of assets – and achieve carbon-pollution free energy in electricity generation by 2035," the plan notes, adding that Biden plans to utilise best practices from state-level clean energy standards.

Panelists said they expect Biden to extend federal incentives for clean energy like the production tax credit (PTC) and investment tax credit (ITC) and to focus on storage and advanced biofuels. "Biden's plan to tighten carbon-emission and fuel-economy standards while expanding the availability of renewables would depress the demand for oil, which would accelerate carbon-transition risks for the industry in the short term," Moody's said in a report on the expected credit effects of Biden policy. "However, these policies could provide impetus for the industry to pursue energy-transition strategies with shifts in product offerings and investments in renewables."

Biden is expected to use the federal procurement market to transform the US federal fleet to clean vehicles and hybrids, according to Laurie Purpuro, a government affairs adviser in the firm's public policy and law group. Additional priorities for the new administration include transmission expansion to enable increased renewables development, fast-tracking clean energy requirements for utilities and grid operators, and vehicle charging station development.

In a document entitled "Nine Key Elements of Joe Biden's Plan for a Clean Energy Revolution", Biden says he will work with governors and mayors to support the deployment of more than 500,000 new public charging outlets by the end of 2030.

In his more detailed plan, Biden emphasises brownfield development, efficiency initiatives, clean transportation, new carbon capture tax incentives, and grid-scale storage. He proposes "cleaning up and redeveloping abandoned and underused brownfield properties, old power plants and industrial facilities, landfills, abandoned mines, and other idle community assets that will be transformed into new economic hubs." He aims to "double down" on research investments and tax incentives for technology that captures carbon and says he will ensure the market can access green hydrogen at the same cost as conventional hydrogen within a decade to provide a clean fuel source for some existing power plants.

Biden aims to create the Advanced Research Projects Agency on Climate, a cross-agency group that will focus on new clean energy technology including "grid-scale storage at one-tenth the cost of lithium-ion batteries" and "using renewables to produce carbon-free hydrogen at a lower cost than hydrogen from shale gas through innovation in technologies like next generation electrolyzers".

Without Democratic control of the Senate, however, sweeping changes "will not happen", according to K&L partner Bart Gordon, the former chair of the US House Committee on Science & Technology. And despite the focus on clean energy, a Biden presidency may not be good news for project finance throughout the energy sector.

Federal permitting regulations that were loosened under the Trump administration, especially those with an environmental component, can be expected to return to their former level of scrutiny. Biden has indicated he plans to discontinue oil and gas development on federally managed lands over time.

A post-election alert from Baker Botts said the firm is preparing to provide counsel on matters such as increased regulatory enforcement and heightened scrutiny of environmental, social and governance (ESG) disclosures under Biden. The firm offered its assistance with "formulating and executing upon strategies for challenging new regulations or executive actions focused on delaying or limiting permitting, leasing and drilling on federal lands and waters", and "advising on a potential increase in citizen enforcement as environmental groups redirect resources from fighting regulatory rollbacks to filing more citizen suits under the Clean Air Act, Clean Water Act, and other statutes".

BERMUDA

) APUC CONTINUES BUYING SPREE IN BERMUDA

Canada's Algonquin Power & Utilities
Corp (APUC) has closed the acquisition of
ASCENDANT GROUP, which includes subsidiary
Bermuda Electric Light Company. It is
the sole utility on the island of Bermuda,
providing regulated electrical generation,
transmission and distribution services
to approximately 36,000 customer
connections.

The purchase price was US\$365m, which APUC will pay in cash. This is APUC's 27th acquisition of a regulated utility since 2009 and follows shortly after its purchase of Empresa de Servicios Sanitarios de Los Lagos (ESSAL) in Chile. APUC is a diversified international generation, transmission and distribution utility with approximately US\$11bn of total assets.

BRAZIL

) EVOLTZ EYES DEBENTURES TRANSMISSION REFI

Texas Pacific Group's local power group EVOLTZ is looking to sell R\$1bn (US\$184m) in debentures to refinance debt backing its Norte Brasil Transmissora de Energia transmission line connecting Porto Velho and Araraquara.

The original financing comprises a BNDES loan and an earlier bond issuance. The company has tapped BTG Pactual, Itau BBA, and Banco ABC to lead the deal. Evotlz bought a 51% stake in the 600kV transmission line in July this year, with Eletronorte holding the remaining 49%.

) CGN PENS PRIVATE PPA WITH BOLT

Chinese company CGN BRASIL ENERGIA has signed a 15MW wind power purchase agreement (PPA) with local company BOLT ENERGY valued at R\$90m (US\$16.5m). The output will come from CGN's 195MW Lagoa do Barro wind farm in Piaui. The PPA is part of a wave of private deals on Brazil's free market, which has been key in driving development of renewables, Bolt said in a statement accompanying the deal.

) IFC AND SANTANDER TO LEND TO SOLAR SECTOR

The International Finance Corporation (IFC) and Santander will put a combined

US\$100m into the Brazilian solar sector in order to help it deal with the fallout from Covid-19. The funds are part of IFC parent group the World Bank's rapid-reaction programme to the pandemic.

The lenders will each take a US\$50m ticket in this deal, which "will be devoted to the commercialization of photovoltaic panels", they said in a statement. The funds will be available as a 12-month bridge deal to borrowers to allow them to continue activity in the sector. The deals will be extendable for a second 12-month period.

The World Bank and the IFC launched a US\$14bn package of fast-track financing to assist companies and countries in their efforts to prevent, detect and respond to the coronavirus, earlier this year.

"It's essential that we shorten the time to recovery. This package provides urgent support to businesses and their workers to reduce the financial and economic impact of the spread of Covid-19," said David Malpass, president of the World Bank Group, at the time.

"The World Bank Group is committed to a fast, flexible response based on the needs of developing countries. Support operations are already under way, and the expanded funding tools approved today will help sustain economies, companies and jobs."

) RIO EYES WIND SALE AGAIN

Denham Capital subsidiary RIO ENERGY is in talks to sell its entire wind portfolio, including brownfield and greenfield assets. The interested buyers already include local utility Copel, according to reports.

This is not the first time noise has been made about a potential sale process for the company, after it shopped some of the wind farms in 2017 that are now up for sale again. Rio Energy has 822MW of power purchase agreements and 2.6GW of projects at various stages of development overall

Rio Energy is also looking to potentially buy some solar projects for up to R\$300m (US\$56.8m), according to the local reports. Rio Energy recently used BNDES to take out a loan of R\$848m (US\$208m) for the company's operating assets and R\$847.9m for its Babilonia cluster.

MINING IPO FACES DELAY

Local steelmaker COMPANHIA SIDERÚGICA
NACIONAL will continue to pursue an initial
public offering of its mining unit CSN
MINERAÇÃO, despite noise about a delay to the
process in local press reports.

Paper Valor Economico said that political and economic uncertainty may hold up the deal, but CSN said in a securities filing that its plans remain on track. Bank of America, XP Inc, Banco BTG Pactual, and Morgan Stanley will manage an offering that may raise R\$10bn (US\$1.81bn). The group owns the Casa de Pedra mine and is the country's largest iron ore exporter. It has certified reserves of more than 3bn tonnes, according to information on the company's website.

CANADA

ATLANTICA TO ACQUIRE DISTRICT HEATING

ATLANTICA SUSTAINABLE INFRASTRUCTURE, the UK-domiciled and Nasdaq-listed yieldco, has agreed to acquire Calgary District Heating for US\$20m in cash. The company has been in operation since 2010 and provides heating services to government, institutional, and commercial customers with high credit quality in Calgary.

Its assets provide 55MW of power and benefit from availability-based revenues with inflation indexation and 20 years of average weighted contract life. Contracted capacity and volume payments represent approximately 80% of total revenue. The transaction will represent Atlantica's first acquisition in the district energy space.

) CLARESHOLM SOLAR FUNDED

Toronto-based renewables developer CAPSTONE INFRASTRUCTURE and Danish solar developer OBTON have met funding conditions to close up to US\$115m of construction-to-term financing on the Claresholm solar project in Willow Creek, Alberta

Over the summer Claresholm signed a credit agreement with ATB Financial, Fiera Infrastructure Private Debt Fund and Telus Pensions Liability Hedging Master Trust. Construction on the project is under way. The project will be Canada's largest solar facility when complete.

) INNERGEX CLOSES RUN-OF-THE-RIVER HYDRO LOAN

INNERGEX RENEWABLE ENERGY and indigenous group PITUVIK have closed a C\$92.8m (US\$71.1m) non-recourse construction and term financing with Manufacturers Life Insurance Company for the construction of Innavik, a 7.5MW run-of-the-river hydroelectric facility.

The project on the Inukjuak River in northern Quebec has a 40-year power purchase agreement (PPA) with Hydro-Quebec. The construction loan will convert into a 40-year term loan carrying a fixed interest rate of 3.95% when the project reaches commercial operation in December 2022. Total construction costs are estimated at C\$127.8m and the remaining C\$35m will be financed by Innergex and Pituvik. Construction is under way.

The project is expected to produce adjusted Ebitda of C\$8.6m per year on average for the first five years of operation and will provide Inukjuak's off-grid customers with power, replacing diesel.

) NWT LOOKS TO REVIVE MACKENZIE DELTA LNG

The government of the Northwest Territories (NWT) is considering a revival of planning efforts for Mackenzie Delta LNG export project off the Tuktoyaktuk hamlet in the Inuvik region.

The project was originally explored in the early 2000s and was to export to the US. This time the government is investigating the possibility of transporting the gas to East Asia by tanker, according to a report from Canada's CBC News.

The government has issued a request for proposals (RFP) for consultants that would prepare a feasibility study on developing the region's gas fields and building pipelines and two offshore liquefaction and tanker loading platforms. The project could ship roughly 4m tonnes of LNG per year. A cost estimate has not yet been prepared. Responses to the RFP are due November 23.

) ORIGIN MAKES OFFER FOR NEWFOUNDLAND REFINERY

Maryland-based oil recycling and terminal storage company origin international has made a formal offer to take over all the assets of Newfoundland and Labrador, Canada-based North Atlantic Refining, including the Come By Chance oil refinery.

A deal to sell the project to Irving
Oil fell through earlier this month. The
refinery is owned by Silverpeak, a New
York alternative investment firm. Details
of the offer have not been disclosed. At
peak operations, the refinery can process
135,000 barrels of oil a day, but it was idled
after the Irving Oil deal failed to close.
Origin plans to bring the project back to
full capacity.

) GENSOURCE INKS SHAREHOLDERS' DEAL

GENSOURCE POTASH has negotiated the shareholding structure with the project offtaker and equity investor, Germany's Helm, and another unnamed financial investor for the Tugaske project special purpose vehicle. The SPV will be the legal entity engaged in the production

of potash near the village of Tugaske, Saskatchewan.

"The finalisation of the shareholding structure for the SPV represents one of the last items required for a decision to advance the senior debt approval," said Gensource chief executive officer Mike Ferguson. "This gets the company one step closer to full construction in 2021."

Gensource will own 49.98% of the SPV while Helm and the other investor will each own 25.01%. Gensource's ownership interest comprises two components: a US\$30m paid-in capital amount representing the value of the project that will be vended into the SPV, plus the project financing costs expended, and a cash investment.

The agreement on shareholding structure has been forwarded to KfW IPEX-Bank and Societe Generale, the mandated joint lead arrangers for senior debt financing, and German federal government credit insurance agency Euler Hermes is expected to bring the project to its Inter-ministerial Committee for a final investment decision (FID) at one of its next regular meetings.

The company previously said the debt would be US\$180m and each of the two lead banks is expected to commit to a significant take-and-hold. The total cost of the project was estimated in 2017 at C\$279m (US\$212m).

) SCOZINC SEEKS MINE PF

Nova Scotia-based mining firm SCOZINC MINING is aggressively pursuing project financing for its Scotia mine project, according to a corporate update. The company recently received a completed pre-feasibility study on the zinc and lead mine and is seeking roughly C\$30m (US\$23m) in project finance.

The mine was put under care and maintenance in 2009 due to the decline in zinc and lead prices. ScoZinc acquired the project in June 2011 and entered an offtake and financing agreement with Switzerland's MRI Trading for the mine's restart in 2018.

MRI agreed to buy the lead and zinc concentrates to be produced throughout the life of the mine and provide C\$10.6m (US\$8.1m) in debt and C\$760,000 (US\$583,200) in equity capital. ScoZinc estimates the mine could be producing in less than a year after closing financing.

ALBERTA MOVES TOWARD TOLLING

Alberta has introduced legislation that will allow the tolling of new roads and bridges for the first time. Existing projects will not be eligible for tolling under the bill but expansions to projects will. The move towards tolling comes as Alberta seeks new ways to finance infrastructure amid an economic slump.

If the bill passes, the first tolling project is likely to be a bridge on Highway 697 over the Peace River that will replace a ferry that has been criticised as unreliable. In September, Alberta deputy minister of infrastructure Shannon Flint said the provincial government is also working to create an unsolicited proposal framework to gather new project ideas and fuel economic recovery from Covid-19 disruption.

) KICKING HORSE P3 REACHES CLOSE

VICKING HORSE CANYON CONSTRUCTORS, a joint venture of Aecon, Parsons, and Emil Anderson Construction, has reached financial close on the Kicking Horse Canyon project – Phase 4 in British Columbia.

The total contract is valued at C\$440.6m (US\$337.4m). Phase 4 of the project lies between the Phase 3 West (Golden Hill to West Portal) and Phase 1 (Yoho Bridge) sections of the Trans-Canada Highway, east of Golden, BC. The project involves upgrading approximately 4.8km of the highway, constructing new bridges, realigning curves and widening the highway to four lanes.

Construction is expected to begin in Q4 and the project is expected to be completed in 2024. The federal government is contributing C\$215m and the provincial government is funding the remainder of the design-build project.

) UNION STATION WINNER EMERGES

Infrastructure Ontario (IO) and Metrolinx (MX) have selected ONTRACK ALLIANCE as the preferred bidder on the Union Station enhancement project in Toronto.

The team comprises Kiewit & Alberici joint venture, WSP Canada, and Mass Electric Construction Canada. Additional teams that competed for the project included GTA Alliance, led by EllisDon and Keltbray with AECOM, Zeidler, and Stephenson Engineering; OneUnion Alliance, led by Aecon, Modern Niagara and PNR RailWorks with Mott MacDonald and Systra; and Union Gateway Alliance, led by Dragados with Parsons and Hatch Engineering.

The private partner will design and construct infrastructure and implement upgrades to accommodate GO rail service expansion. The project will reconstruct platforms, increasing the width and realigning tracks to allow higher speeds. The team will enter into an alliance

AMEDICAS CENEDA	COPPODATE ELINDING	ACTIVITY NOVEMBED 2	2 TO NOVEMBER 16 2020

Security type	Issuer/Borrower	Amount (m)	Maturity	Issue price	Pricing	Bank
Energy, gas and w						
Term Loan	Cypress Creek Renewables	\$200	04/11/27	100.000	N/A	Investec Bank/CA/East West Bank,Pasadena/Silicon Valley Ban
Rev Cred Fac	Oncor Electric Delivery Co	\$2,000	17/11/23	100.000	LIBOR +112.500	JPM/Barclays/Citigroup/MUFG Union/Mizuho FG/RBC CM/
					to 175.000 bp	Wells Fargo
Term Loan	Galloway I Solar Farm	\$151	N/A	100.000	N/A	CIT/Commerz/DNB Cap/Rabobank/Siemens Financial Services
Term Loan	Bakersfield Refinery Green	\$365	04/11/26	100.000		Grosvenor Capital/Orion Energy Partners/Voya Invest Mgmt
Sr Unsecurd Nts	Antero Midstream Partners LP	\$550	15/05/26	100.000	7.875	JPM/Barc/Citigroup GM/CA/Truist Financial/Wells Fargo Secs
Fst Mtg Bonds	Ameren Illinois	\$375	15/11/30	99.577	1.550	Mizuho Secs/SMBC Nikko Secs America/Truist Financial
Sr Unsecurd Nts	Consolidated Edison Co of NY	\$600	01/12/60	99.398	3.000	Citigroup/Wells Fargo /BNY CM/CIBC World Markets
Coll Trust Bds	Entergy Louisiana	\$300	15/12/30	99.61	1.600	Citigroup/KeyBanc/Mizuho/MUFG/Scotia Cap/SMBC Nikko Sec
Coll Trust Bds	Entergy Louisiana	\$300	15/03/51	104.413	2.900	Citigroup/KeyBanc/Mizuho/MUFG/Scotia Cap/SMBC Nikko Sec
Fst Mtg Bonds	Pacific Gas & Electric Co	\$1,450	15/11/21	100.000	Floats	BofA/Mizuho Secs/MUFG Secs Americas/Wells Fargo Secs
Infrastructure Firr						
Term Loan A	Oracle Elevator Co	\$8.45	12/05/24	100.000	LIBOR +550.000 bp	NXT Capital/Twinbrook Capital Partners/Varagon Capital
Mining						
Units	Apex Resources	C\$0.07	-	0.100	-	-
Units	Apex Resources	C\$0.06	-	0.100	_	_
Ord/Common Shs	. Richland Resources Ltd	£1	-	0.028	-	Peterhouse Capital Ltd
Ord/Common Shs	. Richland Resources Ltd	£2.33	-	0.028	_	Peterhouse Capital Ltd
Units	CanAlaska Uranium Ltd	C\$0.44	-	0.200	-	-
Units	CanAlaska Uranium Ltd	C\$0.59	_	0.220	_	-
Units	Fremont Gold Ltd	C\$2	-	0.050	-	-
Ord/Common Shs	. NorthIsle Copper & Gold	C\$3.2	_	0.130	_	-
Units	Richmond Minerals	C\$0.1	-	0.060	-	-
Deposity Rcpts	Aura Minerals	R\$87.3	-	48.500	_	XP Investimentos
Ord/Common Shs	. Skeena Resources Ltd	C\$40	-	2.350	-	Raymond James Ltd/Canaccord Genuity
Units	Ressources Miniere Radisson	C\$6	_	0.340	_	Eight Capital/INFOR Financial/BMO CM
Units	Ressources Miniere Radisson	C\$6.23	-	0.600	-	Eight Capital/INFOR Financial/BMO CM
Flow Through Sh	Ressources Miniere Radisson	C\$0.94	_	0.500	-	Eight Capital/INFOR Financial/BMO CM
Petrochemicals; P	Petroleum Refining					
Ord/Common Shs	. Touchstone Exploration	£23.08	-	0.950	-	Shore Capital Stockbrokers/Canaccord Genuity Ltd
Units	Canadian Spirit Resources	C\$1	_	0.050	-	-
Ord/Common Shs	. 3R Petroleum Oleo e Gas SA	R\$690	-	21.000	-	Banco BTG Pactual/Banco Itau-BBA/XP Investimentos/
						Genial Investimentos
Senior Notes	Continental Resources	\$1500	15/01/31	100.000	5.750	BofA/Citigroup/Mizuho/RBC/TD/JPM/MUFG/US Bancorp/
						Wells Fargo
Telecommunication	ons					
Gtd Sr Notes	Totalplay Telecomunicaciones S	\$575	12/11/25	100.000	7.500	Barc/CS/Jefferies/BCP Secs
Sr Unsecurd Nts	Verizon Communications	\$2,250	20/01/31	99.545	1.750	BofA/Citigroup/GS/JPM/Wells Fargo/BNPP/Loop/Mizuho/
						MUFG/RBC/Santander/TD
Sr Unsecurd Nts	Verizon Communications	\$2,750	20/11/50	99.740	2.875	BofA/Citigroup/GS/JPM/Wells Fargo/BNPP/Loop/Mizuho/
						MUFG/RBC/Santander/TD
Sr Unsecurd Nts	Verizon Communications	\$3,000	20/11/40	99.907	2.650	BofA/Citigroup/GS/JPM/Wells Fargo/BNPP/Loop/Mizuho/
						MUFG/RBC/Santander/TD
Sr Unsecurd Nts	Verizon Communications	\$2,000	20/11/25	99.990	0.850	BofA/Citigroup/GS/JPM/Wells Fargo/BNPP/Loop/Mizuho/
						MUFG/RBC/Santander/TD
Sr Unsecurd Nts	Verizon Communications	\$2,000	20/11/60	99.124	3.000	BofA/Citigroup/GS/JPM/Wells Fargo/BNPP/Loop/Mizuho/
						MUFG/RBC/Santander/TD
ource: Refinitiv						

development agreement with IO and MX to collaborate on design, finalising project cost, and identifying and managing project risks as well as the delivery of the project. The parties expect to reach financial close in autumn 2021.

) WINNER SELECTED ON CREDIT RIVER P3

Infrastructure Ontario (IO) and the Ministry of Transportation (MTO) have selected ELLISDON and COCO PAVING

(EDCO) as the preferred proponent to design, build and finance the QEW/Credit River Improvement project in Mississauga.

The consortium includes Aecom as designer and EllisDon Capital as financial adviser. Other shortlisted proponents were Keystone Transportation Partners, led by Peter Kiewit Sons and Dufferin Construction, with Peter Kiewit Sons also acting as financial adviser; and Credit River

Developers, led by Ferrovial with Scotia Capital as financial adviser.

The project involves construction of a new bridge north of the existing Credit River bridge, rehabilitation of the existing Credit River bridge, and replacement of the Mississauga Road overpass. A plan to demolish the bridge was cancelled earlier this year. The parties expect to reach financial close by the end of the year. A cost estimate has not yet been released.

) RFQ ISSUED FOR MEGA P3 COMMUNITY CENTRE

The City of Toronto and Infrastructure Ontario (IO) have issued a request for qualifications (RFQ) on the George Street revitalisation project, which will be done using a design-build-finance (DBF) model. The project will include about 622,000ft² of new construction and restored heritage buildings that will comprise a long-term care home, a transitional living facility, an emergency shelter, affordable housing and a community hub. A request for proposals (RFP) is expected in spring 2021. The last cost estimate on the project came in at C\$583m (US\$447.9m).

) THREE SHORTLISTED ON ALBERTA P3 SCHOOLS

The Alberta government has shortlisted three groups competing for a public-private partnership to build five new schools in Alberta.

The teams include ALBERTA PARTNERSHIP FOR LEARNING, comprising Graham Capital Partners GEC Architecture, Gibbs Gage Architects, Graham Design Builders and Johnson Controls; CONCERT-BIRD PARTNERS, comprising Concert Infrastructure, Bird Capital, BR2 Architecture, Bird Construction, Wright Construction Western, and Ainsworth; and PLENARY-MAPLE HIGH SCHOOLS, comprising Plenary Group, Stantec Architecture. Maple Reinders Constructors, and Honeywell Canada.

The province expects to select the winning bidder in July and finalise a contract in September. The schools are due to open in 2024. The schools bundle has an estimated total cost of more than C\$200m (US\$151.9m) and will include sites in Blackfalds, Edmonton, Langdon and Leduc. Alberta cancelled plans for the P3 earlier this year as the province said it aimed to avoid delays associated with coronavirus disruption. Procurement was relaunched in September.

CARIBBEAN

) RBC INTO MPC WIND AND SOLAR PLATFORM

Royal Bank of Canada (RBC) through local affiliates in Trinidad & Tobago has committed US\$10m to German asset manager MPC CAPITAL'S Caribbean wind and solar platform. RBC made the investment on behalf of its managed clients' accounts, which enabled local investors such as pension funds, insurance companies, and credit unions to invest in the energy transition in the region. The account has raised US\$30m since 2019.

The commitment is subject to pending approval of the Trinidad & Tobago Securities & Exchange Commission.

"With the impact of Covid-19 on the region and the growing demand for low-carbon power supply, we are determined to invest in the transition to clean energy infrastructure in the Caribbean to make it more resilient and independent," said Martin Vogt, managing director of renewable energies at MPC Capital. "The private sector plays a crucial role in mobilising capital for investment and job creation, and we want our activities to help promote green recovery."

CHILE

) ABENGOA LANDS TRANSMISSION MANDATE

Transelec subsidiary TRANSMISORA DEL PACÍFICO has tapped Abengoa to deliver the 500kV Nueva Tineo—Nueva Ancud double-circuit transmission line. Works include construction of the 95km line and expansion of the Nueva Puerto Montt substation.

Transelec is charged with financing the works to the tune of US\$107m. It will be paid a Valor Anual de la Transmision por Tramo (VATT) of US\$9.57m, which includes US\$7.75m for the investment value annuity and US\$1.82m for the cost of operation, maintenance, and administration.

The project consists of the construction of a high voltage electrical transmission line that will be developed between the Nueva Puerto Montt (Tineo) substation, and the future 220kV Nueva Ancud sectioning substation, passing through the communes of Llanquihue, Puerto Varas, Puerto Montt, Maullín, Calbuco, and Ancud, in the Los Lagos Region.

) GOVT EYES GREEN HYDROGEN LEADERSHIP

The Chilean government is looking to be a world leader in the export of green hydrogen by the end of the decade, President Sebastian Pinera has said. As part of the effort, the government will contribute US\$50m to the sector to help companies develop scalable and replicable projects and to plug potential financing gaps.

Energy Minister Juan Carlos Jobet said the government is hoping to see 5GW of electrolysis capacity either built or in development by 2025, and up to 25GW by the end of the decade. "We need offtakers, we need technology, and we need companies to come down and invest," Jobet said during a recent event.

) CABO LEONES WIND DEAL UP

GRUPO IBEREOLICA and GLOBAL POWER CORPORATION are talking to banks about financing the 204MW Cabo Leones II wind farm. The company has approached lenders and will use project finance to fund the development. The project costs are expected to be around US\$350m.

Grupo Ibereolica and EDF financed Cabo Leones I with a US\$230m, 18-year loan via Caixabank, DNB, and ICO. This deal is expected to follow a similar trajectory. The deal included a US\$20m letter of credit. The scheme will use Senvion turbines. Construction work began in 2019.

) ARROYO LANDS REFI

ARROYO ENERGY has closed its US\$140m refinancing backing a duo of renewables projects. Credit Agricole and SMBC led the deal, which has a seven-year tenor. The assets refinanced include the 115MW El Arrayan wind farm in Coquimbo and the 103MW Conejo solar facility in Antofagasta.

Both sell power to industrial customers under long-term power purchase agreements. The refi was in the market earlier this year, but was delayed due to the outbreak of Covid-19. Arroyo's assets in Chile are held under its subsidiary ARCO and include the 218MW of utility-scale renewables refinanced and 75MW of distributed generation.

Last year, the company closed a US\$64.6m financing through Natixis backing its portfolio of distributed generation projects in the country. The company also recently bought out Pattern Energy's Chilean business.

) NEW CONSTITUTION COULD HIT MINING

The Chilean copper industry will see investment lag for at least two years as the country rewrites a constitution that underpinned nearly three decades of mining growth, a senior mining official told Reuters.

"Hardly a project of a very large magnitude will be carried out in the next two years until there is clarity around the new constitution," said Diego Hernández, president of Chile's National Mining Society (Sonami).

Issues that could arise in the rewrite for miners include indigenous and environmental rights, foreign investment checks, and worker benefits. All noble causes, which could change the way mining finance deals are drawn up.

There were jubilant scenes in Chile in October when the country voted in a landslide 78% victory to change the constitution drafted during the military rule of Augusto Pinochet. A majority of 79% also voted in favour of the new constitution to be drawn up by a body that will be 100% elected by a popular vote.

Another vote will occur on April 11 2021 to choose the 155 people who will make up the convention that will draw up the new constitution. It will be split 50/50 men and women. The new constitution will then be put to the Chilean people for a vote in 2022.

) SACYR LEADS PPP RACE

A SACYR-led consortium has submitted the lowest bid for the US\$112m Buin-Paine hospital public-private partnership. The Consorcio Sacyr group features Sacyr Concesiones, Sacyr Chile, and Global Dominion Access.

The team presented an offer of a fixed subsidy per month during construction of Ps213,376 and a fixed subsidy per month during operation of Ps64,699. The winning bidder will have to invest US\$120m at the site, with a 15-year concession period to follow.

Other bidders included OHL, Consorcio Iberoasiatico, Inversiones Hospitales Maule, GIA+A, and Moller y Perez Cotapos. The hospital will have an area of 56,000m² with 200 beds. A decision is expected in the first quarter of 2021, with construction to begin in 2022, and commercial operation in 2025.

COLOMBIA

) FRENCH GROUP TURNS ON SOLAR

French company GREENYELLOW has turned on the 12.5MW Petalo de Cordoba I solar project in Cordoba. The project has a power purchase agreement with retail chain Grupo Exito. It will power 27 warehouses owned by chain.

This is GreenYellow's first utility-scale project in Colombia. The group has more than 15MW of solar capacity in development. The company's model sees it assume all the financing needs for the design, implementation, and operation of the plants.

) ISA EYES STORAGE AUCTION

Local group INTERCONEXION ELECTRICA (ISA) will participate in Colombia's upcoming auction for utility-scale storage, executives said. Colombia is looking to appoint a company to design, build, operate, and maintain the facility in the department of Atlantico. It is expected to have a 50MW capacity with a likely 15-year service contract.

"We will evaluate all growth opportunities, including the auction for battery storage," said ISA chief executive Bernardo Vargas in a quarterly earnings call. "The plan was for that to happen this year but we think it will now take place at the start of next year."

There isn't much more clarity around the bidding process, but the scheme is expected to enter commercial operation by June 30 2022. The tender is open to local and international companies, with three alternatives available for the winning concessionaire.

The first two each propose the installation of a 15MW battery storage system and another one of 35MW, which will all be connected to different substations. The third option is the installation of a 45MW system connected to one substation.

NGX TAPS CPVEN

NGX ENERGY INTERNATIONAL has received a binding commercial offer from CPVEN to develop gas wells and provide services at the former's SN-9 block in the Lower Magdalena Basin. CPVEN has initially committed to construct and complete four gas wells, including mobilisation, demobilisation, engineering, drilling, and completion, for an aggregate cost of US\$27.2m. CPVEN has offered to finance the construction of the four wells, with defined monthly instalments for each based on the results of the first well; NGX will be obliged to make a 25% downpayment on the cost of each well, with 10% in advance of the commencement of drilling and the remaining 15% paid 90 days after drilling is commenced, with the remaining 75% paid in monthly installments.

NGX will be obligated to maintain a monthly balance of US\$1m to pay for CPVEN's services, which will serve as a guarantee for such payment. This is done under the economic interest the company has in the SN-9 block, according to a statement. CPVEN has operations in Colombia, Ecuador, the USA, Kuwait, Peru, and Venezuela.

) NOVATOR PLOTS MAJOR TELECOMS INVESTMENT

London-based NOVATOR PARTNERS will invest US\$1bn in infrastructure telecoms projects in Colombia over the next five years, it said in a statement. The move comes after the launch of its WOM mobile phone brand in the country and four months after it acquired a majority stake in telco Avantel.

Work includes installation of 8,000 antennas to improve connectivity in rural areas. "Colombia's mobile telephone sector is static; the concentration of the mobile market has delayed key investments for the development of the country," Chris Bannister, CEO of WOM in Colombia, said in a statement.

) MULTINATIONAL INFRA STUDY GROUP LAUNCHED

Colombian development bank Financiera de Desarrollo Nacional (FDN), the Inter-American Development Bank (IDB), and the Government of the United Kingdom will team up to fund a pre-investment vehicle to co-finance pre-feasibility and feasibility studies of infrastructure projects in Colombia. The FDN and IDB will commit US\$1m each, while the UK will provide US\$720,000 to the entity.

"This is an important step for the promotion of new infrastructure projects as it allows to inject resources for a solid structuring, thus making them easily bankable, executable and attractive to the market," said FDN President Francisco Lozano.

The co-financing of this stage is aimed at providing mature infrastructure projects to the market and promoting their structuring with a high quality standard, according to a

Major renewables auction planned

■ COLOMBIA Renewables

Colombia will offer long-term contracts for more than 5,000MW of capacity in its next renewables auction slated for Q1 2021. The procurement will be aimed at power retailers serving large industrial customers, which account for around one-third of the country's overall demand. Projects will have to come online before December 2022.

The solicitation follows on from the country's maiden renewables auction in late 2019, which saw weighted average pricing on the contracts of Ps95.65/kWh (US\$0.026/kWh). Contracts will be pegged to the Colombian peso and updated based on a producer price index certified by

Colombia's National Administrative Department of Statistics.

The auction bidding terms will be elucidated by the Ministry of Mines & Energy over the coming months. In a speech about the auction at the dedication of a solar park, president Ivan Duque said that the Colombian government would also be developing the green hydrogen road-map in collaboration with Chile. He said that Colombia would have "at least two or three large-scale [green hydrogen] projects" developed in the near future.

Nic Stone

statement. "Additionally, the markets in which projects can be financed in the medium and long term are strengthened, ensuring that Colombia has bankable national and local projects," the statement added.

The project selection criteria will be defined by a Directory of Contributors and will consider, among other things, the strategic importance of the project, the co-financing of the studies by public entities, as well as the economic, social, and environmental impacts of the project. A projects committee will evaluate the projects presented against these criteria for the selection of those that will be co-financed with resources from the trio.

The project structuring process will be carried out under best practices implemented by the contributors, according to the statement. The vehicle will operate for a maiden six-year term.

) SECOND WAVE 4G HIGHWAY REBOOT EMERGES

Public hearings are set to be launched for a reworked concession for the stalled 456km Santana–Mocoa–Neiva 4G highway public-private partnership. Lawmakers will meet with stakeholders on November 18 in Pitalito, in Mocoa on December 2, and in Neiva on December 14 to develop a framework for a new tender.

Works are expected to cost around US\$1.8bn, according to the Colombian government. There will be a 29-year concession period. The project was part of the second wave of 4G projects.

COSTA RICA

WIND FARM GETS APPROVAL

Central American interconnection commission CRIE has approved the 110MW Toabre second phase wind complex in Cocle. The project sponsored by RECURSOS EOLICOS and AUDAX RENOVABLES will be the second largest in Costa Rican history. Overall investment is US\$150m. The duo tapped Vestas for the turbines.

Audax closed a US\$104m financing backing an earlier 66MW stage of the scheme. It was financed via a 12-year syndicated loan with Banco Prival acting as agent bank on the deal. The project has a 15-year power purchase agreement (PPA) with a group of three distribution companies priced at US\$95/MWh. Plans exist to expand the project up to 225MW.

Costa Rica gets the majority of its power from hydro, over 50% according to recent estimates, but it is looking to increase the amount of non-conventional renewables on the grid.

MEXICO

) BLACKSTONE'S FISTERRA EYES CCGT BOND REFI

Blackstone affiliate FISTERRA ENERGY is looking to issue US\$904m of 20-year bonds rated BBB– to refinance project finance debt backing the 875MW Tierra Mojada combined-cycle natural gas-fired power plant in Guadalajara.

The company has tapped Morgan Stanley, Goldman Sachs, and SMBC Nikko to lead the deal, with investor calls beginning this month. The deal will come through special purpose vehicle FEL Energy and pricing is expected to be 6.5%.

"The holdco debt will be senior secured, fully amortising (including cash sweeps), with a fixed interest rate," said Fitch. "Bondholders benefit from a cash sweep subject to a target outstanding debt balance throughout the debt life, which is expected to reduce mandatory interest payments during the later years of the debt and significantly improve project resilience to stresses.

"Adequate structural features such as a six-month debt service reserve fund (DSRF), a 12-month backward and forwardlooking DSCR distribution test of 1.2x, and indebtedness limitations are expected to ensure that a sufficient level of liquidity is maintained. The project bears minimal FX risk."

The opco will transfer all of its cashflow after payment of income taxes, other operating expenses, debt service and other pari passu payments to the holdco via intercompany loans or distributions.

The debt will be secured by a first priority, perfected security interest in all tangible and intangible assets of the issuer and the guarantors. This includes certain project accounts, the project documents, and capital stock. Commercial operation was expected in December 2019, but was pushed into this year, prompting the company to take out a US\$88m one-year bridge loan through Morgan Stanley.

Fisterra Energy closed a roughly US\$600m debt package backing the scheme in 2017. That deal features construction facilities and letters of credit, and with an overall cost of about US\$900m the leverage is around 66%. Societe Generale, Credit Agricole, Natixis, SMBC, Mizuho, and Intesa Sanpaolo were the lenders on the deal. Fisterra engaged the World Bank's Multilateral Investment Guarantee Agency (MIGA) to cover the commercial bank debt and equity. The tenor on the deal was 15 years.

The majority of Tierra Mojada's capacity will be sold under a 20-year power purchase agreement (PPA) with Comision Federal de

Electricidad Calificados. Fitch is expected to rate the deal BBB–.

) GANFENG INCREASES SONORA STAKE

Chinese company GANFENG LITHIUM has exercised its option to increase its stake in BACANORA'S Sonora Lithium mine. Cornerstone investor and offtaker Ganfeng will subscribe for 73,955,680 new ordinary shares in project company SLL at £0.2959 (US\$0.39) for a total value of £21,883,485, subject to certain conditions. It will take the group's stake in the project company to 50% from 22.5%.

Bacanora will remain as the project operator in Sonora, while Ganfeng will be responsible for leading the engineering, procurement, and construction of the mine. The move is likely to push the financing to close. Bacanora Lithium has mandated Citi and Canaccord to land full development capital for the mine, with close expected to come before construction begins early next year.

Overall project costs are estimated at about US\$800m across Stage 1 and 2 construction, with US\$420m needed for Stage 1. The company signed a US\$150m conditional senior debt facility with RK Mine Finance in 2018 to finance development of the scheme, with US\$125m still to be drawn. Production is targeted for 2023.

) ORLA DRAWS ON GOLD PF

Canada-listed **ORLA MINING** has drawn down the second US\$50m tranche of its project finance facility backing the Camino Rojo oxide gold mine in Zacatecas. All conditions precedent for the second drawdown have been satisfied, including the receipt of key mine permits at Camino Rojo, according to the company.

To-date, US\$75m of the original US\$125m credit facility has been drawn. The third and final tranche of US\$50m must be drawn within six months of the second tranche and remains subject to meeting certain conditions.

The company closed the five-year deal through Trinity Capital Partners, with Pierre Lassonde and Agnico Eagle Mines joining the syndicate of lenders, in October 2019. Pricing was 8.8%. The deal features a principal repayment at maturity with no scheduled amortisation: Orla can prepay the loan, in full or in part, at any time during the term, without penalty.

Cutfield Freeman & Co provided advisory services, with Cassels Brock & Blackwell as legal counsel. The feasibility study supports a simple open-pit mine and heap-leach operation with low capital and operating costs providing rapid pay-back and a strong financial return, according to the company.

The mine is expected to produce 100,000 ounces of gold annually. The project is

AMLO to expand infra programme

■ MEXICO PPP

President Andres Manuel Lopez Obrador (AMLO) says a second package of infrastructure projects for the Mexican private sector will be announced soon, following on from the US\$14bn plan revealed last month.

The deal is expected to result in "another package of infrastructure works with significant amounts of funding to keep boosting the country's economy," AMLO said at his daily news conference.

The government is looking to bring in private sector finance to help boost the economy and deliver major infrastructure works in the wake of Covid-19.

AMLO revealed the first block of public-private partnerships as part of the economic relief plans at the beginning of October.

The programme builds on the previously launched US\$43bn National Infrastructure Plan (PNI) list of PPPs that the government and the private sector presented in November 2019. Many of those projects were hit by the Covid-19 pandemic.

Unlike the previous plan, the new version combines financing from both the public and

private sectors, with the private sector expected to contribute at least 50% of the funding for each project.

The projects include 28 highways, two ports, two railways, two water and sewage systems, and five energy projects. The list is expected to grow in the coming months and it is the first time energy projects have been included under a programme launched by AMLO.

Seven of the projects are already under construction, nine are set to see construction start by year-end, while the remainder are expected to enter construction in 2021.

"We have agreed on a process from which the potential projects are presented first, then they go on to an analysis stage, then to a specific formulation of the projects, then to the approval and the execution stage," finance minister Arturo Herrera said at the press conference launching the programme.

Some of the highway projects include the Siervo de la Nación urban highway, the Santa Catarina urban viaduct, the Mitla-Tehuantepec II highway, the Ecuandureo to La Piedad highway, the Pacific southern highway package, the

northern highway package, the Aguascalientes bypass, the San Luis Potosí bypass, the Tuxtla Gutiérrez–San Cristóbal highway widening, the Tepic Villa Unión highway, the Fresnillo–Osiris–Cuauhtémoc bypass modernisation, and the Jala–Compostela–Las Varas highway.

On the energy side, projects include the Ethane terminal in Pajaritos, the Camargo fertiliser plant, the Tula refinery coking plant, the rehabilitation of the Cadereyta refinery coking plant, and the Salinas Cruz liquefaction unit.

Other notable works include the roadworks improving connectivity to AIFA, a cruise dock in Cozumel, and the García–Monterrey Airport light rail corridor.

The programme is part of a plan that hopes to start projects worth as much as a quarter of the nation's GDP by 2022 and create as many as 185,000 jobs.

Mexico's finance executives association the IMEF is also currently pushing the government to create a PPP agency for the country to help deliver the projects and provide assistance in structuring and development.

Nic Stone

100% owned and covers more than 200,000 hectares. Commercial operation is expected in 2021.

PANAMA

) ENEL SOLAR CONSTRUCTION BEGINS

Enel, through ENEL GREEN POWER PANAMA (EGPP), has broken ground on the 26.24MW Esperanza solar project in Chiriqui. The scheme is part of EGPP's US\$50m investment plant for solar PV through to 2021 in the country. The project will sell power to commercial and industrial customers. Commercial operation is slated for the first half of 2021.

The scheme will use 64,440 monocrystalline PV modules and produce 41.85GWh of electricity per annum. On September 14, EGPP also started building the 13.12MW Jaguito solar park in Cocle. The projects is likely to contribute to the power purchase agreement EGPP signed with state lender National Bank of Panama (Banconal) to supply 31GWh of clean energy over five years. Overall, EGPP has 62MW of solar online and expects to exceed the 100MW mark by the end of 2021.

) ENA LANDS TOLL ROAD BOND REFI

Local toll road operator EMPRESA NACIONAL DE AUTOPISTAS (ENA) has closed a US\$400m bond issue due 2048 refinancing debt at subsidiaries ENA Sur SA and ENA Este SA.

ENA Sur holds the concession for the Corredor Sur toll road in Panama City and ENA Este holds the concession for the connection between the Panamerican highway and the Tocumen airport.

The deal was led by Bank of America and Banco General. With about US\$2.4bn in orders, the borrower, rated Baa1/BBB+/BBB+, was able to price the amortiser with an average life of around 19 years at a yield of 4%, well inside initial price thoughts of the mid to high 4s.

Final pricing came tight to the last time ENA hit the market in 2012, when it issued US\$600m of 2028 bonds at par to yield 4.95%. Those bonds were recently trading at 100.50 to yield 4.5%, according to MarketAxess.

As a state-owned entity, ENA is seen as quasi-sovereign risk and the deal offered a nice pick-up over Panama's curve, where its long-dated bonds have been trading in the low 3% area.

The company has seen a dramatic decline in traffic and hence revenues during the Covid-19 health crisis. But the decent spread to the sovereign plus the prospects of a recovery in economic growth

in Panama was enough to turn a few heads on the buyside.

"The timing of this deal is not bad because economic activity is on the pick-up. Forecasts show stronger growth in 2021," said an analyst following the deal.

The bond's structure, which carries various reserve accounts and is secured by toll road revenues, also mitigates some of the risks brought on by the pandemic.

