Volume 3 • Issue 2

GETTING THE DEAL THROUGH

market intelligence

Project Finance

Phillip Fletcher and Aled Davies lead the global interview panel covering key economies, regional analysis and PPP

> LNG-to-power projects: is a perfect storm brewing?

The Americas • Asia-Pacific • Europe • Africa • Middle East Activity levels • Keynote deals • Industry sectors • 2016 trends

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Cover: iStock.com/MsLightBox

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Law Business Research

Published by

Law Business Research Ltd 87 Lancaster Road London, W11 1QQ, UK Tel: +44 20 3780 4104 Fax: +44 20 7229 6910 ©2016 Law Business Research Ltd ISSN: 2056-9025



of Law al Practice

Strategic Research Sponsor of the ABA Section of International Law

> Printed and distributed by Encompass Print Solutions Tel: 0844 2480 112

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Welcome to GTDT: Market Intelligence.

This is the second annual issue focusing on the global project finance markets.

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

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Getting the Deal Through London April 2016

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roject finance in 2015 played out against a backdrop of falling commodity prices. Despite the low prices, four out of the top 10 global project finance transactions were in the oil and gas and petrochemicals sectors (Corpus Christi LNG trains 1 and 2, Petro Rabigh II, Sabine Pass LNG train 5 financing and trains 1, 2, 3 and 4 refinancing, and Freeport LNG train 3). However, these were generally 'historic' projects, where sponsors were closing transactions that had started development in prior years and, in the case of the LNG projects, were structured as tolling arrangements and so were insulated from commodity price risk. However, it was inevitable that activity tailed off as 2015 progressed and financial investment decisions (FIDs) for a number of oil and gas or mining projects were deferred or permanently cancelled as continuing low prices forced sponsors to slash spending on capex programmes. This is reflected by debt financing for oil and gas projects falling in 2015 by more than 14 per cent, and this followed a year-on-year fall of 28 per cent in 2014 (note: unless otherwise stated, financial data in this overview compiled by IJGlobal: '2015 Full Year League Tables Analysis'). Having said that, there are a number of large LNG and petrochemical projects that remain in the planning or development stages in East Africa, Papua New Guinea, Australia, Indonesia and North America, which, although possibly subject to deferral, remain likely to come to market in the forthcoming years.

Taken as a whole, although the number of project finance deals in 2015 was up from the previous year by more than 10 per cent to 859, total project finance debt raised in 2015 only increased to US\$309.1 billion from US\$308.4 billion in 2014. The increased deal count can be explained by the healthy activity in the general infrastructure (transport in particular) and renewable energy generation sectors where, on a worldwide basis, total debt of US\$73 billion (as compared to US\$50 billion in 2014) was raised for over 430 renewables projects and about US\$82 billion (as compared to US\$52 billion in 2014) for 124 transport projects. As expected in view of the low commodity prices, total project finance debt raised in the mining sector fell from about US\$31.5 billion in 2014 to about US\$14 billion in 2015. Although debt volume also fell in the telecoms sector from about US\$9 billion to US\$3 billion, there were increases in the social and defence sectors (from about US\$11.5 billion in 2014 to about US\$19 billion in 2015) and the water project sector (from about US\$3 billion in 2014 to about US\$6.4 billion in 2015).

Interestingly, competition and advances in technology in the renewables sector in 2015 led to a noticeable reduction in the pricing for renewable energy projects, especially solar projects and projects in emerging markets. Extremely competitive tariffs were seen on projects in South Africa, Dubai and India. A number of significant financings were sought in 2015 for large offshore wind farms in Europe, including Galloper in the UK and Gode 1 in Germany, and the number of participating lenders increased to support a core group of experienced lenders in the offshore wind project sector.