"Moody's recognises that the weak performance is partially compensated by ENA Master Trust's project finance provisions in the structure and a five-year grace period for principal payments," the rating agency wrote in a report.

Moody's points out that the bond issue has a debt service reserve fund that would cover 12 months in interest and principal payments. Furthermore, the borrower can only make dividend distributions if debt service cover is at least 1.3x.

PERU

) BIDS IN FOR SUBSTATIONS

Private investment promotion agency
PROINVERSION has qualified seven groups for the
30-year public-private partnership concession

to build and operate the 220/60kV Chincha Nueva and Nazca Nueva substations. Bidders include six companies and one consortium; Acciona, Celeo Redes, Cobra, Conelsur, ISA, Terna Plus, and the Edemsa consortium.

The winner will be charged with financing the works, which will be US\$21m for the Chincha site and US\$19.5m for the Nazca one. Financial requirements for bidding companies include US\$30m of equity on the books and US\$90m of assets as a minimum. The winning bidder will receive availability payments for the assets. The awardee will have access to incentives granted by Peruvian law to new infrastructure concessions, such as legal stability agreements, early refund of VAT, and others.

) ENEL INKS DEBT DEAL

ENEL DISTRIBUCION PERU has signed a S140m (US\$39m) debt financing to in part help it fund its investment plans in Peru. The three-year promissory note issue was signed with an unnamed lender.

"With this new debt, the company will be able to continue responding to the financing needs of customers for the payment of their energy bills, in addition to ensuring continuity and quality electricity supply, development of the annual investment plan, company operations and full compliance with the chain of payments to suppliers and workers," Enel said in a securities filing.

Enel Distribucion Peru serves as a concessionaire for the public electricity service in the northern zone of Metropolitan Lima, Callao, Huaura, Huaral, Barranca, and Oyón.

) PIURA TRANSMISSION BID OUT

Private investment promotion agency ProInversion has released the bidding documents for the roughly US\$163.5m Piura–Nova Frontera 500kV transmission line. The scheme will be developed as a public-private partnership, with the private partner charged with the design, financing, construction, operation, and maintenance of the line

It will serve as the main Peruvian artery that will connect the country's grid with the Ecuadorean grid. There will be a 40-month construction period and a 30-year concession. The call is open to domestic and international bidders. The winning bidder will be the company that offers the lowest total service cost, in accordance with the provisions of the bases.

"The importance of our tender is that it will develop the Peruvian section, while Ecuador does the same with its section, and

thus the electrical interconnection between the two countries will be a reality in the medium term. Development in technical aspects is coordinated by a binational commission," said ProInversion's project director, Aníbal del Águila. An award is scheduled for the second quarter of 2021.

SOLARPACK AND ARDIAN LAND REFI

Spain's SOLARPACK and France's ARDIAN INFRASTRUCTURE have closed a US\$226.5m refinancing backing three solar projects. BNP Paribas, Societe Generale, and SMBC were the lenders. BNP was the administrative agent, Citi was collateral agent and account bank, while Astris Finance advised on the deal.

The debt refinances existing debt provided by the US Overseas Private Investment Corporation (OPIC), now known as the International Development Finance Corporation (DFC), which had to be closely coordinated given the unique prepayment sequence and steps that had to be taken with the DFC.

The deal backs the 19.4MW Moquegua, 24.9MW Tacna, and 23.6MW Panamericana solar projects. Each facility benefited from a specific and segregated collateral package, with no cross-collateralisation. The deal thus included more than 30 local security documents, according to one of the firms on the deal.

The transaction also required analysis of each of the power purchase agreements entered into by each borrower with the Peruvian government, in order to assess any potential bankability issues for the lenders. Garrigues and Milbank represented the lenders, while Rodrigo, Elías & Medrano Abogados advised the borrowers.

PUERTO RICO

WINNER NAMED ON FERRIES P3

The Puerto Rico Public-Private Partnerships Authority has selected HMS FERRIES for the operation and maintenance of the Maritime Transportation Authority (MTA) and its assets under a 23-year public-private partnership.

Other shortlisted teams included Balearia Caribbean, Priority Roro Services, Puerto Rico Fast Ferries, and Seastreak. The aim of the project is to improve and modernise the municipal ferry service for the routes of Catano–San Juan and Ceiba–Vieques–Culebra and to reduce the government subsidy of the maritime transportation system. The winning proponent is a unit of Indiana-based HMS Global Maritime.

The private partner will be tasked with the management of MTA's ferries services; the maintenance of the terminals and vessels; the optimisation of ticketing services; and the operation of a maintenance facility in Isla Grande. The authority estimates the P3 will result in savings of approximately US\$337m for the government of Puerto Rico by the end of the project term.

The project proposed by HMS was evaluated as a revenue risk proposal through which the private operator would be entitled to the revenues generated, but would retain the risks associated with the sufficiency of the revenues to continually operate and maintain the ferries, according to project documents.

The services will be performed under a 23-year operations and maintenance agreement (OMA) divided in two phases. Phase 1 will begin after the commercial closing date and last for three years. During this phase the MTA will reimburse the private partner for all operations expenses. HMS will collect fare revenue for the MTA but will not retain revenue until Phase 2 begins on the third anniversary of commercial close.

At the end of the initial three-year term, the government will transfer demand risk to the private operator, which may consider other ancillary services such as parking to generate additional revenue. If fare revenues are 30% higher than projected, the excess will be divided equally between HMS and the MTA.

UNITED STATES

TALEN TO RETIRE 5GW OF COAL POWER

Allentown, Pennsylvania-based TALEN ENERGY is to retire its entire fleet of coal plants by 2028 and will develop new renewables or utilise repowering initiatives to take their place.

Talen operates more than 4GW of projects fuelled entirely by coal and roughly 1GW of additional projects in which coal is a part of the fuel mix. The company will replace part of the lost coal capacity with roughly 1GW of solar, wind, and battery storage it has started developing, and will repower the impacted plants to run on alternate fuel sources.

Some of those projects may transition from baseload to capacity resources within the PJM market. Talen will provide more details on its investments, energy transition strategy, project execution and capital allocation plan at its ESG investor day in Q1 2021.

TVA TO SUPPLY GOOGLE AND VANDERBILT

The TENNESSEE VALLEY AUTHORITY (TVA) has entered power purchase agreements (PPAs) with Google and Tennessee's Vanderbilt University.

Google will buy the entire output of xa new 100MW solar project in Obion County, Tennessee. The tech company will use the power for its data centres in Clarksville, Tennessee and Hollywood, Alabama. The project is being developed by Florida's Origis Energy as part of TVA's Green Invest programme, which aims to help commercial and industrial (C&I) power buyers such as Google connect with renewable energy projects that move them toward long-term sustainability goals. Origis will own and operate the project, which it plans to bring online by the end of 2022.

In recent weeks TVA also entered into a PPA with Vanderbilt University for the output of a 125MW facility to be built in Tullahoma in partnership with Nashville Electric Service

) CIP BUYS HYDRO DEVELOPMENTS

COPENHAGEN INFRASTRUCTURE PARTNERS (CIP) has bought the 393MW Swan Lake and 1,200MW Goldendale pumped storage hydro development projects in Oregon and Washington.

The projects were previously owned and in development under a joint venture between Rye Development (Rye) and National Grid. Rye will continue to lead development of the two projects until the start of construction. Swan Lake secured its 50-year Federal Energy Regulatory Commission (FERC) licence in 2019 while Goldendale filed an application with FERC in June of 2020.

Christian Skakkebæk, senior partner at CIP, said "with the long investment horizon of our funds, it enables us to participate in large projects overseeing contracting, de-risking, financing, construction and operation". CIP said studies have shown the Pacific Northwest will need thousands of MW of new generating capacity and storage as coal is phased out of the grid and renewable energy from wind and solar replaces them. Wind and solar do not produce energy 24 hours a day. Long duration storage, particularly pumped storage hydro, will help solve this challenge by storing the energy until it is needed at peak times.

) GOLDWIND SELLS RATTLESNAKE WIND

Chicago-based GOLDWIND AMERICAS, a unit of China's Xinjiang Goldwind Science and Technology, has sold the 160MW Rattlesnake wind project in McCulloch County, Texas to an investment company advised by Spain's Exus Management Partners, an investment and asset management firm focused on renewable energy.

The purchase price was not disclosed. The project reached commercial operation in 2018. Marathon Capital acted as Goldwind's sell-side financial adviser providing marketing outreach, valuation, structuring, due diligence, and negotiation support throughout the sale process. Goldwind Americas will continue to provide the project with long-term maintenance.

In September 2018 Goldwind Americas closed on tax equity financing from BHE Renewables and Citigroup on the scheme. Goldwind Capital provided construction financing for the project. Rattlesnake sells power under a long-term fixed-price energy hedge.

) SB ENERGY RAISES DEVELOPMENT FUNDING

Deutsche Bank, East West Bank and CIT have closed a US\$150m senior development facility for SB ENERGY, SoftBank's solar development affiliate.

SE US Holdings Three is the borrower on the late development project financing, which will be used to fund utility-scale solar projects. The financing backs a portfolio of five US solar power plants with a combined capacity of more than 1.7GW.

SB Energy acquired the California and Texas projects from Intersect Power. SB agreed to build, own and operate the projects, each of which has a long-term power purchase agreement (PPA) or has entered into contracts to sell the renewable energy and renewable energy certificates (RECs).

The financing transaction is priced higher than more typical renewables project financing deals because it is providing capital to projects in late stage development, prior to notice to proceed, and involves more risk.

) AEP CALLS FOR OHIO AND TEXAS WIND AND SOLAR

AEP ENERGY PARTNERS, a unit of Columbus, Ohio-based utility American Electric Power, has issued a request for proposals (RFP) seeking offtake from new solar and new wind facilities in Ohio and the Electric Reliability Council of Texas (ERCOT).

For the Ohio projects, the company is seeking power purchase agreements (PPAs) of 10, 12, or 15 years for solar or wind facilities that begin operation between 2021 and 2023. In ERCOT, the company is seeking PPAs of 12 years or less for solar facilities that begin operation between 2021 and 2023. Proposals with alternative terms will also be accepted. Notices of intentions to bid

Equinor reveals offshore hub plan

■ UNITED STATES Renewables

EQUINOR has released details of its proposal to locate America's first offshore wind tower manufacturing facility at the Port of Albany in upstate New York. Developed jointly with manufacturers Marmen and Welcon, the port would be used for manufacturing offshore wind towers and transition pieces (TPs), according to a statement.

The Port of Albany extension initiative is part of the bid Equinor submitted in response to the New York State Energy Research and Development Authority's (NYSERDA) latest offshore wind energy solicitation, which seeks up to 2.5GW of offshore wind and multi-port infrastructure investment plans (PIIPs).

The proposals comprise plans for manufacturing offshore wind components upstate at the Port of Albany and the Port of Coeymans as well as making South Brooklyn Marine Terminal the hub for construction activities and an operations and maintenance

(O&M) base. Development of the sites is contingent upon NYSERDA selecting Equinor's bid and PIIP.

Equinor offered bids for phase two of Empire Wind near Long Island and Beacon Wind near Montauk Point.

The first phase of Empire Wind is an 816MW project that was named a winning bidder in the state last year, and the Beacon site has a potential development capacity of 2.4GW.

New York State has a goal to secure 70% of its electricity from renewable energy by 2030, and to have at least 9GW of offshore wind by 2035. The state said it will decide on the winning bidders for the latest offshore procurement by the end of this year.

In September, BP and Equinor formed a partnership for offshore wind in the US, making BP a 50% non-operating partner in the Empire Wind and Beacon Wind assets. That transaction is expected to close in early 2021.

Alison Healey

were due by November 13 and responses to the RFP are due by November 23.

) CHABERTON GETS GREENBACKER INVESTMENT

Maryland renewable developer CHABERTON ENERGY HOLDINGS has received a corporate-level investment from Greenbacker's Development Opportunities Fund I.

The investment will support the growth of the company and its development of a portfolio of distributed generation solar projects in the Mid-Atlantic region of the US. The size of the projects in the portfolio will be 1MW–5MW.

Greenbacker was launched earlier this year to provide flexible capital to sustainable infrastructure developers. Chaberton Energy was founded in 2020 primarily to develop distributed solar generation assets in the mid-Atlantic, from origination to ready-to-build.

COLLAB LAUNCHED FOR OFFSHORE

The governors of Maryland, North Carolina, and Virginia have set up a three-state collaboration to advance offshore wind projects in the region called the Southeast and Mid-Atlantic Regional Transformative Partnership for Offshore Wind Energy Resources (SMART-POWER).

The entity will provide a framework for the states to cooperative, promote, and develop offshore wind projects as well as the ancillary services needed for the industry. The states are now expected to nominate a leadership team for SMART-POWER. According to the United State Department of Energy (DOE), the Atlantic Coast offshore wind project pipeline is estimated to support up to US\$57bn in investments by 2030.

EDP AND ENGIE JV FOR OFFSHORE

EDP Renewables and Engie have landed approval from local regulators to merge their offshore wind businesses in the US into a joint venture to be known as OCEAN WINDS NORTH AMERICA. It is the 50% owner of the 804MW Mayflower offshore wind project, which saw its long-term contracts approved this month by the Massachusetts Department of Public Utilities (DPU). Ocean Winds North America is a partner in the Redwood Coast floating offshore wind project in California.

Ocean Winds chief executive officer Spyros Martinis said: "OW will be a major element in creating the new clean, sustainable, and prosperous economy that Americans are demanding and OW North America can help to build that future. OW North America from Day One is in the business of developing and delivering real offshore wind projects."

Ocean Winds has 5.5GW of "committed offshore assets" comprising 1.5GW under construction and 4GW under development, with the target of reaching up to 7GW of projects in operation or under construction and 10GW under advanced development by the middle of this decade, the company said

) FOREFRONT BUILDING ILLINOIS SOLAR

San Francisco distributed solar and storage company FOREFRONT POWER is building a portfolio of six solar plants in Illinois, adding 6.6MW of capacity in McHenry and Williamson counties.

Each of the projects received incentives through the state's adjustable block programme (ABP), which was established by the state's Future Energy Jobs Act to support the development of photovoltaic distributed generation and community solar projects.

The ABP enables new projects to sell solar renewable energy credits (SRECs) to local utilities to reduce the cost of the power. The SRECs are then retired to count toward Illinois' renewable energy goals. Three of the projects in the portfolio will sell power to auto supplier AISIN Group, while the others will supply Huntley Community School District. Forefront Power is a unit of Japan's Mitsui. With the latest projects Forefront has developed 22.9MW of solar in Illinois, representing US\$46.7m of investment.

) MAINE FLOATING OFFSHORE PROGRESSES

Project sponsor NEW ENGLAND AQUA VENTURES has kicked off a search for vendors and suppliers for the building of what is expected to be the US's first demonstration of commercial offshore floating wind technology. Developers plan to begin construction in 2022, with commercial operation in 2023.

Mitsubishi subsidiary Diamond Offshore Wind and RWE Renewables joined the public-private partnership and committed to investing US\$100m in the project in August this year, while the US Department of Energy (DOE) will provide US\$47m for the scheme.

) MASS APPROVES MAYFLOWER CONTRACTS

The Massachusetts Department of Public Utilities (DPU) has approved long-term contracts between ROYAL DUTCH SHELL and OCEAN WINDS NORTH AMERICA'S 804MW Mayflower offshore wind farm and local

electric distribution companies. The move is a critical step for the financing process, which is expected to be launched in 2021.

The power purchase agreement (PPA) on the project will run for 20 years. The contract cost will be US\$58/MWh, lower than the US\$65/MWh for the state's other pending offshore wind project, the 800MW Vineyard Wind scheme.

Credit Agricole has been advising on Mayflower for over a year. The amount of the debt that will be put in place for Mayflower remains to be determined and may require a reassessment of certain project costs to see if equipment costs have changed due to Covid-19.

"The approval of these contracts furthers the Commonwealth's development of an offshore wind industry that will create local jobs, spur economic development and provide Massachusetts ratepayers with clean, affordable and resilient energy," Massachusetts Governor Charlie Baker said.

Mayflower Wind was selected in October 2019 under a request for proposals (RFP) and approved by the DPU after review by an independent evaluator on May 17 2019.

EDP Renewables and Engie recently landed approval from local regulators to merge their offshore wind businesses in the US into a joint venture known as Ocean Winds North America, which holds 50% of the equity in Mayflower.

) NEVADA VOTES FOR 50% RENEWABLES

Voters in Nevada have approved an amendment to the state constitution that will require the state to get at least half its electricity from renewable sources by 2030. The state's previous renewable portfolio standard (RPS) mandated utilities to get 25% of their electricity from renewables by 2025. The ballot measure known as Question 6, or the Nevada Renewable Energy Standards Initiative, was approved by 56% to 44%. The state must procure 22% of its power from renewables from 2022 and the percentage will increase over the following eight years until it reaches 50%. Legislation facilitating the adjustments will be implemented by July 2021 under the measure

) NORTHLAND GETS INTO NY RENEWABLES

Toronto's NORTHLAND POWER has entered the US renewable energy market with the acquisition of three wind projects in New York. Northland Power paid C\$5.6m (US\$4.2m) for the High Bridge, Bluestone, and Ball Hill projects, each 100MW.

The company expects to incur development cost for the projects this year. Northland said the projects position the company to actively participate in the renewables market in New York, which is expected to grow by 26GW by 2030.

) ORMAT'S PUNA BACK ONLINE

ORMAT TECHNOLOGIES' Puna geothermal has resumed commercial operation after it was damaged and taken offline by a volcano eruption in 2018. The plant is currently delivering up to 2MW to the grid. Ormat expects to gradually ramp up production to approximately 15MW by year-end 2020, subject to the successful connection of an additional production well to the power plant.

Earlier this year, Ormat amended its power purchase agreement with Hawaiian Electric for the project. The amended PPA extends the tenor until 2052 with an increased contract capacity of 46MW and a fixed price of US\$70 per MWh.

The PPA stipulates there will be no escalation in pricing regardless of changes to fossil fuel pricing. The commercial operation date (COD) of the new plant is expected during the first half of 2022. The existing PPA remains in effect, on current terms, until the expansion is completed and the new plant reaches its COD. Ormat's acquisition of Puna was project-financed in 2005.

) PG&E TO SELL CALI HYDRO

PACIFIC GAS AND ELECTRIC (PG&E) is preparing to launch a sale process for its 28.7MW Crane Valley hydroelectric project in Madera

County, California. The project includes five hydroelectric powerhouses, two dams that form storage reservoirs, and seven smaller diversion dams. PG&E decided to sell Crane Valley because it no longer serves as an economical source of generation for its customers.

"An increasingly competitive energy market, lower forecasted generation needs for PG&E's bundled electric customers and the increasing cost of operating the facilities are all factors in the company's decision to sell," PG&E said. The utility plans to launch a request for offers for an auction process that will begin in the spring. PG&E expects the transfer of the project to a new owner could take as long as three years to complete.

) WISCONSIN UTILITY TO ADD RENEWABLES

Wisconsin's largest utility **WEC ENERGY** is planning to add more than 1.5GW of renewable energy and 300MW of new gasfired power as it prepares to retire 1.8GW of fossil fuel projects over the next five years.

The company's plan calls for 800MW of solar and 100MW of wind to be combined with 600MW of battery storage as it looks to achieve a 55% reduction in carbon emissions by 2025 and produce carbonneutral electricity by 2050.

The utility has not yet disclosed its plan for procuring the new capacity. For its gas-fired plans the company will purchase a 200MW share of Alliant Energy's new West Riverside gas plant and build 100MW of peaking plants.

) AEP CALLS FOR WIND AND SOLAR

AEP ENERGY PARTNERS, a unit of Columbus, Ohio-based utility American Electric Power, has issued a request for proposals (RFP) seeking offtakes from new solar and new wind facilities in Ohio and the Electric Reliability Council of Texas (ERCOT).

For the Ohio projects the company is seeking power purchase agreements (PPAs) of 10, 12, or 15 years for solar or wind facilities that begin operation between 2021 and 2023. In ERCOT the company is seeking PPAs of 12 years or less for solar facilities that begin operation between 2021 and 2023. Proposals with alternative terms will also be accepted. Notices of intention to bid are due by November 13 and responses to the RFP by November 23.

) CLEARWAY CLOSES MULTIPLE DEALS

A unit of renewable energy developer **CLEARWAY ENERGY** has entered into a series of transactions including a distributed generation refinancing and drop-down deals with its parent company and is considering an investment in a 1.6GW portfolio.

DG-CS Master Borrower has issued a US\$467m loan and a US\$30m debt service reserve letter of credit. Proceeds will repay existing project-level debt at four assets, unwind related interest rate swaps in the amount of US\$42m, and pay transaction fees of US\$9m.

The new debt bears interest at 3.51% and will mature in 2040. Clearway acquired Clearway Energy Group (CEG)'s residual interest in the distributed generation partnerships and a contract related to the monetisation of renewable energy credits associated with assets within the partnerships for US\$43.5m.

The partnerships and a contract for renewable energy credits are expected to contribute asset cash available for distribution (CAFD) on a five-year average annual basis of approximately US\$5.3m beginning January 1 2021. Clearway also entered into agreements with CEG to acquire 100% of the cash equity interests in Langford Wind, a 160MW project in West Texas under repowering, which will close when the project starts operating in Q4. The corporate capital commitment for the transaction is expected to be US\$64.3m and the project is expected to contribute CAFD on a five-year average annual basis of approximately US\$8.5m.

Clearway also received an offer from CEG to enter into partnership arrangements with an undisclosed third-party equity investor to acquire a 100% cash equity interest in a 1.6GW portfolio of wind, solar and solar plus

Offshore wind pipeline grows

■ UNITED STATES Renewables

The US offshore wind industry is slated to see precipitous growth in the coming years, with the American Wind Energy Association (AWEA) updating its outlook for wind energy across the US in the coming decade. Offshore wind is slated to have 20GW of operational projects by 2029, according to AWEA, boosted by the election of Joe Biden to the presidency.

The Northeast Coast will see the most activity, due to the welcoming geography of the region and ample wind resource.

The West Coast could see some activity, but may have to wait until floating offshore is more mature because off the steep drop-off into the Pacific Ocean that makes it harder to install turbines. Pilot projects for floating offshore are continuing in Maine, with US government support. There is also talk of

project possibilities in the Great Lakes region of the country.

Upcoming offshore wind auctions include:

- New York's 2nd solicitation for up to 2,5000MW in Q4 2020.
- Maryland's 2nd solicitation for up to 400MW in 04 2020
- New Jersey's 2nd solicitation for up to 2,400MW in Q4 2020.
- A Rhode Island solicitation for up to 600MW expected in H1 2021.
- Massachusetts's 3rd solicitation for up to 1,600MW in H2 2021.
- Connecticut's 4th solicitation for up to 1,000MW in H2 2021.
- Maryland's 3rd solicitation for up to 400MW sometime in 2021.

Alison Healey

storage assets that will be completed between Q4 2020 and Q4 2022 as well as CEG's remaining cash equity interest in Mesquite Star, a 419MW wind project in Texas that came online in June. Approximately 90% of the portfolio's output is contracted with primarily investment-grade counterparties and has a greater than 14-year blended average contract length. Clearway remains in discussions on the offer and expects to commit US\$230m to US\$240m to the transaction if it moves forward.

) DOMINION ADDING SOLAR

pominion energy virginia has applied for regulatory approval to add a portfolio of new solar projects with a capacity of nearly 500MW. Six of the projects totaling 416MW were selected for power purchase agreements (PPA) following a competitive solicitation process and three will be owned by the utility.

Dominion is acquiring the 20MW Grassfield solar project in Chesapeake, Virginia from Solar Access Development Group and Blue Green Energy; the 20MW Norge solar project in James City County from Clearway Energy; and the 42MW Sycamore solar project in Pittsylvania County from Open Road Renewables and MAP Energy.

Dominion identified the six projects it has selected for PPAs in a regulatory filing, providing project names but not the names of individual developers. The projects include Watlington Solar (20MW) in Halifax County, Pleasant Hill Solar (20MW) in the city of Suffolk; Chesapeake Solar (118MW) in the city of Chesapeake; Wythe Solar (75MW) in Wythe County; Cavalier Solar (170MW) in Wight County and Surry County; and Rivanna Solar (13MW) in Albermarle County.

On October 9, Dominion Energy Virginia issued a request for proposals (RFP) soliciting bids for small-scale solar projects up to 3MW in size. Another RFP for large-scale solar, onshore wind and energy storage projects is under way and a request for information (RFI) to purchase or lease land suitable for largescale solar development was released in August. Dominion is advancing the projects as it works to comply with the Virginia Clean Economy Act (VCEA), which requires 100% of its electricity sales in the Commonwealth to be sourced from clean energy facilities by 2045. State regulators will hold a hearing to consider Dominion's proposal February 17.

) AMERESCO CLOSES SOLAR FINANCE

Energy efficiency and renewable energy developer AMERESCO has closed a construction loan facility for up to US\$30m to finance solar projects.

The non-recourse loan was provided by Fifth Third Bank. It will enable Ameresco to draw proceeds for solar projects in construction as a bridge to permanent financing or sale upon commercial operation.

At the end of Q3 Ameresco reported US\$1bn in contracted backlog representing signed customer contracts for installation or construction of projects and US\$1.2bn of awarded projects that have not yet been contracted.

) FIRM TO PROPOSE ALASKA LNG TAKEOVER

Former governor of Alaska Bill Walker has partnered with former Alaska Gasline Development Corp (AGDC) chief executive officer Keith Meyer to launch Alaska Gasline & Ling, a firm that will look to move the stalled US\$38bn Alaska LNG project forward.

The project has been significantly de-risked since securing more than 70 permits, according to Walker. Earlier this year AGDC, a public corporation of the State of Alaska, said it was considering the sale of its assets if it could not find a new development lead for the proposed LNG export project and pipeline. It obtained federal authorisation to construct and operate the Alaska LNG project on May 21.

AGDC took over as sponsor of the project in 2016 after its original developers BP, ExxonMobil, and ConocoPhillips, and TransCanada dropped out amid rising costs. AGDC has not yet held formal negotiations with Alaska Gasline and LNG about taking over project development.

) CHENIERE HURT BY LNG CARGO REFUSAL

LNG developer CHENIERE ENERGY posted a wider Q3 loss compared with 2019, hurt by customers under sales and purchase agreements (SPAs) electing against taking delivery of cargoes from its US Gulf export projects.

The company posted a loss of US\$463m or US\$1.84 per share, wider than the loss of US\$318m or US\$1.25 per share in 2019.

"Total margins decreased during the three months ended September 30, primarily due to the accelerated recognition of revenues in prior periods related to elections by our long-term SPA customers to not take delivery of LNG cargoes that were scheduled to be delivered during the current period," the company said. Cheniere recognised US\$171m in lost revenue for cargoes not taken during the quarter and US\$932m for the first nine months.

CONTURA INKS COAL DIVESTMENTS

Tennessee-based CONTURA ENERGY will sell its Pennsylvania operations to IRON SENERGY HOLDING. The transaction is expected to close before December 31 2020 and will see the transfer to Iron Senergy of the subsidiaries that hold Contura's Cumberland and

PA mulling US\$1bn toll bridge P3

■UNITED STATES Transport

The Pennsylvania Department of Transportation (PennDOT) has won approval to charge tolls on bridges and may launch a public-private partnership for one or more projects, according to a report from the Pittsburgh Post-Gazette.

The structure under consideration would see PennDOT seek proposals from private companies to design, upgrade and maintain major bridges across the state that need to be rehabilitated or replaced and would be good candidates for tolling.

Contractors would submit a proposal for an individual bridge or several bridges and the maintenance period would extend for 20 to 30 years. The state plans to use proceeds from a deal to pay for other transportation projects. Its budget for projects has been negatively impacted by the pandemic as drivers used less

gas and the state received diminished gas tax revenues.

The state had success with a prior bridge rehabilitation P3 in 2015, but that project did not have a toll component and was structured with availability payments. Plenary Walsh Keystone Partners signed on as the private partner for the Pennsylvania Rapid Bridge Replacement project, which involved the design, accelerated construction, financing, maintenance and rehabilitation of 558 structurally deficient bridges across the state over a 28-year contract term.

The price was initially projected at U\$\$899m but increased to U\$\$942m. The project was financed with U\$\$721.4m of private activity bonds (PABs), which were purchased by more than 40 different investors.

Alison Healey

Emerald mines and the associated coal reserves, mining permits and operations, infrastructure, equipment, and transloading facilities

The subsidiaries include Emerald Contura, LLC; Cumberland Contura, LLC; Contura Coal Resources, LLC; Contura Pennsylvania Land, LLC; and Contura Pennsylvania Terminal. Senergy will also assume up to US\$169m of cash commitments at the entities, including debt. The transaction is subject to a number of conditions to closing, with the parties working to address all of these conditions.

) BROADBAND UTILITY MODEL WINS VOTES

Voters in the cities of Denver, Berthoud, and Englewood, Colorado, and Chicago, Illinois have voted in favour of measures that could spur the development of municipal broadband and indicate a potential move toward a utility model for the service.

In the Colorado cities voters approved the city opting out of a state law that prohibits municipalities from investing in or building their own broadband network, opening the possibility of a city-owned network in the future. Chicago voters indicated they are in favour of the city pursuing broadband internet connectivity for all residents. The cities have not yet laid out plans for how they will move forward with the election results for specific projects.

) MACQUARIE AND GCM TO BUY ALASKA BROADBAND

Macquarie Capital and Chicago-based alternative asset management firm GCM Grosvenor have agreed to acquire ALASKA COMMUNICATIONS SYSTEMS, a broadband service provider, for approximately US\$300m, including debt.

The companies will acquire Alaska Communications for US\$3.00 per share in cash, representing a premium of approximately 57% over the closing price before the deal became public. Alaska Communications may seek superior proposals from third parties for a period of 30 calendar days through to December 3.

Macquarie Capital is serving as its own financial adviser and as financial adviser to GCM Grosvenor. The transaction will result in Alaska Communications becoming a privately held company and is expected to close in the second half of 2021. The transaction has fully committed debt and equity financing and is not subject to any conditions with regard to financing. Equity financing will be provided by Macquarie Capital and GCM, through GCM's Labor Impact Fund.

) MACQUARIE AND GCM TO BUY ALASKA TELECOM

MACQUARIE CAPITAL and Chicago-based alternative asset management firm GCM GROSVENOR have agreed to acquire Alaska Communications Systems, a broadband service provider, for approximately US\$300m, including debt.

The companies will acquire Alaska Communications for US\$3.00 per share in cash, representing a premium of approximately 57% over the closing price before the deal became public. Alaska Communications may seek superior proposals from third parties for a period of 30 calendar days through to December 3.

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BRIGHTLINE RAIL POSTPONED

FORTRESS INVESTMENT GROUP'S Brightline unit has postponed plans to build a rail link to Las Vegas from Southern California after failing to sell US\$3.2bn in green bonds, The Bond Buyer reported.

"Unfortunately, there is not a lot of liquidity in the market and a lot of economic uncertainty at this moment," California Treasurer Fiona Ma said in an email quoted in the report. "The project is postponed until market liquidity improves." The postponement was confirmed by Brightline spokesman Ben Porritt.

In recent weeks Brightline made changes to its bond offering in an attempt to attract investors, as investors questioned the strength of the project's green bond credentials and the broader business model for the project, including ridership projections. The sponsor cut the size of the deal, added equity, strengthened reserves, and added stricter leverage limits on the Morgan Stanley-led offering. The California Infrastructure & Economic Development Bank was to be conduit issuer on the bonds. California plans to take back the bond capacity and allocate it to affordable housing projects and other projects such as recycling facilities.

MARKET HOPES FOR BIDEN INFRASTRUCTURE SUCCESS

Hopes for a comprehensive federal infrastructure plan getting passed have

been revived to some degree with Joe Biden's presidential win, but the ability of legislators to craft a plan that will get enough votes from both houses of Congress is likely to remain a major challenge. The success of any plan is likely to hinge on Biden's skill in bringing together a Congress so divided it has not yet been able to agree on coronavirus stimulus measures that will be more pressing as he takes office in January.

The Trump administration tried multiple times to get a package passed and came very close, but talks ultimately collapsed amid rising tensions between the parties on trade, the administration's resistance to congressional investigations, and questions on preferred funding for the infrastructure bill.

This time around an infrastructure bill is not expected to be limited to traditional road and bridge transactions but should also include funding for airports, highways, hospitals, schools, and technology such as autonomous vehicles and charging stations, panelists predicted on a K&L Gates town hall seminar that took place in election week.

Moody's projects that Biden's plan to "markedly increase federal infrastructure spending" will lift demand for construction, telecoms and utilities, but his campaign proposal to raise corporate taxes will reduce cashflow for those sectors. However, the ratings agency sees it as unlikely that Biden would make a move on corporate taxes in the short term based on pandemic-related economic conditions

Biden has called for US\$2trn of infrastructure investment over four years, focusing on speeding up the transition to cleaner energy for transportation and buildings, broadband expansion, and school modernisation.

Specific initiatives proposed include providing every American city with 100,000 or more residents with zero-emissions public transportation options such as light rail through flexible federal investments. Biden has emphasised improvement of roads and bridges, rail, aviation, ports, and inland waterways.

"Biden will make sure that America has the cleanest, safest, and fastest rail system in the world – for both passengers and freight," the president-elect promises on his Web site. The water sector is also prioritised by Biden, who proposes investments in the repair of water pipelines and sewer systems, replacement of lead service pipes, the upgrade of treatment plants, and integration of efficiency and water quality monitoring technologies.

TAMPA ISSUES P3 TRANSIT RFP

The City of Tampa, Florida has issued a request for proposals (RFP) seeking a private partner to develop a mass transit project that will connect the Tampa International Airport with the Westshore, downtown, and East Tampa regions.

The project will be procured using a design, build, finance, operate and maintain (DBFOM) model. The project includes vehicles and system technology, operation and maintenance facilities, and related civil infrastructure, including road reconstruction. The city expects to use a performance-based availability payment structure over the operating period but will also consider paying milestone payments during the construction phase.

In September, the city received an unsolicited proposal from Hyperloop Transportation Technologies for a bullet train in the region. The city previously received an unsolicited proposal from Brightline to expand its passenger rail service to Tampa. Responses to the RFP are due by December 7 and the city plans to choose a winner by January 25. The city expects the transit line to be in service in 2026.

) RFI SEEKS LA PORT INPUT

Los Angeles has issued a request for information (RFI) inviting the private sector to provide input to the Port of Los Angeles as it looks to accelerate the development and adoption of zero-emission trucks.

Responses will inform mayor Eric Garcetti's plan to transition all trucks transporting goods to the San Pedro Bay port complex to zero emissions by 2035. Submissions should address approaches to maximise the use of public and private funding sources, describe new asset management structures that can accommodate the San Pedro Bay ports' scale, incorporate proposals for charging and fuelling infrastructure, propose maintenance and procurement methods, and lay out a public-private partnership model to achieve the zero-emission transition. Responses to the RFI are due by January 7.

) PURPLE LINE BONDHOLDER FORBEARANCE EXTENDED

US Bank, the bondholders' trustee on debt backing the Purple Line light rail transit (LRT) project, has extended its forbearance on the debt to November 30. The move gives Purple LINE TRANSIT PARTNERS

an additional month to negotiate with the Maryland Department of Transportation (MDOT) to salvage their US\$5.6bn public-private partnership before the bank takes enforcement action that could mean default.

PLTP terminated its partnership with the state on September 10, but the state is contesting the legality of the termination. The PLTP consortium, comprising Fluor, Meridiam, and Star America, previously won the court's permission for workers to walk off construction due to an inability to resolve disputes with Maryland authorities, and the Maryland Transit Administration (MTA) has since taken over hundreds of subcontracts. The Purple Line is backed by US\$313m in bonds and a US\$875m Transportation Infrastructure Finance & Innovation Act (TIFIA) loan.

) ABERTIS AND MANULIFE TO BUY ERC

Spain's ABERTIS and MANULIFE INVESTMENT
MANAGEMENT have agreed to acquire 100%
of the Elizabeth River Crossings (ERC)
concession in Virginia from Macquarie and
Skanska.

The concession operates four tunnels and a highway in the area of Norfolk under a contract with a remaining term of 50 years. The sale agreement was closed with US\$1.18bn of total equity, which is subject to change prior to close. The acquisition will be carried out through a consortium in which Abertis will hold a maximum of 68%, which may be reduced to a minimum of 51%. Manulife reached the agreement on behalf of its subsidiary John Hancock Life Insurance Company.

Abertis will finance the deal with a combination of committed bank facilities and cash, and the companies expect the acquisition to close by year-end. ERC posted 2019 Ebitda of US\$60m and carries more than US\$1.1bn in debt.

The ERC contract was valued at roughly US\$1.5bn when the project reached financial close in 2012 with a private activity bond (PAB) and Transportation Infrastructure Finance and Innovation Act (TIFIA) loan financing package.

Last year, Macquarie and Skanska hired RBC to begin shopping the asset, which brought in interest from a first round of bidders in July. Australia's Transurban was among the interested parties. The acquisition of ERC is in line with Abertis' growth strategy in the US and is the company's second major North American acquisition in less than a year following the purchase of a controlling interest in the Red de Carreteras de Occidente (RCO) toll road in Mexico in June.

AUSTIN TRANSIT PLAN WINS VOTE

Voters in Austin, Texas have approved a US\$7.1bn transport initiative known as Project Connect that may include public-private partnerships for some of its components.

Two ballot measures needed to advance the project won support from the majority of voters. Proposition A called for a 4% property tax hike that will be used to fund a high-capacity transit system while proposition B allows US\$460m in debt issuance towards transport improvements such as sidewalks, bikeways, urban trails, and safety projects.

The dedicated property tax revenue will be combined with funding from Austin's Capital Metropolitan Transportation Authority and directed to to Austin Transit Partnership, a new organisation that will oversee, finance and implement Project Connect. The city is expecting to receive federal funding for approximately 45% of the project's total cost. Project Connect includes construction of three light rail lines, an underground tunnel, new park-and-ride facilities, customer technology and maintenance facility improvements, and creation of a rapid bus route.

THIRTEEN COMPETE FOR UNI ADVISORY

A total of thirteen firms have responded to a request for proposals (RFP) seeking public-private partnership, infrastructure, and real estate advisory services for the eight campuses of Florida's Miami Dade College.

Competing firms include Aecom, Aegis Project Controls, Avison Young Florida, Brailsford Dunlavey, CH Johnson Consulting, Deloitte, Ernst & Young, HRA Advisors, Jones Day, KPMG, Rieth Jones Advisors, Savills, and The Concourse Group.

The college has not yet identified specific projects it is considering for P3s. It is looking for an adviser with experience in assessing real estate portfolios to identify project opportunities; developing plans to optimise and transform assets; evaluating and executing P3s, alternative funding and construction mechanisms; advising on transactions, including partner selection and lease or sale negotiations; performing market feasibility studies and highest and best use analysis; and providing lessor/lessee representation. Representatives from the college's purchasing department are reviewing the proposals and will make recommendations to an evaluation committee.

NEWS ASIA-PACIFIC

) Australia 26) India 31) Indonesia 32) New Zealand 34) Philippines 36) Singapore 37) Thailand 38) Vietnam 38

■ FRONT STORY AUSTRALIA - TELECOMS

Towers sales loom large in Australia

- Digital infrastructure is an attractive asset class for infrastructure investors
- The biggest telecoms companies in Australia have thus far held onto their infrastructure assets

BY ALEXANDRA DOCKREAY

Telstra, the largest of three mobile network operators in Australia, has announced a major restructuring that is due to lead to the sale of its towers infrastructure portfolio in 2021. The carrot has been dangled in front of a crowd of eager infrastructure investors that were already forming their teams ahead of Optus' delayed telecom towers sale, due to kick off at the start of 2021.

Digital infrastructure is an attractive asset class for infrastructure investors, within the context of Covid-19 and longterm given positive data demand trends, while other core infrastructure sectors have suffered demand destruction during Covid-19. Tower construction risk is low, they have relatively low maintenance expenditure requirements, revenues from leases to mobile carriers are stable, and independent tower owners can gain new revenue streams by adding towers in rural areas or in some cases, can lease the towers to additional customers. Investors in towers would also partner the telecoms companies for investment in the infrastructure assets to enable 5G.

The biggest telecoms companies of Australia – Telstra and Optus – have held on to their infrastructure assets, after telcos all over Europe were selling them off in the last few years, and the US towers have long been mostly held by independent towercos. Sales of portfolios in emerging markets of Asia and Africa have been common too. Deals over the last several years in Europe have shown there is very healthy appetite among a varied infrastructure crowd of fund managers, institutional investors and independent towers companies, and with the broad field Ebitda multiples are high - with enterprise valuations passing 20x Ebitda

Telstra is proposing to split its group into three entities next year. The three entities would be InfraCo Fixed, the owner and operator of passive or physical infrastructure assets; InfraCo Towers, the owner and operator of passive or physical mobile tower assets (the ducts, fibre, data

centres, subsea cables and exchanges); and ServeCo, the retail business and owner of the active parts of the network including the radio access network and spectrum assets.

The company has already hived off infrastructure into a standalone entity called Telstra InfraCo, but this new structure will see that divided into two next year. While monetisation of the roughly 8,000 towers will come first, Telstra has suggested the new structure will enable the option for further divestments.

Telstra intends to "maintain control of its strategic towers" as it seeks investment from third parties. The book value for the towers was A\$280m at June 30 and the tower portfolio's Ebitda for FY20 is estimated at A\$193m—\$205m. There are 5,570 mobile towers and 2,630 nonmobile towers, which Telstra says is the largest portfolio in the country.

The value of the portfolio could be in the region of A\$1.5bn, or up to A\$1bn equity with debt financing likely to be required

Optus' towers sale process is likely to come to market before Telstra's. In both cases it is not certain what size of stake will be on the block.

Bank of America Merrill Lynch is financial adviser to Optus' parent Singtel, based in Singapore. The sale launch was pushed back from an expected start in Q3.

The value of the portfolio could be in the region of A\$1.5bn, or up to A\$1bn equity with debt financing likely to be required, PFI heard from an interested party. They added that potential investors are keen to get visibility on the tax outcome of the asset carve-out and the necessary regulatory approvals, including from the Foreign Investment Review Board. Also the length of the lease with Optus for the assets has not been clear.

A broad field of bidding groups has emerged ahead of the Optus deal, for

which the adviser was appointed in March this year.

OMERS Infrastructure, the investment arm of US\$84.8bn Canadian pension fund Ontario Municipal Employees' Retirement System, has formed a consortium with Australian telecoms towers company Stilmark and its major US-based shareholder ATN International to pursue opportunities in the Australian telecoms sector. Stilmark has about 400 sites in its portfolio and development pipeline. The new platform named Symphony Consortium is poised for bidding.

Axicom, owned by Macquarie, a fund of UBS Asset Management and UniSuper, is a local independent towerco with about 2,000 towers looking to grow its portfolio. The investors acquired the Australian portfolio of US independent towerco Crown Castle in 2015 for A\$2bn.

The whole telecoms company Vodafone New Zealand, including its infrastructure, is already in the hands of two infrastructure investors. Morrison & Co-managed fund Infratil and Brookfield's fourth infrastructure fund, acquired the whole company for NZ\$3.4bn in 2019. They are likely to make a play. Morrison & Co is reported to be talking to the Future Fund and Commonwealth Super Corp.

Local fund manager AMP Capital is another candidate, having made investments in towers abroad, and it recently lent a A\$130m senior stretch loan to Stilmark out of its APAC infrastructure debt strategy.

In the European markets giant tower company Cellnex Telecom is a prolific buyer and has appeared among the list of hopefuls for Optus' portfolio. It owns 103,000 towers in 12 European countries, having just made an enormous €10bn acquisition of 24,600 towers from CK Hutchison.

Based on that deal's pricing per tower, Telstra's 8,000 towers could be valued in excess of €3bn or A\$5bn. Enterprise valuations of more than 20x Ebitda have been seen in Europe. Vodafone has sold its 11,000 Italian towers at a multiple of 24x this year to independent towerco INWIT.

AUSTRALIA

FRV BUYS NSW SOLAR

Global solar developer FOTOWATIO RENEWABLE VENTURES (FRV) has acquired the 143.5MW Metz solar farm in the New England region of New South Wales from Shanghai-listed solar PV company Clenergy. The Metz project has a PPA with federal governmentowned energy company Snowy Hydro, agreed in late 2018. Clenergy has obtained all permits and the target was to start construction before the end of 2020. The project has yet to reach financial close.

FRV, a global solar developer owned by Saudi Arabia's Abdul Latif Jameel group, now has eight solar projects in Australia. Clenergy had acquired the Metz project from Infinergy in 2018.

It emerged in October that FRV is marketing an up to 50% shareholding in its Australian renewables portfolio, with Credit Suisse advising. Operating assets include the 69.75MW Goonumbla solar, 90MW Sebastopol solar and 56MW Moree solar projects in New South Wales, and the 125MW Lilyvale solar in Queensland. Development-stage projects include the 106MW Winton solar farm in Victoria and the 115MW Chaff Mill solar in South Australia.

) NT LAUNCHES BATTERY TENDER

Northern Territory government-owned electricity producer **TERRITORY GENERATION** has launched a tender to bring private investment into a planned A\$30m (US\$21.6m) 35MW battery energy storage system (BESS) for the Darwin-Katherine grid. Local businesses are invited to participate in a two-part procurement, and pre-qualified bidders will be invited in December to participate in the second stage. Territory Generation plans to award the contract in early 2021.

The BESS is expected to pay for itself in around five years, after operations start in the second half of 2022. The BESS will supply power system services that existing gas-fired generation fulfills. The Northern Territory is targeting 50% renewables by 2030, and rooftop solar PV installations have risen 45% on average each year since 2010

) H2U'S HYDROGEN PROJECT INTO FEED STUDY

The front-end engineering and design (FEED) study is due to start in December for a proposed green ammonia production

facility named Eyre Peninsula Gateway Hydrogen Project. The hydrogen plant is being developed by THE HYDROGEN UTILITY (H2U), with MITSUBISHI HEAVY INDUSTRIES as technology partner.

The South Australia 2020/21 Budget has allocated A\$37m (US\$27m) to upgrade the state-owned Port Bonython so that it can be the point of export, AFR reports.

The two-stage hydrogen project will start with a A\$240m demonstrator, integrating a 75MW electrolysis plant that uses green energy and a 120 tonnes-per-day, or 40,000 tonnes-per-year, ammonia production facility. This will be one of the largest electrolysers for an Australian project. It will supply domestic markets, with some trial exports to Japan and North Asia. The second stage could take capacity to 2,400tpa of green ammonia, becoming an export-scale project. SA awarded the project a A\$4.7m grant in 2018 and a A\$7.5m loan.

Attilio Pigneri is the founder and chief executive of H2U, and president-elect of the Australian Association for Hydrogen Energy. Adelaide-based boutique advisory firm Woods Streets Partners has been collaborating on the project.

MHI in October invested NKr120m (US\$13m) in a Norwegian company, Hydrogen Pro, that makes electrolysers and in September launched a new council – the Kobe/Kansai Hydrogen Utilization Council – with various partners in Japan with the goal of developing the hydrogen industry.

) NEOEN WINS AEMO CONTRACT FOR BIG BATTERY

French renewables developer NEOEN has won a major contract from the Australian Energy Market Operator (AEMO), which will underpin the planned 300MW/450MWh Victorian Big Battery in Geelong. The contract with AEMO is a 250MW grid services contract until 2032. Under the A\$84m (US\$60m) 11-year contract, the battery will provide an automatic response in the event of an unexpected network outage. AEMO awarded it after running the System Integrity Protection Scheme 2020 procurement process on behalf of the Victoria government. The battery will also participate in the National Electricity Market with remaining capacity.

Tesla is to supply its Megapack technology. AusNet is network partner and is sourcing components such as the power transformers. Neoen is targeting operations by the end of 2021.

"Neoen's solution, developed with Tesla and AusNet Services, on a unit cost basis, was a significantly more cost-competitive and attractive market response than other recent major battery developments in Australia," said AEMO chief executive Audrey Zibelman.

The Victorian Big Battery will be the largest in the southern hemisphere, double the size of Neoen's Hornsdale Power Reserve in South Australia. That was also developed using Tesla technology, with a 100MW/129MWh first phase completed previously and a 50MW/64.5MWh second phase completed in September.

Neoen project-financed the Hornsdale battery's first and second stages combined in November 2019, with Clean Energy Finance Corporation providing a A\$50m 13-year loan and Australian Renewable Energy Agency providing an A\$8m grant. Neoen invested A\$141m of equity in the two stages.

) NSW GOVERNMENT BACKS RENEWABLES AND STORAGE

The New South Wales government has launched an Electricity Infrastructure Roadmap 20-year plan. Treasurer Dominic Perrottet said the roadmap will grow the economy, create jobs and deliver an expected A\$32bn (US\$23.3bn) of private sector investment in electricity infrastructure by the end of the next decade.

Energy Minister Matt Kean said the roadmap will support the private sector to bring 12GW of renewable energy and 2GW of storage, such as pumped hydro, online by 2030. The plan includes A\$50m of grants to support pumped hydro projects.

The state plans to appoint a community trustee, which will tender long-term energy services agreements to underpin both generation and storage projects.

The plan also aims to speed up approvals for transmission infrastructure in Renewable Energy Zones. New South Wales has just added a fourth proposed REZ to its plans, in the coal-focused Hunter region. The other REZs are New England, South-West and Central-West

The plan is to be enabled by the proposed Electricity Infrastructure Investment Bill 2020, which the state's Legislative Assembly passed on November 17.

The Clean Energy Investor Group welcomed the roadmap. "This Roadmap is a welcome plan for private sector investors, harnessing the power of private markets to accelerate NSW's renewable energy goals – all through providing policy certainty and distinct market signals," chair Simon Corbell said.

"The CEIG will be focused on working with the NSW Government on the detailed design of financial instruments proposed in the plan to ensure investors can proceed with confidence to deliver the low cost capital required to make this plan a reality."

ASIA-PACIFIC GENERAL CORPORATE FUNDING ACTIVITY NOVEMBER 2 TO NOVEMBER 16 2020

Security type	Issuer/Borrower	Amount (m)	Maturity	Issue price	Pricing	Bank
Energy, gas and v	vater distribution					
Medium-Term Nts	State Power Invest	C¥2,300	Perpet.	100.000	N/A	Ping An Bank/Bank of China
Medium-Term Nts	State Power Invest	C¥2,000	Perpet.	100.000	N/A	Postal Savings Bank Of China/Bank of Shanghai
Medium-Term Nts	Datang Shaanxi Power	C¥2,000	Perpet.	100.000	N/A	Guotai Junan Secs/China Construction Bank
Medium-Term Nts	Shenzhen Energy Group	C¥3,000	10/11/25	100.000	3.950	Agricultural Bank of China/China Merchants Bank
Medium-Term Nts	State Power Invest	C¥2,000	Perpet.	100.000	N/A	China Everbright Bank/China Merchants Bank
CP	State Power Invest	C¥3,000	21/04/21	100.000	2.500	Bank of China
Islamic Finance	Idiwan Solar	RM1.31	11/11/21	100.000	Floats	OCBC Al-Amin Bank
Unsecured Bond	China Datang	C¥4,500	12/11/23	100.000	4.120	Everbright/Founder Financing Services/CSC Financial/
						Huatai United/Guotai Junan/CITIC/Haitong
Unsecured Bond	China Datang	C¥2,250	12/11/25	100.000	N/A	Everbright/Founder Financing Services/CSC Financial/
						Huatai United/Guotai Junan/CITIC/Haitong
slamic Finance	BGMC BRAS Power	RM24.32	11/11/21	100.000	Floats	OCBC Al-Amin Bank
Medium-Term Nts	Huadian Power	C¥2,000	Perpet.	100.000	N/A	Bank of Shanghai
CP	Shenzhen Energy	C¥2,000	12/05/21	100.000	2.900	Agricultural Bank of China
	State Power Invest	C¥2,000	Perpet.	100.000	N/A	Ping An Bank Co
	China Natl Nuclear	C¥2,000	16/11/22	100.000	3.780	CSC Financial/China Int/Haitong Secs/CITIC
Senior Notes	Taipower	NT\$4,000	13/11/25	100.000	.450	Hua Nan Commercial Bank
Senior Notes		NT\$2,400			.560	Masterlink Secs Co
CP Senior Notes	Taipower	C¥2,800	16/11/30 15/04/21	100.000		Bank of Shanghai/Industrial & Comm Bank China
CP CP	State Power Invest	,		100.000	N/A	Bank of Snangnai/Industrial & Comm Bank China Bank of Beijing/China CITIC Bank
	Shanghai Electric	C¥2,000	18/12/20	100.000	N/A	Bank of Beijing/China CTTC Bank
Infrastructure Fire		CÁRC O	10 /11 /00	100.000	5.000	
	Heeton Holdings	S\$28.9	13/11/23	100.000	6.800	Oversea-Chinese Banking
CP	Shandong Hi-Speed Grp Co	C¥2,000	10/05/21	100.000	2.200	Bank of China
	Nanjing Jiangning Econ	C¥2,200	13/11/23	100.000	4.060	Bank of Hangzhou/Industrial & Comm Bank China
St Enterprise	Nanchang Rail Transit Grp Co	C¥2,000	18/11/25	100.000	N/A	Shenwan Hongyuan Secs Co
Islamic Finance	Prasarana Malaysia	RM300	13/11/24	100.000	2.230	CIMB Investment Bank
Islamic Finance	Prasarana Malaysia	RM300	13/11/25	100.000	2.470	CIMB Investment Bank
Unsecured Bond	Shandong Hi-Speed Grp Co	C¥2,000	16/11/23	100.000	4.210	Huatai United/Zhongtai/CSC Financial/Shenwan Hongy
Mining						
Ord/Common Shs	. Duke Exploration	A\$8	-	0.250	_	Morgansorate
Ord/Common Shs	. Myanmar Metals	A\$2.5	_	0.075	_	_
Ord/Common Shs	. Diatreme Resources	A\$2.54	-	0.010	-	-
Ord/Common Shs	. Blackearth Minerals Nl	A\$0.39	_	0.050	_	_
CP	China Copper Co	C¥2,000	11/05/21	100.000	3.400	Huaxia Bank/China Merchants Bank
CP	Jinneng Group	C¥2,000	12/11/21	100.000	4.300	China Everbright Bank
Guaranteed Bds	J Resources Asia Pasifik Tbk	Rp251,660	07/12/21	100.000	9.250	PT Indo Premier Secs/Trimegah Securindo Lestari PT
Guaranteed Bds	J Resources Asia Pasifik Tbk	Rp163,090	27/11/23	100.000	10.250	PT Indo Premier Secs/Trimegah Securindo Lestari PT
Ord/Common Shs	. Dart Mining NL	A\$2.44	-	0.200	_	Veritas Secs Limited
Ord/Common Shs	. Pursuit Minerals	A\$1.42	_	0.009	_	CPS Capital Group
Ord/Common Shs	. Nex Metals Explorations	A\$4.27	_	0.059	_	
CP	Shaanxi Coal & Chem Ind Grp	C¥2,000	09/08/21	100.000	2.050	China Guangfa Bank/China Everbright Bank
	Yang Quan Coal Industry (Grp)	C¥2,000	13/11/23	100.000	N/A	Zhongtai Secs Co
Ord/Common Shs		A\$12.49	_	0.100	.,,,,	Zhongtai Sees eo
	Petroleum Refining	A\$12.43		0.100		
Unsecured Bond		C¥4,000	05/11/22	100.000	3.950	Ping An/CSC Financial/China Int/CITIC/BOC
	Sinochem	,	05/11/23			-
Unsecured Bond		C¥2,000	05/11/23	100.000	N/A —	Ping An/CSC Financial/China Int/CITIC/BOC
Ord/Common Shs		A\$4	12 /11 /22	0.210		- Contrary (Discovery Chicago Int.) (CCC Figure 1:11) Interest Interest
Jnsecured Bond	Shaanxi Yanchang Petro (Grp)	C¥1,500	13/11/23	100.000	4.250 —	Guotong/Ping An/China Int/CSC Financial/Huatai United Guotai Junan/Haitong/CITIC
Jnsecured Bond	Shaanxi Yanchang Petro (Grp)	C¥1,500	13/11/22	100.000	3.850	Guotong/Ping An/China Int/CSC Financial/Huatai United Guotai Junan/Haitong/CITIC
slamic Finance	Dialog Group	RM500	Perpet.	100.000	4.150	AmInvestment Bank
CP	Sinochem	C¥2,000	31/12/20	100.000	N/A	China Guangfa Bank
C: Telecommunication		,	,,,		,	
CP		C¥2 000	04/02/21	100.000	2 170	China Everbright Rank / Agricultural Rank of China
CP	China Tolocom	C¥2,000	04/02/21	100.000	2.170	China Everbright Bank/Agricultural Bank of China
	China Telecom	C¥3,000 HK\$5,500	11/12/20	100.000	1.200 Hong Kong IBOR	Shanghai Pudong Development China Constr (Asia)/Credit Agricole CIB/JPM Co
RevCred/Term Ln						

Source: Refinitiv

TASMANIA SUPPORTS GREEN HYDROGEN STUDIES

The Tasmanian government has announced A\$2.6m (US\$1.9m) in grant funding for supporting feasibility studies on three large-scale renewable hydrogen projects. The funding comes from the A\$50m Tasmanian Renewable Hydrogen Industry Development Funding Program, announced in May.

The first project is Australian utility ORIGIN ENERGY's green hydrogen and ammonia production facility at the Bell Bay Advanced Manufacturing Zone. It would have export scale production capacity, at 420,000 tonnes per year of green ammonia and 500MW electrical load.

The second project is new company ABEL ENERGY's flagship export-scale 100MW green hydrogen and methanol project, also at the same Bell Bay industrial complex. It would use 38 tonnes per day of hydrogen to produce methanol and make 6tpd of hydrogen available for sale. Carbon dioxide for the methanol production process is to be derived from local wood waste, or from direct capture from the atmosphere.

The third is Australian iron ore miner and pellet producer GRANGE RESOURCES' 90MW–100MW renewable hydrogen project to use hydrogen instead of natural gas to provide the industrial heating at its own Port Latta pelletising facility.

Outside of the A\$2.6m in grants, Fortescue has also unveiled plan to build a 250MW, 250,000 tpa green ammonia production facility at the Bell Bay industrial complex. The Tasmania Office of the Coordinator General will cooperate with Fortescue.

There were 23 submissions in August to the programme's first round tender, which has now closed.

Minister for State Growth Michael
Ferguson said the government will
be fast-tracking work on identifying
hydrogen domestic offtake opportunities
in Tasmania, in areas such as transport,
commercial applications and agricultural
use. Metro Tasmania has been tasked with
trialling electric and hydrogen buses within
the next two years.

Tasmania's Lower House passed legislation earlier this month setting a target to achieve renewable energy generation equivalent to 200% of its current energy needs by 2040. The government has said it is on track to be 100% self-sufficient in renewable energy by 2022.

) AKUO DROPS WIND PROJECT OVER COVID-19

French global renewables developer AKUO ENERGY has dropped the Granite Hills Wind

Farm project in southern New South Wales due to Covid-19.

Akuo has informed the NSW planning department and in a notice to the local community said: "The pandemic has placed extreme financial pressures on international organisations, causing increased uncertainty for all businesses. Akuo Energy is headquartered in France, where the pandemic has been particularly severe and as a result impacted global operations."

Granite Hills Wind Farm's proposed capacity is 132MW, spread across 23 turbines. It was due to be a state significant development, thus requiring the developer to prepare an environmental impact statement, and it had also been referred to the federal government for assessment.

) CIP JOINS WA MURCHISON RENEWABLES HUB

COPENHAGEN INFRASTRUCTURE PARTNERS (CIP)

has agreed to become the equity funding partner with project proponent HYDROGEN RENEWABLES AUSTRALIA (HRA) for the up to 5GW Murchison Renewable Hydrogen Project in the mid-west of Western Australia. The owners of the project SPV HRA started an international roadshow in Europe to seek a strategic equity partner in December. However, they have ultimately drawn on an existing relationship with CIP that started three years ago for another Australian project.

The expected project cost would be in excess of A\$10bn (US\$7.3bn), though it is expected to be staged. Fund manager CIP has around €12bn (US\$14.2bn), under management.

The Murchison project is an exportoriented green hydrogen development featuring up to 5GW of onshore wind and solar PV for power generation, electrolyser technology and a desalination plant for seawater. Key markets for the project exports would be Japan and South Korea. Advisers that have worked on the project include technical adviser WSP and law firm Finlaysons.

HRA signed a memorandum of understanding in May with Australian Gas Infrastructure Group to run a feasibility study on technical and policy aspects of blending hydrogen into the Dampier-Bunbury gas transmission pipeline. Siemens has been in discussions with HRA and is a potential provider of the electrolyser technology.

HRA's owner-founders are Terry Kallis and Peter Sgardelis. Both are leading development of Australia's first offshore wind farm project, the 2.2GW Star of the South. CIP is also a partner with Kallis and Sgardelis for the offshore wind.

The level of hydrogen production will depend on what offtake agreements are reached. Kallis told PFI that the next two to three years will be focused on technical studies, community engagement, and offtake negotiations, before the financing. CIP will be leading on raising financing.

On hydrogen pricing, Tallis explained that the targets spoke of in the Australian market are to produce hydrogen at A\$2 per kilo at the production point, or another target is to deliver hydrogen to Japan at US\$3 per kilo. He said HRA is confident to be competitive against those.

TRIANGLE AND PILOT JOIN IN SECOND OWP

TRIANGLE ENERGY has agreed to take a 20% share in the new Cliff Head Wind and Solar Project JV with PILOT ENERGY, to together assess the feasibility of Pilot's planned large-scale 1.1GW offshore and onshore wind and solar scheme around the Cliff Head oil field. The renewables assets would utilise existing oil and gas infrastructure. Pilot will carry Triangle's costs for the feasibility study. Pilot started the feasibility study in September and announced it would be seeking strategic co-investors.

The study will consider the viability of supplying energy for hydrogen production domestically or abroad. The renewables assets would connect with Western Power's South West Integrated System for electricity transmission.

The offshore component is Australia's second proposed offshore wind farm, after the 2.2GW Star of the South Wind Farm in South Australia in the development stage.

Triangle has agreed to buy a 78.75% interest in offshore Perth Basin exploration permit WA-481-P from Pilot Energy. Pilot owns 60% and has signed a transaction to buy out 40% partner Key Petroleum, a condition of the deal with Triangle, which would take over operatorship. The WA-481-P permit's area is adjacent to and contiguous with the Cliff Head oil field offshore mid-west Western Australia, where Triangle is already a producer under another permit.

) SOUTH AUSTRALIAN LNG IMPORT FACILITY ADVANCING

South Australian ports owner and operator funders ports has signed a project agreement with venice energy, the developer of the A\$200m (US\$145m) Outer Harbor LNG import facility in Port Adelaide. Flinders Ports is the operator of Port of Adelaide. The companies have agreed a concept design for two operating berths and associated onshore facilities.

The facility is designed for the import of 80 petajoules per year of LNG, with a moored floating storage and regasification unit. Venice Energy is targeting operations starting in late 2022.

Venice said earlier this year it was aiming for a final investment decision by February 2021, but a spokesperson has told PFI the target is now Q2 2021. Venice Energy lodged a development application with the State Commission Assessment Panel at the end of October and expects the outcome in early 2021. The capitalraising process will follow that approval. Venice Energy has yet to determine the debt to equity ratio.

"We are intending to implement a deaggregated delivery model, to ensure we maximise opportunities for local suppliers," a Venice spokesperson said.

Ashurst is legal adviser to Venice. Design and consultancy firm Arcadis has been working with Venice Energy on the project since 2018. Other advisers are environmental advisory firm JBS&G and 57 Films, which offers 3D modelling.

) JEMENA PARTNERS FOR NORTHERN GAS PIPELINE EXPANSION

Gas infrastructure company JEMENA has signed a memorandum of understanding with TAMBORAN RESOURCES, an Australian upstream company with a 25% working interest in a prospective project in the Beetaloo/McArthur Basin in the Northern Territory.

Jemena plans to progressively increase its Northern Gas Pipeline capacity from 90 terajoules of gas per day to 1,000TJ/d, through compression and looping. From 2025, Jemena expects the NGP's capacity will reach 200TJ/d. Jemena plans to invest about A\$5bn (US\$3.64bn) increasing NGP's capacity and extending it to connect the Beetaloo Basin in western Queensland to the Wallumbilla Gas Hub in Queensland.

The extended NGP would link up to Jemena's proposed Galilee Gas Pipeline, a 585km line from the Galilee Basin to Wallumbilla Gas Hub. The 622km NGP, from Tennant Creek in NT to Mt Isa in Queensland, started commercial operations in January 2019.

Jemena managing director Frank Tudor said: "While our MoU with Tamboran gives us exclusivity, it also highlights the importance of collaboration and we plan to make our infrastructure available to all industry participants." Additionally, Jemena is considering construction of a pipeline north from Beetaloo into Darwin once new LNG trains or local demand centres have been sanctioned, which Jemena believes could occur in the late 2020s.

) SANTOS CLOSES SYNDICATED LOAN

SANTOS has closed a US\$750m syndicated bank loan with a tenor of 5.25 years, raised from new and existing lenders. Santos said the loan was around three times subscribed. Proceeds will refinance a US\$750m facility raised for Santos'

acquisition of northern Australia and Timor-Leste assets in May from ConocoPhillips.

Refinitiv LPC reported in October that 17 lenders joined this refinancing in syndication. ANZ, CBA and MUFG were mandated lead arrangers and bookrunners for the unsecured, dual-tranche loan that matures on January 30 2026. The loan, split between a term loan Tranche A and a revolving credit Tranche B, offers an interest margin of 200bp over Libor.

Lenders that joined were: China Everbright Bank, DBS Bank, DNB, Intesa Sanpaolo, ING, NAB, State Bank of India, SMBC, Bank of China, Credit Suisse, Goldman Sachs Mortgage Co, United Overseas Bank, Westpac, Bank of Communications, First Commercial Bank and RBC.

) AGIF PRICES BONDS

AGIFINANCE (AGIF) has priced A\$750m (US\$546m) of senior secured bonds in two tranches, writes IFR. An A\$325m five-year floating-rate tranche was priced at par and pays three-month BBSW plus 100bp, inside guidance of 115bp area. An A\$425m eight-year fixed-rate tranche was priced at par to yield 1.8152%, equivalent to semi-quarterly coupon-matched asset swaps plus 120bp, inside 135bp area guidance.

The bonds have expected ratings of A3/BBB+ (Moody's/S&P). Goldman Sachs and Westpac were lead managers. Australian Gas Infrastructure Group (AGIG) is one of

Woodside seeks Pluto LNG 2 infra investors

■ AUSTRALIA LNG

WOODSIDE ENERGY is considering selling around 50% of its planned Pluto LNG Train 2 in Western Australia, part of its stake in the Sangomar oil field in Senegal, and some of the company's infrastructure assets in Australia to investors, in order to raise funds for developing new projects. Woodside has already started to engage with investors.

Woodside will target to reach equity holdings of around 50% or less for Pluto train 2 and around 40% for Sangomar. The sales are due to take place next year.

Last year, Woodside sounded out major oil companies to buy part of its 75% stake in the Scarborough gas field, which will supply Pluto LNG. However, due to the oil and gas price drop this year, that no longer makes sense, chief executive Peter Coleman said during an investor presentation. He told Reuters that potential Chinese buyers including PetroChina

had stopped talks due to the souring in diplomatic relations between China and Australia this year.

Coleman said the planned 2021 sales will help Woodside avoid having to sell new shares to fund its projects.

The U\$4.2bn Sangomar phase one project's target for first oil is 2023. Woodside owns 31.89% and is due to buy a further 36.44% from Cairn Energy during this quarter. The target is to reduce ownership to around 40% in 2021 to reduce the capital spend by around A\$1.2bn.

Woodside owns 100% of Pluto LNG Train 2 and 73.5% of Scarborough, alongside minority partner BHP with 26.5%. Selling down its share in Pluto LNG Train would reduce Woodside's capital spend by around A\$3bn.

Woodside said it is on track to reach final investment decisions (FIDs) for the Pluto LNG 5m-tonnes-per-year second train and the

Scarborough gas project during the second half of 2021. The aim is for first cargo from the two projects in 2026.

In March, Woodside had pushed back the timeline and announced plans to add 20% upstream capacity compared with initial plans at Scarborough "at very modest capex with virtually no cost impact on the downstream".

Then in November, Western Australia and the federal government's Offshore Petroleum Joint Authority offered two production licences for the A\$11bn-plus (US\$8bn) Scarborough project, off the Burrup Peninsula, which Woodside will accept. The production licences account for 11.1trn cubic feet of contingent resource dry gas volume. Next, the partners will submit the pipeline licence application and field development plan for Scarborough to the joint authority.

Alex Dockreay

the largest gas infrastructure businesses in Australia and is owned by CK Group. AGIF is the financing vehicle for Australian Gas Networks, Dampier Bunbury Pipeline and Multinet Gas Networks.

Last week, AGIG completed a financing amendment under which it will consolidate the three operating companies into a common financing vehicle. AGI Finance and all three operating companies will act as co-borrowers with cross-guarantees on existing debt facilities. While the maturities of existing loans remain unchanged, the calculations on applicable financial covenants and guarantees are affected.

) STANMORE COAL RAISES SECURED LOAN

STANMORE COAL has signed for a US\$40m secured loan maturing June 30 2022 from Golden Energy and Resources (GEAR). It has an upfront fee of 2%, plus an interest rate on drawn funds of 8% per year and 2% on undrawn funds. The borrower is Stanmore IP Coal. The lender GEAR controls Golden Investments, which is a shareholder of Stanmore Coal. Non-binding agreements for the loan were signed in June.

The loan has guarantees from Stanmore Coal and certain Stanmore subsidiaries. It is secured against all the borrower's and the guarantors' assets, Stanmore Coal's shares in Stanmore Bowen Coal and mortgages over land and mining leases from Stanmore IP Coal and Stanmore IP South. Stanmore is producing at its Isaac Plains East Mine and has the Isaac Downs coal mine project still in approvals, with an estimated capacity to produce 35m tonnes of coal over a 16-year life.

Stanmore raised the loan from GEAR after Taurus Funds Management gave notice in June that it would cancel a US\$12m bonding facility and US\$28m undrawn working capital facility on September 16.

Stanmore Coal last week signed a memorandum of understanding with gas exploration company Blue Energy to develop a plan to capture, process and market waste mine gas from Isaac Plains in the North Bowen Basin. Blue has exploration tenements overlapping with Stanmore's project. The gas would be drained before mining in some of Stanmore's mining lease blocks, for sale to Blue's domestic gas customers.

) ABRA MINE PROJECT FINANCE LOAN SIGNED

ABRA MINING, owned by ASX-listed sponsor Galena Mining, has signed a US\$110m project financing from Taurus Mining Finance Fund No 2, a vehicle of metals and mining specialist Taurus Funds Management.

The debt, secured against the Abra lead-silver project in Western Australia, is split into a U\$\$100m 5.75-year term loan and a U\$10m cost overrun facility. The term loan pays 8% on drawn amounts, with a 2% commitment fee on undrawn amounts and a 2.5% arrangement fee. The cost overrun loan has a fixed interest rate of 10% per year on drawn amounts. Abra Mining entered into a royalty deed with Taurus for a 1.125% net smelter return. Taurus and Galena agreed the terms of the debt in July.

Abra Mining's owners are Galena Mining and Toho Zinc Co. Toho, a Japanese producer of lead, committed to investing US\$90m equity in Abra Mining in tranches. Galena retains 85.31% project ownership. Toho signed an offtake agreement for 40% of Abra's production for 10 years. The mine has a total estimated mineral resource of 41.1m tonnes. Estimated capex is A\$170m (US\$123m). To-date, 12% of the mine's development is complete at a cost of A\$23m.

) WA ENVIRONMENT AUTHORITY BACKS SANDS EXPANSION

The Environmental Protection Authority of Western Australia has recommended to the state's minister for environment the approval of TRONOX'S A\$220m (US\$160m) Cooljarloo West titanium minerals expansion project. The appeals period will close on November 25. The proposed dredge mining project is to the west of, and serves as a major expansion to, Tronox'S Cooljarloo mineral sands dredge mine. The reserve at the Cooljarloo West dredge mine is estimated at 2.6m tonnes of in-place heavy minerals.

Tronox first proposed the expansion project in May 2013 to the EPA WA, but then amended its proposal several times. The heavy mineral concentrate produced at Cooljarloo is transported south by road to Tronox's Chandala processing plant for separation and processing. The mine and processing plant have been operating for around 30 years. Tronox is a US-headquartered mining and chemical company.

) IRON ROAD STARTS CAPITAL-RAISING

Mining company IRON ROAD, which has a multi-commodity deep sea port in development, has launched an up to A\$13.9m (US\$10m) capital-raising. Iron Road opened the deal on November 17, offering 99m new shares at A\$0.14 to eligible shareholders on a 1-for-7 basis. The offer closes on December 11. Iron Road's largest shareholder, Sentient Fund IV, managed by Sentient Equity Partners, has

indicated it intends to fully participate, for approximately A\$8.66m.

The proceeds will fund Iron Road's share of Cape Hardy Stage I port development costs, maintain the Central Eyre Iron Project (CEIP) mining lease, repay debt and be used for corporate expenses and costs of the offer

Iron Road is co-sponsor of the A\$250m Cape Hardy port project in South Australia's Eyre Peninsula alongside Macquarie Capital and Eyre Peninsula Cooperative Bulk Handling. Financial close is targeted for Q3 2021. Iron Road is seeking a strategic partner for the US\$1.74bn CEIP, a 12m-tonne iron concentrate per year development that will be able to use the port for exports.

) SUBURBAN RAIL LOOP EARLY WORKS FUNDED

The Government of Victoria has committed A\$2.2bn (US\$1.61bn) of funding for the initial and early works on stage one of the Suburban Rail Loop project. These works are to start in 2022. The funding will purchase land, upgrade roads and power supply, build new sub-stations, relocate and protect gas, water and other utilities, and deliver other vital works to prepare for major construction.

The government will launch the call for expressions of interest to start the tender for the early works package before the end of 2020. The investment case for the Suburban Rail Loop is due to be complete by early 2021, providing further details on the delivery model. There is potential for private finance to be included.

The Suburban Rail Loop, Victoria's biggest rail project in history, is a 90km rail loop both above and below ground in the Melbourne metropolitan area, connecting to every major rail line and with three transport super-hubs to connect regional services. The Victorian government established the Suburban Rail Loop Authority in September 2019 to lead its delivery

There are four sections to be built over decades costing tens of billions of dollars: South-East, North-East, North-West and South-West. Stage one is the South-East section, from Cheltenham to Box Hill. Advisers include the Aurecon/Jacobs/Mott MacDonald Joint Venture (AJM) as technical adviser and KPMG as commercial adviser for the project.

) CANBERRA COURTS PPP IN REFINANCING

The sponsors of the Australian Capital Territory Law Courts PPP are refinancing the project debt, PFI has learned. The sponsor consortium is JURIS PARTNERSHIP. Macquarie Capital and Aberdeen Standard

Investments hold the equity currently. Laing O'Rourke was an original sponsor with Macquarie.

The A\$172m (US\$125m) of debt raised in December 2015 had a 3.5-year tenor. SMBC and Macquarie Corporate Holdings underwrote that senior debt and another unnamed lender joined in syndication. According to PFI data, SMBC and AustralianSuper, with QBE Insurance, refinanced the project with a new A\$171m loan in August 2019.

The 25-year availability-based design, build, finance and maintain PPP concession, signed in December 2015, was the first PPP the territory government awarded. Completion of stage one occurred in October 2018, and stage two was completed after delays in January 2020. The capital expenditure estimate at financial close was A\$160m.

The project involved constructing a new Supreme Court building with eight courtrooms, and connecting it with the refurbished Magistrates Court, while adding various additional facilities including a 110kV solar array. The concession expires in August 2043.

) DIF JOINS INLAND RAIL PPP TEAM

Dutch fund manager DIF has recently joined the CAPSTONE consortium, alongside CIMIC Group companies and Ghella, in the bidding on the Inland Rail Gowrie-Kagaru PPP in Queensland. PFI previously revealed the departures of John Holland and Samsung from this team, and the addition of Ghella.

The three consortia invited to the second round of procurement have had access to the request for proposals documents since November 2. The three teams that received the RFP are the GZKONNECT consortium of Acciona, Ferrovial, Cintra, advised by Macquarie Capital; REGIONERATE, a consortium of Plenary, Clough, GS Engineering and Construction, Webuild (previously Salini Impregilo) and Lend Lease Services, advised by Plenary; and the Capstone consortium of Pacific Partnerships, UGL, CPB Contractors, DIF and Ghella advised by MUFG Bank. Australian Rail Track Corporation is due to award the PPP concession in 2022. The 130km PPP section is understood to have a project cost of A\$3.55bn (US\$2.58bn).

BANGLADESH

) IPP FINANCED

Power plant developer LAKDHANAVI has raised US\$64m from three lenders for its third power plant in Bangladesh.

WestConnex in refinancing as NSW plans exit

■ AUSTRALIA Transport

The **SYDNEY TRANSPORT PARTNERS** consortium is in the market with a refinancing of the WestConnex toll road stage one project debt. UBS is running the process, PFI has learned.

In October 2018, banks provided A\$4bn (US\$2.9bn) of non-recourse senior debt for the New M4 section, or stage one, of WestConnex. It was split evenly into A\$2bn of three-year and A\$2bn of five-year debt. IFR reported a 140bp margin on the A\$4bn loan.

The lenders included Agricultural Bank of China, ANZ, Bank of China, and CBA as MLAs, and other participating banks were Credit Agricole, Canadian Imperial Bank of Commerce, Export Development Canada, Industrial & Commercial Bank of China, ING Australia, Hana Bank, Mizuho Bank, Bank of Nova Scotia, Societe Generale, Westpac, NAB and SMBC.

As well as refinancing stage one's debt, that 2018 loan repaid a A\$1.1bn acquisition facility that part-funded the Transurban-led consortium's A\$9.26bn upfront acquisition payment for a 51% equity stake in the WestConnex operator Sydney Motorway Corporation (SMC). The NSW government retained 49%. SMC will operate all of the

WestConnex under a concession to 2060.

The 33km WestConnex is split into three projects: New M4, the New M5 tunnels and the M4-M5 Link Rozelle Interchange. The new M4 twin tunnels, stage one, officially opened in July 2019. The M5 tunnels then opened in July 2020. The last stage is due to open in 2023.

The Sydney Transport Partners consortium, which owns 51% of SMC, features Transurban (50%), AustralianSuper (20.5%), Canada Pension Plan Investment Board (20.5%) and Tawreed Investments, owned by Abu Dhabi Investment Authority, (9%).

The consortium might be soon able to seek to raise its shareholding in Sydney Motorway Corporation to 100%, using pre-emption rights. The New South Wales government confirmed in early November that, following a strategic review process, it intends to sell its 49%.

In March, NSW started a scoping study to consider selling its 49% shareholding in the WestConnex concessionaire, with RBC Capital Markets and Citigroup advising. The government would put the proceeds into new infrastructure building.

Alex Dockreay

Infrastructure Development Co, the OPEC Fund for International Development and the Islamic Corp for the Development of the Private Sector were the lenders on the financing to Lakdhanavi subsidiary Feni Lanka Power, according to a press release from legal adviser Ashurst on November 13.

The limited recourse financing will be used for the development, construction, operation and maintenance of a 114MW heavy fuel oil power project at Feni in Chattogram city. Lakdhanavi is the largest independent power producer in Sri Lanka.

INDIA

RENEW POWER SELLS WIND FARMS

RENEW POWER is reported to have sold a 300MW portfolio of wind farms in Karnataka to Ayana RENEWABLE POWER for Rs16bn (US\$216m). The wind farms are in the districts of Raichur, Bijapur, Belgaum and Bellary.

The shareholders of Karnataka-based IPP Ayana are the UK's development finance institution CDC Group, the UK-India joint Green Growth Equity Fund managed by Eversource Capital, and the Indian government-backed National Investment and Infrastructure Fund (NIIF). Ayana has 800MW of assets across the states of Andhra Pradesh and Rajasthan. CDC launched Ayana in 2018 to develop utilityscale wind and solar in India.

) CCI APPROVES ORIX GREENKO INVESTMENT

The Competition Commission of India has approved Japan-based Orix Corporation's investment in at least a 20% stake in GREENKO ENERGY HOLDINGS. Orix will invest at least US\$980m to acquire the stake and will hand over its 873MW operational wind portfolio to Greenko as part of the deal.

Greenko founding shareholders Anil Kumar Chalamalasetty and Mahesh Kolli are selling around 10.7% and the remainder will be from primary issuance of shares. The deal was signed in September and is due to close this year.

The deal values Greenko at US\$5.75bn. Greenko's operational capacity will swell to 6.5GW of Indian wind, solar and hydro after completion. Singaporean sovereign wealth fund GIC is Greenko's majority shareholder, and its shareholding will drop to 57% from 65.8% because of dilution. Abu Dhabi Investment Authority owns 16.5% of Greenko.

KKR REFINANCES MAHARASHTRA SOLAR

KKR's Indian renewables platform VIRESCENT INFRASTRUCTURE is raising a one-year Rs6.14bn (US83m) bridge loan to refinance a recently acquired 130MW solar asset in Maharashtra, reports Refinitiv LPC. Standard Chartered is sole MLA, bookrunner and underwriter, and BNP Paribas has joined the deal. The interest rate on the loan is about 815bp above the marginal cost of funds-based lending rate.

The project SPV is Solar Edge Power & Energy for the asset, which is split across two locations in Beed district and Jalgaon district. Solar Energy Corporation of India is the offtaker under a 25-year PPA that started in March 2018 at a tariff of Rs4.43 per kWh.

KKR's new platform, Virescent
Infrastructure, acquired the asset in
late October within a portfolio of five
operational solar assets with 317MW
of capacity from Shapoorji Pallonji and
Company. PFI records the name of the
asset in Maharashtra as Muktinagar &
Parli. The other four assets are in Tamil
Nadu. Virescent paid Rs15.54bn for the
portfolio. Virescent's investments are being
mainly facilitated by KKR's Asia-focused
infrastructure fund: KKR Asia Pacific
Infrastructure Investors.

) MEGA PETCHEM COMPLEX PUT ON HOLD

BASF, ADANI, BOREALIS and ABU DHABI NATIONAL OIL COMPANY have put plans on hold for a US\$4bn renewable energy-powered chemical complex on an Adani-owned site in Mundra, Gujarat. At the same time as announcing completion of a joint feasibility study, the partners said that global economic uncertainties caused by the Covid-19 pandemic have led them to review the timing for the undertaking, despite "attempts to optimise the scope and configuration". The partners will periodically explore market conditions and discuss the opportunity.

The project involved developing a worldscale propane dehydrogenation plant, a propylene production plant and an acrylics value chain complex. The partners agreed to start the feasibility study in October 2019.

The original sponsors of the project were BASF and Adani, which would own the propane dehydrogenation plant and acrylics value chain complex. ADNOC would be propane feedstock supplier. ADNOC and Borealis, through their joint venture Borouge, were to join as partners to own the polypropylene complex. To power the chemical complex, the partners were considering co-investment in a wind and solar park.

INDONESIA

FC ON JAWA 9 & 10 CFPP LOAN

INDO RAYA TENAGA, the project company that will operate the Jawa 9 & 10 units under the Suralaya independent power project (IPP), has reached financial close on its debt.

The company has achieved all conditions precedent (CPs) and has already made its first disbursement from the US\$2.6bn 15.25-year facility raised in July to finance the development of a 2GW coal-fired plant that will use ultra-supercritical technology.

The sponsors are PLN subsidiary Indonesia Power (51%), Barito Pacific subsidiary Barito Wahana Lestari (34%) and Korea Electric Power (Kepco, 15%).

The loan facility was provided by financial adviser DBS; Korea Export Import Bank, Korea Development Bank and Hana Bank of South Korea; CIMB and Maybank of Malaysia; Bank of China; and Bank Mandiri, Bank Negara Indonesia and Exim Bank of Indonesia.

DLA Piper was legal adviser to the sponsors while Milbank Tweed was adviser to the lenders. Doosan Heavy Industries & Construction is the contractor for engineering, procurement and construction.

) DETAILS OUT ON SOLAR SCHEME BIDS

Financial bids for three of the four solar energy projects under the Hijaunesia Proyek programme of PLN have been opened.

For the Lampung 100MW solar and storage project in Lampung province, the respective base equity base technical (BEBT) and alternate equity base technical (AEBT) bids per kilowatt hour are as follows: US\$0.09075 and US\$0.09173 for Acwa Power; US\$0.10194 and US\$0.09945 for Masdar; US\$0.1528749 and US\$0.1528202 for EDF; US\$0.1605 and US\$0.2195 for Akuo; and US\$0.1683 and US\$1610 for Engie.

For the Saguling 60MW floating solar project in West Java, the respective BEBT and AEBT bids are US\$0.03748 and US\$0.03638 for Masdar; US\$0.038885 and US\$0.039095 for ACWA; US\$0.0542 and

US\$0.0519 for Akuo; US\$0.063936 and US\$0.061758 for Marubeni; US\$0.0798 and US\$0.0741 for Vena Energy; and US\$0.028 and US\$0.0894 for Engie.

For the Singkarak 60MW floating solar project in West Sumatra, the respective bids are US\$0.036826 and US\$0.037302 for Acwa; US\$0.03952 and US\$0.03842 for Masdar; US\$0.0617 and US\$0.0595 for Akuo; US\$0.069424 and US\$0.067918 for Marubeni; US\$0.0919 and US\$0.0885 for Vena Energy.

As for the fourth scheme, which is located in Kalimantan, financial bids are understood only due to be submitted later this month.

The winning bidder in each project will be granted a 49% stake in the project and will partner with PLN subsidiary Indonesia Power, which will hold 51%. KPMG is IP's commercial adviser while Nah'R Murdono Law Office and UMBRA-Strategic Legal Solutions are its legal advisers.

PLN TO SWAP DIESEL FOR SOLAR

PLN is looking to replace some 200 dieselfired power plants with solar power by 2022, said PLN mega projects director Ikhsan Asaad.

The move aims to increase use of renewable energy and reduce power production costs, the director told the media. The solar farms will have a capacity of 225MW and cost about Rp100trn (US\$6.83bn). "That is huge money," the director was quoted saying to the local media.

He added that PLN plans to conduct bidding for the conversion in December this year with a 2022 target for commencement of operation.

The conversion is part of PLN's dedieselisation programme that is aimed to boost clean energy and lower production costs. It also has plans to replace diesel-fired with LNG-fired plants.

The state utility has some 2,025MW of diesel plants that are targeted to be replaced with renewable energy. Phase two will involve 500MW and phase three will target the remaining 1,300MW.

) BUMI GETS 10 MORE YEARS

Bumi Resources, Indonesia's top coal miner by output, has been granted a 10-year permit extension to a mining concession in South Kalimantan by the Ministry of Energy & Mineral Resources (MEMR).

Its subsidiary ARUTMIN INDONESIA has secured the extension to the permit, or coal contract of works, which expired on November 1. It now has until November 1 2030 to continue to conduct its mining activities.

Broadband project raises debt

■ INDONESIA Telecoms

NETI INDONESIA, a subsidiary of Net1 International Holdings, has secured US\$75.5m of debt financing for its US\$96m broadband expansion project in Indonesia, which is being developed through special purpose vehicle Mobile Internet Holdings (MIH).

The funds, in the form of loans with maturities under 10 years, were provided by a club of investors, not the usual commercial banks. They are Gem Capital (US\$48m), InfraCo Asia (US\$15m), and OP Finnfund Global Impact Fund 1 (US\$12.5m). Legal advisers are Norton Rose for the lenders and Shaw Smith for the borrower.

"We are delighted with the additional support from our current lenders and shareholders, as well as from two new and important financing partners," said JD Fouchard, chairman of Net1 International, which has investments in 4G LTE operations in the Philippines and Indonesia. Net1 Indonesia has 15MHz of bandwidth on the LTE-enabled 450MHz band.

This partnership with Gemcorp, OP Finnfund Global Impact Fund 1 and Net1 marks Infraco Asia's first project finance initiative in the telecommunications sector, "adding diversity to our infrastructure portfolio", said Infraco Asia's CEO Allard Noov.

Gemcorp, an existing partner, is a global investment organisation specialised in emerging markets whose focus is on sovereign and private credit lending. Infraco Asia, headquartered in Singapore, is a commercially managed infrastructure investment company of the Private Infrastructure Development Group (PIDG). OP Finnfund is Finland's first global emerging markets impact fund.

The facility will support MIH's investment in Net1 Indonesia, which is the only operator in Indonesia licensed to operate the 450MHz

spectrum. The spectrum is described as being more efficient in broadcasting signals over long distances than the higher frequency spectrums, according to a statement.

Only 3% of Indonesia's population of 261m has access to fixed broadband connectivity and Net1 aims to provide that connectivity to more than 300,000 households over the next five years.

The installation will be in phases, and an equipment supplier is selected for each phase. The supplier for the first phase is still to be appointed.

The company plans to install antennae for the broadband connection in 1,000 locations with one antennae per location across the country. It will focus on rural areas in provinces such as West Kalimantan, Aceh, North Sumatra and South Sumatra.

Minerva Lau

Arutmin is understood to be the first of seven old mining giants to "receive the legal certainty" following the recent passing of a revised Coal and Mineral Mining Law.

The revised law guarantees continued operations for at least another 20 years (two 10-year contracts) for the mining giants whose mining contracts will expire between 2020 and 2025. However, they are obligated to explore new reserves every year, compared with "being allowed". The revised law also allows miners to explore Indonesian seas, whereas the previous law limited offshore activity to within 12km of the coast.

The energy ministry is understood to be working on three derivative government regulations related to commercialisation, spatial planning and land reclamation in the mining industry. Officials have until June 10 next year to complete the task.

) SEVEN PPP PROJECTS PLANNED IN 2021

Indonesia's Ministry of Public Works & Housing is planning to launch the bidding in early 2021 for seven projects worth Rp76.37trn (US\$5.4bn) under a public-private partnership framework. They comprise six toll roads and bridges and one drinking water system in Purwakarta, West Java.

"In 2021, we will start the procurement process for six roads that span 208.7km and a drinking water system project. If everything goes smoothly, we could execute the process for all listed projects," said public works and housing ministry infrastructure financing director general Eko Djoeli Heripoerwanto.

"We are directing the private sector to help build infrastructure that could support economic growth. Meanwhile, the state and regional budgets will be allocated for basic service infrastructure procurement," Eko told local media. The seven projects are among 158 infrastructure projects under the PPP scheme, estimated to be worth around Rp1.31 quadrillion, according to The Jakarta Post.

JAPAN

) JRE PLANS 1GW HOKKAIDO OFFSHORE WIND

JAPAN RENEWABLE ENERGY (JRE) plans to develop an as much as 1GW offshore wind power farm off the coast of Ishikari Bay in Hokkaido, the northern island of Japan.

The company stated it is planning to build a landing of a type that fixes the base of the wind turbine to the seabed. The area has not been designated by the government as one of the potential "promotion sites" for offshore wind projects but it seems that a number of power developers are looking at it as well.

In addition to the Ishikari bay facility, JRE is preparing to develop offshore wind schemes off the coast of Enoshima, Saikai City in Nagasaki Prefecture, Happo Town in Akita Prefecture, and Noshiro City, which were selected by the government as promising candidate sites for promotion areas.

) MARUBENI TO DEVELOP TAHARA BIOMASS

A unit of MARUBEN is leading a consortium that will develop a 75MW biomass power plant in Tahara City, Aichi Prefecture, Japan.

The project, called Aichi Tahara Biomass Power Plant, is the SPV set up by Marubeni Clean Power (37.5%), together with JAG International Energy (37.5%) and Osaka Gas (25%). The power generated will be sold to Chubu Electric Power Power based on the feed-in tariff (FiT).

Construction is targeted to begin in September 2021 and commercial operation in aimed to commence in October 2024.

Marubeni Clean Power, formerly called Marubeni Thermal Power Co, develops and operates thermal power generation and biomass power generation. It is operating a woody biomass power plant with an output of 32MW in Tsuruga City, Fukui Prefecture, in addition to natural gas combined cycle thermal power generation and coal biomass co-firing thermal power generation.

) MHI TO ISSUE GREEN BONDS

MITSUBISHI HEAVY INDUSTRIES (MHI) has released more details on its plan for a five-year green bond issue aimed to support its operations in renewable and clean energy projects.

The lead managers are Mitsubishi UFJ Morgan Stanley Securities (green bond structuring agent), SMBC Nikko Securities, Mizuho Securities, Nomura Securities, Daiwa Securities, and BofA Securities.

MHI is looking to raise ¥25bn (US\$240m). The issue date is November 24 2020 and the maturity date November 21 2025. The proceeds will go into new or existing projects related to renewable energy or clean energy such as wind, hydrogen and geothermal power systems. The notes have received an AA– rating from Japan Credit Rating Agency.

SOLAR DEALS AWARDED IN SIXTH ROUND

Japan's Ministry of Economy, Trade & Industry (METI) has awarded a combined total of 368.8MW of solar photovoltaic bids out of the 526.5MW it has received in the sixth round of its solar energy tender held last week.

It was aiming to procure a total of 750MW capacity and the ministry has capped bids for feed-in tariffs at ¥12 per kilowatt hour (kWh).

It received bids ranging from a low of ¥10/kWh to a high of ¥12/kWh, with the average rate at ¥11.48/kWh. The rates are lower than those received in round five, which ranged between ¥10.99 and ¥13 per kWh.

METI selected a total of 254 bids out of 321 it has received. Successful bidders include Canadian Solar, Ciel Terre Japan, Eneos Corp, JAG International Energy, Clean Venture 21 Corp, Renewable Japan, ACA Clean Energy, Promedia Corp, Eneglobal Corp and Toda Power.

) RENEWABLE JAPAN TO REFI WITH A BOND

RENEWABLE JAPAN (RJ) plans to raise a ¥12.7bn (US\$121.6m) bond issue to refinance existing debt for its solar power project in Ichinoseki City, Iwate prefecture. Barclays Securities is the lead bank.

The note issue has received a preliminary rating of BBB by Rating & Investment Information (R&I) based on the assessment of the probability that the principal and interest will be paid fully at maturity. The bonds, which will be issued via RJ Renewable Energy Project Bond VIII, are targeted to be issued on January 29 2021. The maturity date is August 20 2040.

) OFFSHORE WIND AUCTION THIS MONTH

Japan's Ministry of Economy, Trade & Industry (METI) and Ministry of Land, Infrastructure, Transport and Tourism (MLITT) are expected to launch the next phase of round one bidding for offshore wind projects this month.

The sites will be off Noshiro in Akita prefecture in the north-west of the country's main island; off Yurihonjo, also in

Offshore wind is key

■ JAPAN Renewables

Offshore wind is key to Japan's goal to become carbon-neutral by 2050. Huge opportunities abound in the nascent Japanese offshore wind energy industry. The country and its government are moving slowly but steadily into developing renewables to replace nuclear energy. There are huge opportunities, specifically in the offshore wind sector, but there are challenges as well that will face developers and financiers alike. These issues were discussed at the PFI virtual roundtable on Japan Offshore Market held on November 10.

Japan has the seventh longest shoreline in the world and is estimated to have 300GW of capacity for offshore wind energy. Japan's Ministry of Economy, Trade & Industry (METI) and Ministry of Land, Infrastructure, Transport and Tourism (MLITT) have already started the first round of bidding for offshore wind projects with the Goto site, which offers up to 21MW of capacity. Bids are due to be submitted by December 24.

The next phase of round one is expected to be launched this month for sites that have been

earlier identified – off Noshiro in Akita prefecture in the north-west of the country's main island; off Yurihonjo, also in Akita; and off Choshi in Chiba prefecture. The Yurihonjo site is divided into north and south areas. There is massive interest in participating in these bids – both from local and international power developers.

There are a lot of activities not just around one auction but potentially five auctions, said Hirofumi Taba, a partner at Linklaters Tokyo. Taba, who has been involved in discussions with METI and MLIT, said there have been three key developments and concerns in the Japanese offshore wind energy market. One involves longerterm discussions and another is the round one auctions. The third development is the recent amendment to the Feed-in Tariff (FIT) Act.

Offshore wind is expected to play a major role in the government's energy policy, especially following the statement of Japan's prime minister Yoshihide Suga. He has pledged to "radically change" Japan's policy on coal-fired power generation, abolishing coal and being carbon

Akita; and off Choshi in Chiba prefecture. The Yurihonjo site is divided into north and south areas.

Bidders can propose capacity and feed-in tariffs for the projects, but each site is expected to have a capacity of 300MW–400MW. The four sites will all be based on fixed foundations, unlike the Goto floating offshore wind scheme that is out to tender and has a fixed feed-in tariff of ¥36 per kWh. Bids for the Goto scheme are due by December 24 and the winner will be announced six months later.

MYANMAR

THILAWA GROUP APPOINTS LTP LA

The Thilawa consortium, comprising Japanese conglomerates MARUBENI, MITSUI & CO, and SUMITOMO CORP and local partner EDEN GROUP, has appointed Shearman & Sterling as legal adviser to the Thilawa LNG-to-power (LTP) project in Yangon.

The companies received the notice to proceed from the country's Ministry of Electricity and Energy (MOEE) in July, receiving the exclusive development rights for the project, which involves building, owning and operating a 1.25GW gas-fired power plant and an onshore LNG storage and regasification facility. It will have a 25-

year power purchase agreement (PPA) with Electric Power Generation Enterprise (EPGE).

) PROPOSALS IN FOR NEW YANGON CITY

Myanmar has received 16 expressions of interest in the New Yangon City project, which is part of China's Belt & Road Initiative (BRI). It entails public works and infrastructure construction, such as a Yangon River bridge, roads, resettlement, an industrial park, water treatment, sewerage, a power plant and commercial and residential land.

The interest is said to have come from Japan, Singapore, Italy, Spain and France. The development proposal was drawn up by China Communications Construction Co and a Swiss challenge will be conducted. CCCC's proposal will be made public to allow interested parties to compete. If the winning bidder is not CCCC, it will have to reimburse the Chinese firm for costs incurred, according to reports.

NEW ZEALAND

) MORRISON & CO POSTPONES PIP I FUND SALE

New Zealand headquartered fund manager Morrison & Co has postponed the sale of its 2009-vintage PUBLIC INFRASTRUCTURE neutral by 2050. It remains challenging to restart commissioning new reactors and in the absence of further technical innovation, offshore wind is the alternative, said Taba.

Other policies of decarbonisation include coal-fired phase-out in the domestic market, and tightening of requirements for supporting coal in other countries, but with 300GW of potential wind energy, offshore wind is the key as it has the size and scale, cost-effectiveness, economic impact and others. The Ministries are now proceeding with auctions while still discussing issues regarding auction guidelines.

One of the issues being discussed and making potential bidders unhappy is the ceiling price for fixed-bottom projects that has been announced. An adviser panel of METI has proposed a price cap of ¥29/KWh (US\$0.277/KWh) for upcoming tenders in Akita and Chiba and the price cap includes the cost of connecting to the grid – apparently an extra fee not always paid by developers in other countries. That is a big drop from ¥36, said Taba, adding that it sent some shockwaves to the market. It indicates how much METI and MLIT are expecting a reduction in the tariff.

There are concerns too on scheduled commercial operations dates (CODs) and

construction risk. Any delay will result in a shorter revenue period, as developers will have 30 years of use of the seawater, based on the new maritime law passed two years ago. There is a requirement to establish a fund for the fishery community and local community. Details have not been finalised and are said to be subject to discussion post-awarding.

Another concern is the decommissioning cost for the fixed-bottom projects. It is currently estimated to be 70% of marine construction costs. Based on feedback, it is considered high, something that is recognised by the government officials.

Changes in shareholding structures have also been clarified. "It is not the shareholding necessarily in the project, but it is the role played and how that is going to be used or deployed in particular projects," said Taba.

The reliability of the technology will be an important part of the evaluation. There is a recognition that the natural conditions in Japan may not be the same as in Europe. Japan has earthquakes and typhoons. During the bidding process, share transfers are allowed – less than one-third during construction and one-half or less after completion of construction, said Shinichi

Yasuda, senior vice-president of structured finance department at DBJ.

For Daniel Mallo, managing director and head of natural resources and infrastructure, Asia-Pacific for Societe Generale, Japan should be a land of opportunity for them. He described Japan as being seven times the size of Taiwan in terms of the power matrix and it is also accelerating its energy transition. Thus he foresees opportunities.

However, there are concerns regarding risks and concerns in costs. Curtailment and transmission lines from the northern part of Japan to Tokyo were issues highlighted during the discussion. On the amendment to the FIT Act, the new legislation will come into effect on April 1 2022. One of the changes is the introduction of a feed-in premium (FiP) for renewable energy. The new mechanism will allow renewable power producers to sell their electricity in a spot market at a premium to wholesale prices.

The market-driven feed-in premium will be added to the market price. The idea behind this is the integration of larger-scale generation facilities into the wholesale market. Also required is the upgrading of the electricity grid and financial support nationwide, and some reserve for the decommissioning costs.

Minerva Lau

PARTNERS FUND (PIP I), a maturing NZ\$160m (US\$110m) fund that invests in social infrastructure PPPs, to a South Korean consortium. Several different events have affected the sale process.

A consortium of NH Investment Partners and KDB Infrastructure Investments Asset Management Co came into the preferred bidder position to buy PIP I earlier this year, after KPMG launched the auction process around mid-2019. Amid the Covid-19 pandemic, the sale was significantly delayed. The reported value the consortium was bidding was A\$560m (US\$409m), according to South Korean media.

At the asset level there are two important events that have also disrupted the sale.

A Morrison & Co spokesperson told PFI: "We have postponed the sale of the PIP I assets. Investors have been fully informed and remain committed to the portfolio of investments." The portfolio for sale is set to be one PPP lighter, but two of the other PPPs have obtained augmentations.

The University of Wollongong has decided to exercise its right of termination for the student accommodation PPP and to buy back the accommodation units. This should occur in early 2021. The university has made this decision, which is within the rights of its contact, due to the damaging impacts of Covid-19 on the student accommodation market. PIP I owns 50% of the PPP concessionaire, alongside Balfour

Beatty. The PPP involved developing 1,000 beds in two new on-campus residences and operating over 39 years the accommodation at nine existing residences. Commissioning was in 2018.

Separately, the PIP I fund has a new opportunity to invest additional capital in augmentation projects for two of its PPPs - the New Zealand Schools Bundle 1 PPP, known as Hobsonville Point Schools PPP, and New Zealand Schools Bundle 2 PPP. The Ministry of Education has committed to expansions of both and has asked PIP I to arrange project funding and organise the expansions under the Change Notices regime of the project agreements. Additional equity funding is needed from PIP I's limited partners (LPs) and where the LPs do not opt in, the PIP III fund will contribute that share. PIP I owns 100% of the Bundle 1 concession and 90% for Bundle 2.

These augmentations relate to three schools. The project sponsor must add capacity for 270 more students at Hobsonville Point Primary School, for the bundle 1 PPP. For the bundle 2 PPP, at the Rolleston school, the sponsor should build capacity for 700 more students, and at Wakatipu school another 600 students and design a concept for a new double gym facility. For all three schools, the sponsors should also provide temporary accommodation for the construction

Project costs are not public, and PFI understands the potential debt financing implications are not yet decided on.

One of the LPs in PIP I has made a statement about the process as it stands.

The New Zealand Social Infrastructure Fund (NZSIF) states that it will be investing a further NZ\$7.5m into PIP1 to cover its share of the schools augmentations, and will be using proceeds from the University of Wollongong PPP termination toward funding that commitment. NZSIF is a NZ\$41m fund that was created for the public to be able to invest in PIP I. The sovereign investor New Zealand Superannuation Fund was another LP, which committed NZ\$100m.

The other assets in PIP I are: 49.9% of the Melbourne Convention Centre PPP; 100% of the Bendigo Hospital Workers' Accommodation PPP and 100% of the Auckland Prison PPP

PAKISTAN

) GOVT TO RETENDER M-6 TOLLROAD

The Pakistani government has decided to re-tender the M-6 expressway project or the Sukkur–Hyderabad Motorway project, due to poor responses. The government, through the National Highways Authority,

received only one indication of interest, which opted for pre-bid qualification for the Sukkur–Hyderabad Motorway, according to reports.

The expressway, estimated to cost Rs175bn (US\$1.1bn) and launched under a public private partnership (PPP) framework, is considered an important part of the China-Pakistan Economic Corridor (CPEC).

The government is said to be currently evaluating its options and has been holding discussions with the International Finance Corp and the Asian Development Bank, which are believed to be its transaction advisers. There are a number of options said to be being evaluated, and one proposal involves dividing the project into three packages.

The proposed motorway is a 306km sixlane high-speed toll road that would start from Hyderabad (at the end of the Karachi–Hyderabad Motorway M-9) and terminate at Naro Canal (the start of the Sukkur–Multan Motorway M-5).

PHILIPPINES

ST RAPHAEL CFPP JV CANCELLED

SEMIRARA MINING AND POWER CORPORATION (SMPC) has cancelled its joint venture agreement with MERALCO POWERGEN CORPORATION (MGen) for the development of the St Raphael power plant, a 700MW coal-fired power plant in Calaca, Batangas.

The JV, called St Raphael Power Generation Corporation (SRPGC), was set up in 2016 but the sponsors have not managed to make progress due to a number of hurdles that included legal issues related to the approval of the power supply agreements (PSAs) of Manila Electric Company, MGen's parent. I

In a disclosure to the Philippine Stock Exchange, SMPC indicated that the joint venture deal is deemed terminated as of November 9 2020, and that it "shall reacquire all the equity shareholdings of MGen in SRPGC". They had a 50:50 equity shareholding structure for the proposed IPP.

) EDC RECEIVES SECOND GEOTHERMAL CEPNS

ENERGY DEVELOPMENT CORPORATION (EDC) of the Lopez Group has received a certificate of energy project of national significance (CEPNS) for its Bacon-Manito geothermal expansion project that is expected to generate 49MW. This is its second certificate. The first CEPNS was granted in November last year for the proposed Mahanagdong geothermal brine optimisation plant, which could have an output of 18.7MW.

Govt sets conditions for Malampaya extension

■ PHILIPPINES Gas

The Philippine government is reported to have set at least eight conditions to be met for the Malampaya consortium to be able to seek an extension to their Service Contract (SC) 38 or the licence of the US\$4.5bn Malampaya deep-watergas to power project. The consortium comprises SHELL PHILIPPINES EXPLORATION (SPEX, 45%), UDENNA CORP (45% acquired from Chevron), and PHILIPPINE NATIONAL OIL CO-EXPLORATION CORP (PNOC-EC, 10%)

DoE assistant secretary Leonido J Pulido III told local media that the eight-point negotiating terms with the Malampaya consortium will look into: 1) the remaining reserves in the gas field; 2) the banked gas; 3) the development opportunity or the work programme that will be necessary in order for the Department of Energy (DOE) to evaluate the proposals of the consortium members; 4) the split or royalty sharing between the government and the project contractor; 5) the decommissioning plan; 6) the asset disposal; 7) the price of the gas in the event of licence extension; and 8) the corporate social responsibility (CSR) programmes that must be carried out by the consortium.

"This proposal was necessary in our view, so the DOE and the members of the consortium would have common ground on which topics to discuss; so that we – the department – could ensure that we can get the best terms for the national government," Pulido said, according to local papers.

He added that based on preliminary studies and evaluations done by the DoE and the Malampaya consortium, the depletion of gas from the field may not happen for the next six to seven years, or around 2027, slightly longer than the previously expected 2025.

The energy official also added even if the Malampaya gas field will eventually have a new operator, the government requires that the consortium members will continually pursue development in the areas within SC 38 – including those in the Malampaya East, lloc, Nido and the Linapacan plays.

"All of these fields have varying possibilities of success in geological terms. The talk about the potential of each area and each one has its own estimated potential volume of petroleum – whether in the form of natural gas, condensate or oil," Pulido said. He said that Malampaya East has prospects estimated at 140 billion cubic feet, and the government is hoping that this area will be further developed.

Minerva Lau

) FGEN LNG SIGNS EPC DEAL

FGENLING, a special purpose vehicle set up by First Gen for its LNG business, has signed the engineering, procurement and construction (EPC) contract for the interim offshore LNG terminal in Batangas with the local unit of an Australia-based McDonnell Dowell

The interim offshore terminal will allow FGen LNG and partner Tokyo Gas to speed up their ability to introduce the imported LNG to the country as early the third quarter of 2022. The facility will serve the natural gas requirements of existing and future gas-fired power plants, including those of affiliates and third parties.

McDonnell Dowell plans to tap into First Balfour as a major subcontractor for the onshore gas receiving facility and the multi-purpose jetty mechanical and instrumentation installation works, Jonathan Russell, First Gen executive vicepresident and chief commercial officer, told the media. Construction is scheduled to commence within this year, as soon First Gen's unit "secures the requirements, including enhanced work and safety protocols to minimise the impact of Covid-19 on the personnel and local community".

The company is currently bidding out a contract to charter a floating storage and regasification unit (FSRU) for the imported fuel. It has added one more name to the earlier shortlisted three bidders. They are BW Gas; GasLog LNG Services; Hoegh LNG Asia; and new addition Dynagas, an LNG maritime transportation company based in Athens, Greece.

At the same time, the company is looking to supply natural gas to the economic zones and industrial parks in the country, expanding its distribution network. It is reported to be planning to introduce LNG at the First Philippine Industrial Park, which is in the Calabarzon (Cavite-Laguna-Batangas-Rizal-Quezon) industrial region. The terminal

will be built at the First Gen Clean Energy Complex in Batangas City, about 50km from the industrial park.

) TWO LNG PLANS GET EPNS CERTS

The Philippines' Department of Energy (DoE) has separately issued certificates of energy project of national significance (CEPNS) to two LNG schemes.

One is for the Ps37.553bn (US\$783m) Batangas Clean Energy project of LUCIO TAN and its American partner GENX ENERGY. The project involves integrated investments for an onshore LNG import terminal as well as anchor power projects.

The energy department specified that the EPNS certifications for the Batangas Clean Energy LNG import facility and the proposed combined-cycle power plant projects had been issued separately. The 3mtpa onshore LNG import terminal, targeted to be completed in 2025, will be sited close to the distilleries of the Tan group – Tanduay and Asia Brewery – at Pinamucan Ibaba in Batangas City.

Upon completion of the import terminal, the LNG facility will provide fuel to 1,100MW of gasfired power generating facilities, which will be designed to cater to the future requirements of the Tanowned distilleries as well as the JG Summit petrochemical complex of the Gokongwei group in Batangas.

The other certificate is for the floating storage regasification unit (FSRU) import facility of EXCELERATE ENERGY of Texas, USA. It is targeting to be the first player to bring LNG into the Philippines by targeting to have it operational in the second quarter of 2022. It intends to allow third-party access (TPA) on its LNG import terminal, making its facility available to not just one captive customer but to other industrial users that will require gas.

The CEPNS will entitle the two schemes to a streamlined process of securing permissions, which should be completed within 30 days, as sanctioned under Executive Order No 30 issued by President Rodrigo Duterte in 2017.

) MEGAWIDE ASSURES ON NAIA FINANCING

MEGAWIDE CONSTRUCTION is capable of sustaining the financing requirements of the Ninoy Aquino International Airport (NAIA) rehabilitation in different phases, the company declared in a statement to the exchange.

"This includes providing sufficient equity and obtaining debt in order to

fund the project in compliance with the requirements set out in Section 5.4(c) of the BOT law implementing rules and regulations. All the necessary documents have been submitted to NEDA-ICC to establish the company's qualifications," it said.

Megawide issued the statement in response to local newspaper reports that a Transportation Department official had indicated that Megawide's proposal for the Ninoy airport project was noncompliant with "needed documentary requirements which could prove that the consortium is financially capable to pursue the airport expansion project".

Megawide reiterated that GMR Infrastructure of India has not withdrawn from the project and remains its partner. In a disclosure to the exchange, Megawide confirmed that GMR is taking a 40% stake in the partnership for the proposed upgrade and development of NAIA.

It added that GMR, its equity partner in Mactan-Cebu International Airport, was one of the leading and largest airport operators in the world. The Mactan-Cebu Airport, located on the Cebu Island in the Visayas, is the first airport PPP and is the second busiest international airport in the country. It was awarded in 2014 and commenced operation in 2018.

The two partners raised debt financing of Ps23bn (about US\$476m) based on a 70:30 debt-to-equity ratio. BDO Capital was the lead arranger and lenders were BDO Unibank, Bank of the Philippine Islands, Development Bank of the Philippines, Land Bank of the Philippines, Metropolitan Bank & Trust, and Philippine National Bank.

"They are currently operating and/ or developing key international gateways such as the Delhi Indira Gandhi International Airport, GMR Goa International Airport and the Crete International Airport in Greece. GMR's airport assets serve more than 100 million passengers per year," Megawide said. It added that GMR's financial fundamentals were "strong and it possesses the capability to fully finance" all proposed phases of the NAIA rehabilitation project.

The project is estimated to cost Ps107bn (US\$2.23bn)) and debt financing will be based on a 70:30 debt-to-equity ratio. The proposal is now with the National Economic and Development Authority Board's Investment Coordination Committee, whose approval will give the final greenlight to the Megawide-GMR consortium.

SINGAPORE

) PACIFICLIGHT POWER REFINANCES

PACIFICLIGHT POWER has raised a S\$1bn (US\$740m) debt facility that will take out debt that funded the development of an 800MW combined-cycle gas turbine (CCGT) facility on Jurong Island in Singapore. The lenders consortium is led by Maybank and is joined MUFG, Sumitomo Mitsui Trust Bank and Standard Chartered.

The loan package, its third refinancing, includes a S\$613m term loan facility and credit support and working capital facilities of S\$207m and US\$100m with maturity dates of December 2026. Norton Rose was legal counsel for the lenders. PacificLight Power is owned 70:30 by FPM Power Holdings and Petronas Power, respectively. It generates close to 10% of Singapore's power supply and has been operating since 2013.

) HYFLUX PUT UNDER COURT-APPOINTED MANAGEMENT

HYFLUX will be placed under a courtappointed judicial manager, Singapore's high court ruled this week, two years after the company filed for financial restructuring. The decision is seen as a step forward for the company, which has not been able to conclude any rescue agreement since 2018.

Restructuring firm Borrelli Walsh has been appointed as the judicial manager and he will lead Hyflux's restructuring, with no involvement from the company management team including founder Olivia Lum.

Borrelli was financial adviser to the unsecured working group of 19 creditors led by BNP Paribas, Mizuho Bank, and Standard Chartered Bank. The group, which is estimated to hold more than \$\$930m (US\$694m) of Hyflux's debt, has demanded judicial management. Hyflux also owes about \$\$900m to 34,000 retail investors holding its perpetual and preference shares (PnPs).

Hyflux has enjoyed 12 extensions of debt moratoriums over 2.5 years, with the judge giving it the opportunity to conclude a rescue package among the number of suitors that included Indonesian conglomerate Salim Group and UAE utilities company Utico.

But the Hyflux board failed to close a deal that would have put funds into the company. The situation has become worse as Hyflux and its current and former directors are now being probed for suspected false and misleading statements and breaches of disclosure rules.

"The moratorium must end at some point, it is not intended to continue indefinitely," Justice Aedit Abdullah, who presided over the case, said during a court hearing on Monday, as reported in local media.

TAIWAN

) ORSTED TO ISSUE OFFSHORE BONDS

ORSTED plans to make its second green bond issue in Taiwanese dollars to finance the development of the 900MW Changhua 1 and 2a offshore wind projects.

It aims to raise up to NT\$15bn (US\$524m) in maturities of seven, 10 and 20 years. The final sizes, tranches and pricing are likely to be determined when bookbuilding closes. BNP Paribas, Cathay United Bank, and CTBC Bank are mandated lead arrangers.

The bonds will be issued by Orsted Wind Power TW Holding, the Danish-based holding company of Orsted's activities in Taiwan, and guaranteed by Orsted. The company is rated Baa1 with a stable outlook by Moody's, BBB+ with a stable outlook by S&P, and BBB+ with a stable outlook by Fitch. The bond proceeds will presumably be used for the equity component.

Orsted is finalising its US\$2bn limited recourse financing for the 605MW Changhua 1 schemes. Financial advisers CTBC and HSBC have put together a group of banks that includes BNP Paribas, Credit Agricole, OCBC, Societe Generale, Siemens Bank, SMBC and Standard Chartered; and Taiwanese financiers Cathay Bank, E Sun Bank, and KGI Bank as well as Cathay Life Insurance and Taiwan Life Insurance.

It has lined up export credit agencies, namely, the Netherlands' Atradius, South Korea's KSure and the UK's UKEF. The lenders have Linklaters as legal adviser.

THAILAND

) HSR PROJECT SEEKS LEGAL ADVISER

The CHAROEN POKPHAND consortium is said to be in the process of selecting a legal adviser for its lenders for the debt funding to finance the Bt224bn (US\$7bn) high-speed rail project linking three airports.

The consortium, comprising CP, Bangkok Expressway and Metro, China Railway Construction Corporation, Ch Karnchang and Italian-Thai Development, won the bid to develop a 220km rail link that will shuttle passengers between the airports – Bangkok's Suvarnabhumi and Don Muang international airports to U-Tapao airport, near Pattaya.

HSBC and Siam Commercial Bank, the financial advisers to the consortium, are raising up to 75% of the project cost, and potential lenders include multilaterals and export credit agencies from China and Japan, in addition to commercial bank lenders.

VIETNAM

) AES APPOINTS LA FOR SON MY 2 LTP

AES CORP and partner PETROVIETNAM have appointed Shearman & Sterling as legal adviser to the proposed US\$2.8bn Son My 2 LNG-to-power project. The two partners will jointly develop a 2.2GW gas-fired power plant and an LNG terminal. The US company recently signed a memorandum of understanding (MoU) with Vietnam's Ministry of Industry and Trade (MOIT) to strengthen cooperation on the Son My 2 IPP in Binh Thuan province.

) SN POWER BUYS DAM NAI WIND

SN POWER is acquiring **DAM NAI WIND POWER**, which owns and operate a 39.4MW wind

farm in Ninh Thuan province, about 350km north of Ho Chi Minh City.

It is acquiring the asset from Mekong Wind, which is owned by Singapore-based Armstrong South East Asia Clean Energy Fund. The acquisition amount was not disclosed but the total project cost was estimated at US\$60m and about US\$45m of non-recourse debt was thought to have been raised via Bank for Investment and Development of Vietnam (BIDV).

This is the company's first wind farm in the country. Phase I (7.9MW) of the development reached commercial operations in October 2017 and Phase II (31.5MW) in December 2018.

Closing of the Dam Nai Wind acquisition transaction is expected to be achieved in Q1 of 2021.

Aboitiz Power of the Philippines was initially interested in the asset but dropped the plan. Scatec Solar, which last month acquired SN Power, said it supports the investment and the project economics meets its return thresholds.

) MAINSTREAM SIGNS 500MW OFFSHORE DEAL

MAINSTREAM RENEWABLE POWER has signed a joint development agreement with local partner ADVANCE INFORMATION TECHNOLOGIES CORPORATION (AIT) to co-develop a 500MW offshore wind project in Ben Tre province.

AIT is a specialist in providing EPC services to power projects and is also a developer of renewables. It is aiming to reach financial close and start construction by 2023–24 with commencement of operation by 2025–26.

The project received its site survey licence last year and it has also completed a feasibility study, said Mainstream. It has submitted a power development plan (PDP) application to the ministry of industry and trade, which is in the process of finalising the government's PDP for 2021–2030.

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■ FRONT STORY EUROPE - TELECOMS

Fibre and 5G rule telco market

- Europe's telecoms market has seen a flurry of activity as investors rush in
- Asset owners are making the most of the region's push towards a higher level of connectivity

BY JORDAN BINTCLIFFE

Europe's telecoms market has seen a flurry of activity in recent months as investors rush to make the most of the region's push towards a higher level of connectivity through fibre and wireless infrastructure assets

French multinational telecoms company Orange has a number of deals under way. The group's Polish subsidiary is seeking a co-investor for a roll-out of fibre infrastructure to 600,000 households in mid- and low-competition areas with nonbinding bids due by the end of November, according to a source. Final bids will be due towards the end of the year or in early 2021, the source added. The overall value of the deal is unclear although the source put it as sub-€1bn.

Orange Polska in October shared an information memorandum with a "significant number of interest parties", CEO Julien Ducarroz said on a Q3 results call. Project Nebraska will be financed off the company's balance sheet in a FiberCo special purpose vehicle. This will provide greater flexibility needed ahead of Poland's planned 5G auction, the exact timing of which is yet to be released.

The deal will be financed by banks and with the equity co-investor, which will buy a 50% stake in the business. Orange Polska is contemplating a future fibre roll-out to a pipeline of 1.7m customers. Project Nebraska will see it shift 600,000 of these into the FiberCo.

The company sees fibre as being core to its strategy. Internet penetration is around 62% in Poland versus 80% in the rest of the EU, giving the company plenty of space to gain a foothold. Orange Polska intends to build an open network, targeting the low and medium-competition areas to gain both retail and wholesale customers. The "open network" structure will enable Orange Polska to sell use of the network to wholesale clients.

Financial close is expected in the first half. Lazard is providing financial advice to Orange Polska on the deal, a source said. Lazard and Orange Polska declined to comment. Orange is also in the midst of selling a stake in its Orange Concessions' business, with binding bids expected in January (PFI 684). With an expected enterprise value of around €2bn, the network brings together the 4m fibre-to-the-home (FTTH) current and future outlets belonging to local authorities.

In France, fibre-optic company Altitude Infra will close on a debt package for its €200m Cote d'Or and Landes FTTH projects before the end of November. Lenders on the deal include Natixis, Societe Generale, NordLB and Sabadell, according to a source involved. Cote d'Or and Landes will be financed as a single package, geared at around 70:30.

The debt package will be structured as a mini-perm. The contract and tenor length are unclear, although lenders usually want a tail of four to seven years after concession expiry, the source said. Altitude Infra is receiving financial advice from H3P, with White & Case as legal adviser.

Altitude Infra specialises in networks in low to medium-density areas. Cote d'Or and Landes are being developed as "calls for demonstration of local commitments" or AMEL, which means Altitude keeps ownership of the network and effectively rents it to telecoms operators such as Orange.

Contract lengths tend to be 15–35 years depending on how expensive the network is to build and whether a subsidy or public financial support is available.

Altitude Infra in mid-2019 financed its Tarn-et-Garonne broadband network with a similar financial structure. It had a soft mini-perm with a 26-year legal tenor backed by a 30-year concession. It was geared at 75:25.

Altitude Infra in September said it intends to invest more than €2.5bn to expand fibre networks over the coming three years. It has 17 Public Initiative Networks (PIN) and more than 3 million plugs. It aims to connect 3.5 million by 2023.

Altitude Infra Tres Haut Debit (THD), which structures and operates the fibre networks, the same month raised €500m in equity and junior debt. The equity was

subscribed to by a pension fund managed by the real assets and private markets division of UBS Asset Management. White & Case also assisted the group on that deal. Altitude Infra Holding is the controlling company of the Altitude Group's infra activities.

Spanish telecoms company Telefonica is making a concerted push into the fibre market with plans to create a €5bn, 50:50 FTTH joint venture with Allianz Group to deploy fibre networks in under-served rural and semi-rural areas in Germany (PFI 684).

The JV will be financed through a variety of sources including a long-term subordinated loan as well as non-recourse external financing. It will be rounded out with €500m of shareholder's equity from Telefonica and €1bn from Allianz, via different instruments. The investments will be spread out over six years. The company aims to deliver connections to over two million homes and to create a network more than 50,000km in length.

Europe's tower market is seeing activity, with Hong Kong-headquartered CK Hutchison in advanced talks to sell its European telecoms assets to Cellnex Telecom. Total proceeds are expected to be €10bn, inclusive of minority partners' shares. Cellnex will pay €8.6bn in cash and a further €1.4bn with the issue of new shares, giving CK Hutchison an approximate 5% stake in Cellnex's capital at closing. Cellnex will finance the deal with its existing cash and available liquidity.

CK Hutchison's European unit CK Hutchison Group Telecom Holdings will dispose of its indirectly held telecoms infrastructure assets in Europe. The deal will see Cellnex acquire 24,600 tower sites and could also see it rolling out up to 5,250 sites over the coming eight years. The roll-out would require a further €1.4bn investment.

Cellnex will gain a presence in Sweden, Denmark and Austria as a result of the deal with 5,200, 1,900, and 4,900 sites, respectively. The company's Italian tower portfolio will rise to 24,500 from 15,000 sites previously, and its UK tower numbers will increase to 14,700 from 8,000. It will gain a further 1,300 tower sites in Ireland, rising to 2,300 in all. After the sale, Cellnex will enter a 15-year service agreement to provide CK Hutchison with telecoms services and support an accelerated 5G network roll-out through a built-to-suit expansion programme.

CK Hutchison Group Telecom Holdings was formed in 2019 to consolidate the group's European operations, 3 Group Europe, and Hutchison Telecommunications Hong Kong under one holding entity.

It also holds the group's European tower assets via CK Hutchison Networks Holdings, and is active across eight countries. The unit reported revenues of HK\$93.5bn (US\$12bn) and Ebitda of HK\$35.3bn in 2019, up 8% and 16% from 2018, respectively.

The two have reached substantial agreement on the key commercial terms, they said, although no binding agreement has been reached.

The purchase will be completed across six transactions over the next 18 months with the individual components closed on a staggered and per-country basis. The deals for the Ireland, Sweden and Denmark-based assets are expected to close in the first half. Acquisition close of the Austrian and Italian assets is expected in the second half of 2021, and closing of the UK assets is expected in the first half of 2022.

The deal is transformational for Cellnex, increasing its number of towers to around 103,000. It will increase the company's adjusted Ebitda to €3bn from €2bn.

Revenues will rise by €1.2bn to a total €3.8bn after the completion of the planned roll-outs. Cellnex's sales backlog will increase by €33bn to €86bn as a result of the deal.

Cellnex was advised by AZ Capital and HSBC as financial adviser, and by law firm Clifford Chance. Price Waterhouse Coopers provided tax due diligence and Arthur D Little was commercial adviser.

EUROPE

EC CONSIDERS 60GW OFFSHORE WIND

The European Commission (EC) is considering a 60GW target of offshore wind capacity by 2030, followed by 300GW by 2050, according to a draft of the EC's strategy for offshore renewable energy, Reuters reported.

The strategy also targets 60GW of wave and tidal energy capacity by 2050. It is due to be published on November 18. The bloc's existing capacity stands at 12GW.

Some €789bn of investment would be needed to meet the targets, the document suggests. Countries' existing policies only enable 90GW of offshore capacity by 2050, and so would also need to be revamped.

The draft suggests that guarantees or power purchase agreements could be used to support the roll-out. The European Union's €750bn Covid-19 recovery fund could also be used to support new projects.

FRANCE

CSM BANKS DUE

The lead banks on the €2.2bn 450MW Courseulles-sur-Mer (CSM) offshore wind financing are believed to be in place. EDF holds 50% of both projects, with Enbridge and CPP holding the other half. BNP Paribas is advising. EDF has been rotating the lead banks on its three offshore deals in France – CSM, Fecamp and Saint Nazaire.

) ROMANDE/CALYCE PLAN 646MW WIND

Swiss renewable power generator ROMANDE ENERGIE and CALYCE DEVELOPPEMENT have signed an agreement for the development of a 646MW portfolio of wind farms in France. The French arm of Romande Energie signed

the partnership agreement that will see Calyce Developpement develop 15 projects in the Grand Est, Hauts-de-France, and Pays de la Loire regions.

Romande Energie will acquire 50% of six of the projects in an early stage of development, 100% of seven others in advanced development and another already in operation. It will also acquire 80% of one other in its late stages and nearing operation. The deal is expected to be finalised in the coming weeks. Romande Energie supplies electricity in French-speaking Switzerland and has over 400MW of renewable energy production capacity in Switzerland and France.

The company's electricity distribution network is more than 10,500km. Founded in 2011, wind developer Calyce Developpement has previously commissioned 226MW of capacity and has a pipeline exceeding 1GW.

TOTAL/LHOIST TO DEVELOP PV

French renewables developer TOTAL QUADRAN will develop 83MW of photovoltaic (PV) capacity for Belgian mineral producer LHOIST at eleven of its sites in France, covering around 70% of Lhoist's electricity requirements in the country.

Four of the plants are for on-site self-consumption. The PV plants will be entered into CRE's next call for tenders with the aim of winning a feed-in tariff to support the developments. They will be commissioned by 2023.

Engie, EDF, Neoen and Total were among the winners of 600MW of wind and solar in the French Ministry of Ecological Transition's most recent CRE auction. Total won 67MW of solar capacity, bringing its total won over all CRE auctions to 606MW – the second largest of any of the bidders.

MINISTERS ADOPT PV TARIFF CUTS

French ministers this week voted to adopt plans to retroactively cut the tariffs of

solar photovoltaic (PV) projects that began operations pre-2011. The move paves the way for cuts to purchase contracts concluded between 2006 and 2011 for PV plants of 250kW or larger.

If it comes into effect, the amendment to 2021's Finance Bill will affect around 800 purchase obligations. The next stage of the process is for France's Senate to examine the amendment.

The amendment aims to revise the future tariff of the contracts "in order to reduce their profitability to a level corresponding to a reasonable return on capital", the amendment reads. "It thus aims to put an end to a situation of excessive and unjustified remuneration" related to the obligation to purchase the solar power.

The amendment provides a "safeguard clause" to the benefit of installations that would have their production viability compromised by the law.

"At the request of the producer, the ministers of energy and of the budget will thus be able to take into account the situation of each installation and consequently define suitable arrangements allowing the continued operation of these installations," it reads. The tariff revision will affect approximately 0.5% of solar purchase contracts under the decrees of July 10 2006, January 12 2010 and August 31 2010.

The amendment adds that it targets a "limited number of old purchase contracts for which the remuneration is excessive, it does not induce any new risk on the financing of new renewable energy projects. New renewable energy projects are therefore based on solid purchase contracts that cannot be called into question."

Public expenditure amounts to €2bn per year for the contracts affected – more than a third of France's annual expenditure in support of renewable energies – which produce less than 5% of the country's electricity production.

The proposed cuts have not been received well by the industry. Solar industry association Enerplan called them "an abuse of power".

"The principle of unilateral and retroactive questioning of a contract by the government is totally unacceptable," it said.

Enerplan said that the government's arguments are not convincing, saying: "They are based on vague notions with a completely anachronistic comparison between the cost of solar today and that of ten years ago."

"If solar energy is so efficient today, it is because there were pioneer companies which took the risk of investing ten years ago at the time of the financial crisis."

French state owned utility EDF intends to defend its case for remuneration for 150MW of projects owned by its subsidiary EDF Renewables that would be affected by the planned cuts.

"We do not consider that we enjoyed in excessive remuneration," the group's senior executive VP Xavier Girre said on a results call recently. "And we intend to defend our case with the French authorities when the detailed parameters are known."

The details of the revisions are not known yet, and they may not be disclosed before January, he said. France's new budget law is due to be published in the official gazette before December 31 and is likely to be implemented by ministerial order by the spring.

The process from there is yet unclear, but "the amendment suggests that the producers would have to raise their hand if the new feed-in tariff threatens the financial sustainability of their investment/assets," Sebastien Canton, a partner at BMH Avocats said.

"The government may then, on a case-by-case basis and subject to proper evidence submitted by the producers, issue additional ministerial orders to 'soften' the rules of the first above mentioned ministerial order."

Its unclear how exactly this would work, Canton adds, as the criteria mentioned in the amendment concerning the exceptions to the "new" feed-in tariff remain quite vague.

The new rules remain to be defined although Canton notes that the amendment puts the focus on the "producer" rather than the "PV plant" for the assessment of the "financial viability" of the assets, which would be decisive to grant any derogation, or relaxation, of the law.

"One could imagine that the government could refuse a derogation on the ground that, even if one or more of the producer's PV plants are concerned by the 'lowered' feed-in tariff, and those PV plants would not be 'financially viable' anymore as a result of the new conditions, the loss would be compensated by the profits made from other assets of the same producer," Canton said, and "so there would be no derogation allowed in the end".

"And from a more general point of view, it is difficult to imagine that one producer at a time would knock at the door of the Economy and/or Energy Ministry to argue its case and request that a specific ministerial order, regarding such or such PV-plant, be issued," Canton said. "This would be terribly time-consuming... besides this, producers may initiate judicial proceedings to challenge the ministries' decision regarding such or such project."

Despite the bill being sent on to the Senate, it is not guaranteed that the

retroactive cuts will enter into force – or indeed how they would look if they did. The next stage of the process is for France's Senate to examine the wider Finance Bill as well as the amendment, following which the National Assembly (NA) will be able to make modifications.

If the NA does make changes, a joint committee comprising National Assembly and Senate members would be formed to reach an agreement on the contentious provisions. Once the joint committee reaches an agreement; the bill is passed. The budget law is usually then challenged before the French Constitutional Court in light of the country's constitutional rules.

GERMANY

TRIANEL BUYS ABO'S WIND

TRIANEL ERNEUERBARE ENERGIEN (TEE) has acquired a 33.6MW onshore wind plant in Brandenburg from developer ABO WIND. Commissioning of the Spreeau project in the municipality of Spreenhagen is expected by the end of 2021.

The acquisition of Spreeau brings TEE's portfolio to 44MW of photovoltaic and 191MW of wind capacity. TEE is backed by 37 of Germany's municipal utilities, which are investing about €500m in the development and expansion of their renewables portfolio in Germany.

German developer ABO Wind earlier this year took action against a regional council over its application for a 25.2MW wind project in the state of Hesse – which it sold to TEE in August 2018. ABO Wind was denied approval for the six-turbine

EMEA GENERAL CORPORATE FUNDING ACTIVITY NOVEMBER 2 TO NOVEMBER 16 2020

Security type	Issuer/Borrower	Amount (m)	Maturity	Issue price	Pricing	Bank
Energy, Gas, and Wa	ater Distribution					
Term Loan	Terna	€200	02/11/22	100.000	N/A	IMI - Intesa Sanpaolo
Rev Cred Fac	Vattenfall Treasury	€2,000	06/11/23	100.000	N/A	_
Ord/Common Shs.	Plutus Powergen	£6	-	0.002	-	Allenby Capital/Turner Pope Invests (TPI)
Infrastructure Firms						
Rev Cred Fac	Curium Sas	€80	02/05/27	100.000	N/A	Barc/DB/JPM/Nomura
Term Loan B	Curium Sas	\$265	02/11/27	100.000	LIBOR +425.000 bp	Barc/DB/JPM/Nomura
Term Loan	Curium Sas	\$325	02/11/28	100.000	LIBOR +775.000 bp	Barc/DB/JPM/Nomura
Rev Cred Fac	Morgan Sindall Group	£150	04/11/23	100.000	N/A	Undisclosed Advisor
Term Loan	Cadeler	€75	09/11/23	100.000	N/A	-
Term Loan	Cadeler	€20	N/A	100.000	N/A	_
Senior Notes	Empresa Nacional de Autopistas	\$400	19/05/48	100.000	4.000	Bank of America Merrill Lynch
Mining						
Term Loan	Polimetall AO	\$125	05/11/26	100.000	N/A	Societe Generale
Ord/Common Shs.	Kavango Resources	£2.15	-	0.030	_	_
Petrochemicals; Pet	roleum Refining					
Ord/Common Shs.	Advance Energy	£0.3	-	0.002	-	-
Telecommunications	5					
Ord/Common Shs.	Turkcell Iletisim Hizmetleri	1,677.5	-	15.250	-	Goldman Sachs/Credit Suisse

Source: Refinitiv

Nentershausen project in the Hersfeld-Rotenburg district based on alleged conflicts with species protection, it said.

The developer has been working on Nentershausen's development for five years and said it met all the requirements for the project to be approved. ABO Wind said that between 2014 and 2017, an average of 91 turbines were installed in Hesse per year but that the number has since collapsed.

ABO Wind develops wind, solar, and biogas projects worldwide. It has developed and sold over 3GW of capacity since 1996, according to its website. Around half of that total was built on a turnkey basis.

) UNIPER LNG REGAS ON HOLD

UNIPER is reviewing plans for an LNG regas terminal in Wilhelmshaven, citing reluctance by market players to make binding bookings for import capacities during an open season round. "Numerous market players took part in the procedure and expressed general interest, but not enough of them have made their booking intentions binding," Uniper said in a statement.

New options for LNG Terminal Wilhelmshaven GmbH (LTeW) include using it as an import terminal for environmentally friendly gas or hydrogen, Uniper said.

Mitsui OSK (MOL) and Uniper's project company LTeW) had signed a 20-year charter contract for a 263,000m³ floating storage and regasification unit (FSRU) that would have served the terminal. The FSRU was to be built by Daewoo Shipbuilding Marine Engineering (DSME). SMBC was advising on financing the project.

Wilhelmshaven is Germany's only deep-sea port and has infrastructure for offloading LNG tankers of all sizes. RWE is still pushing ahead with its German LNG Terminal in Brunsbuettel, a joint venture project involving Dutch gas network operator Gasunie, German tank storage provider Oiltanking GmbH and Dutch storage company Vopak LNG Holding.

) GERMANY GOES FOR 40GW OFFSHORE WIND

Germany's parliament has set a new target of 40GW of offshore wind energy capacity by 2040 and an interim target of 20GW by 2030. The Bundestag agreed an amendment, introduced by the Federal Ministry of Economic Affairs & Energy (BMWI), to the Offshore Wind Energy Act outlining the new capacity targets

The BMWI introduced the Investment Acceleration Act (IAA), which aims to speed the expansion of onshore wind energy

Warnow Tunnel up for refi

■ GERMANY Transport

Australian toll road operator ATLAS ARTERIA is considering restructuring the debt on its Warnow Tunnel project near Rostock in Mecklenburg-Vorpommern. The operator wants to restructure the debt in order to "underpin sustainable distribution flows", it said.

Warnow is meeting its bank covenants but net cashflows are being swept to lenders for debt reduction. Atlas Arteria reported net debt of €140.4m on the project in the first half. The sweep has brought the debt total down somewhat from €146m in the first half of 2019.

The deal was originally financed by lead arrangers Deutsche Bank, NordLB, and KFW in 2000 with a €154m, 25-year debt package. Another 10 commercial banks were brought into the deal including Landesbanks and some international lenders such as ING and DePfa, as well as the EIB, which guarantees 25% of the debt.

The Macquarie/Bouygues-developed road opened in 2003 but by 2004 was facing some difficulties after reporting traffic volumes of only 25%–40% of its 20,000-vehicles-per-day base

case. That has improved in recent years with Atlas Arteria reporting an average of around 13.000 daily in 2019.

Project sponsor Macquarie Atlas Roads was spun out of the Macquarie infrastructure group in 2018, becoming Atlas Arteria and later acquiring the outstanding 30% interest in Warnow from Bouyques.

Atlas Arteria said the Covid-19 pandemic caused a 9.1% traffic reduction in the first half although it has since recovered to pre-Covid levels. Traffic has shown a strong recovery following the easing of movement restrictions from the end of April. Warnow's revenues shrunk by 7.3% and Ebitda was €4.3m in the first half, down 13.5% from 2019.

The Warnow Tunnel, also known as the Warnowquerung, is a 700-metre tunnel under the Warnow river 240km north-west of Berlin. It provides a route across the river that reduces travel times and avoids congestion and a longer route through the city centre. The concession expires in 2053.

Jordan Bintcliffe

through structural improvements in the planning process. Among changes are the suspension of a regulation that limited onshore wind turbines to a height of 50 metres.

The IAA will enable certain projects to apply for the cost of investigations to be covered. German offshore wind industry body WAB welcomed the new target for providing planning security to the industry but criticised the lack of a contract for difference (CfD) model included in the act, which regulates the tender design for future offshore wind projects.

WAB noted the lack of a "coherent concept for identifying other energy generation areas in which green hydrogen is to be generated from offshore wind". WAB and fellow industry body BWO both advocate for a CfD model, which they say will help reduce electricity generation costs by 30%.

GREECE

) PIRAEUS BACKS PV

Greek bank Piraeus will provide €22m in debt financing for 24MW of solar capacity in Greece developed by NATIONAL ENERGY HOLDINGS (NEH). The package will finance

the construction of five photovoltaic projects located in central Greece. They are expected to become operational within six months.

NEH's five projects were awarded 20year fixed tariffs in the July 2019 auction conducted by the Greek Regulatory Authority of Energy. NEH was advised by KLC Law Firm and Tuv Hellas. Londonbased NEH develops, builds and operates renewable energy assets with a focus on solar and wind. It is backed by US-based investors

Piraeus Bank has provided financing for more than 1.7GW of renewable capacity. Earlier this year it provided Cubico Sustainable Investments with a €24m debt package to refinance three Greek wind farms it had acquired. Cubico acquired Eoliki Zaraka Rachi Gkioni Energy, the owner of the three operational wind farms, from Underfoc Holdings.

) SOLARCENTURY SEEKS SOLAR SITES

The UK's **SOLARCENTURY** has made applications for three sites on which to develop a 250MW solar farm in Greece.

The company, which is about to be acquired by Statkraft, announced its entry into the country in late October with the acquisition of development-stage solar projects of 284MW, according to its website.

Two of the potential sites are in Farsala, Thessaly, while the third site is in Vouzi in central Greece. The project, wherever it is built, will have capex of about €140m. Statkraft this week agreed to acquire Solarcentury and its 6GW global solar pipeline pipeline for £117.7m from Scottish Equity Partners, VantagePoint Capital Partners, Zouk Capital, and Grupo Eco.

) BIDS DUE ON EGNATIA CONCESSION

The seven shortlisted bidders for the Egnatia Oddos motorway concession were finally able to submit binding offers from earlier this month as the final draft contract is finalised and published.

The shortlisted bidders are ANAS International; Diolkos; GEK Terna and Egis; Macquarie-owned Freyja Holdings; Roadis Transportation and Aktor Concessions; Sichuan Communications Investment Group and Damco Energy; and Vinci Highways, Vinci Concessions and Mytilineos Holdings.

The deadline had already been pushed back several times due to various procurement issues. Terms were recently changed on the contract to include the imposition of financial penalties if sponsors have not already secured project financing agreements. Some bidders have opposed the change, as it was not a requirement when bidding first began in 2019, with the move said to be unfairly creating "two-speed" bids.

Significant capital will be required for the upgrading and repairing of the road, which was completed in 2009 costing €5.9bn. Bidders are competing to finance, operate and maintain the 648km motorway on a 35-year concession. Alpha Bank is the financial adviser, while Fortsakis, Diakopoulous Mylonogionnis & Associates (FDMA Law Services) is advising on legal and Avaris and Novus on technical advice.

IRELAND

) BNM PICKS EIB/BOI FOR RESS WIND

Irish semi-state utility BORD NA MONA (BnM) has mandated the European Investment Bank (EIB) and Bank of Ireland (BoI) to lend on its €100m Cloncreen wind project in Ireland, a source said. The 75MW Cloncreen project won a 15-year Renewable Electricity Support Scheme (RESS) subsidy mechanism earlier this year.

BnM, the sole owner of the project, in early October broke ground at the site. The utility is initially financing Cloncreen onbalance sheet. Financial close is targeted for February. Operations are expected to begin in early 2022.

BnM is developing the 83MW Oweninny 2 wind project in County Mayo, a 50:50 joint venture with fellow semi-state Electricity Supply Board (ESB). ESB in October approached the market to finance its portion of the project, issuing a project information memorandum for the €140m project's non-recourse financing.

BROOKFIELD RP LINES UP WIND SALE

Toronto-listed BROOKFIELD RENEWABLE PARTNERS (Brookfield RP) is selling the remainder of its Irish wind operations and expects to complete the sale in 2021, CEO Connor Teskey said on an analyst call.

Brookfield RP has issued a teaser for the sale, which includes 372MW of operational assets along with a development pipeline of over 300MW, and its Irish trading and optimisation platform. KPMG and BNP Paribas are leading the sale. Brookfield RP in 2019 completed a €345m refinancing of its Irish wind assets with AIB, CIBC, EDC, Natixis and Sabadell.

The European Commission recently gave approval for Mitsubishi UFJ Lease & Finance (MUFJ) and Arjun Infrastructure Partners' (AIP) acquisition of the 19MW Ballyhoura wind farm in County Clark and the 27.5MW Slievecallan wind farm in County Clare from Brookfield RP.

Brookfield RP developed and financed the Ballyhoura and Slievecallan plants, which began operations in February and August 2018, respectively. The sale price was €118m with Brookfield RP reporting proceeds of €46.5m.

Senior debt financing of €88m was raised in 2017 from MUFG as lead arranger, hedge provider, security and facility agent, SMBC, and Export Development Canada. The projects receive Ireland's 15-year REFIT 2 subsidy scheme. Nordex provided the turbines.

London-based AIP's subsidiary Arjun Alliance UK 2 and MUFJ acquired project companies Ballyhoura Wind and CCWFL via jointly held SPV AAUK2 MUL HoldCo.

) OMNES BUYS INTO SOLAR DEVELOPER

Paris-based private equity company omnes has acquired a controlling stake in solar developer POWER CAPITAL RENEWABLE ENERGY (PCRE) in Ireland.

PCRE has a project pipeline of 300MW in Ireland and in August the company won 15-year support for four of its projects under the country's RESS scheme. The four projects amount to 27MW. In the long-term, PCRE will aim to build-out 500MW of capacity in the country.

"We intend to grow this pipeline through further development, acquisition of assets and via co-development and partnership opportunities," Peter Duff, PCRE director, wrote on LinkedIn. Duff and co-founder Justin Brown set up the company in 2011.

Omnes made the investment via its Capenergie IV renewable energy fund. Capenergie IV has raised over €500m so far and has a focus on wind and solar power. The investment in PCRE is the fund's fifth investment this year.

M20 ROAD/RAIL PPP CONSULTATION

A public consultation of options for the up to €1bn N/M20 Cork–Limerick PPP project is due to start on November 19, with a number of road and rail-based options shortlisted and under consideration for their engineering, environment, and economic effects.

Public consultation runs until December 18. Limerick City and County Council is progressing the development of the N/M20 project in partnership with Cork County Council, Cork City Council, Transport Infrastructure Ireland and the Department of Transport.

Irish prime minister Leo Varadkar in early 2019 confirmed in a parliamentary debate that the M20 Limerick–Cork project will be carried out as a PPP. Local authorities and state agency Transport Infrastructure Ireland began looking for design consultants for the project in 2018. The 105km project, estimated to cost up to €1bn, will be an upgrading of the existing N20 route. It will be Ireland's largest road PPP for over 10 years.

NORWAY

) FRED OLSEN TEAMS UP FOR 4.5GW OFFSHORE

FRED OLSEN and HAFSLUND ECO have agreed a 50:50 offshore wind partnership with plans to bid for up to 4.5GW of capacity in 2021. They will cooperate on submitting a preapplication for development of offshore wind projects at the Sorlige Nordsjo and Utsira Nord sites when bidding for the Norwegian continental shelf begins in 2021.

"The combination of Hafslund Eco's competencies as power producer and grid operator with [Fred Olsen's] experience within development of renewable and offshore projects gives the partnership a unique position to contribute to the realisation of an offshore wind industry in Norway," a statement said.

FX risk open on Rv 555

■ NORWAY Transport

The three pre-qualified bidders on the NKr10bn (US\$974m) Rv 555 Sotrasambandet road PPP will submit initial clarifications on their proposals early next month with one key risk still said to be outstanding, the FX risk.

Norway's road authority Vegvesen is keen that the financing will be in Norwegian kroner but it is widely perceived that the local market is not liquid enough for a debt deal this size with infrastructure style tenors. The alternative would be to fund in euros but the question would then be who would take the currency risk.

In mid-2018 Skanska reached financial close in kroner on the Rv3/Rv25 road PPP but this was a much smaller deal at NKr2.6bn. SEB and Swedish export credit agency SEK provided the debt.

The pre-qualified consortia for Rv 555 are SOTRA LINK, represented by FCC Construccion, with Salini Impregilo, SK Engineering & Construction, and Macquarie Corporate Holdings; ITIAS, represented by Itinera, with ASTM and IHI Corporation; and VIA SOTRA, represented by Vinci Concessions, with Vinci

Highways, Acciona Concesiones, and Implenia Switzerland.

The bidders were shortlisted in May and since then they have begun the tender work and obtain further knowledge of the scope and deliverability of the project. A clarification phase was held with four meetings held with each supplier. However the FX question is still overhanging the process.

The availability-based Rv 555 project will involve financing, building and operating the road for 25 years. It is expected to be awarded in the first half of 2021. The project will consist of a 1km suspension bridge; a 9km four-lane road; 11km of tunnels; 14km of pedestrian and cycle paths; 19 short underpass tunnels; 22 bridges; and 23 tunnel portals. The project will upgrade the existing two-lane Sotra connection, where the bridge is the only access to the Oygarden municipality.

After Rv 555, Vegvesen is preparing the up to NKr7bn E10/Rv 85 80km road in the far north of the country for tender.

Rod Morrison

Norway's government in June issued a royal decree making it possible to submit licence applications for offshore wind power projects in the areas from January 1. The 1,000km² Utsira Nord is north-west of Stavanger and will be suitable for floating wind power, the government said. The 2,592km² Sorlige Nordsjo II runs along Norway's maritime border with Denmark and is suitable for bottom-fixed wind power.

SPAIN

CIP/FORESTALIA TEAM UP FOR 1GW WIND

COPENHAGEN INFRASTRUCTURE PARTNERS (CIP) and FORESTALIA have agreed to co-invest in a 1GW portfolio of 27 wind farms under development in the Spanish province of Teruel. All of the plants have grid connection rights and are being progressed towards financial close, which is expected in approximately two years.

Forestalia has developed the projects, which have not been involved in public auctions. The agreement will see the company continue to provide development services, taking the projects to close and into construction.

CIP made the investment via its Copenhagen Infrastructure IV (CIIV) fund, which recently reached a €4bn close. CIIV has a target fund size of €5.5bn. CIP declined to comment. CIP was advised by Watson Farley & Williams and FIH Partners. Forestalia was advised by Clifford Chance.

In July, CIP closed on a 15-year, €380m non-recourse project financing credit facility for its 487MW Monegros portfolio of 12 wind projects in Aragon (PFI 677). Monegros is part of the €3.5bn Copenhagen Infrastructure III energy infrastructure fund, acquired from Forestalia in September.

Debt providers include BBVA, Sabadell and Bankia with €73m tickets each; ABN AMRO and Bankinter with €61m each; and UniCredit with the remaining €41m. The projects have power purchase agreements (PPAs) for 10 years from the beginning of operations and covering the majority of output generated, CIP said. Monegros will produce about 1.5TWh of power annually, with around 12TWh expected to be sold under the PPA.

) GOVT PLANS COGEN AUCTION

Spain's government is preparing to imminently issue a call for 1.2GW of cogeneration capacity under efforts to decarbonise industrial investment in the country. The new, high-efficiency capacity will be compatible with renewable gas or

with hydrogen, the Spanish Association of Cogeneration (Acogen) said in a statement.

The auction is being held under the framework of the Integrated National Energy & Climate Plan. Up to 50% of power produced by cogeneration is self-consumed on-site in factories and the other half is proximity self-consumption, Acogen said – for example at nearby industrial sites.

It is expected that cogeneration "will be allowed to hybridise with other renewable technologies, such as photovoltaics", Acogen said. The body also hopes for cogeneration to be "an ally for the future integration and energy systems and the development of the hydrogen economy". It said: "Cogeneration plants can already operate with hydrogen mixtures in the gas network, with production systems and local mixing of hydrogen, and with 100% hydrogen."

Spain's government announced plans to auction 3.1GW of renewables capacity before the end of the year (see separate story in this issue).

Cogeneration production in 2020 has been affected by the Covid-19 pandemic. The year is expected to end with a roughly 8% drop in production compared with 2019. Production dropped by 30% in March and April before rebounded to 3.5% growth over pre-Covid-19 figures, and falling again by 4.4% in October. Acogen represents more than 110 business groups from the cogeneration and industrial sectors, among others.

) ANCALA BUYS ENCE RENEWABLES STAKE

Spanish company ENCE ENERGIAY CELULOSA has agreed to sell a 49% stake in its Spanish renewables unit Ence Energia to UK-based infrastructure investment fund ANCALA PARTNERS. The deal values the company at €886m including €154m of debt. Ence will retain control of the subsidiary with a 51% stake. The deal does not include its 90% stake in the 50MW Puertollano solar thermal plant.

Ence has begun a process to sell its 90% stake in the Puertollano solar thermal plant. The company acquired the plant in November 2018 for €146m.

Ence operates 405MW of renewable capacity including 240MW of photovoltaics (PV) and four biomass plants totalling 165MW. The company intends to enter the projects into Spain's upcoming renewables auctions. Spain is planning auctions of at least 3.1GW of renewable capacity by the

end of the year (see Spain file in this issue).

ELAWAN RAISES PV DEBT

ELAWAN ENERGY has raised a €92m loan to finance its 250MW Campanario solar PV project in the Albacete region. Lenders include Banco Sabadell, Bankia, Abanca Corporacion Bancaria, and Banco Pichincha Espana.

The development includes the construction of five adjacent PV plants of 50MW each. The plants are expected to be operational by Q4 2021. French builder Eiffage's local energy subsidiary was awarded the engineering, procurement and construction (EPC) contract in October.

The contract is worth over €120m. Eiffage in the first half of this year built Elawan's 35.6MW Torrijos PV plant in Noves. Elawan was advised on the debt financing by Watson Farley & Williams. The lenders were advised by Cuatrecasas. Formerly known as Gestamp Wind, Elawan has deployed around 1.3GW of renewable capacity since 2008.

) IBERDROLA PICKS GREEN HYDROGEN EPC

Spanish wind energy group IBERDROLA has chosen Nel Hydrogen Electrolyser as its supplier for a 20MW green hydrogen plant in Puertollano. The company will supply the electrolyser for the €150m project, which is being developed as a joint venture with Fertiberia and is expected to begin operations in 2021.

The hydrogen facility will consist of a 100MW solar photovoltaic plant, a lithium-ion battery system with 20MWh storage, and the hydrogen production unit. Hydrogen produced at the site will be used in Fertiberia's nearby ammonia factory to manufacture green fertilisers.

The joint venture is also looking into the development of 800MW of green hydrogen capacity at Fertiberia plants in Puertollano (Ciudad Real) and Palos de la Frontera (Huelva) by 2027. Total investment required is around €1.8bn.

Nel Hydrogen Electrolyser is a division of Norwegian hydrogen technology provider Nel

Iberdrola intends to invest €74bn in renewable energy production and power grids by 2025 as demand for clean power continues to grow, it said in November. Iberdrola wants to increase its installed solar and wind capacity 2.5 times over by 2030, and its offshore wind power by 4.5 times. Meeting those goals would boost its total generation portfolio to 95GW.

SWEDEN

DOWNING BACKS CLOUDBERRY WIND

Oslo-based developer CLOUDBERRY CLEAN ENERGY and DOWNING will partner on the construction and ownership of the 100MW Rewind Vanern shallow water offshore wind project in southern Sweden. Londonheadquartered Downing and Cloudberry entered an exclusivity agreement with Downing to buy a "significant majority interest" in the Lake Vanern project. The deal is expected to close in the first half.

Cloudberry's estimated value realisation for the development of the 100MW project is around US\$32.8m, including Cloudberry's project development fee, it said. Approximately one-third of the value is expected to be paid in the first half of 2021, pending final grid confirmation, and the remainder at commissioning in 2023–24.

Cloudberry in September made a cashand-share offer to acquire ScanVind 2, which is developing the project in the northern part of Lake Vanern. Cloudberry will issue 2.2m shares at NKr12.50 per share, making a cash payment of a maximum NKr7m (US\$765,000), and reversing ScanVind 2's existing sales credit to Cloudberry.

Cloudberry has been involved in the project's development since its inception in 2010. The project was later sold to the ScanVind 2 consortium "for more detailed planning", Cloudberry said.

Downing has more than £1bn of assets under management. The deal with Cloudberry is one of a "string of opportunities" that Downing is focusing on in the Nordic renewables sector.

UK

WPD SALE FOR NEXT YEAR

The formal start of the sale of the WESTERN POWER DISTRIBUTION (WPD) businesses owned by US utility PPL is expected to start next year after the final determination by energy regulator Ofgem on the RIIO-2 price controls are revealed for power and gas transmission, due at the end of this year. Interested bidders include Macquarie, Dalmore, Iberdrola, CKI and Enel, plus a whole host of infrastructure funds.

The price review for the power distribution network operators (DNOs) will not kick in until 2023. But the recently proposed better-than-expected regulatory settlement in the water sector gave some comfort to utility investors, and WPD is expected to wait until it sees the results of RII0-2 in the energy sector. A favourable settlement would create a better sales environment for WPD, a sale that could raise £12bn.

WPD is split into four distribution network operators (DNOs) – South-West, with a regulated asset value (RAV) of £1.76bn, South Wales £1.19bn, East Midlands £2.53bn, and West Midlands £2.54bn. Ofgem wants the RIIO-2 price controls to begin in April 2021 following the final determinations but the process could be delayed by appeals from the utilities

It will be interesting to see if the UK government encourages industry-style bidders or is still happy with infrastructure fund investors joining the fray for another regulated utility. The utility regulators had been using the latest five-year pricing rounds to push down returns to utilities.

Additionally, the government is introducing legislation, the National Security & Investment Bill, requiring businesses to notify authorities about foreign investment in sensitive industries including nuclear, communications, data infrastructure, energy and transport.

That said, the government is introducing a cross government group to attract foreign investment into the UK. The Office for Investment will look to unlock investment in sectors such as infrastructure development and renewable energy.

DOGGER FC DUE

The signing date for the £5.5bn 2.4GW Dogger Bank offshore wind project financing is now due. Sponsors SSE and Equinor have bought 29 banks into the deal and sold a 20% stake in the project. The financing will fund the first two phases of the scheme and the sponsors are expected to move fairly quickly to finance the third 1.2GW phase in the new year using a similar template. Masdar is expected to join the deal by taking a 20% equity stake.

TRIG PICKS UP EAST ANGLIA ONE STAKE

Renewables fund TRIG has bought a 14.3% stake in the 714MW East Anglia One offshore wind farm developed by Scottish Power, with funds run by its investment manager InfraRed buying a further 5.7%. The sales price was not disclosed but is rumoured to be around £250m.

The stake has been bought from GIG, which held a 40% interest. GIG bought its stake last summer from Scottish Power for £1.63bn and funded it with a £1.13bn

16-year holdco loan priced at 160bp to year five, 170bp to year 10 and then 185bp. The debt financing includes a £200m OFTO loan on top and £170m of ancillaries. The loan will remain in place. ING, Goldman Sachs, Lloyds, MUFG, Santander and SMBC funded the loan.

) FINAL BIDS DUE FOR HUMBER GATEWAY

Final round bids are due this week for the 49% stake in the 219MW Humber Gateway offshore wind farm in the UK North Sea. BlackRock, Greencoat UK Wind, Norges Bank and Red Rock are still said to be looking at the deal. Morgan Stanley is advising the seller, RWE, which will continue to hold 51%. This will be the fourth and final bidding round.

Analysts at RBC suggested a sales price of £4m per MW compared with the £3.8m/MW on the recent sale by SSE of a 25% stake in the 367MW Walney project for £350m to Greencoat. Humber Gateway is three years younger than Walney. Both schemes are backed by two renewable obligation certificates (ROCs).

) FRV TO SEEK BATTERY PF

FOTOWATIO RENEWABLE VENTURES (FRV), part of Abdul Latif Jameel Energy, is to build its second UK battery storage project in a joint venture with its partner Harmony Energy, the 34 MW/68MWh Contego scheme near Burgess Hill in West Sussex. The team is expected to look at the possibility of raising project finance on the asset in the new year.

The £25m project will use 28 Tesla Megapack lithium-ion batteries, utilising Tesla's Autobidder AI software for real-time trading and control. The scheme will be fully merchant but will rely on the artificial intelligence software to maximise its revenues.

Construction will start in December and when finished the facility will be one of the largest battery plants in the UK. The joint venture's first scheme is the 7.5MW/15 MWh battery plant at Holes Bay, Dorset, which has been operating since June. It has been participating in the EPEX spot market, in the firm frequency response (FFR) and in the Balancing Mechanism. The site was the first to go live in the National Grid's new wider access application programming interface (API) for the Balancing Mechanism.

The joint venture has identified seven projects in the UK. It is expected to look to project-finance each scheme initially as standalone projects. Law firm Bracewell advised FRV on the Contego scheme,

) GORE STREET GETS NEW BATTERIES

Listed energy storage fund GORE STREET has bought a portfolio of 81MW UK operating, cash-generating energy storage assets from Anesco for £28.1m via cash and the issuance of new shares.

The portfolio comprises 81MW of operating energy storage assets across the UK in five projects with 14 underlying storage assets in Greater Manchester, Cheshire and Derbyshire plus other locations.

The battery energy storage systems at all sites were provided by BYD. Anesco was the EPC provider and will continue to provide asset management services for the portfolio, and is engaged with the fund on terms to subsequently provide a full revenue optimisation service.

) INCH CAPE UP FOR CFD AUCTION

It is expected that the 1GW Inch Cape offshore wind project will be submitted to next year's contract for difference (CfD) auction. ESB has joined the project as a 50/50 partner with China's SDIC Power RED ROCK POWER. ESB said: "We are continuing to review the project's development strategy and consider options regarding future financing and route to market. But yes, it is very likely that we will enter the next CfD auction."

ESB was rumoured to be taking a stake in earlier this year but the deal seemed to be off in July as ESB was looking to bid the scheme into the next contract for difference (CfD) auction and Red Rock was following a more merchant project approach. Last year, ESB bought a 50% stake in EDF's Neart na Gaoithe 450MW offshore project and then reached financial close on the £2bn project financing. The two Scottish schemes are close to each other at the edge of the Firth of Forth.

SMBC had been advising Red Rock on the scheme when it bid the Inch Cape project into the last CfD round last September and was not successful. Societe Generale could be involved now. Adam Ezzamel is now the project director on the scheme. Ezzamel was a project manager this year for EDF on its Neart na Gaoithe (NnG) scheme. Since the last auction the scheme has been upsized from 748MW to 1GW.

) INFRACAPITAL PUTS £150M INTO ZENOBE

M&G fund manager Infracapital has committed £150m to ZENOBE ENERGY, an owner and operator of battery storage and provider of services to electric vehicle operators. Zenobe has more than 170MW of contracted grid-scale batteries and

provides a full EV fleet solution for bus operators, serving around 20% of the EV bus market in the UK.

In June, Zenobe signed a £20m receivables-type financing banked on electric vehicle (EV) charging contracts for six bus depots with NatWest. Zenobe currently services more than 100 electric buses, with a further 250 electric vehicles in the pipeline by summer 2021.

The five to 10-year NatWest loans provide cheap pricing to the sector. Zenobe receives a service charge for providing overnight charging to the buses via a Telsa battery and for providing software services. During the day it can supply services to the grid. In addition, Zenobe owns the batteries on the buses and can finance the chassis part of the new buses.

Once a depot is operating the debt can be drawn down for the asset. The first depot, for Stagecoach in Guildford, is operating under a seven-year contract. Abellio has a scheme in London, National Express has two in the West Midlands, the local council has one in Newport and First Group has won in Yorkshire. Zenobe is looking to add more depots that could be financed by additions to the NatWest facility. And it is looking to supply similar services to the delivery vehicle sector.

Zenobe raised a £25m loan from Santander in early 2018 on its battery assets, with £10m finally drawn down last November. In June, it announced a partnership with EDF to jointly trade and optimise 59MW of its battery portfolio. Zenobe's operational battery assets are in Claredown, Aylesford and Kings Barn. The EDF deal extends Zenobe's access to the wholesale market and balancing mechanism by utilising EDF's trading desk. It includes contracts for supply and offtake of energy.

The company raised £35m in equity last year from JERA and Tepco Power Grid. PwC advised on the latest equity fund-raising.

MEGA SCOTS ONSHORE PROJECTS ANNOUNCED

COMMUNITY WINDPOWER (CWP) has filed a planning application for the 560MW Scoop Hill wind farm in Dumfries and Galloway, Scotland. The £1.8bn scheme will include energy storage and the tallest wind turbines in Scotland – 22 turbines of up to 250 metres, two 225-metre machines, 47 200-metre machines and four at 180 metres.

Danish developer EUROPEAN ENERGY is partnering with local company Locogen to deliver an 800MW onshore wind portfolio in Scotland over the next five years. Edinburgh-based Locogen is run by Andrew Lyle.

Scots drop fixed offshore sites

■ UK Renewables

The Scottish government has dropped two 1GW fixed foundation sites in Solway Firth and Moray Firth in the final Sectoral Marine Plan for Offshore Wind Energy. This leaves five fixed sites totaling 7GW in the plan, although each of these – in the north-east, east and three off Islay – have various issues. Fifteen sites are now in the plan, down from 17.

Applications for the ScotWind site leasing round will close on March 31. Project sponsors say the plan will favour floating offshore wind schemes in the longer term at the expense of fixed schemes in the nearer term, But Crown Estate Scotland said "the areas identified offer clear opportunities for both fixed and floating wind technologies". Crown Estate Scotland will confirm the final arrangements on January 15 for submitting applications.

The ScotWind bid round is expected to attract big offshore wind players, including GIG/RIDG, Iberdrola, Shell and Total. Last week, a new SSE/CIP/Marubeni team was announced as one of the bidders.

Ben Miller, senior policy manager at the Scottish Renewables trade body said: "The

Scottish Government's statement that 11GW of offshore wind deployment is possible by 2030 means there is much work to do, but this is a milestone moment for the decade ahead.

"We are, however, disappointed that some areas in the draft Sectoral Marine Plan have not been taken forward at this stage. If we are to deliver on those stretching climate targets, it's imperative that we use every tool in our armoury and continue to work together to find creative solutions to the further deployment of the cheap, popular renewable energy technologies which are already delivering environmental and economic benefits across Scotland."

The aim of the leasing round is to deliver another 8GW–10GW of offshore wind, which will see the Scottish capacity target increase to 17GW–19GW, the bulk of which should be delivered by 2030. Ten of the 15 sites have water depths in excess of 60m and therefore lend themselves to floating offshore wind projects. This first ScotWind round will therefore lead to the development of some of the first commercial-scale floating wind projects in the world.

50% stakes in two Wheelabrator schemes – Ferrybridge 1 and 2 – at a multiple of 20x Ebitda, it has set an aggressive benchmark for the Wheelabrator assets. A winner is due to be announced by year-end,

) NE WTE BIDDER WAIT

The announcement of the three bidders for the £300m, 450,000-tonnes-per-year waste-to-energy (WtE) plant in the north-east of England could wait until the proposed shortlisted teams submit the final make-up of their line-ups on November 20. One team that failed to make the cut is said to have appealed the decision. Market rumours suggest Covanta, MVV and Veolia have not yet made it to the shortlist.l

The project will take waste from Suez's trains one and trains of its South Tyneside project when those contracts run out. KPMG and DLA Piper are advising the seven local councils involved. Hartlepool Borough Council is leading the design, build, financing, commissioning, testing and operation of the WtE scheme on behalf of itself and Darlington, Durham County, Middlesbrough, Newcastle, Redcar and Cleveland, and Stockton-on-Tees.

Another large-scale scheme has been proposed in the area. PD Ports has signed an agreement with environmental consulting company Wentworth Clean Power Limited (WCP) for a 300,000tpa, 30MW project, the Teesport Renewable Energy Centre, on land owned by the port.

) OFTO TR7 ROUND INTO GEAR

Ofgem has started the next round of offshore transmission (OFTO) tenders, round seven (TR7). The tender process for the 950MW Moray East project developed by EDPR and Engie and the 860MW Triton Knoll scheme developed by Innogy will begin on November 30. Ofgem has appointed Smith Square Partners in consortium with Centrus and CEPA as its adviser. It is due to hold a webinar information event on the tender this Friday, November 20.

In the current TR6 round, Transmission
Capital Partners (TCP) has won the 588MW
Beatrice project. Diamond, a Mitsubishi/Chubu
Electric joint venture, has won the 1.2GW
Hornsea One scheme, the biggest OFTO
so far. The 714MW East Anglian scheme is
still being tendered. However, as individual
OFTOs get bigger, the government and
regulators are looking at new ways of funding
the transmission links. The Department
for Business, Energy & Industrial Strategy
(BEIS) is leading a review into the offshore
transmission regime that could lead to a new
collective approach, as opposed to the single
asset OFTO approach.

) TESCO SIGNS LOW CARBON PPA

Supermarket chain **TESCO** has signed up to buy power from three solar schemes

being developed by Exeter-based LOW CARBON totalling 100MW. The power will be used by Tesco with additional supplies going to the grid. The farms will be built next year and will be in Essex, Anglesey and Oxfordshire.

Low Carbon, headed by Mark James, said it will remain closely involved in the projects during construction and in operation through the provision of asset management services to maximise the operational and financial performance for each of the solar parks. Tesco announced last year it is to buy renewable power from five onshore wind farms. Tesco has already fitted 60 stores with solar panels. It says it now has the largest unsubsidised power purchase agreement (PPA) portfolio in the

) FINAL BIDS DUE FOR WHEELABRATOR

Final bids for the WHELABRATOR Waste to energy (WtE) assets are due in mid-December. FSI, Equity and Cory are still said to be in the running alongside possibly CKI, although it is unclear if CKI would be interested in taking a 50% stake in some of the assets.

FSI has already secured SSE's 50% stake in projects developed in joint venture by SSE and Wheelabrator. With funds run by FSI having successfully bid £995m for SSE's

) GIGACLEAR SYNDICATION CLOSED

Syndication of the £525m loan backing GIGACLEAR, the rural fibre-to-premises provider owned by Infracapital, has closed. It is not clear yet how much was sold down or who joined but some reports suggest most of the loan was sold down.

ABN AMRO, Santander, Lloyds and NatWest underwrote the deal in the spring pre-Covid and it is believed it was flexed. The seven-year bullet deal is priced at 350bp stepping up to 475bp, with fees at 75bp. The £45m revolver in the deal is priced at 350bp. Cash sweeps kick in after five years at 75%, and then at 100% the next year. There is a £190m uncommitted accordion facility on top of the loan. Up to 70% of the loan can be hedged.

NSMP SYNDICATION LAUNCHED DUE

Santander is due to launch syndication of the £615m seven-year loan backing the refinancing of the current £767m NORTH SEA MIDSTREAM PARTNERS (NSMP) loan. Financial adviser RBC put the deal to the market in February pre-Covid, seeking a

new £800m–£900m loan with reduced pricing. But since Covid the deal has been tightened, with cash sweeps added and reduced leverage.

Santander has underwritten the loan by itself. The debt is backed by the current contractual revenues from the Teesside gas processing plant, the St Fergus gas reception and processing facilities, and the Shetland Islands regional gas evacuation system (SIRGES).

The sponsor, Kuwait's Wren House, bought the asset in mid-2018 for £1.3bn and then sold a 43.1% stake to JP Morgan Asset Management. The current mandated lead arrangers are ABN AMRO, Santander, MUFG, Credit Agricole, Societe Generale, SMBC and HSBC. The lead arrangers are CIBC, Lloyds, Mediobanca, RBS and Wells Fargo. Interest on the current loan is 2.36%.

) THAMES PRICES HIGH-YIELD

THAMES WATER priced its £250m 5.5-year noncall life high-yield bond offering at 4.625% last week, following initial price thoughts of low 5s.

The deal, issued through Thames Water Kemble Finance (B1/B+), will refinance debt at the regulated holdco level, which sits above the firm's securitisation ring-fence in its capital structure. There's just one bond issue outstanding at that level – the £175m of 5.875% July 2022s.

"Generally, people see fair value in the high 4s, so IPTs are also reflecting a new issue premium," said a high-yield banker. "People are triangulating fair value from the Anglian Water holdco – the Osprey 4% March 2026s, which are trading in the low 4s."

Joint physical bookrunners were BNP Paribas, HSBC, Morgan Stanley and RBC.

ALBANIA

) AUCTION PLANNED FOR 100MW SOLAR FARM

Albania is set to launch a tender for a 100MW solar farm, the third renewables auction in the country's nascent market. Half the capacity will be contracted under a power purchase agreement (PPA), with the other half sold on the open market.

This is similar to the 140MW Karavasta solar farm, awarded to Voltalia in June for a bid of €24.98/MWh, the lowest in the Balkans so far and less than half the original ceiling price of €55/MWh. The PPA with state transmission operator Oshee is for 15 years. The EBRD helped to structure the Karavasta auction and associated regulation.

CE Oltenia targets 2GW

■ ROMANIA Power

Romania's second largest energy company **CE OLTENIA** will develop 700MW of solar projects and a 1.3GW gas-fired power plant as part of a €3.5bn restructuring and decarbonisation plan, CEO Daniel Burlan told local reporters.

The eight solar farms and gas plant will be rolled out over the next five years, partially financed with proceeds from the restructuring for which Oltenia is currently in negotiations with the state and European Commission, whose decision on state aid should come by the end of the year.

According to the local press, the government will provide up to €1.3bn in funding, €250m of which has already been paid as emergency funds due to Covid-19, while Oltenia is also applying

to Romania's Modernisation Fund for a further €700m – which will be earmarked specifically for the new projects. The decarbonisation plan will involve the company phasing out its coal and mining operations and selling off or outsourcing certain assets.

The company has reported a loss in five of the last eight financial years. It is separate from Distributie Oltenia, an electricity and gas supply business recently acquired by Macquarie Infrastructure and Real Assets (MIRA) from Czech group CEZ. As well as the solar and gas projects, the decarbonisation plan includes the rehabilitation of a 10MW hydro plant.

Peter Collins

LITHUANIA

) SECOND OFFSHORE WIND TENDER PLANNED

Lithuania is planning a second 700MW offshore wind farm soon after the first project goes to auction in February 2023, vice-minister of energy *Rytis Kevelaitis* told an offshore wind conference in Klaipeda yesterday.

The new project will be tendered a year or two later. Lithuania's legal framework for offshore wind support is likely to use a "two-sided" contract-for-difference (CfD) structure, it is understood.

Departing slightly from the system used in the UK and neighbouring Poland, the traditional price guarantee will be matched by a payment guarantee from the sponsors to ensure certainty on both sides. The law is still being debated in parliament, and a centre-right coalition government won an election last month.

Lithuanian utility Ignitis has struck a partnership with European offshore wind giants EDPR and Engie to compete in 2023, with the scheme valued at €1bn. A recent study put the country's total offshore potential at 3.4GW.

POLAND

) EXTENSION ON 500MW SOLAR JV TALKS

Two Polish companies, OICYBERATON and DEKPOL, have signed an extension to set a mid-December date to conclude a 500MW

solar joint venture. The letter of intent was signed on September 21 but due to "external conditions" had been unable to conclude the contract.

The JV will include the development of greenfield projects as well as acquisitions of existing projects, though no new details were disclosed. Two 75MW projects are understood to have been in planning since the original letter of intent was signed, which marked Dekpol's entry into the solar PV market.

TAURON ISSUES Z1bn GREEN BOND

Polish utility TAURON has issued Z1bn (€219m) of ESG-linked five-year unsecured bonds to develop a wind and solar portfolio. Santander was the coordinator, lead arranger and bookrunner, with the EBRD another headline investor. The multilateral invested the equivalent of €55.8m, just under a quarter of the total.

The bonds, listed on the Warsaw stock exchange, were priced at 135bp over Wibor with a six-month interest period. A central part of Tauron's wider decabornisation strategy is to replace its ageing coal-fired plants with a 300MW solar PV portfolio and 720MW onshore wind portfolio by 2025. By 2030, the company aims to generate more than 65% of its energy from zero and lowemission sources.

Tauron will develop its own projects as well as acquire later development-stage projects. The company specified onshore wind in its communications despite the rise of Poland's offshore wind sector. Utilities tend to target large-scale long-term contracted assets so Tauron could very well get involved further down the line

The company may not use the funds for any coal-related projects or its coal-focused subsidiaries. Other ESG conditions on the bond issue mean that Tauron will face higher financing costs if it does not meet certain sustainability targets, needing to achieve an average 2% reduction in CO₂ emissions and an 8% increase in renewable capacity annually. Tauron, along with PGE, Enea, and KGHM Polska Miedz, have signed a letter of intent to transfer ownership of Poland's first planned nuclear power plant to the government.

) PACIFICO TO REFI WIND FARMS

PACIFICO RENEWABLES YIELD has secured exclusive access to a 51.8MW wind portfolio in Poland developed by an affiliate company in anticipation of a planned debt refinancing.

Pacifico Energy Partners, the strategic partner and project developer, will transfer the three wind farms and their existing project debt: Z225.1m (€50m) provided by Bayerische Landesbank priced at 3.6% per year with hedging until June 2037.

The company holds subordinated debt of €38.7m that will be refinanced with a separate rights issue. The refinancing terms for the larger loan will include a four-year tenor until the end of 2024 and an interest rate of 6.45%.

Pacifico Renewables will then acquire full equity ownership of the wind farms – already at an advanced construction stage – once they're fully built in March 2021. Capex is €103m.

The schemes benefit from a combination of Poland's 15-year inflation-linked state support mechanism and a three-year fixed price power purchase agreement, while some of the power will be sold on the open market. Sullivan & Cromwell and Dentons are providing legal counsel to the buyer while DNV GL is technical adviser.

ROMANIA

) OFFSHORE WIND AUCTIONS PLANNED

The Romanian senate has passed a law promoting offshore wind investments as the country seeks to take advantage of its coastal wind resources. The law is still being debated by the Chamber of Deputies but it includes a subsidy scheme for projects and tender procedures for procuring developers, though projects can access subsidies through direct licensing as well. Successful bidders will be granted concessions based on lowest price offers.

A feasibility study is looking into the possibility of a contract-for-difference

structure similar to that of the UK, Poland and, it is understood, Lithuania. Directly procured projects could receive a fixed ceiling price of €25 per MWh as long as the sum total does not exceed €60/MWh.

Romanian state-owned power company Hidroelectrica is planning a 300MW offshore wind farm by 2026 in what will be the first of its kind in the Black Sea. The government will be hoping to target more investors from Europe and Asia with the new law, which should be finalised by the end of the year.

RUSSIA

) AMUR GCC PF DUE FOR NEW YEAR

sibur is set to launch the project financing for the US\$10.7bn Amur gas chemical complex (GCC) in 2021. China's Sinopec is expected to join the scheme and take a 40% stake. Construction started in August. Linde, NIPIgaspererabotka, Univation Technologies, Chevron Phillips and LyondellBasell are involved on the technology side. Gazprombank and ING are advising.

The scheme will produce 2.3m tonnes of polyethylene and 400,000 tonnes of polypropylene per year. It will use ethylene and liquefied petroleum gas (LPG) from Gazprom's Amur gas processing plant (GPP).

The €11.4bn project financing backing GPP was signed earlier this year. GPP will send methane to China. The GPP project financing is backed by an availability payment structure. The financing is split into a €3.66bn 17-year loan from European and Japanese banks covered by Euler Hermes and SACE, a €1bn 15-year uncovered loan, a €3.4bn 15-year Chinese bank loan, and a €1bn/Rbs170bn (US\$2.7bn) Russian bank loan one-third covered by Russian export credit agency Exiar.

SERBIA

) FINTEL GETS MEGA WIND APPROVAL

FINTEL ENERGIJA, the Belgrade-listed subsidiary of Italy's Fintel, has received approval from the Serbian city of Subotica for its planned 572MW onshore wind farm.

The application was filed through another subsidiary, Maestrale Ring. This is an early but important first step for the project, which was first announced by Fintel Energija in February 2019 along with two smaller projects of 10MW each, Lipar 1 and Lipar 2.

Fintel last year raised €81.5m of project financing for the 69MW Kosava wind farm in Serbia, its largest project at the time, from Erste Group, UniCredit and the Austrian Development Bank. In 2018, it successfully completed the first initial public offering (IPO) on the Belgrade Stock Exchange since 1940, raising about US\$7.5m to finance new renewables ventures. Since 2008, Fintel has developed wind projects in Serbia through MK Fintel Wind, a joint venture with Serbian vertically integrated conglomerate MK Group.

TURKEY

) OFFSHORE WIND AUCTION SCRAPPED

The expected re-launch of Turkey's offshore wind tender has been abandoned due to a lack of investor appetite, PFI has learnt. A 1.2GW scheme was originally tendered in 2018 before being cancelled and was expected to go back to auction sometime this year but, due to lack of foreign investor interest and with a lack of experience in the local market, the project has been sidelined and is understood to no longer be a priority for the government.

The cancellation comes despite the threeyear extension of a technical cooperation agreement on offshore wind with the Danish government in March 2019.

Turkey has 70GW of offshore wind potential, but the sector has been stymied by the country's ongoing economic crisis and concerns over risk allocation in the project contract, which follows the same model as onshore wind and solar PV. Due to the added complexity and scale of offshore projects, one source told PFI that a switch to a PPP model would be preferable to attract the right kind of investors.

The Danish Energy Agency, with which the technical cooperation agreement was signed, has estimated that "immediate opportunities" for offshore wind in Turkey are between 7GW and 10GW, a number that could increase. The agency is assisting the Turkish authorities in developing its framework for the sector in terms of policy, strategy and solutions based on its own experiences.

) YEKA SOLAR BIDS IN JANUARY

Bids for the upcoming 1GW YEKA solar tender in Turkey are now expected in January, a market source informed PFI. This would represent a delay over the last announced timeline – which would have seen the tender launched at the end of September.

The tender is for more than 70 separate projects ranging from 10MW to 50MW, including rooftop residential and commercial and industrial schemes. The ceiling price is expected to start slightly higher than the US\$0.07 per kWh achieved by Kalyon and Hanwha QCells for the 1GW YEKA solar farm in 2017.

Turkish developer Kalyon is in fact targeting financial close on its 1GW YEKA solar project this year. A new team of financiers is in place led by UK Exim after Hanwha exited the project and with it the potential financing from Kexim.

UKRAINE

) POWERCHINA SIGNS US\$1bn WIND JV

POWERCHINA has signed a joint venture agreement with local developer WINDFARM to build an 800MW onshore wind farm in Ukraine that will operate without any subsidy. The joint implementation agreement signed last week saw the companies pledge US\$1bn towards the scheme. The merchant power strategy will see the developers forgo the generous Ukrainian feed-in-tariff, which pays around €99/MWh for recent projects. It would be the first Ukrainian IPP to do so.

PowerChina will manage construction of the project, while Vestas could be the turbine supplier but no deal has been confirmed. An interconnection agreement will be signed with state utility Ukrenergo.

WindFarm consists of "Ukrainian energy sector veterans", involved in the installation of some of the country's earliest and largest schemes as well as DTEK's recent Primorskaya wind farm. Should this new project come to fruition, it will overtake Romania's 600MW Fantanele-Cogealac project as the largest onshore wind farm in Europe. The project, which has been planned for over a year, will be located in the Donetsk region in the Manhush and Nikolske districts.

JORDAN

VOLTALIA TAKES 70% SOLAR STAKE

French renewables developer VOLTALIA has taken a 70% interest in a 57MW four-project solar portfolio in Jordan it had a part in building. The plants became operational in 2015–16, with Voltalia the EPC and O&M provider. The portfolio

First IWTP emerges

■ SAUDI ARABIA Utilities

Saudi Water Procurement Company (SWPC) has issued an expressions of interest (EoI) document for the first independent water transmission pipeline (IWTP) scheme, the 1,400km, 685,000m³/day Riyadh–Qassim scheme. The request for pre-qualification is due in January and the request for proposals will then follow a couple of months later.

SWPC said the IWTP schemes are the first standalone water transmission pipeline projects to be implemented in the world using a PPP framework. The government has set up the Water Transmission & Technologies Company (WTTCO) to run the kingdom's network, supervise the IWTPs and privatise some of the assets. SWPC will, however, procure the new water transmission projects in the kingdom.

The schemes will be large, perhaps around US\$1bn. It is expected infrastructure type

investors will be attracted to the deals as the construction risk is modest and the proposed concession period is long at 50 years. One risk is the geological risk of the land over which the pipes will run.

Synergy Consulting, DLA Piper and Fichtner are advising on the first batch of three schemes in the programme – Riyadh–Qassim, the 600km, 650,000m³/day Jubail–Buraydah scheme, and the 300km, 400,000m³/day Ras Mohaisan–Makkah project.

There are five other projects in the programme – the 100km, 900,000m³/day Rayis–Rabigh scheme, the 100km, 600,000m³/day Rabigh–Jeddah scheme, the 250km, 300,000m³/day Jazan scheme, the 546km, 497,000m³/day Tabuk Ula scheme, and the 350km, 200,000m³/day RAK–KF scheme.

Rod Morrison

consists of three 11MW plants and a 24MW scheme, all of which are signed to 20-year power purchase agreements.

Revenues are dollar-linked with guarantees from the government for the full length of the PPAs. They were financed primarily by the IFC. Voltalia is taking a majority interest in the projects to gain experience and become a clean power generator in Jordan in its own right. It submitted a bid for a 50MW solar scheme in Jordan in 2017 and again in 2018 during the country's renewable auctions.

SAUDI ARABIA

) QURAYYAH REFI BIDS IN

The sponsors of the Qurayyah 4GW gasfired power plant have taken bank bids for refinancing the project debt on the scheme. ACWA Power has 22.5%, Samsung C&T 12.5%, MENA Infrastructure Fund 15%, and utility client Saudi Electricity Company (SEC) 50%.

The 23-year project finance package from 2011 is split among Kexim with US\$160m, a US\$1bn Islamic tranche, Hermes with US\$125m, US Exim with US\$550m, and commercial banks US\$250m. The pricing on the Islamic tranche came in at 145bp–200bp and on the dollar bank tranche at 180bp–225bp. The commercial banks on the current deal are Arab National Bank, NCB,

Samba, Saudi British, Saudi Fransi, KfW IPEX, HSBC, Standard Chartered and SMBC

) SEC MOVES TO A RAB MODEL

SAUDI ELECTRICITY COMPANY (SEC) Will

implement a regulatory asset based (RAB) model as a mechanism to regulate its revenues from 2021 as part of a wideranging corporate shake-up announced. For 2020, it will implement an operating revenue cap model mechanism to regulate its required revenue to cover SEC's total operating and financing costs, including the distribution of dividends to all its shareholders including the Public Investment Fund (PIF).

As part of this corporate shake-up, SEC has signed an agreement with the government to convert state liabilities worth SR167.92bn (US\$45bn) into a subordinated perpetual financial instrument to strengthen its balance sheet. The sharia-compliant perpetual equity-like instrument will carry a 4.5% profit rate and a redemption option, it said in a statement.

"With the signing of the agreement and the implementation of the approved reforms, in addition to the cancelling of the government fees imposed on the company, SEC will be better able to fulfil its obligations," Khaled bin Saleh al-Sultan, chairman of SEC, said in the statement. This conversion is considered non-dilutive and will therefore have no impact on SEC's existing shareholders.

) SEC LOOKS AT NEW CCGT IPPS

Saudi Electricity Company (SEC) has asked its panel of advisers to prepare for a possible new advisory tender. It is believed the state-owned utility is looking at procuring new combined-cycle gas turbine (CCGT) independent power projects (IPPs). The programme could total up to 7GW, although presumably this would be undertaken in phases.

The Renewable Energy Project
Development Office (REPDO) is procuring renewable schemes in the kingdom but baseload and flexible CCGT generation might be needed too. Earlier this summer Abu Dhabi utility EWEC signed the 2.4GW Fujairah 3 CCGT IPP project financing with Marubeni. This scheme will make use of the latest highly efficient gas turbines. The project cost for five 2.4GW projects was just over US\$1bn.

SEC procured a range of IPPs earlier this decade and then in late 2016 asked for expressions of interest from developers on its 5,400MW PP15 gas-fired power plant near Riyadh. That scheme was one of a number of power projects SEC had on its books at the time. It had two new IPPs – the 1,700MW Dhuba 2 scheme and the 3,800MW Taiba scheme – and an 3,600MW equipment supplier-led deal. But since then little has been heard of its IPP programme and instead the focus in the kingdom has shifted to new renewable schemes.

) QIDDIYA GETS NEW CEO

Philippe Gas has been appointed as the new chief executive officer for the QIDDIYA INVESTMENT CO (QIC), the developer of an entertainment city, replacing Qiddiya's founding CEO Michael Reininger.

Gas has been with the Walt Disney company for 30 years, most recently as president and managing director of Walt Disney Attractions Japan and Disneyland International. ACWA Power and Al Fanar are currently bidding for the utility project at the city and a decision was due, although it could now be delayed slightly by the new appointment. QIC is owned by the Public Investment Fund (PIF).

TAIF STP GETS TO FC

COBRA INSTALACIONES Y SERVICIOS and local company TAWZEA have reached financial close on the Taif independent sewage treatment plant (ISTP) project procured by Saudi Water Partnerships Company (SWPC).

The project will be developed in two phases, with the first SR320m, US\$85m, 100,000 m³/day phase expected to start operations in the third quarter of 2022. The concession runs for 25 years. Funding is believed to have come from Al Rajhi. The 170,000m³/day second phase will be developed when the first phase's operational capacity exceeds the usage rates. Mizuho, White & Case and WS Atkins advised SWPC.

) TRSDC PLANS MEGA LOAN

THE RED SEA DEVELOPMENT CO (TRSDC) is plans to finalise a 15-year SR14bn (US\$3.73bn) loan by the end of the year to partly fund its SR30bn of capital spending by 2023, as it expects to end 2020 with around SR15bn worth of committed contracts, chief executive John Pagano told Reuters. The remaining funding needed for the first phase will come from project owner Public Investment Fund (PIF).

In September, the ACWA Power/ Energy China team won the US\$1.7bn utilities project on the TRSDC scheme. PIF is providing a guarantee on the debt repayments. Standard Chartered, Al Rajhi, Fransi, Mizuho and Saudi British will provide the US\$1.3bn of project debt. The scheme will provide solar power, water, district cooling, waste-water, municipal solid waste, pipelines for all the utilities and ICT data centre services to the new leisure city complex in one integrated project.

Pagano, a former managing director at London's Canary Wharf Group, sought to allay fears that the Red Sea environment could suffer once the project is completed in 2030, saying it was not aimed at catering for a mass market. "Even in the full build-up by 2030 – when we have built the entire development – we will be 800,000 to 1m visitors per year max," he said.

) JUBAIL 3B BID RUMOURS

Local market rumours suggest Utico could have submitted a competitive bid on the 570,000m³ Jubail 3B independent water project (IWP), followed by Veolia and Engie.

The submissions went in earlier this month and the commercial offers will be opened shortly once the technical evaluation is completed. Bids were submitted by Aqualia/HAACO/Alfanar, Engie/Nesma/Alajlan, Utico and Veolia/Aljomaih/Alkifah.

Synergy Consulting, DLA Piper and Atkins are advising the client and offtaker on the scheme, Saudi Water Partnership Company (SWPC).

UAE

) EGA SET TO SELL POWER ASSETS

EMIRATES GLOBAL ALUMINIUM (EGA) is considering selling its power assets linked with its two large-scale smelters in Jebel Ali in Dubai and Taweelah in Abu Dhabi to Taqa. Citigroup is believed to be advising EGA and Bank of America/Alderbrook, Taqa.

State-owned Mubadala and AD Power hold significant stakes in EGA and Taqa, respectively. The Jebel Ali power plant has a capacity of 2.35GW and Taweelah, 3.1GW. A further 600MW is being added at Jebel Ali via a new Siemens machine.

All new standalone power projects are developed using the model of the private sector holding 60% and state companies 40%. The power is sold to state utility EWEC. This sale, however, is believed to be based on Taqa holding 100%, presumably because the offtaker is an one industrial user, albeit state-owned. The aluminium price this year had crashed after Covid but is now back to US\$1,900 a tonne.

) DUBAI WTE SET TO REACH FC

The Dubai waste-to-energy (WtE) project is set to reach financial close this year following official approval of the scheme by Sheikh Mohammed Bin Rashid Al Maktoum late last month. He said on Twitter on October 31: "Today we were briefed on the Dubai project for energy production by treating waste at a cost of Dh4bn. The project accommodates a thousand garbage trucks per day and generates sufficient energy for 135,000 homes. . . Dubai is a clean city . . . its energy is clean . . . and its neighbourhoods are clean . . . and its energy resources must remain clean."

The bank group for the project financing on the scheme was assembled a year ago. Credit Agricole, KfW IPEX, Mizuho, Siemens, Societe Generale, SMBC and Standard Chartered are believed to be the banks backing the US\$900m scheme. The financing will be a 24-year deal with half the debt provided by JBIC and the rest split 75:25 between a Nexi-covered tranche and uncovered debt. SMBC is advising. ITOCHU, Hitachi Zosen, Besix and Dubai Holding are in the sponsor group.

The scheme will process 1.8m tonnes of waste per year and produce nearly 200MW of power. The deal will be one of the first for JBIC in Dubai since the financial crisis. It is backed by the government of Dubai, although the scheme is for the municipality. The project will be backed by waste-gate fees and a power offtake with

DEWA. The power element will be the main payment stream at around 80% of the revenues.

) DHAFRA FC DUE

Financial close on EDF/JINKO'S 1.5GW Al Dhafra solar PV project is due shortly. The team and client EWEC are sticking to the pre-Covid 80bp loan pricing on the US\$850m construction loan bridge to bond financing. Banks going into the loan will be on the subsequent bond issue, which will help their overall return. The banks are believed to be Mizuho, MUFG, SMBC, Citigroup, HSBC, Credit Agricole and Standard Chartered.

) HASSYAN PB DUE

Local reports suggest UTICO has been confirmed as the winner of the Hassyan independent water project. It bid US\$0.027762/m³ on the 120m-gallons-a-day base bid and US\$0.026918 on the alternate 180m-gallons-a-day bid. The rival ACWA team bid US\$0.029892 and US\$0.028991, respectively. Utico is backed by AIIB, Apicorp, IsDB and Siemens Bank, and is being advised by Synergy Consulting. It is believed Mubadala is due to join the Utico team.

KENYA

) CONSULTANTS SOUGHT FOR LNG-TO-POWER

Kenya Electricity Generation Company (KenGen) has launched a request for expressions of interest from consultants to complete a feasibility study into the development of LNG infrastructure and a new gas-fired power plant. Kenya's government is moving forward with plans to create a domestic natural gas market to diversify its power base and for industrial use.

The entire natural gas infrastructure project that will be subject of the feasibility study will consist of a gas import, storage and regasification facility; the conversion of about 720MW of heavy fuel oil (HFO) thermal power plants to natural-gas; the development of a new gas-fired plant; and the operations and maintenance of the project for 20 years.

The selected consultant, as well as performing site identification and project due diligence, will determine whether to procure the infrastructure via PPP or through the more traditional EPC or EPC+ models. EoIs are due by November 30.

) ENGIE QUITS OLKARIA VI TENDER

ENGIE has dropped out of the tender for the 140MW Olkaria VI geothermal project in Kenya, PFI has learned. An Engie spokesperson explained it was due to "the group's decision to focus on a restricted number of geographies".

Five bids were shortlisted from Ormat Technologies; Itochu; Sumitomo; Enel Green Power; and a four-company consortium of Engie Energie Services, Toyota Tsusho Corporation, Kyuden International and DL Koisagat Tea Estate. It is understood that the consortium will proceed without Engie.

The next stage of the tender was meant to be launched in June but has been delayed due to Covid-19. Once selected, most likely in 2021, the preferred bidder will enter a joint venture SPV with KenGen – which will take up to a 25% stake – and finance, construct, own and operate the plant on a BOOT basis.

Olkaria VI will be signed to a 25-year steam supply agreement with KenGen – which is part-listed (30%) on the Nairobi stock exchange – and a 25-year power purchase agreement (PPA) with Kenya Power and Lighting Company. Construction is expected to be completed within three years of financial close.

In its H2 financial results, Engie said it was focusing on "simplifying the group" and exiting 25 countries by the end of 2021. It is also merging the regional organisations of its African and Middle East business units, as well as its Asia-Pacific and Chinese businesses, a process that should be completed in early 2021

MALAWI

LIQUIDITY SUPPORT FOR 46MW SOLAR FARM

The African Trade Insurance Agency (ATI) has provided financing through its Regional Liquidity Support Facility (RLSF) to the 46MW Nkhotakota solar farm in Malawi, financed in January. The RLSF will provide liquidity cover to Dubaibased project sponsor PHANES GROUP for 10 years as the second project to receive RLSF backing after Gigawatt Global's 7.5MW solar IPP in Burundi.

Phanes' project was financed with debt from the DFC. The company raised US\$67m in partnership with the European investment fund responsAbility Renewable Energy, which provided equity to the scheme. Nkhotakota is the recipient of Malawi's first renewables power purchase agreement (PPA), signed in February 2019 for 20 years. Phanes was awarded the project in 2017 following a tender process involving 21 other bidders. Natsons is the local development partner. RLSF has been backed by KfW since its launch in 2017.

MOZAMBIQUE

ROVUMA LNG SLOWS DOWN

Development work on the Exxon-led Rovuma LNG project is said to have slowed in the country, raising fears the scheme might be on hold for some time. EXXONMOBIL's Mozambique managing director, Jos Evens, told the Mozambique Gas Summit recently any decision on pressing ahead with the US\$30bn 15m-tonnes-per-year scheme "depends on how the market develops in the coming months and years" and it remains necessary to "assess the feasibility of the project".

Last month, it was reported that the EPC contractor on the scheme, the JGC, Fluor and TechnipFMC consortium, was asked to reprice its bid on the scheme. However, the project may be facing more fundamental issues given its size and the current state of the global energy market. ExxonMobil has its own issues this year with low oil prices. Its share price has halved in 2020. Its current development focus is on its US\$9bn Guyana oil field development.

The Rovuma sponsors are ExxonMobil, Eni, CNPC, Kogas and Galp. The Rovuma scheme relies on the project sponsors offtaking the LNG from the mega scheme. A year ago it emerged that the size of the debt package on the scheme had increased to more than US\$17bn from US\$14.4bn following the retendering process on the EPC contract. The proposed financing now includes a larger shareholder loan from the Exxonled sponsor group.

SENEGAL

) FAR SELLS OUT OF SNE SANGOMAR

Small Australian oil independent FAR has sold its 15% stake in the US\$4.2bn SNE Sangomar offshore oil scheme to India's ONGC for US\$45m at deal completion. ONGC will reimburse FAR's share of working capital for the project from January 1 2020 for US\$66.58m. It will

ECA-backed solar farms financed

■ ANGOLA Renewables

An international consortium of developers, contractors and advisers has financed an export-credit backed 370MW solar portfolio in Angola, which is being developed using an EPC model rather than as an IPP.

The seven-project portfolio raised €560m over 18-years from from Swedish Export Credit Corporation (SEK), which provided €480m and the Development Bank of South Africa (DBSA) the remaining €80m. Swedish Export Credit Agency (EKN) provided coverage on SEK's tranche – about 85% of the total – as did South Korea's K-Sure with €100m. The recipient of the loan is the Angolan government, which will own the project.

Loan signing actually occurred in May, with a first advanced disbursement in July. Construction began earlier this month.

ING was lead arranger, advised by Clifford Chance. Lisbon-based Miranda & Associates,

DLA Piper and McDermott, Will & Emery advised the development consortium while Norton Rose Fulbright advised the government.

The consortium consists of developer SUN AFRICA, a US developer and EPC contractor Grupo MCA, with module supplier Hitachi ABB Power Grids, NEXTracker and Hanwha Q Cells in its first African project. The role of MCA – which has operated in Angola for years – was said to be crucial to the project's success.

Sun Africa originally developed the projects in 2017 but decided a year later to pursue a non-IPP strategy to mitigate the currency and long-term risks in Angola's power sector. Nikola Krneta, the company CEO, explained that this strategy ensured a lower levellised cost of electricity (LCOE) and allowed the projects to function without the backing of a power purchase agreement (PPA).

"When it comes to power projects, the LCOE should be start and end of all conversations – not tariffs," he told PFI. "The LCOE is the proof of concept here – how cheap is the plant to operate, how cheap is it to finance? The math is simple."

The portfolio is broken down between two larger projects of 180MW and 100MW, a 60MW project, two 20MW projects and two other smaller-scale hybrid plants. All of them will be commissioned within 24 months.

Asked whether the company would be likely to pursue more EPC-style power projects rather than the traditional IPP route, Krneta said "only time will tell. Covid has changed a lot, but IPP is not the be-all and end-all for Africa's energy solutions." The project was completed under the US's Prosper Africa's advocacy programme, "one of the key elements" of the project's success. Peter Collins

also pay contingencies to FAR capped at US\$55m up to 2027 if certain conditions are met

In January, FAR received underwritten commitments for a US\$300m senior secured reserve-based lending (RBL) on the project, with BNP Paribas, Glencore and Macquarie Bank each providing US\$100m at Libor plus 775bp. But since then the appetite for new oil investments has been hit by Covid-19. Early in the year FAR lost its arbitration against Woodside over its acquisition of a 35% stake in the project from ConocoPhillips for US\$350m in 2016.

The remaining stakeholders on the 231m-barrel scheme are operator Woodside, 68%, and state oil company Petrosen. Woodside said last week it will sell part of its stake in the scheme after having bought out Cairn Energy's 40% stake in August for US\$400m. Lukoil had been in line to buy the Cairn stake for US\$400m but Woodside stepped in.

) KOSMOS SCRAPS TORTUE LNG SALE

KOSMOS ENERGY has scrapped selling down its 30% interest in the Greater Tortue Ahmeyim LNG project in Senegal and Mauritania, the company said in its Q3 results. Instead, Kosmos will seek additional financing alongside project partner BP rather than sell down to 10% ownership in a deal that was expected to close this year.

"With the prospect of enhanced future returns, now is not the optimal time to

reduce our interest in the project and we have established a financing path which funds Kosmos' capital obligations to first gas. This enables Kosmos to retain its current equity stake through to production," said Kosmos CEO Andy Inglis as Phase 2 of the scheme makes "good progress".

To finance its portion, Kosmos and BP will sell the floating production, storage and offloading (FPSO) vessel to a special purpose vehicle by Q1. About US\$160m of net proceeds will go to Kosmos and the FPSO will be leased back to the scheme while the SPV covers its future spending – presenting more cost savings for Kosmos.

The company will also refinance its loans to national oil companies under agreements with commercial banks in 2021 which is expected to yield US\$100m. Phase 2 will largely be funded through Phase 1 cashflows. By leveraging all the major infrastructure from Phase 1, capital costs for Phase 2 have fallen and expected returns have risen. Phase 2 will double production to 5m tonnes per year. Kosmos posted a Q3 net loss of US\$37m, or an adjusted loss of US\$50m.

SOUTH AFRICA

DEVELOPERS EXIT COAL IPP

MARUBENI has pulled out of the planned 630MW Thabametsi coal-fired power

plant in Limpopo province, Reuters reports, following the exit of South African investors this week and project co-sponsor Korea Electric Power Co (Kepco) and its subsidiaries last week.

"As per our policy that we will not develop any new coal power project, we are in process of the withdrawal from the project with the Government of South Africa," a Marubeni spokesman said in response to questions from Reuters, without providing further detail.

The project is all but dead in the water and signals the possible end of the line for coal in South Africa.

Kepco's withdrawal and the loss of its billion-dollar investment pledge – which preceded the exodus of the remaining stakeholders – followed the 2018 announcements that Nedbank, Standard Bank and Rand Merchant Bank – all understood to be involved in Thabametsi – would no longer finance new coal power. Absa bank was the only South African commercial lender left.

Kepco CEO Kim Jong-gap had said earlier this month that the company and its subsidiaries will stop pursuing new overseas coal power projects with the exception of the Jawa 9 and 10 coal IPP in Indonesia and Vung Ang 2 coal plant in Vietnam.

Compounding the issue, South Africa's biggest state pension fund manager the Public Investment Corporation (PIC), and the Industrial Development Corporation (IDC), told Reuters they would no longer

support the project, which was planned to come online in 2021.

Thabametsi was awarded to Marubeni in the October 2016 new-coal IPP programme along with ACWA Power's 300MW Khanyisa project. Having endured legal challenges from environmental groups throughout 2017, the plants were thought to be back on track before the exodus of banks from coal-to-power projects.

) AIIM AND STOA INVEST IN FIBRE COMPANY

African Infrastructure Investment Managers (AIIM) and French-owned STOA have invested R1.5bn (€98m) in South African open access fibre network operator METROFIBRE NETWORK.

AIIM's investment stands at R980m, while the South African Housing Infrastructure Fund (SAHIF) invested in MetroFibre's capital expansion, which is targeted at R3bn over three years. STOA, which is owned by Caisse des Depots and AFD, is providing incremental funding. The investors join existing stakeholders Sanlam Private Equity and African Rainbow Capital. MetroFibre operates in

fibre-to-the-home (FTTH) and fibre-to-the-business (FTTB).

UGANDA

) INVESTORS TO BE SOUGHT FOR EACOP

The sponsors of the US\$3.5bn 1,500km East African Crude Oil Pipeline (EACOP) from the Lake Albert oil fields are looking at bringing financial investors into the scheme to cover Tullow's 33% stake. Total finally bought last week Tullow's stake and its Ugandan assets for US\$500m, plus US\$75m when the final investment decision (FID) is reached on the Lake Albert scheme. Total now has 66% with Chinese company CNOOC holding the rest.

Tullow is selling out due to its corporate issues and the state of the energy markets this year. Total said the deal gives it access to the Lake Albert oil field asset "for less than US\$2 a barrel in line"

However, other types of investors can be bought into financing the pipeline,

an infrastructure asset. The pipe runs from the Lake Albert oilfields to the port of Tanga in Tanzania's north-east region. Three-quarters of the route will run through Tanzania.

Oil companies have been looking to bring infrastructure investors into their infrastructure assets and the process has accelerated this year given the Covid problems. Last week, Australian oil major Woodside said it was looking to bring financial investors into its Pluto LNG 2 scheme in Australia rather than farm down to other oil companies. It had sounded out major oil companies to invest but due to the oil and gas price drop this year, that no longer makes sense, chief executive Peter Coleman said.

Total is looking to get the EACOP scheme financed quickly, although the project is likely to be a 2021 deal. A final investment decision (FID) is due this year, although more realistically it will probably be early next year. Standard Bank and SMBC are advising on the debt financing. Nine contractors are currently competing for three pipe-laying contracts for EACOP.

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LEGAL REPORT 2020

IN THIS SECTION

56 Global review57 League tables60 Project list

64 Americas67 Asia Pacific70 EMEA

FEATURES

TOP FIRMS BOOST DEAL NUMBERS

DESPITE THE IMPACT OF COVID-19, MANY OF THE TOP GLOBAL LAW FIRMS HAVE SIGNIFICANTLY INCREASED THE NUMBER OF DEALS WORKED ON COMPARED WITH THE PREVIOUS YEAR. POWER, TRANSPORT AND OIL & GAS DEALS UNSURPRISINGLY CONTINUE TO DOMINATE, WITH OFFSHORE WIND HAVING A NOTABLE YEAR AND MANY TELECOMMUNICATIONS DEALS ALSO CLOSING. BY PETER COLLINS.

It would be an understatement to call 2020 a "challenging" year but, despite the world coming to somewhat of a halt due to the novel coronavirus pandemic, the Refinitiv Project Finance International (PFI) annual legal survey shows that deals have continued to close at a strong pace. The survey charts firms advising the lenders and the sponsors of internationally significant deals with a value more than US\$500m closed between September 2019 and 2020.

Clifford Chance, the top ranked law firm in 2020, led the pack with 40 global deals, nine more than in the previous year. Other top firms such as Allen & Overy, with 35 global deals, Linklaters with 26, and White & Case with 33 increased their share, the latter nearly doubling its 2019 deal total and consequently jumping to third in the global rankings.

Baker McKenzie broke into the top 10 with a total of 10 deals – interestingly, all on the lender's side. Hogan Lovells and Watson Farley Williams both shot up the rankings with seven deals each, CMS joining them further up the table having doubled its deal total from three to six. Freshfields came in right below CMS at 17th, having also improved significantly on its 2019 ranking.

It was a slightly less positive picture for some of the other US-based firms, Milbank with 15, Latham & Watkins 23, and Shearman & Sterling 11, having fallen down the rankings, while the UK's Ashurst (9) also slipped from eighth to 11th and DLA Piper (2) fell out of the top 20.

The regional breakdowns naturally offer a more nuanced picture. Sydney-headquartered Allens led the Asia tables with seven deals, tied with King & Wood Mallesons and Linklaters. Despite their poorer global showing, Latham & Watkins and Milbank still led the Americas with 15 and 13 deals, respectively. Clifford Chance, Allen & Overy and Linklaters were the top three in EMEA, representing no change on last year despite White & Case closing the gap significantly with 16 deals in fourth place – one below third-placed Linklaters.

Some notable people moves across firms may shake up the rankings next year. Milbank will certainly hope to benefit from the recently announced arrival of Clifford Chance partners Barbara Mayer-Trautmann and Markus Muhs, who are both joining the US firm's Munich office with their substantial acquisition, structured financing and cross-border expertise.

Dentons, which marginally increased its ranking despite no increase in deals, will hope for a boost from the arrival of partners Thomas Doermer and Tim Heitling and associates Annekathrin Markert and Daniel Neudecker from Baker McKenzie. Meanwhile, Pinsent Masons – which has climbed the global rankings into the top half – will hope to build on this momentum with the appointment of Leeds-based Melanie Grimmitt as its new global head of energy in October. In the US, the legal moves were dominated by the major players in the renewables sectors – a theme that is explored in more detail in this report.

Across the EMEA and Asia-Pacific regions, law firms have strengthened their offshore wind credentials through a number of deals in the sector. In the UK, Linklaters advised the lenders on both the £2bn Neart na Gaoithe (NnG) and £3bn Seagreen offshore wind financings. The UK firm also led the US\$920m Akita and Noshiro project in Japan with local firms Mori Hamada & Matsumoto and Nishimura & Asahi providing them with valuable experience on Japan's first commercial offshore wind financing. The transfer of knowledge and best practices to local firms in fledgling offshore wind sectors is a subject of discussion in this year's survey.

Clifford Chance advised the sponsors on NnG and on the US\$1.1bn Norther project in Belgium, and advised the lenders on the €1.2bn Fecamp offshore wind syndication in France and the US\$2bn Formosa II financing in Taiwan.

The firm appeared on several telecoms deals in France, the Netherlands, and the UK. Herbert Smith Freehills, Latham & Watkins, White & Case and Linklaters were also big players in the telecommunications sector, which saw more than twice the number of deals close, 10, compared with last year, four. The oil and gas sector saw a flurry of M&A deals, especially in the US, where the likes of Orrick, Milbank, Kirkland & Ellis and Latham & Watkins featured most prominently. The latter also advised on a number of power M&A deals in the US and Mexico.

Finally, the transport sector had a healthy amount of M&A, financing and refinancing deals across all regions. The US\$752m Almaty ring road PPP financing in Kazakhstan, advised on by Allen & Overy and White & Case, was the country's first and a notable success story for the country and the sector.

Despite the year being clouded by the unprecedented disruption of a global pandemic, law firms – like the project finance sector in general – have adapted well and swiftly. This

can be seen by the high volume of deals still being closed and this development is explored in more detail in this issue with a focus on Asia.

GLOBAL - OCTOBER 2019 TO SEPTEMBER 2020

Firm	Sponsors	Lenders	Total
Clifford Chance	15	25	40
Allen & Overy	19	16	35
White & Case LLP	21	12	33
Linklaters	8	18	26
Latham & Watkins	8	12	20
Norton Rose Fulbright	1	16	17
Milbank LLP	6	9	15
Shearman & Sterling LLP	1	10	11
Herbert Smith Freehills	10	1	11
Baker Mckenzie	10	0	10
Ashurst	5	4	9
Allens	3	4	7
King & Wood Mallesons	3	4	7
Watson Farley & Williams LLP	4	3	7
Hogan Lovells	4	3	7
CMS	3	3	6
Freshfields Bruckhaus Deringer	2	3	5
Simpson Thacher & Bartlett	0	5	5
Kirkland & Ellis	3	2	5
Torys	2	3	5
King & Spalding	5	0	5
Skadden	3	1	4
McCarthy Tetrault	2	2	4
Orrick Herrington & Sutcliffe LLP	4	0	4
Jones Day	2	2	4
Cyril Amarchand Mangaldas	0	4	4
Vinson & Elkins LLP	4	0	4
Sullivan & Cromwell	3	0	3
Gilbert + Tobin	1	2	3
Pinsent Masons	3	0	3
Machado Meyer Sendacz & Opice	2	1	3
Gibson Dunn & Crutcher	3	0	3
NautaDutilh	0	2	2
Blake Cassels & Graydon	1	1	2
Lee and Li	1	1	2
DLA Piper LLP	2	0	2
Bredin Prat	2	0	2
BonelliErede			
Stocche Forbes Advogados	2	0	2
Squire Patton Boggs LLP	2	0	2
	1		
Shardul Amarchand Mangaldas & Co	2	1	2
Gowling WLG Osler Hoskin & Harcourt LLP		0	
	1	1	2
Dentons	1	1	2
Loyens & Loeff	1	1	2
Lee & Ko	2	0	2
Kim & Chang	0	2	2
Nishimura & Asahi	1	1	2
Greenberg Traurig	0	2	2
Garrigues	0	2	2
Morgan Lewis & Bockius	1	1	2
Addleshaw Goddard	0	2	2
Gianni Origoni Grippo Cappelli & Partners	0	1	1
Olaniwun Ajayi	1	0	1
Templars Law Firm	0	1	1
Corrs Chambers Westgarth	1	0	1

Mannheimer Swartling Advokatbyra	1	0	1
Blanke Meier Evers	1	0	1
Tsar and Tsai Law Firm	0	1	1
Simmons & Simmons	0	1	1
Dias Carneiro Advogados	0	1	1
Hunton Andrews Kurth LLP	0	1	1
Mattos Filho Veiga Filho Marrey Jr	1	0	1
Mohsin Tayebaly & Co	0	1	1
Pinheiro Guimaraes	0	1	1
Arias Fabrega & Fabrega	0	1	1
Legance Avvocati Associati	1	0	1
L&L Partners	1	0	1
Claro y Cia	1	0	1
Heuking Kuehn Lueer Wojtek	1	0	1
Rothschild & Morgan PC (GA)	1	0	1
De Pardieu Brocas Maffei	1	0	1
McMillan LLP	0	1	1
Pioneer Legal	0	1	1
Stibbe Avocats Luxembourg	1	0	1
Mori Hamada & Matsumoto	1	0	1
Afridi & Angell	1	0	1
Al-Tamimi & Co	0	1	1
Borden Ladner Gervais LLP	1	0	1
Amicus Legal	1	0	1
Mijares, Angoitia, Cortes y Fuentes	1	0	1
Posse, Herrera & Ruiz	1	0	1
Jones Walker LLP	0	1	1
Aequitas	0	1	1
Sheppard, Mullin, Richter & Hampton	1	0	1
Davies Ward Phillips & Vineberg LLP	0	1	1
Stikeman, Graham, Keeley & Spiegel	1	0	1
McGuireWoods LLP	0	1	1
Sidley Austin LLP	1	0	1
Morales & Besa	1	0	1
Albuquerque & Associados	1	0	1
Bracewell LLP	1	0	1
Covington & Burling	1	0	1
Gandhi & Associates	1	0	1
RIAA Barker Gillette	1	0	1
Bae Kim & Lee	1	0	1
Shin & Kim	0	1	1
Gonzalez Calvillo SC	1	0	1
Ritch Heather y Mueller SC	0	1	1
Weilmuenster & Wigginton (IL)	0	1	1
Estudio Luis Echecopar Garcia	0	1	1
Nagashima Ohno & Tsunematsu	0	1	1
Osler	1	0	1
Husch Blackwell Sanders LLP	1	0	1
Weil & Associes	0	1	1
Wilson Sonsini Goodrich & Rosati	0	1	1
Kummerlein, Simon & Partner	1	0	1
		9	

ASIA-PACIFIC OCTOBER 2019 TO SEPTEMBER 2020

Firm	Sponsors	Lenders	Total
Allens	3	4	7
King & Wood Mallesons	3	4	7
Linklaters	2	5	7
White & Case	4	2	6
Allen & Overy	3	2	5
Clifford Chance	2	3	5
Ashurst	3	2	5
Cyril Amarchand Mangaldas	0	4	4
Herbert Smith Freehills	3	1	4
Gilbert + Tobin	1	2	3
Baker Mckenzie	3	0	3
Lee and Li	1	1	2
Shardul Amarchand Mangaldas	1	1	2
Lee & Ko	2	0	2
Kim & Chang	0	2	2
Latham & Watkins	0	1	1
NautaDutilh	0	1	1
Freshfields Bruckhaus Deringer	1	0	1
Watson Farley & Williams	0	1	1
DLA Piper	1	0	1
Milbank	0	1	1
Corrs Chambers Westgarth	1	0	1
Blanke Meier Evers	1	0	1
Hogan Lovells	1	0	1
Tsar and Tsai Law Firm	0	1	1
Mohsin Tayebaly	0	1	1
Pinsent Masons	1	0	1
L&L Partners	1	0	1
Pioneer Legal	0	1	1
Amicus Legal	1	0	1
Gandhi & Associates	1	0	1
RIAA Barker Gillette	1	0	1
Shearman & Sterling	0	1	1
Bae Kim & Lee	1	0	1
Shin & Kim	0	1	1

AMERICAS - OCTOBER 2019 TO SEPTEMBER 2020

Firm	Sponsors	Lenders	Total
Latham & Watkins	6	9	15
Milbank	6	7	13
White & Case	6	5	11
Shearman & Sterling	1	9	10
Norton Rose Fulbright	0	8	8
Allen & Overy	4	3	7
Clifford Chance	2	5	7
Baker Mckenzie	5	0	5
Kirkland & Ellis	3	2	5
Torys	2	3	5
King & Spalding	5	0	5
McCarthy Tetrault	2	2	4
Orrick Herrington & Sutcliffe	4	0	4
Sullivan & Cromwell	3	0	3
Machado Meyer Sendacz & Opice	2	1	3
Gibson Dunn & Crutcher	3	0	3
Vinson & Elkins	3	0	3
Simpson Thacher & Bartlett	0	3	3
Skadden	1	1	2
Blake Cassels & Graydon	1	1	2
Linklaters	2	0	2
Stocche Forbes Advogados	2	0	2
Squire Patton Boggs	2	0	2
Gowling WLG	2	0	2
Osler Hoskin & Harcourt	1	1	2
Jones Day	2	0	2
Greenberg Traurig	0	2	2
Garrigues	0	2	2
Morgan Lewis & Bockius	1	1	2
Ashurst	1	0	1
Dias Carneiro Advogados	0	1	1
Hunton Andrews Kurth	0	1	1
Mattos Filho Veiga Filho Marrey Jr	1	0	1
Pinheiro Guimaraes	0	1	1
Arias Fabrega & Fabrega	0	1	1
Claro y Cia	1	0	1
Freshfields Bruckhaus Deringer	0	1	1
BonelliErede	1	0	1
DLA Piper	1	0	1
Dentons	1	0	1
McMillan	0	1	1
Borden Ladner Gervais LLP	1	0	1
Mijares, Angoitia, Cortes y Fuentes	1	0	1
Posse, Herrera & Ruiz	1	0	1
Jones Walker	0	1	1
Sheppard, Mullin, Richter & Hampton	1	0	1
Davies Ward Phillips & Vineberg	0	1	1
Stikeman, Graham, Keeley & Spiegel	1	0	1
McGuireWoods	0	1	1
Sidley Austin	1	0	1
Morales & Besa	1	0	1
Gonzalez Calvillo	1	0	1
Ritch Heather y Mueller SC	0	1	1
Herbert Smith Freehills	1	0	1
Estudio Luis Echecopar Garcia	0	1	1
Hogan Lovells	1	0	1
Osler	1	0	1
Husch Blackwell Sanders	1	0	1
Wilson Sonsini Goodrich & Rosati	0	1	1

EMEA - OCTOBER 2019 TO SEPTEMBER 2020

Firm	Sponsors	Lenders	Total
Clifford Chance	11	17	28
Allen & Overy	12	11	23
Linklaters	4	13	17
White & Case	11	5	16
Norton Rose Fulbright	1	8	9
Herbert Smith Freehills	6	0	6
CMS	3	3	6
Watson Farley & Williams	4	2	6
Hogan Lovells	2	3	5
Latham & Watkins	2	2	4
Freshfields Bruckhaus Deringer	1	2	3
Ashurst	1	2	3
Bredin Prat	2	0	2
Pinsent Masons	2	0	2
Jones Day	0	2	2
Loyens & Loeff	1	1	2
Skadden	2	0	2
Baker Mckenzie	2	0	2

Simpson Thacher & Bartlett	0	2	2
Addleshaw Goddard	0	2	2
Gianni Origoni Grippo Cappelli & Partners	0	1	1
Mannheimer Swartling Advokatbyra	1	0	1
Milbank	0	1	1
BonelliErede	1	0	1
Simmons & Simmons	0	1	1
Legance Avvocati Associati	1	0	1
Heuking Kuehn Lueer Wojtek	1	0	1
Rothschild & Morgan PC (GA)	1	0	1
De Pardieu Brocas Maffei	1	0	1
NautaDutilh	0	1	1
Stibbe Avocats Luxembourg	1	0	1
Weilmuenster & Wigginton (IL)	0	1	1
Weil & Associes	0	1	1
Kummerlein, Simon & Partner	1	0	1
Vinson & Elkins	1	0	1

Project Name	Country	Cost (US\$m)	Sector	Sponsors counsel	Lenders counsel	Subsidiary roles
chthys LNG Project	Australia	34000	Oil & gas	Allen & Overy	Herbert Smith Freehills, Latham & Watkins, NautaDutilh	-
mur Gas Processing Plant Project	Russian Fed	21063.4	Oil & gas	Herbert Smith Freehills, White & Case	Freshfields Bruckhaus Deringer, Linklaters	_
orpus Christi Liquefaction Project	United States	17700	Oil & gas	Sullivan & Cromwell	Norton Rose Fulbright, Skadden	-
ubail Refinery and Petroleumchemical Plant Project (Satorp)	Saudi Arabia	14000	Industrial	Allen & Overy, White & Case	Linklaters	_
FK International Airport Redevelopment Project	United States	13000	Transportation	Allen & Overy		_
Cameron LNG Export Project	United States	10785	Oil & gas	Sullivan & Cromwell	Latham & Watkins, White & Case	_
Roy Hill Iron Ore Mine Project	Australia	10000	Mining	Herbert Smith Freehills	Allen & Overy	-
Mead Township Petroleumchemical Ethane Cracker Complex Project	United States	10000	Oil & gas	Baker Mckenzie	_	_
NSW Poles and Wires Asset Privatization Project (TransportationGrid and AusGrid)	Australia	8819.2	Power	-	Gilbert + Tobin	_
Sydney Metro & Southwest Rail Project	Australia	8480	Transportation	Allens	King & Wood Mallesons	-
Project Galaxy	Utd Arab Em	7960	Oil & gas	Ashurst, Clifford Chance, Latham & Watkins	Linklaters, Simpson Thacher & Bartlett	_
Open Fiber 100Mbps Broadband Network Project	Italy	7718.75	Telecommunications	White & Case	Gianni Origoni Grippo Cappelli & Partners	_
Ras Az Zawr Fertiliser Plant Project	Saudi Arabia	7500	Industrial	Baker Mckenzie, White & Case	Allen & Overy	-
Fransportation-Sumatra High Grade Highway Project	Indonesia	6725.925926	Transportation	Allen & Overy	Linklaters	_
Sabine Pass 5 Project	United States	5800	Oil & gas	Latham & Watkins	Norton Rose Fulbright	-
Sydney North West Rail Link Project	Australia	5630.72	Transportation	Allens	King & Wood Mallesons	_
Nigeria LNG [NLNG] Carrier Vessels Acquisition	Nigeria	5400	Oil & gas	Allen & Overy, Latham & Watkins, Olaniwun Ajayi	Templars Law Firm, White & Case	-
lorth Marmara Highway Project	Turkey	5000	Transportation	White & Case	Clifford Chance	_
Port of Melbourne Acquisition	Australia	4897.44	Transportation	Allen & Overy	King & Wood Mallesons	_
Coastal GasLink Pipeline Project	Canada	4716.644036	Oil & gas	Blake Cassels & Graydon	Norton Rose Fulbright	_
Freeport LNG Train 3 Project	United States	4615.789	Oil & gas	White & Case	Kirkland & Ellis	_
Vest Gate Tunnel Project (Western Distributor Road)	Australia	4557.34	Transportation	White & Case		Clayton Utz
Camago and Malampaya Natural Gas Project	Philippines	4500	Oil & gas	Freshfields Bruckhaus Deringer	Ashurst	-
Pembina Petroleumchemical Facility Project		4500	Petroleum	Ashurst	Norton Rose Fulbright, White & Case	_
Seagreen Offshore Wind Project	UK	3891.3399	Power	Linklaters	Norton Rose Fulbright, White & Case	_
Changfang and Xidao Wind Farm Projects CFXD]	Taiwan	3608.401851	Power	Baker Mckenzie, White & Case	Lee and Li, Linklaters, Watson Farley & Williams	_
Suralaya Coal-Fired Power Plants (Java 9 & 10) Project	Indonesia	3500	Power	DLA Piper , White & Case	Milbank	_
Project Violin	France	3250	Power	Allen & Overy, Bredin Prat	Linklaters	_
Cross River Rail Project	Australia		Transportation	Ashurst, Corrs Chambers Westgarth	Allens	Clayton Utz
Project Snowball	Sweden	2829.6	Power	Mannheimer Swartling Advokatbyra	Latham & Watkins, Milbank	-
NPD Yunlin County Wind Power Project	Taiwan	2795.51136	Power	Blanke Meier Evers, Hogan Lovells, Linklaters	Tsar and Tsai Law Firm, White & Case	-
Fecamp Offshore Wind Farm Project	France	2663.52	Power	Clifford Chance	Ashurst, Linklaters	_
BreBeMi Project	Italy	2640.96	Transportation	Bonelli Erede, White & Case	Allen & Overy, Ashurst, Linklaters, Norton Rose Fulbright, Simmons & Simmons	=
Neart Na Gaoithe Offshore Wind Farm Project	UK	2631.130364	Power	Allen & Overy, Linklaters	Clifford Chance	-
	Australia	2603.76	Transportation	King & Wood Mallesons	Allens	-
				Clifford Chance, Mattos	Dias Carneiro Advogados, Hunton	_
Project	Brazil	2280	Industrial	Filho Veiga Filho Marrey Jr	Andrews Kurth	
Project Puma II Pulp Mill Project	Brazil United States	2280			Andrews Kurth Latham & Watkins	_
Mitcham-Frankston (EastLink) Toll Road Project Puma II Pulp Mill Project IPF II/Rolling Hills Portfolio Formosa II Offshore Wind Project				Marrey Jr		-
Project Puma II Pulp Mill Project PF II/Rolling Hills Portfolio Formosa II Offshore Wind Project Calpine Geysers Geothermal Power Plant	United States	2060	Power Power	Marrey Jr Milbank Clifford Chance, Lee	Latham & Watkins	- -
Project Puma II Pulp Mill Project IPF II/Rolling Hills Portfolio	United States Taiwan	2060 2029.1232	Power Power	Marrey Jr Milbank Clifford Chance, Lee and Li, White & Case	Latham & Watkins Linklaters	-

Project Name Proj							
More Service Copies Milloank	Project Name	Country	Cost (US\$m)	Sector	Sponsors counsel	Lenders counsel	Subsidiary roles
	Amadeus Dissolving Wood Pulp Project	Brazil	1823	Industrial			_
Common	Huemul Portfolio Project	Chile	1800	Power			_
Paramala V Power Plants		United States	1780	Transportation		Shearman & Sterling	-
Angle	Condor Energia Renovable Platform Project	Chile	1700	Power	Milbank	Shearman & Sterling	_
Project Part Project Trailand 1555 Power Balar McMenzie Linkiaters —	Parnaiba V Power Plant	Brazil	1685.134	Power		Machado Meyer Sendacz & Opice	-
MED Patent Clause Patent		Netherlands	1658.55	Transportation	Allen & Overy	Norton Rose Fulbright	-
Project	Rayong Gas-Fired Power Plant Project	Thailand	1656	Power	Baker Mckenzie	Linklaters	_
		Panama	1535	Power	Clifford Chance	3,	-
	Granite Generation Refinancing Project	United States	1500	Power	Milbank	Shearman & Sterling	_
National Project Note Acquisition Project Note College States Policy (Source Acquisition Project (Source Acquisition Project (Source Acquisition Project) Note College Acquisition Project Note College Acquis	Cascade Power Project	Canada	1500	Power	Torys	McCarthy Tetrault	-
Transportationnission Project Silvertown Turnel Project Silvertown Silvertown Turnel Project Silvertown Silv	Mistral Wind Refinancing Project [Ventient]	Spain	1457.751915	Power	Allen & Overy	Linklaters	_
Maintenant Project United Kingdom 1407-2809 Transportation Legance Avevatal Allen & Overy Project Maintenant Maintena		Canada	1455.0466	Power	-	McCarthy Tetrault	-
Montrol Mont	3owie Acquisition Project	United States	1435	Oil & gas	Kirkland & Ellis	Milbank	_
Associatif Weade Pipeline Acquisition Project Weade	Silvertown Tunnel Project		1407.2809	Transportation	Allen & Overy	Hogan Lovells	,
Suncilla-Corahspur LPC Pipeline Project India 1366.09315 30 il. 8 gas L&I Partners Shardul Amarchand Mangaldas — Corbane Coanhapur LPC Pipeline Project Chile 1363.7 Power Claro y Cla — Claro y Claro		France	1406.172	Transportation		Allen & Overy	_
Cechane Coal-Fired Project Chile 1363, Power Clary Clair Carlo y Clair Project Broadway Subway Canada 1394 Tansportation Cowling WLG Older Hockin & Harcourt - Ad9 Motorway Expansion PPP Project Germany L'298.22 Tansportation Heuking Kuehn Luerg Ad9 Motorway Expansion PPP Project Germany L'298.22 Tansportation Heuking Kuehn Luerg Ad9 Motorway Expansion PPP Project Germany L'298.22 Tansportation Heuking Kuehn Luerg Ad9 Motorway Expansion PPP Project Ad9 Motorway Expansion PPP Project Germany L'298.22 Tansportation Ad9 Motorway Expansion PPP Project Australia Ad149 B78 Australia Australi	Meade Pipeline Acquisition Project	United States	1370	Oil & gas	Sutcliffe , Squire Patton	Latham & Watkins	-
PROS Almirante Barroso MV32 Project Brazil 1350 OI & gas King & Spalding Notron Rose Fulbright — Project Broadway Subway Canada 1399. I Transportation Cowling WLG Older Hockins R Harcourt — — Canada 1399. I Transportation Cowling WLG Older Hockins R Harcourt — — Canada A244 Motorway Expansion PPP Project Commany 1296.528289 Industrial CMS Clifford Chance, Notron Rose — Fulbright Chance, White & Case — — Carloga Azoty Polypropylene Facility Project Volk 1272.2 Power Clifford Chance Allen & Ower, Linklaters — — Topodobampo Ammonia Plant Project United States 1250 Oil & gas Milbank — Freshfields Bruchaus Deringer — — Hurontario Light Rail Transportationit (LRT) Canada 144.9875 Transportation Refinancing Project United States 144.9875 Transportation Refinancing Project Australia 1440 Power Ashurst Clifford Chance, White & Case — — Asterix Fibre to the Home Project France 114.691808 Power De Pardeue Brocas Marfel Boreller Fede, DLA Piper Torys — — — Persons, McCarthy Project Asterix Fibre to the Home Project France 114.691808 Power De Pardeue Brocas Marfel Borallex Sainte Christine Refinancing Project France 114.691808 Power Leyens & Leeff Clifford Chance, White & Case — White & Case — White & Case — White & Case — White & Case — — White & Case — — White & Case — — White & Case — — Call Transportation Refinancing Project Project Project United States 1095 Transportation Baker Michael State Energy Center United States 1095 Transportation Baker Michael Elementary Refinance Project Project Christine Refinance Project United State Energy Center United State State Energy Center Christine Refinance Project Rustralia 1048.8 Transportation Autoration Refinance Project Rustralia 1048.8 Transportation Autoration Refinance Project Rustralia 1048.8 Transportation Autoration Refinance Project Rustralia 1048.8 Transportation Rustral Rustralia Rustralia Rustralia 1048.8 Transportation Rustralia Rustralia Rustra	Kandla-Gorakhpur LPG Pipeline Project	India	1366.095153	Oil & gas	L&L Partners	Shardul Amarchand Mangaldas	_
Project Broadway Subway Canada 1319.4 Transportation Gowling WLG Oster Hoskin & Harcourt Heuking Kushn Luer Clifford Chance, White & Case Project Arthur UK 1256.22228 Industrial CMS Clifford Chance, White & Case Project Arthur UK 1257.22 Power Clifford Chance University of lowa Utility System P3 Project Australia 1440 Power Ashurts Ashurts Clifford Chance, White & Case — Ashurts Clifford Chance, White & Case — Ashurts Ashurts Clifford Chance, White & Case — White & Case — White & Case — White & Case — Ashurts Ashurts Clifford Chance, White & Case — Clifford Chance, White & Case	Cochrane Coal-Fired Project	Chile	1363.7	Power	Claro y Cia		-
A49 Motorway Expansion PPP Project Germany 1298.22 Transportation Works Works Grupa Azoty Polypropylene Facility Project Poland 1296.528289 Industrial CMS Grupa Azoty Polypropylene Facility Project Poland 1296.528289 Industrial CMS Grupa Azoty Polypropylene Facility Project UK 1272.2 Power Clifford Chance Allen & Overy, Linksters — Fopotobampo Ammonia Plant Project Mesic 1250 Olik gas Milbank Freshfields Bruckhaus Deringer — Jones Day, Sheaman & Sterifield Bruckhaus Deringer — - Allen & Overy, Linksters — - Allen & Overy, Linksters — - Allen & Overy — - Allen & Ov	FPSO Almirante Barroso MV32 Project	Brazil	1350	Oil & gas	King & Spalding	Norton Rose Fulbright	_
Wotek Fulbright Transparatory Polypropylene Facility Project Poland 1296528289 Industrial CMS Clifford Chance, White & Case — Poland Polypropylene Facility Project Wish 1272.2 Power Clifford Chance Alten & Overy, Linklaters — Project Arthur UK 1272.2 Power Clifford Chance Alten & Overy, Linklaters — Proposition Project Medico 1250 Oil & gas Milbank Freshfields Bruchhaus Deringer — Jones Day, Shearman & Allen & Overy, Linklaters — Preshfields Bruchhaus Deringer — Jones Day, Shearman & Allen & Overy Clifford Chance Allen & Overy Sterling Shear Hoselin & Hallen & Overy Clifford Chance, White & Case — Lincontario Light Rail Transportationit (LRT) Project Transportationit (LRT) Australia 1140 Power Allen & Overy Clifford Chance, White & Case — Preshfields Bruchhaus Deringer — Jones Day, Shearman & Allen & Overy Clifford Chance, White & Case — Preshfields Bruchhaus Deringer — Preshfields Bruchhaus Deringer — Jones Day, Shearman & Allen & Overy Clifford Chance, White & Case — Preshfields Bruchhaus Deringer — Preshfields Bruchhaus Deringer — Jones Day, Shearman & Allen & Overy — Preshfields Bruchhaus Deringer — Jones Day, Shearman & Allen & Overy — Preshfields Bruchhaus Deringer — Jones Day, Shearman & Clifford Chance, White & Case — Preshfields Bruchhaus Deringer — Propiect — Preshfields Bruchhaus Deringer — Jones Day, Shearman & Clifford Chance, White & Case — Preshfields Bruchhaus Deringer — Propiect — Preshfields Bruchhaus Deringer — Jones Day, Shearman & Clifford Chance, White & Case — Preshfields Bruchhaus Deringer — Propiect — P	Project Broadway Subway	Canada	1319.4	Transportation	Gowling WLG	Osler Hoskin & Harcourt	_
Project Arthur UK 1272.2 Power Clifford Chance Allen & Overy, Linklaters — (poplobampo Ammonia Plant Project Mexico 1250 O il & gas Milbank Freshfields Bruckhaus Deringer — (poplobampo Ammonia Plant Project United States 138 Power Jones Day, Shearman & Allen & Overy — (poplobam) (poplobam)	A49 Motorway Expansion PPP Project	Germany	1298.22	Transportation	-		-
Topotobampo Ammonia Plant Project Mexico 1250 Oil & gas Milbank Freshfields Bruckhaus Deringer — Jones Day, Shearman & Alten & Overy — Jones Day, Shearman & Sterling — Jones Day, White & Case — Jones Day	Grupa Azoty Polypropylene Facility Project	Poland	1296.528289	Industrial	CMS	Clifford Chance, White & Case	_
United States 1183 Power Jones Day, Shearman & Allen & Overy — Jones Day, Shearman & Sterling Torps Jones Day, Shearman & Allen & Overy — Jones Day, Shearman & Sterling Torps Jones Day, Shearman & Allen & Overy — Jones Day, Shearman & Sterling Torps Jones Day, Shearman & Allen & Overy — Jones Day, Shearman & Stering — Jones Day, Shearman & Shear & Clifford Chance, White & Case — Jones Day, Shearman & Shear & Clifford Chance, White & Case — Jones Day, Shearman & Shear & Clifford Chance, White & Case — Jones Day, Shearman & Shear & Clifford Chance, White & Case — Jones Day, Shearman & Stering — Jones Day, Shearman & Stering — Jones Day, Shearman & Shear & Clifford Chance, White & Case — Jones Day, White & Case — Jones Day, White & Case — Jones Day, White & Case — Jones & Loeff & Clifford Chance, Jones Day, White & Case — Jones & Case & Clifford Chance & Clifford Chance & Clifford Chance & Case &	Project Arthur	UK	1272.2	Power	Clifford Chance	Allen & Overy, Linklaters	_
Australia 1141-9875 Transportation Benefit Rail Transportation (LRT) Canada 1141-9875 Transportation Benefit Rail Transportation (LRT) Canada 1141-9875 Transportation Benefit Rail Transportation Project Australia 1140 Power Ashurst Clifford Chance, White & Case — Asharst Clifford Chance, White & Case — Casterix Fibre to the Home Project France 1124 Telecommunications Clifford Chance, Rothschild & Morgan P.C. (C.A.) Boralex Sainte Christine Refinancing Project France 1114-691808 Power De Pardieu Brocas Maffel Clifford Chance, Jones Day, White — C. (C.A.) Belgium 1100.3 Power Loyens & Loeff Clifford Chance, Jones Day, White — C. (Sase Sase Sase Sase Sase Sase Sase Sase	Topolobampo Ammonia Plant Project	Mexico	1250	Oil & gas	Milbank	Freshfields Bruckhaus Deringer	-
Project Serial Acquistion Project Australia 1140 Power Ashurst Clifford Chance, White & Case — Asterix Fibre to the Home Project France 1124 Telecommunications Clifford Chance, Rothschild & Morgan PC (CGA) Boralex Sainte Christine Refinancing Project France 1114-691808 Power De Pardieu Brocas Linklaters — COMMENT OFFICE (CGA) Boralex Sainte Christine Refinancing Project France 1114-691808 Power De Pardieu Brocas Linklaters — COMMENT OFFICE (CGA) Boralex Sainte Christine Refinancing Project France 1114-691808 Power De Pardieu Brocas Linklaters — COMMENT OFFICE (CGA) Boralex Sainte Christine Refinancing Project France 1100-3 Power Logens & Loeff Clifford Chance, Jones Day, White & Case Marfel Norther Offshore Wind Farm Project United States 1095 Transportation Orrick Herrington & Shearman & Sterting — Comment of Stericing — Comment of	University of Iowa Utility System P3 Project	United States	1183	Power		Allen & Overy	_
Asterix Fibre to the Home Project France 1124 Telecommunications Clifford Chance, Rothschild & Morgan PC (CA) Boralex Sainte Christine Refinancing Project France 1114.691808 Power De Pardieu Brocas Maffei Linklaters — Norther Offshore Wind Farm Project Belgium 1100.3 Power Loyens & Loeff Clifford Chance, Jones Day, White — TR Chicago Ohio Turnpike Highway Project United States 1095 Transportation Orrick Herrington & Shearman & Sterling — SSM-R Project France 1084.6 Transportation Hogan Lovells, White & Case Case Case Case Case Case Case Case		Canada	1141.9875	Transportation	, Dentons, McCarthy Tetrault, Osler Hoskin &	Torys	_
Boralex Sainte Christine Refinancing Project France 1114.691808 Power De Pardieu Brocas Maffel Loyens & Logens & Loff Clifford Chance, Jones Day, White & Case Norther Offshore Wind Farm Project Belgium 1100.3 Power Loyens & Loeff Clifford Chance, Jones Day, White & Case TRR Chicago Ohio Turnpike Highway Project United States 1095 Transportation Orrick Herrington & Shearman & Sterling — GSM-R Project France 1084.6 Transportation Hogan Lovells, White & Case CSM-R Project Uruguay 1070 Transportation Baker Mckenzie Clifford Chance — Ferrocarril Central Railway P3 Project Uruguay 1070 Transportation Baker Mckenzie Clifford Chance — Ferrocarril Central Railway P3 Project Uruguay 1070 Transportation Baker Mckenzie Clifford Chance — Ferrocarril Central Railway P3 Project Uruguay 1070 Transportation Baker Mckenzie Clifford Chance — Ferrocarril Central Railway P3 Project Uruguay 1070 Transportation Baker Mckenzie Clifford Chance — Ferrocarril Central Railway P3 Project Uruguay 1070 Transportation Baker Mckenzie Clifford Chance — Ferrocarril Central Railway P3 Project Uruguay 1070 Transportation Baker Mckenzie Clifford Chance — Ferrocarril Central Railway P3 Project Uruguay 1070 Transportation Lee & Ko Kim & Chang Farris Vaughan Wills & Murphy Kangnam Beltway Project Australia 1046.88 Transportation Ashurst Allen & Overy — Ferrocarril Central Railway P3 Forject (Project Australia 1046.88 Transportation Ashurst Allen & Overy — Ferrocarril Central Railway P3 Forject Nepal 985.6366623 Power In House Cyril Amarchand Mangaldas, Pioneer Legal Borkum Riffgrund West 2 Project Germany 980.5952 Power Skadden — Ferrosiber Refinancing Project Netherlands 964.31858 Telecommunications Allen & Overy Clifford Chance — AD Badhoevedorp-Holendrecht Motorway Netherlands 941.545 Transportation Allen & Overy Clifford Chance — Ferrocarril Central Railway P3 Clifford Chance, Linklaters, — Ferrocarril Central Railway P3 Clifford Chance, Linklaters, — Ferrocarril Central Railway P3 Clifford Chance, Linklaters, — Ferrocarril Cent	G-Rail Acquistion Project	Australia	1140	Power	Ashurst	Clifford Chance, White & Case	-
Norther Offshore Wind Farm Project Belgium 110.0.3 Power Loyens & Loeff Clifford Chance, Jones Day, White & & Case Clifford Chance, Jones Day, White & Shearman & Sterling — Sutcliffe GSM-R Project France 1084.6 Transportation Gayan Lovells, White & Allen & Overy — Case Clifford Chance — Rhode Island State Energy Center Acquisition Project United States 1068 Power Latham & Watkins Kirkland & Ellis — Rarris Vaughan Wills & Murphy Asangnam Beltway Project South Korea 1051.228655 Transportation Lee & Ko Kim & Chang — Cedar Project (Alpha Trains) Germany 1022.3883 Transportation Watson Farley & Allen & Overy — Williams Eastern Creek Data Center Project (Project Australia 1018.5786 Industrial Fower In House Cyril Amarchand Mangaldas, Pioneer Legal Borkum Riffgrund West 2 Project Remany Pass Sedden — EuroFiber Refinancing Project Netherlands 941.545 Transportation Allen & Overy Clifford Chance, — Clifford Chance, — Allen & Overy — Clifford Chance — Clifford Chance — Case — Case Allen & Overy — Clifford Chance — Case — Canda 1051.761701 Transportation Ashurst Allen & Overy — Williams Allen & Overy — Cedar Project (Project (Project Australia 1018.5786 Industrial Gilbert + Tobin King & Wood Mallesons — Case Proincer Legal Borkum Riffgrund West 2 Project Cermany 980.5952 Power Skadden — EuroFiber Refinancing Project Netherlands 941.545 Transportation Allen & Overy Clifford Chance — Case Clifford Chance — Clifford Cha	Asterix Fibre to the Home Project	France	1124	Telecommunications	Rothschild & Morgan	White & Case	_
TR Chicago Ohio Turnpike Highway Project United States 1095 Transportation Orrick Herrington & Shearman & Sterling — Statcliffe Suntcliffe Allen & Overy — Reproper State Energy Center United States 1068 Power Latham & Watkins Kirkland & Ellis — Reproject Parullo Bridge Replacement Structure Project South Korea 1051.761701 Transportation Lee & Ko Kim & Chang — Reproject Australia 1046.88 Transportation Lee & Ko Kim & Chang — Reproject [Alpha Trains] Germany 1022.3883 Transportation Williams Eastern Creek Data Center Project (Project Australia 1018.5786 Industrial Williams Borkum Riffgrund West 2 Project Netherlands 964.31858 Telecommunications Allen & Overy Clifford Chance — Reproject Clerkenshoek Rail Tunnel Project Netherlands 941.548 Transportation Allen & Overy Clifford Chance — Reproject Clifford	Boralex Sainte Christine Refinancing Project	France	1114.691808	Power		Linklaters	-
Sutcliffe GSM-R Project France 1084.6 Transportation Baker Mckenzie Clifford Chance — Rhode Island State Energy Center United States 1068 Power Latham & Watkins Kirkland & Ellis — Acquisition Project Project South Korea 1051.228655 Transportation Gowling WLG Kim & Chang — Forowoomba Second Range Crossing Project Australia 1046.88 Transportation Ashurst Allen & Overy — Eastern Creek Data Center Project (Project Australia 1018.5786 Industrial Gilbert + Tobin King & Wood Mallesons — Eastern Creek Data Center Project Germany 980.5952 Power Skadden — EuroFiber Refinancing Project Netherlands 964.31858 Telecommunications Allen & Overy Clifford Chance — Belgium 935.9489 Transportation Allen & Overy Clifford Chance — Rower Latham & Watkins Kirkland & Ellis — Cowling WLG McMillan Farris Vaughan Wills & McMillan Farris Vaughan Wills & Murphy Kangan Beltway Project (Project Australia 1051.228655 Transportation Lee & Ko Kim & Chang — Forowoomba Second Range Crossing Project Australia 1046.88 Transportation Ashurst Allen & Overy — Eastern Creek Data Center Project (Project Australia 1018.5786 Industrial Gilbert + Tobin King & Wood Mallesons — Eastern Creek Data Center Project (Project Refinancing Project Nepal 985.6366623 Power In House Cyril Amarchand Mangaldas, Pioneer Legal Project Refinancing Project Netherlands 964.31858 Telecommunications Allen & Overy Clifford Chance — EuroFiber Refinancing Project Netherlands 941.545 Transportation Allen & Overy Clifford Chance, Australia Luxembourg NautaDutilih Project Livembourg NautaDutilih Clifford Chance, Linklaters, —	Norther Offshore Wind Farm Project	Belgium	1100.3	Power	Loyens & Loeff		-
Referrocarril Central Railway P3 Project Uruguay 1070 Transportation Baker Mckenzie Clifford Chance — Rhode Island State Energy Center United States 1068 Power Latham & Watkins Kirkland & Ellis — Acquisition Project Patullo Bridge Replacement Structure Canada 1051.761701 Transportation Gowling WLG McMillan Farris Vaughan Wills & Murphy Kangnam Beltway Project South Korea 1051.228655 Transportation Lee & Ko Kim & Chang — Toowoomba Second Range Crossing Project Australia 1046.88 Transportation Ashurst Allen & Overy — Cedar Project [Alpha Trains] Germany 1022.3883 Transportation Watson Farley & Williams Eastern Creek Data Center Project (Project Australia 1018.5786 Industrial Gilbert + Tobin King & Wood Mallesons — Eastern Creek Data Center Project (Project Australia 985.6366623 Power In House Cyril Amarchand Mangaldas, Pioneer Legal Borkum Riffgrund West 2 Project Germany 980.5952 Power Skadden — EuroFiber Refinancing Project Nethands 964.31858 Telecommunications Allen & Overy Clifford Chance — Perpoper Colliford Chance — A9 Badhoevedorp-Holendrecht Motorway PPP Project Liefkenshoek Rail Tunnel Project Belgium 935.9489 Transportation Allen & Overy, Freshfields Clifford Chance, Linklaters, —	ITR Chicago Ohio Turnpike Highway Project	United States	1095	Transportation		Shearman & Sterling	-
Rhode Island State Energy Center Acquisition Project Patullo Bridge Replacement Structure Canada 1051.761701 Transportation Gowling WLG McMillan Farris Vaughan Wills Murphy Eastern Creek Data Center Project Australia 1046.88 Transportation Farris Vaughan Wills Murphy Ashurst Allen & Overy Cedar Project [Alpha Trains] Germany 1022.3883 Transportation Watson Farley & Allen & Overy Williams Eastern Creek Data Center Project (Project Australia 1018.5786 Industrial Gilbert + Tobin King & Wood Mallesons Arun III Hydroelectric Power Plant Project Power Power Faria Vaughan Wills Allen & Overy Cedar Project (Project Australia 1018.5786 Industrial Gilbert + Tobin King & Wood Mallesons Foreigner Legal	GSM-R Project	France	1084.6	Transportation		Allen & Overy	-
Acquisition Project Patullo Bridge Replacement Structure Patullo Bridge Replacement Structure Project Canada 1051.761701 Transportation Gowling WLG McMillan Farris Vaughan Wills Murphy Kangnam Beltway Project South Korea 1051.228655 Transportation Lee & Ko Kim & Chang — Toowoomba Second Range Crossing Project Australia 1046.88 Transportation Ashurst Allen & Overy — Cedar Project [Alpha Trains] Germany 1022.3883 Transportation Watson Farley & Williams Watson Farley & Williams Farris Vaughan Wills Allen & Overy — Cedar Project [Alpha Trains] Farris Vaughan Wills Allen & Overy — In House Cyril Amarchand Mangaldas, Pioneer Legal Borkum Riffgrund West 2 Project Germany 980.5952 Power Skadden — EuroFiber Refinancing Project Netherlands 964.31858 Telecommunications Allen & Overy Clifford Chance — A9 Badhoevedorp-Holendrecht Motorway Netherlands 941.545 Transportation Allen & Overy, Clifford Chance, NautaDutilh Allen & Overy, Clifford Chance, NautaDutilh Allen & Overy, Freshfields Clifford Chance, Linklaters, —	Ferrocarril Central Railway P3 Project	Uruguay	1070	Transportation	Baker Mckenzie	Clifford Chance	_
Project Kangnam Beltway Project South Korea 1051.228655 Transportation Lee & Ko Kim & Chang — Toowoomba Second Range Crossing Project Australia 1046.88 Transportation Ashurst Allen & Overy — Cedar Project [Alpha Trains] Germany 1022.3883 Transportation Watson Farley & Williams Eastern Creek Data Center Project (Project Australia 1018.5786 Industrial Gilbert + Tobin King & Wood Mallesons — Arun III Hydroelectric Power Plant Project Nepal 985.6366623 Power In House Cyril Amarchand Mangaldas, Pioneer Legal Borkum Riffgrund West 2 Project Germany 980.5952 Power Skadden — EuroFiber Refinancing Project Netherlands 964.31858 Telecommunications Allen & Overy Clifford Chance Allen & Overy, Clifford Chance NautaDutilh Liefkenshoek Rail Tunnel Project Belgium 935.9489 Transportation Allen & Overy, Freshfields Clifford Chance, Linklaters, —		United States	1068	Power	Latham & Watkins	Kirkland & Ellis	-
Toowoomba Second Range Crossing Project Australia 1046.88 Transportation Ashurst Allen & Overy — Cedar Project [Alpha Trains] Germany 1022.3883 Transportation Watson Farley & Williams Eastern Creek Data Center Project (Project Australia 1018.5786 Industrial Gilbert + Tobin King & Wood Mallesons — Zali) Arun III Hydroelectric Power Plant Project Nepal 985.6366623 Power In House Cyril Amarchand Mangaldas, — Pioneer Legal Borkum Riffgrund West 2 Project Germany 980.5952 Power Skadden — EuroFiber Refinancing Project Netherlands 964.31858 Telecommunications Allen & Overy Clifford Chance — A9 Badhoevedorp-Holendrecht Motorway Netherlands 941.545 Transportation Stibbe Avocats Luxembourg NautaDutith Liefkenshoek Rail Tunnel Project Belgium 935.9489 Transportation Allen & Overy, Freshfields Clifford Chance, Linklaters, —		Canada	1051.761701	Transportation	Gowling WLG	McMillan	
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Williams Eastern Creek Data Center Project (Project Australia 1018.5786 Industrial Gilbert + Tobin King & Wood Mallesons — Arun III Hydroelectric Power Plant Project Nepal 985.6366623 Power In House Cyril Amarchand Mangaldas, — Borkum Riffgrund West 2 Project Germany 980.5952 Power Skadden — EuroFiber Refinancing Project Netherlands 964.31858 Telecommunications Allen & Overy Clifford Chance — A9 Badhoevedorp-Holendrecht Motorway Netherlands 941.545 Transportation Stibbe Avocats Luxembourg NautaDutilh Liefkenshoek Rail Tunnel Project Belgium 935.9489 Transportation Allen & Overy, Freshfields Clifford Chance, Linklaters, —	Toowoomba Second Range Crossing Project	Australia	1046.88	Transportation	Ashurst	Allen & Overy	_
Zali) Arun III Hydroelectric Power Plant Project Nepal 985.6366623 Power In House Cyril Amarchand Mangaldas, Pioneer Legal Borkum Riffgrund West 2 Project Germany 980.5952 Power Skadden — EuroFiber Refinancing Project Netherlands 964.31858 Telecommunications Allen & Overy Clifford Chance — A9 Badhoevedorp-Holendrecht Motorway Netherlands 941.545 Transportation Stibbe Avocats Luxembourg NautaDutilh Liefkenshoek Rail Tunnel Project Belgium 935.9489 Transportation Allen & Overy, Freshfields Clifford Chance, Linklaters, —	Cedar Project [Alpha Trains]	Germany	1022.3883	Transportation		Allen & Overy	-
Borkum Riffgrund West 2 Project Germany 980.5952 Power Skadden — EuroFiber Refinancing Project Netherlands 964.31858 Telecommunications Allen & Overy Clifford Chance — A9 Badhoevedorp-Holendrecht Motorway Netherlands 941.545 Transportation Stibbe Avocats Luxembourg NautaDutilh Liefkenshoek Rail Tunnel Project Belgium 935.9489 Transportation Allen & Overy, Freshfields Clifford Chance, Linklaters, —		Australia	1018.5786	Industrial	Gilbert + Tobin	King & Wood Mallesons	_
EuroFiber Refinancing Project Netherlands 964.31858 Telecommunications Allen & Overy Clifford Chance — A9 Badhoevedorp-Holendrecht Motorway Netherlands 941.545 Transportation Stibbe Avocats Luxembourg NautaDutilh Liefkenshoek Rail Tunnel Project Belgium 935.9489 Transportation Allen & Overy, Freshfields Clifford Chance, Linklaters, —	Arun III Hydroelectric Power Plant Project	Nepal	985.6366623	Power	In House		-
A9 Badhoevedorp-Holendrecht Motorway Netherlands 941.545 Transportation Stibbe Avocats Allen & Overy, Clifford Chance, — PPP Project Belgium 935.9489 Transportation Allen & Overy, Freshfields Clifford Chance, Linklaters, —	Borkum Riffgrund West 2 Project	Germany	980.5952	Power	Skadden		_
PPP Project Luxembourg NautaDutilh Liefkenshoek Rail Tunnel Project Belgium 935.9489 Transportation Allen & Overy, Freshfields Clifford Chance, Linklaters, —	EuroFiber Refinancing Project	Netherlands	964.31858	Telecommunications	Allen & Overy	Clifford Chance	-
		Netherlands	941.545	Transportation			_
	Liefkenshoek Rail Tunnel Project	Belgium	935.9489	Transportation			-

Country	Cost (US\$m)	Sector	Sponsors counsel	Lenders counsel	Subsidiary roles
UK	932.365	Social	Baker Mckenzie	Clifford Chance	-
Netherlands	929.1	Telecommunications		Clifford Chance	_
Germany	921.7814258	Power	Linklaters, Watson Farley & Williams	Clifford Chance	-
Japan	920.2171713	Power	Linklaters, Mori Hamada	Nishimura & Asahi	-
India	902.4151789	Petroleum	In House	Cyril Amarchand Mangaldas	_
Bangladesh	900	Power	Baker Mckenzie	Clifford Chance	-
Utd Arab Em	900	Power	Afridi & Angell, Clifford Chance, Herbert Smith Freehills, White & Case	Al-Tamimi & Co, Norton Rose Fulbright	-
Utd Arab Em	900	Water	In House	Norton Rose Fulbright	-
Netherlands	877.1	Power	Clifford Chance	Allen & Overy	_
El Salvador	877	Power	White & Case	Norton Rose Fulbright	-
United States	875	Power	King & Spalding, Latham & Watkins	Milbank	_
France	870.4	Telecommunications	Herbert Smith Freehills	Allen & Overy	-
UK	861.575	Telecommunications	CMS	Clifford Chance	-
United States	850	Power	Kirkland & Ellis		-
Canada	841.8152598	Power	Borden Ladner Gervais	Torys	_
India	820.7571206	Petroleum	Amicus Legal	Cyril Amarchand Mangaldas	-
Germany	811.125	Power	_	Hogan Lovells	_
Australia	809.3	Transportation	Herbert Smith Freehills	Ashurst	
Spain	802.854	Telecommunications	Herbert Smith Freehills	Latham & Watkins	_
Mexico	801.7	Transportation	Mijares, Angoitia, Cortes y Fuentes	Greenberg Traurig	-
Ghana	800	Oil & gas	Herbert Smith Freehills	Norton Rose Fulbright	-
United States	781	Petroleum	King & Spalding	Latham & Watkins	-
United States	770	Power	White & Case	Latham & Watkins	_
Utd Arab Em	770	Water	Clifford Chance, Hogan Lovells, White & Case	Norton Rose Fulbright	-
Colombia	765	Transportation	Jones Day, Posse, Herrera & Ruiz	Milbank	_
India	760	Oil & gas	Clifford Chance	Clifford Chance	-
United States	760	Oil & gas	Latham & Watkins, Vinson & Elkins	Jones Walker , Milbank	_
Kazakhstan	752	Transportation	White & Case	Aequitas, Allen & Overy	Gide Loyrette Nouel
United States	747.932	Power	King & Spalding	Norton Rose Fulbright	-
Portugal	745.9	Power	Bredin Prat	Linklaters	-
Mexico	724	Power	Linklaters	Latham & Watkins	-
Germany	718.38	Power	Clifford Chance	Freshfields Bruckhaus Deringer, Simpson Thacher & Bartlett	_
United States	716.938	Power	Sheppard, Mullin, Richter & Hampton	Milbank	_
			McCarthy Tetrault	Davies Ward Phillips & Vineberg	_
Canada	714.591968	Transportation	Torys		
Canada	714.591968 709.8557872			Blake Cassels & Graydon	-
	709.8557872		Torys Stikeman, Graham,	Blake Cassels & Graydon	-
Canada	709.8557872	Power	Torys Stikeman, Graham, Keeley & Spiegel Stocche Forbes	·	
Canada Brazil	709.8557872 700.5 700	Power Transportation	Torys Stikeman, Graham, Keeley & Spiegel Stocche Forbes Advogados Baker Mckenzie, Vinson	-	
Canada Brazil Colombia	709.8557872 700.5 700	Power Transportation Transportation Social	Torys Stikeman, Graham, Keeley & Spiegel Stocche Forbes Advogados Baker Mckenzie, Vinson & Elkins	- Clifford Chance	-
Canada Brazil Colombia United States	709.8557872 700.5 700 700 695.8696	Power Transportation Transportation Social	Torys Stikeman, Graham, Keeley & Spiegel Stocche Forbes Advogados Baker Mckenzie, Vinson & Elkins Allen & Overy	Clifford Chance	-
Canada Brazil Colombia United States Germany	709.8557872 700.5 700 700 695.8696 693.8	Power Transportation Transportation Social Social	Torys Stikeman, Graham, Keeley & Spiegel Stocche Forbes Advogados Baker Mckenzie, Vinson & Elkins Allen & Overy Clifford Chance	Clifford Chance Latham & Watkins CMS	-
Canada Brazil Colombia United States Germany Australia	709.8557872 700.5 700 700 695.8696 693.8 693.6	Power Transportation Transportation Social Social Oil & gas	Torys Stikeman, Graham, Keeley & Spiegel Stocche Forbes Advogados Baker Mckenzie, Vinson & Elkins Allen & Overy Clifford Chance King & Wood Mallesons	Clifford Chance Latham & Watkins CMS Allens	- - - -
Canada Brazil Colombia United States Germany Australia United States	709.8557872 700.5 700 700 695.8696 693.8 693.6 690.8	Power Transportation Transportation Social Social Oil & gas Power	Torys Stikeman, Graham, Keeley & Spiegel Stocche Forbes Advogados Baker Mckenzie, Vinson & Elkins Allen & Overy Clifford Chance King & Wood Mallesons Squire Patton Boggs	Clifford Chance Latham & Watkins CMS Allens	- - - -
Canada Brazil Colombia United States Germany Australia United States Australia	709.8557872 700.5 700 700 695.8696 693.8 693.6 690.8 690.2	Power Transportation Transportation Social Social Oil & gas Power Power	Torys Stikeman, Graham, Keeley & Spiegel Stocche Forbes Advogados Baker Mckenzie, Vinson & Elkins Allen & Overy Clifford Chance King & Wood Mallesons Squire Patton Boggs Allens Gibson Dunn &	Clifford Chance Latham & Watkins CMS Allens Simpson Thacher & Bartlett Greenberg Traurig,	- - - -
	Netherlands Germany Japan India Bangladesh Utd Arab Em Netherlands El Salvador United States France UK United States Canada India Germany Australia Spain Mexico Ghana United States Utd Arab Em Colombia India India United States Vid Arab Em Colombia India United States Portugal Mexico Germany	UK 932.365 Netherlands 929.1 Germany 921.7814258 Japan 920.2171713 India 902.4151789 Bangladesh 900 Utd Arab Em 900 Netherlands 877.1 El Salvador 877 United States 875 France 870.4 UK 861.575 United States 850 Canada 841.8152598 India 820.7571206 Germany 811.125 Australia 809.3 Spain 802.854 Mexico 801.7 Ghana 800 United States 781 United States 770 Utd Arab Em 770 Colombia 765 India 760 Kazakhstan 752 United States 745.9 Mexico 724 Germany 718.38 United States 716	Netherlands 929.1 Telecommunications 921.7814258 Power 921.7814258 Power 921.7814258 Power 920.2171713 Power 920.24151789 Petroleum 900 Power 900 Power 9000 Power 90000 Power 9000 Power 9	Netherlands 929.1 Telecommunications Germany 921.7814258 Power Linklaters, Watson Farley & Williams Japan 920.2171713 Power Linklaters, Mori Hamada & Matsumoto India 902.4151789 Petroleum In House Bangladesh 900 Power Baker Mckenzie Utd Arab Em 900 Water In House Verberd States 877 Power White & Case United States 878 Power Kird, and & Ellis United States 850 Power Kird, and & Ellis Canada 841.8152598 Power White & Egal United States 80.3 Transportation Herbert Smith Freehills Mexico 80.1.7 Transportation Herbert Smith Freehills Mexico 80.1.7 Transportation Herbert Smith Freehills United States 770 Power White & Case United States 850 Power Kird, and & Ellis Canada 841.8152598 Power Borden Ladner Gervais India 820.757,1206 Petroleum Amicus Legal Germany 811.125 Power — Australia 809.3 Transportation Herbert Smith Freehills Mexico 80.1.7 Transportation Herbert Smith Freehills Mexico 80.1.7 Transportation Herbert Smith Freehills United States 770 Power White & Case United States 770 Power White & Case Utd Arab Em 770 Water Clifford Chance, Hogan Lovelts, White & Case Utd Arab Em 770 Water Clifford Chance, Hogan Lovelts, White & Case Utd Arab Em 770 Water Clifford Chance, Hogan Lovelts, White & Case United States 760 Oil & gas Clifford Chance, Hogan Lovelts, White & Case United States 749.932 Power King & Spalding United States 749.932 Power King & Spalding Portugal 745.9 Power Bredin Prat Mexico 724 Power Linklaters Germany 718.38 Power Clifford Chance United States 716.938 Power Sheppard, Mullin, Richter & Hampton	UK 932.365 Social Baker Mckenzie Clifford Chance Netherlands 929.1 Telecommunications Clifford Chance Germany 921.7814258 Power Linklaters, Watson Farriey & Williams Clifford Chance Japan 920.217173 Power Linklaters, Mor Hamada & Mishimura & Asahi Bangladesh 900 Power Baker Mckenzie Clifford Chance Bangladesh 900 Power Artidi & Angell, Clifford Chance Clifford Chance Utd Arab Em 900 Water In House Norton Rose Fulbright Netherlands 877.1 Power Clifford Chance Allen & Overy El Salvador 877 Power King & Spading, Latham & Watkins Milbank France 870.4 Telecommunications Herbert Smith Freehilts Allen & Overy Ukited States 850 Power Kirkland & Ellis Cuifford Chance United States 850 Power Kirkland & Ellis Cuifford Chance United States 850 Power Kirkland &

Project Name	Country	Cost (US\$m)	Sector	Sponsors counsel	Lenders counsel	Subsidiary roles
Celeo Transportationmission Line Portfolio Project	Chile	682.4	Power	Morales & Besa	Garrigues, Milbank	-
Mankato Energy Center Acquisition Project	United States	680	Power	Orrick Herrington & Sutcliffe	Morgan Lewis & Bockius	
Al Kharsa Solar Power Project	Qatar	670	Power	Albuquerque & Associados, Allen & Overy, Bracewell	Clifford Chance, Dentons	DLA Piper
Chhattisgarh East-West Rail Corridor Project	India	657.1625017	Transportation	Shardul Amarchand Mangaldas & Co	Cyril Amarchand Mangaldas	_
Jubail Phase 3A Independent Water & Power Project	Saudi Arabia	650	Power	Covington & Burling	Hogan Lovells	-
Pinyon Pines I & Pinyon Pines II Projects (Alta Wind VII & Alta Wind IX)	United States	649.629	Power	Gibson Dunn & Crutcher	Simpson Thacher & Bartlett	-
Upper Trishuli 1 Hydro Power Plant Project	Nepal	647.4	Power	Gandhi & Associates, RIAA Barker Gillette	Shearman & Sterling	-
Busan Ring Road PPP Project (Mandeok- Centum)	South Korea	642.026	Transportation	Bae Kim & Lee	Shin & Kim	-
IEnova Solar Project	Mexico	641	Power	Gonzalez Calvillo SC, Latham & Watkins	Allen & Overy, Ritch Heather y Mueller SC	-
Nairobi Solar Refinancing Project	Spain	630.5941018	Power	Linklaters	Clifford Chance, Watson Farley & Williams	-
Bolt Energy Storage Portfolio Project	United States	620	Power	Latham & Watkins	Shearman & Sterling	_
Dongbukseon City Railroad Project	South Korea		Transportation	Lee & Ko	Kim & Chang	-
Vale Azul II Combined Cycle Gas-Fired Power Plant Project	Brazil	604.946		Machado Meyer Sendacz & Opice	-	-
CAKUA Gas Compression Project	Mexico	600.8559	Oil & gas	Allen & Overy	Clifford Chance, Garrigues	_
Race Bank Offshore Transportationmission Owner Project	United Kingdom	587.79	Power	Pinsent Masons, Watson Farley & Williams		-
Project Tidal	United Kingdom	586.7433	Social	Clifford Chance	CMS, Weilmuenster & Wigginton (IL)	-
Windpark Zeewolde Project	Netherlands	583.284	Power	Norton Rose Fulbright	Clifford Chance	-
Arkona-Becken Sudost Offshore Wind Farm Stake Sale [Project Explorer]	Germany	581.7950147		Skadden	CMS	-
Project Artico	Brazil	581	Oil & gas	Herbert Smith Freehills	White & Case	-
TransportationGrid Transportationmission Network Maintenance Project	Australia	575.5	Power	King & Wood Mallesons	Gilbert + Tobin	-
Red Vial 4 Road Refinancing Project	Peru	575	Transportation	Baker Mckenzie	Estudio Luis Echecopar Garcia, Clifford Chance	-
Ishinomaki Biomass Power Plant Project	Japan	575.1696454	Power	Nishimura & Asahi	Nagashima Ohno & Tsunematsu	_
Gulf Coast Ammonia Plant Project	United States	574.384	Industrial	Hogan Lovells, King & Spalding, Vinson & Elkins	White & Case	=
Armow Wind Project	Canada	574	Power	Osler	Torys	_
Maverick Creek Wind Project	United States	570.578	Power	Husch Blackwell Sanders	Norton Rose Fulbright	_
Swedegas and Weum Refinancing Project [Nordion]	Sweden	569.3851704	Petroleum	_	Weil & Associes	-
Arkona-Becken Sudost Offshore Wind Farm Stake Sale [Project Explorer]	Germany	569.3650662	Power	Skadden	CMS	-
GSRP Portfolio Solar Project	United States	565	Power	Allen & Overy, Skadden	Latham & Watkins	-
Gulf Wind RePowering Project	United States	564.212	Power	Orrick Herrington & Sutcliffe	Wilson Sonsini Goodrich & Rosati	-
Walney Offshore Transportationmission Asset Acquisition Project [Project Whale]	United Kingdom	560.43834	Power	Pinsent Masons, Watson Farley & Williams	Addleshaw Goddard	-
Project Pizzaro	Spain	544	Power	In House	Watson Farley & Williams , Jones Day	-
South Texas Midstream Project	United States	538.1	Oil & gas	Kirkland & Ellis	Simpson Thacher & Bartlett	_
Project Illini	United States	528	Telecommunications	White & Case	Shearman & Sterling	-
GuD Herne Project	Germany	527.7478	Power	White & Case	Clifford Chance	-
Telefonica Deutschland Cell Sites Acquisition Project	Germany	524	Telecommunications	CMS, Kummerlein, Simon & Partner	Linklaters	-
Empark Acquisition	Portugal	523.925	Transportation	Vinson & Elkins	Allen & Overy	-
Deurganck Dock Container Terminal Refinancing Project	Belgium		Transportation	Allen & Overy, Clifford Chance	Linklaters	-
Ruta 2 Mcal Jose F Estigarribia & Ruta 7 Dr Gaspar Rodriguez de France Expansion	Paraguay	520	Transportation	White & Case	Clifford Chance	-
Hills M2 Motorway Upgrade (Expansion) Project	Australia	509.416	Transportation	Herbert Smith Freehills	Allens	-
UTE Marlim Azul Project	Brazil	501.5225702	Power	Baker Mckenzie	White & Case	Machado Meyer Sendacz & Opice
Outlaw Wind Farm Acquisition Project	United States	500.5	Power	Morgan Lewis & Bockius	Milbank	-
Project Skyfall	UK	500	Oil & gas	Herbert Smith Freehills	-	-

FEATURES

AMERICAS LEGAL MOVERS AND SHAKERS

THIS YEAR'S NORTH AMERICAN LEGAL MOVES WERE DOMINATED BY THE MAJOR PLAYERS IN THE RENEWABLES SEGMENT OF PROJECT FINANCE, A SCENARIO THAT HAS BEEN REPEATED FOR THE PAST SEVERAL YEARS. BY ALISON HEALEY AND NIC STONE.

One of the most prolific hiring firms was Bracewell, adding three partners in power and renewables. The firm hired renewable energy attorney Danielle Varnell from Jones Day as a partner in its Washington power practice. Varnell has represented clients on mergers, acquisitions, and project development in the energy and infrastructure sectors, including more than 8GW of wind generation, 6GW of solar, and 4GW of nuclear assets.

Another key Washington addition was tax attorney Don Lonczak, who joined from Baker Botts as a partner. He advises on tax matters related to US and international mergers, acquisitions, and joint ventures, and has experience structuring renewable energy projects eligible for the production tax credit (PTC) or investment tax credit (ITC).

In New York, Bracewell hired Martha Kammoun as a partner in its power practice. Kammoun was co-general counsel at Starwood Energy and previously worked at O'Melveny & Myers and Dewey & LeBoeuf in New York as well as Abousleiman & Partners in Beirut. She focuses on advising domestic and international private equity funds, sponsors and financial institutions on acquisitions and finance with a particular focus on energy and infrastructure investments.

Bracewell lost energy partner Dale Smith to Mayer Brown in Houston. Smith represents energy industry clients in traditional oil and gas transactions and the monetisation of water assets. He joined Mayer Brown's corporate and securities practice, where he will continue to represent upstream and midstream clients in energy and energy finance.

Several firms made key hires for their Washington DC practices. Mayer Brown expanded its project finance and infrastructure capabilities with the arrival of Mark Williams, who joined the firm as a partner in the corporate and securities practice. Williams was previously at Morgan Lewis & Bockius. For nearly 30 years he advised on electricity and gas investments, financings, mergers, acquisitions, securities and restructuring transactions for clients in the electric power and natural gas industries.

Seattle, Washington-based Perkins Coie hired Edward Boling as a partner and Stacey Bosshardt as senior counsel in the firm's environment, energy and resources practice in Washington. Boling joined from the White House Council on Environmental Quality (CEQ), where he was the country's top National Environmental Policy Act (NEPA) lawyer and Bosshardt joined from the Department of Justice (DOJ) where she was an assistant chief in the environment and natural resources division and a litigator for the federal government. Both attorneys will focus on advising clients in renewable energy, resource development, transport and infrastructure.

Two attorneys from DLA Piper joined Covington this year, including one for the Washington office and two for the New York office. Andrea Chambers will be based in Washington while Joseph Tato and Charles Carroll joined in New York. Chambers represents clients in energy matters before the Federal Energy Regulation Commission (FERC). She focuses on rate-making and tariffs applicable to wholesale electric energy markets and natural gas pipelines transportation services, and the interconnection of renewables.

Tato and Carroll represent sponsors, equity investors, financial institutions and governments on energy and infrastructure development and financing. Tato focuses on power, oil and gas, LNG, renewables, water, and mining, while Carroll has spent more than 30 years working on the acquisition, disposition, financing, and restructuring of renewable and other energy and infrastructure projects.

The Clark Hill law firm, headquartered in Detroit, Michigan, named Steven Shparber as a member of its environment, energy, and natural resources practice group in Washington. Shparber provides counsel to new participants in wholesale power markets and advocates for new market opportunities on behalf of independent power producers and renewable energy trade groups. He was previously an energy lawyer for three years at Nelson Mullins Riley and Scarborough, where he was named partner in January. Prior to that he was counsel to PJM Interconnection and an adviser to the Federal Energy Regulatory Commission's (FERC's) Office of Administrative Law Judges.



One of the most prolific hiring firms was Bracewell, adding three partners in power and renewables On the West Coast, Sheppard Mullin Richter & Hampton hired Elliot Hinds as a partner in the corporate practice and as a member of the energy, infrastructure and project finance team in Los Angeles. Hinds was previously a partner at Crowell Moring and focuses on the energy sector, with emphasis on renewable energy, electric power and energy storage, and project agreements.

The year saw Ashurst open an office in Los Angeles to build on its capacity to deliver on major projects in the US. Partner Anna Hermelin will act as managing partner of the office, which will focus on project finance work in the transport and social infrastructure sectors.

Vinson & Elkins said its head of renewables and sustainable energy and infrastructure practices Kaam Sahely would relocate to Austin, Texas in a move is aimed at "enhancing the group's capabilities to serve clients in one of the nation's clean technology centers".

Winston & Strawn formed a new environmental, social, and governance (ESG) advisory team in an effort that brought together various geographies. Co-chaired by Houston-based partners Mike Blankenship and Eric Johnson, the team will help boards and management teams oversee the complete spectrum of ESG-related legal and business issues. The team will also include Chicago partners Mike Melbinger, Eleni Kouimelis, Cardelle Spangler and Rex Sessions, with of counsel Stephanie Sebor; New York partner Tara Greenberg; and London partners Peter Crowther and Anthony Riley.

In the infrastructure space, transportation and public-private partnership attorney Karen Hedlund has joined American Triple I Partners (ATI), a New York-based investor, developer and manager of infrastructure assets. Hedlund joined the firm as an operating adviser. She advised on the Gateway programme connecting New Jersey and New York, worked as chief counsel and deputy administrator of the Federal Railroad Administration (FRA), and as a partner at Nossaman. Earlier this year American Triple I Partners was selected as a 30% investor/equity owner of New York's JFK International Airport Terminals 6 and 7 redevelopment project.

Latin America's project finance legal landscape was again characterised by expansion of operations and an increased focus on growing industries, which even saw a number of new firms emerge in the region.

Perhaps the best example saw former lawyers at Chile's largest firm, Carey, launch an environment and natural resources-focused law firm called Lawgic Abogados. Felipe Meneses, Agustin Walker, and Sebastian del Campo are the founding partners. The firm will specialise in environmental law, water, energy, mining, agribusiness, corporate, and infrastructure and project development. Other hires include Andres Verdugo and Cristian Franz as senior

counsel, Constanza Pelayo as a specialist, and Gustavo Ramirez as head of the Canada desk. The firm's offices are in Santiago.

"The value that differentiates us is our delivery of a service that matches the quality and standard of a large law firm, but from a smaller platform that is closer to the client, and which allows us to offer counsel that is made-to-measure and with a flexibility of fees that makes us fit to the individual structure of each business," partner Agustin Walker said.

Chile is likely to require a lot of legal work in the coming years, as the country embarks on a path toward a new constitution in 2022.

Broquel Abogados opened as a new firm in Peru this year. The firm will operate across a range of practice areas, including infrastructure, public works, and public-private partnerships. The law firm comprises five partners: Jean Paul Calle Casusol, who heads the infrastructure, public works, and PPP practice as well as the regulation and compliance practice; Francisco Franco Pérez, who is in charge of the litigation and conflict solution practice and oversees the state contracts practice, advising clients on formulating project bids; Alberto Lastres Basurto, who heads the criminal law practice; Franco Velazco Imparato, who heads the energy, mining, and natural resources practice as well as the immigration and labour law practices; and Luis Eduardo Cuba Velaochaga, who focuses on labour law, mining, energy and natural resources, as well as arbitration and conflict resolution.

"We identify and evaluate our clients' risks or problems, define the objectives to be achieved and select the best strategies and tools for mitigation, offering counsel and defence, as well as post-process monitoring in order to achieve satisfactory results," the firm said in a statement.

In Argentina, Dentons launched a combination with local law firm Rattagan Macchiavello Arocena to be branded Dentons Rattagan Macchiavello Arocena. As a result of the move, Dentons now has a presence in 24 countries across the Latin American and Caribbean region. Rattagan Macchiavello Arocena is less than 15 years old and has operated across practices including corporate and M&A, energy, environment and natural resources, banking and finance, compliance and anti-corruption, government relations, infrastructure, labour law, litigation and dispute resolution, pharmaceuticals, and tax.

"Dentons' launch in Argentina enables us to meet client needs in another priority market for our clients," said Elliott Portnoy, global CEO of Dentons. So far in 2020, Dentons has launched Dentons Bingham Greenebaum and Dentons Cohen & Grigsby, the first step in forming a national law firm in the United States as part of Dentons' "Project Golden Spike". The firm has launched Dentons Kensington Swan in New Zealand, Dentons Lee in South Korea, and

Dentons Jiménez de Aréchaga in Uruguay, and opened an office in St Lucia.

Existing firms expanded their operations in the region. Spain-based law firm Cuatrecasas tapped Chilean lawyer Cristián Conejero Roos as a partner to lead the firm's new office in Santiago de Chile. Roos specialises in international arbitration. He was previously a partner at Cuatrecasas from 2007 to 2013, after working as counsel at the ICC International Court of Arbitration in Paris and as a lawyer at other leading international law firms such as Shearman & Sterling. He joined from Philippi Prietocarrizosa Ferrero DU & Uría, where he was a partner.

Greenberg Traurig expanded its Latin America Practice in the firm's Mexico City office with the addition of partner Rodrigo Orozco Waters and four associates. The team joins Greenberg Traurig from Orozco Waters Abogados, where Orozco Waters was the founder. He is joined in the move by Victor Felipe Callarisa Rivera, Alfonso Malagón Lozano, Edgar Fernando Orozco Ceballos, and José Manuel López Castro. The group has experience in public-private partnerships

and project financing, including in the infrastructure and energy sectors.

Peruvian natural resources and environmental-focused law firm Cilloniz Valincia & Eyzaguirre Abogados tapped Oscar Eyzaguirre as a new partner. Eyzaguirre joined from Credicorp Capital, where he worked as the regional general manager and legal director for Peru, and was secretary of the board of directors of Credicorp Capital Peru. He previously served as the legal and compliance manager for Deutsche Bank's Peruvian and Chilean offices and worked as senior associate for five years at Miranda & Amado alongside Fernando Valencia and Diego Cillóniz, the firm's founding partners.

Garrigues hired Adriana Espinosa to head the firm's infrastructure practice in Colombia as a partner. Espinosa joined Garrigues from Colombian firm Arrieta Mantilla & Asociados, where she headed the infrastructure practice as a partner. With the incorporation of Espinosa, Garrigues' office in Bogotá now has seven partners and more than 50 professionals covering the main areas of business law. The firm has offices in Brazil, Chile, Peru, Mexico and Colombia in Latin America.



New York skyline at night © Juliengrondin | Dreamstime.com

FEATURES

LAW FIRMS ADJUST TO NEW NORMAL

IT HAS BEEN 10 MONTHS SINCE THE SARS-COV2 VIRUS STARTED DOMINATING AND DISRUPTING LIVES AND BUSINESSES, INCLUDING LOCKDOWNS. DESPITE THE NO-FLIGHT MEASURES, LAW FIRMS IN ASIA-PACIFIC ARE ADAPTING WELL AND TRANSACTIONS ARE CONTINUING, ALTHOUGH AT SLOWER PACE. BY MINERVA LAU AND ALEXANDRA DOCKREAY.

Singapore

"I have been working from home and go into the office maybe once a week or even less frequently. It works pretty well for the type of work we do," Bill McCormack, Singapore-based partner at Shearman & Sterling, told PFI.

With a slight easing of movement restrictions in the city state, McCormack said that he would go to the office more often for collaboration with other members of the team. However, he would do client work from home.

Many clients are outside Singapore anyway. So the lawyers work from home by default and the firm has organised two separate teams for business services staff – Team A and Team B – which are allowed to go to the office on alternate weeks, under business continuity plan guidelines issued by Singapore's ministry of health and manpower and other government agencies.

That statement, however, is not his alone. Every lawyer, and every banker, spoken too was mostly at home, adjusting to the new normal as a result of the Covid-19 pandemic that has gripped the world since January this year. Singapore was among the first countries in East Asia that implemented a lockdown, with the government introducing circuit breaker (CB) measures to mitigate the spread of the SARS-COV2 virus. Many law firms have their regional offices in Singapore, and the no-flying restriction hampered the way business has been done in normal situations.

Clearly, the halt in travel in the region has greatly affected the way firms have been doing their business. One area heavily affected is business development. In Asia, despite the SARS-COV2 virus crisis, a personal connection means a lot more than the virtual discussions via zoom or video conference that have replaced face-to-face (F2F) meetings, and that has had an impact on negotiations.

"I used to travel every week, literally every week overseas last year. A lot of that was deal-related as it was a very busy year for us, but I also do a lot of client visits to keep connected and looking to support them developing new business. That stopped. So that whilst Zoom is the new norm, it is definitely not quite the same," said Martin David, principal and head of Asia Pacific Projects at Baker & McKenzie Wong & Leow.

This was echoed by lawyers spoken to stressing that it's still good to have face-to-face meetings. In Singapore, a group of up to five people, and soon up to eight, is allowed; and up to 100 people with masks and social distancing are allowed for social and religious gatherings, as well, as conferences and exhibitions. The project finance world, in general, has not been affected as much as some other practices.

"It is the nature of our work. We are often working on a large-scale energy or infrastructure project that may go on for years, and everyone recognises that we have to carry on despite the pandemic," said McCormack.

The Covid-19 and working from home environment has made law firms review their working conditions. Some have set up an adhoc team or task force to study the impact and implication of Covid-19 on changing requirements in the office as many are able to effectively work from home. Is there a need for bigger offices or should there be more space for collaboration meetings, and so on.

In addition, the task force will be looking at the fallout of Covid-19 measures on projects, both operating projects and those under construction. Clients are understood to be seeking advice on the implications of Covid-19 mitigation related measures and force majeure claims, not just arbitration work. Litigation lawyers are coming into the picture, working together with construction lawyers and project lawyers. Power purchase agreements (PPAs) impacted by Covid-19 are expected to be opened and renegotiated.

Some firms have big litigation teams and some have big capital markets teams. Firms with a big litigation presence will be more successful at the moment, said one lawyer. At the same time, sponsors are also looking for additional line of credit, said James Harris, a partner at Pinsent Mason. According to him, lenders such as the Asian Development Bank (ADB) and International Finance Corp (IFC) in existing deals are being approached by the sponsors for additional working capital that will cover operating costs and those under construction.

There was an observation of a number of big deals that are "aggressively priced" by firms

that sit outside the core group of five or six go-to regional projects firms, as they try to keep their business alive at a time when deals have definitely slowed. Price is their main differentiator given their lack of profile in the market.

The new norm has shown one thing. Deals can still be done without travel. Technology means that transactions can be done remotely. A good example is the development and financing of the 718MW natural gas-fired combined-cycle power plant of Reliance Power and JERA in Bangladesh. Baker & McKenzie, legal adviser to the sponsors, managed to finalise all commercial contracts, negotiated, agreed and signed the financing documents for what is a complex deal without being able to travel, said David. "We need to embrace the new norm and let's hope it forces deal execution to be more cost-effective and efficient," he said.

Law firms are gearing for the growing demand for LNG-to-power transactions, in addition to the massive interest in solar and wind energy projects. Shearman & Sterling, which has lost LNG lawyers Anthony Patten and Lachlan Clancy to King & Spalding, has brought in Angela Heywood Bible from Houston, and promoted Jean-Louis Neves Mandelli to partner.

Firms, such as S&S, B&M, K&S and others are forming partner-led teams that are dedicated to LNG transactions. And they have to work with power partners as LNG is replacing coal in most of new power plant projects being announced recently, excluding renewables – which are taking the region by storm.

The law firms spoken to so far have not indicated any downsizing and some, such as DLA Piper, are expanding. Vincent Seah, the firm's partner in its finance and projects practice, said he has hired four associates recently and is likely to hire one more. The firm has been busy with projects mainly in Bangladesh, Myanmar and Indonesia.

Australia

In a relatively remote corner of the world, Australia has isolated itself by cutting off international travel since March 2020, while state governments have also imposed bans on interstate travel for much of 2020. Those interstate restrictions have started to ease off in Q4 2020. Lawyers in Sydney have been able to go into their offices for most of the year, but Melbourne has experienced a protracted second lockdown and lawyers still cannot attend their offices in November.

Three of the law firms PFI spoke with said the shift in flexible working is irreversible and

going forth Australian projects lawyers will in general spend around half of the working week in the office. Client interactions are just starting to pick up again, though only with some clients, and there will be some Christmas period gatherings on a much smaller scale than previously. Regarding the shift to undertaking negotiations via video conferencing, according to Andrew Griffiths, Sydney-based partner at Herbert Smith Freehills, in some instances lawyers at deal tables pushed harder on certain positions, where normally they would not inperson. Therefore, deals are often taking longer to negotiate.

Another projects partner said that, while mostly deals progressed at the usual speed this year with fully virtual communications, sometimes financing deals took longer as lenders displayed more conservative approaches to risk allocation. They have concerns over new risks, such as the increasingly realistic prospect of negative base rates.

On fee structures, in the last few years it has become commonplace for clients to push for success-contingent pricing, based on bid outcomes. This persists. And, Pinsent Masons Melbourne-based infrastructure and energy finance partner Jeremy King said, "there has been downward pressure on fees for some time, and the move toward 'deconstructed' mandates, where clients unpack the various services lawyers provide and may appoint a different firm for each aspect".

"Both trends have accelerated in 2020. Firms are pursuing technology-based solutions to bring down the overall cost of legal services, such as new software platforms using artificial intelligence for large-scale due diligence," King said.

There has been a good deal of rates-based work coming from handling Covid-prompted additional advisory services on in-construction deals, which is positive for firms. Fee pricing is said to now be broadly similar to 2019. There was a shortlived period in the earlier days of Covid where some firms were making aggressively priced pitches, amid concerns that the pandemic would dry up workflow.

This year has not seen much partner hiring activity in Australia, compared with the last three to four years, with firms across the board either freezing new recruitment or at least limiting it as a pandemic response. Griffiths said: "2020 has been an odd year for not being able to plan ahead. For senior lawyers there has been a reasonably normal workload for 2020. It was probably more of a rough trot for more junior members of teams, given lots of advice for clients has been urgent and needed to be done by the senior level."

Sydney-based Allen & Overy partner and Australia head of debt and projects Adam Stapledon said: "2020 has been quite a busy year despite the turmoil. We have seen a bit of a decrease in greenfield, and an increase



On fee structures, in the last few years it has become commonplace for clients to push for successcontingent pricing in refinancings and brownfield deals, either expansions or secondary market transactions."

PFI also heard there has been more work this year advising on projects in the delivery phase.

PPP lawyers expect a relatively typical flow of deals into 2021, with Sydney Metro Western Sydney Airport and Sydney Metro West PPPs and the Frankston Hospital Redevelopment to be in procurement, the ongoing advisory on Inland Rail PPP, Transurban's unsolicited proposal for the M7 and the augmentation of Canberra Light Rail.

The governments' major push for building new infrastructure to stimulate economic recovery should provide a boost to both PPP and design and construction advisory work. With the ongoing glut of infrastructure projects, especially along the eastern seaboard, contractor capacity issues are likely to lead to a lot of active advisory in the project delivery and construction completion stages.

Energy teams continue to position for the global energy transition: their focus on renewables is growing. Lawyers are starting to look at what is next in the energy transition after solar and wind. This year, Australia has seen increased interest in batteries, and plenty of secondary market trades in renewables.

King said Pinsent Masons' finance and projects team is positioned for the emergence in Australia of waste-to-energy, energy storage (both battery and hydro), low emissions

technology (LET) and green hydrogen. For LET and green hydrogen the work is very early stage, often advising clients on establishing a presence in Australia and assessing the regulatory environment.

Stapledon said: "Allen & Overy set up an international working group for hydrogen, as we seek to stay at the forefront of this industry off the back of our strengths in renewables and LNG. We recently won a significant mandate in Australia."

Providing advice on connection risks into Australia's electricity networks has been important throughout the year. In another regulatory upheaval, the government has proposed reforms to the money-lending exemption for Australia's foreign investment laws during 2021. This will be a relevant hurdle for foreign entities lending to national security businesses, which include owners of critical electricity, port, water or gas assets, buildings occupied by defence or intelligence agencies, data centres hosting sensitive data and telecommunications networks.

Stapledon said: "We've already started some work for clients where we are looking at existing debt structures to see what FIRB approvals their lenders may need to obtain and planning ahead for refinancings. For some secured debt-raisings, the reforms will mean an additional workstream, with some delays and added costs."



The Singapore city skyline around Marina Bay, with the Esplanade Bridge in the foreground. © Matthew Weinel | Dreamstime.com

FEATURES

OFFSHORE WIND OFFERS A LEGAL PIPELINE

AS EUROPE PUSHES FOR MORE AMBITIOUS DECARBONISATION TARGETS, OFFSHORE WIND CONTINUES TO GROW AS AN ATTRACTIVE ASSET CLASS. AUCTIONS AND SUPPORT MECHANISMS THAT HAVE PROVEN SO SUCCESSFUL IN WESTERN EUROPE ARE NOW BEING ADOPTED IN NASCENT SECTORS FURTHER EAST, PROVIDING NEW OPPORTUNITIES FOR SEASONED LEGAL ADVISERS. BY PETER COLLINS AND JORDAN BINTCLIFFE.

For lawyers familiar with the offshore wind markets of Western Europe, their experience should prove to be a valuable asset to the East, as the Baltic States signal their strong intent to develop the wind potential of their northern coastlines.

Poland plans to support 5.9GW next year, Lithuania will auction 700MW in 2023 and another 700MW in 2025, and the governments of Estonia and Latvia have signed a memorandum of understanding (MoU) on the joint development of an up to 1GW wind farm. Though it is not all plain sailing for these new markets – an auction in Turkey for a 1.2GW scheme was recently scrapped and privately-procured projects in Estonia lay "dormant" – early excitement has been generated by the similarities of the support mechanisms to the tried-and-tested Western models.

A third and likely final version of Poland's offshore wind law is supposed to be passed before the end of the year, although it could slip to January. The law, described as comprehensive and timely by market actors, sets out an ambitious 10GW to be awarded under a contract for differences (CfD) structure.

"A CfD was always the main model from which Poland's framework was designed," said Piotr Ciolkowski, energy partner in CMS's Warsaw office. "The starting perception was that the UK system would be the most suitable for Poland."

Poland has run auctions successfully since 2017 – albeit with some minor technical hiccups to begin. The pace has picked up in the last two years, with a string of onshore wind and solar projects financed since May 2019. The 15-year tariff is structured essentially similar to a CfD, with guaranteed price floors providing certainty to sponsors and lenders.

An offshore wind "basket" has existed in past auctions, but for all intents and purposes its inclusion has been purely symbolic.

"The existing auction system is not fully adjusted to the needs of offshore projects," said Ciolkowski, as the larger, more expensive offshore projects will typically require longer tenors and offtake agreements, which the offshore wind law provides with 25-year contracts.

Europe's commercial banks are comfortable with the market and ready to get involved. The long tariff period is encouraging, but some concerns do remain. Currency denomination is obviously a factor, as the bid bond and tariff will be denominated in zloty and the question will be whether banks have enough capacity to lend in local currency.

"Offshore wind developers are really looking at Poland seriously, not only investing but investing early," said Thomas Schubert, a partner at Dentons' Berlin office. Indeed, Orsted, Equinor, RWE Renewables, EDPR and E.ON – among others – have all struck partnerships with local utilities or begun developing their own projects and many will be among the first in line to secure a CfD. A revised draft of the law released this summer increased the maximum capacity from 4.6GW to 5.9GW in the first phase in response to the high levels of interest.

Eastern Europe's offshore wind market hasn't yet lived up to investors' ambitions however.

"Offshore wind in Eastern Europe has had a lot of attention in the past five years, although this does not in all instances seem reflective of the traction it has gotten in real life," said Malte Jordan, global energy sector co-head and a partner in Watson Farley & Williams' corporate and M&A group based in Hamburg. WFW has instructions from developers in both Poland and Estonia.

"We are involved in the Eastern European offshore wind marking by using correspondent local firms," Jordan said. WFW's strategy is to bring its in-sector experience to bear while teaming up with native firms that bring experience of local law.

Despite showing promise, the industry doesn't yet have the draw to bring international law firms in of their own accord – although they are following their key clients into the



The ones deciding which law firm to use tend to be the international developers so typically the most efficient strategy is to team up with them

region, according to Christian Knuetel, partner in Hogan Lovells' Hamburg office says.

Hogan Lovells is working on an "opportunistic basis", Knuetel said, when it comes to entering Eastern Europe – as the team is already being kept busy on mandates in Taiwan, Germany, Vietnam and the US. He added that the firm's strategy is more about following existing clients into the markets where they want to be active.

"It's a question of who would be your clients if you enter a new market," Knuetel said. "If you enter a market and target local developers and make them your client, you'll typically see things will really speed up only when the international developers are moving in, buying stakes and partnering up with the local developers."

In Knuetel's view, the most efficient and promising strategy is to team up with large, international firms and to be on their radar when they do pull the trigger to enter a new geography, rather than having boots on the ground to build clients in a new country or region.

"In the end, the ones deciding which law firm to use tend to be the international developers, so typically the most efficient and promising strategy is to team up with them and to be on their radar when they need help on a project, rather than doing grassroots work in the country itself," he said.

Knuetel said Hogan Lovells is already active on a mandate in Poland with a large German company that has entered the market and partnered with a local developer, buying a stake in their developments. This is likely to be the primary route of entry for international firms – on a cooperative, rather than competitive basis.

This was the view of Sergej Butov, a partner at Sorainen, which advised Ignitis Grupe on the formation of its offshore wind partnership with industry heavyweights EDPR and Engie in Lithuania

"For some phases of the work, the presence of international practices will be very much needed to follow the good examples set by other countries," said Butov, who added that Engie and EDPR would be likely to bring in an international firm to partner with the local lawyers. "Since the first 700MW was announced, there has been lots of positive attention – we've received many calls and emails from European and UK firms. This is what's building the excitement for the sector," he said.

In terms of which market holds the most appeal, Poland appears to have the greatest draw. Although Latvia, Estonia and Lithuania are showing promise, "they don't have a comparable amount of funds and as much need to transition to green from brown like Poland does," according to Knuetel.

Poland has other elements in its favour too – including strong wind resources and good environmental and site conditions.

"Poland is also in a good position because its support industry is already very developed, with the exception of turbine manufacturing," said Ciolkowski, another area of advantage for the Polish market over its eastern neighbours.

Countries that are now beginning to pursue offshore wind could look at some of the historical events in the now more established markets. Offshore wind developers in Germany such as Siemens and RWE faced problems with their projects not being grid-connected in time to begin operations.

A lack of definition regarding grid operators' liabilities to connect the new offshore wind projects meant that in its early days Germany's offshore wind boom was close to finishing before it had even started. At the end of 2011, North Sea grid operator TenneT said it was becoming increasingly difficult to finance new grid connections and that it would not be able to connect new wind farms to the grid after 2015 under the then regulatory framework.

At one point, newly built offshore wind farms were consuming energy. Diesel generators powered some turbines to keep them moving and prevent corrosion in the salty sea air, local daily Der Spiegel reported in 2013. The turbines created more power than was needed to start them up, and with no grid connection it was not possible to dispose of the surplus.

Developing a stable regulatory framework is clearly needed in order to successfully foster a new industry. A clear pipeline of upcoming opportunities is also a help, Daisy East, a London-based partner in Watson Farley & Williams' energy group said:

"One of the hard-learnt lessons is that uncertainty around the regulatory environment makes it very difficult to build the volume of transactions that you need to bring costs down. That uncertainty can include changing regimes from one support system to another."

Auctions need to have low cost barriers to entry, to ensure enough companies take part and encourage competition – which in turn will reduce costs over the long-term.

"If the costs of getting to auction are prohibitive in the context of allocation risk, then there will be a reduced number of players taking part," East said. "So regulatory arrangements over how the grid connection, consenting, the mass spatial planning of wind, wake effects and so on will all work – these are all required in order to bring costs down and create a competitive market that isn't dominated by just four or five names."

Encouraging investment into local economies is a key consideration when developing a regulatory regime. In Germany's case, "there was an understanding right from the beginning that if you want to be seriously involved in offshore wind that means significantly upgrading local infrastructure such as factories, supply chains, and so on," said Jordan.

"In order to get the private sector to invest in these kinds of developments, there needs to be a reliable project pipeline and developers need to be sure of what kind of volumes are being tendered, for example. If you don't provide any certainty about tendered volumes, that's clearly a problem."

In some newer markets, such as Turkey, local lawyers feel they have the legal capabilities and experience to work on these projects – the missing link is technical expertise. Mustafa Durakoglu, partner at Turkish firm Cakmak, said the reasons a planned 1.2GW offshore wind auction was recently scrapped were the project's size and technical inexperience among local investors and advisers.

"The project was too big, and a lack of measurement and site data made it very difficult for potential bidders to identify the risks involved in a very limited period of time," he explained, adding that "any winning bidder would have to face a lot of 'firsts' from legal, regulatory and technical perspectives, which is a huge burden."

"Turkish lawyers have experience in designing successful frameworks, but the difficult part is to make thorough technical risk analysis."

On the legal side, there are plenty of international firms with a Turkish presence that will be both used to issues unique to offshore wind as well as to the Turkish YEKA and YEKDEM support systems – on which the planned offshore support is based. Indeed, some law firms are finding that much of their experience in existing markets is applicable to the newer Eastern European markets as they open up.

"How to do a turbine supply agreement or a balance of plant contract, or whatever the procurement strategy is, is about 90% the same across the world. And then the rest tends to be specialist, local stuff like earthquakes or typhoons in Taiwan, local content, fishing rights, or regulatory issues. So these are areas where you need to custom tailor rather than bluntly applying your experience earned in Western Europe," Knuetel said.

The contractors and suppliers involved tend to be the same all over the world, and they often have similar asks, concerns, and approaches as to how they do things – which add further familiarity to deals in new locales.

The auction procedures and CfD or CfDadjacent structures add another level of confidence, with trends pointing towards the mechanism becoming widely regarded as the fairest and most reliable for offshore wind.

"Over time, even more established markets will move to a CfD," opined Dentons' Thomas Schubert.

There is some pressure on firms' rates, but the biggest pressure is on caps or lump sums for certain phases of work.

"Generally speaking, we see firms bidding extremely aggressive caps which they know won't work, but it's still attractive for the client because it looks as though its better value," Knuetel said. "So the question is do you underprice intentionally from the outset in order to get the job and then manage the problem when you get in, or do you pursue the more straightforward approach with a realistic cost projection?"



Aerial view Dutch landscape with offshore wind turbines along coast. © T.w. Van Urk | Dreamstime.com

WHERE IS THE NEXT...DUBAI, SHANGHAI, SINGAPORE?

Landscapes and cityscapes have transformed over the years with the development of major infrastructure projects across many countries. The OECD estimates that meeting the UN Sustainable Development Goals (SDGs) will require "\$6.3T in annual investment immediately, increasing to "\$6.9T to meet the Paris Agreement goals.

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