In 2015 the UK government rolled out plans for nuclear new-build power plants, and optimists look forward to groundbreaking activity in the near future. However, it was not a good year for traditional combined cycle gas turbine (CCGT) plants, other than those fortunate enough to be able to source shale gas at low prices in certain US markets. Looking at the conventional power sector as a whole, although the number of projects worldwide remained the same as for 2014 at 107, total debt raised declined more than 25 per cent.

A key aspect of activity in 2015 was that liquidity in the bank market provided sponsors with the opportunity to refinance projects at lower pricing and on more favourable terms and conditions. The Ijmuiden sea-lock PPP project in the Netherlands is one such example of a project that maintained the downward movement in pricing stemming from the re-emergence of longterm commercial bank debt in the project finance sector.

NORTH AMERICA AND THE CARIBBEAN

Project financing in North America remained active with total debt financing in the region rising from about US\$85 billion in 2014 to about US\$98 billion in 2015. However, there was a shift in activity from the huge LNG export projects that were financed in 2014 and the first half of 2015 to renewables and transport projects, as well as new gas-fired power projects capitalising on access to new shale gas production. This resulted in total debt raised for oil and gas projects in North America in 2015 dropping by a fifth from 2014 to just over US\$30 billion.

The three LNG export projects that reached financial close in 2015 were structured on a 'tolling basis', similar to the precedent deals of 2014. Corpus Christi LNG is noteworthy for being the first greenfield LNG export terminal to be financed in the US, and also for the absence of any export

"Four out of the top 10 global project finance transactions were in the oil and gas and petrochemicals sectors." credit agency (ECA) support. Although the first wave of LNG export project financings has now been completed, a number of greenfield and expansion projects are still progressing albeit on a more cautionary basis as markets for the purchase of LNG remain a challenge and low pricing affects overall project economics. We are also likely to witness increased exports of LPG and ethane (both as a by-product of shale gas) in 2016 leading to the creation of new markets, potentially in the Asia-Pacific region in particular. The widening of the Panama Canal will spur on this development.

Increased shale gas production, and the consequent drop in natural gas pricing, opened the door in the US to more downstream project activity in both the chemical and more importantly power generation sectors. Examples of some of the gas-fired power projects that closed in 2015 are the US\$730 million Salem Harbor 700MW gas-fired power project and the Carrol County gas-fired power project. Salem Harbor was unique as being the first merchant power project financing to access the new ISO New England capacity award regime. Another example of a project whose financing was structured based on capacity revenues generated was the Bear Swamp Pumped Storage Facility financing in Massachusetts. Therefore, a trend seen in 2015 is that of commercial banks financing quasimerchant power projects.

North America witnessed its strongest ever year in 2015 for renewables projects, ascending one place to become the second biggest sector, with 153 deals closed totaling US\$47.5 billion (note: data compiled by IJGlobal: 'Data Analysis: US Renewables Financing Surges', published 21 December 2015). Over two-thirds of the projects comprised solar and onshore wind. The US\$290 million project financing of the 30MW Block Island offshore wind farm was noteworthy as it was the first offshore wind farm in the US to achieve financial closure. Development on the only other offshore wind project, Cape Wind off the coast of Massachusetts, did not proceed in the face of political opposition. Future prospects for this sector may depend in part on whether the

"A trend seen in 2015 is that of commercial banks financing quasi-merchant power projects." US Congress continues to afford it tax-incentive benefits.

In the petrochemical sector, a landmark project was the development of a world-scale US\$1 billion methanol plant and associated dimethyl ether production facility in Trinidad and Tobago, and similar large-scale methanol production projects remain under development in the US; these have been taking advantage of low feed-stock pricing.

A notable project in the telecoms sector was the US\$500 million project funding for Seaborn Network's Seabras-1, the first direct point-topoint subsea fibre-optic cable system between New York and Brazil. It was also significant for being the first ever ECA-backed project financing of a subsea cable system. RAM Telecom International and NEC closed a financing for a cable project connecting with the SEA-US submarine cable project, a 15,000km submarine cable directly connecting Indonesia with the US. In satellites, there was the US\$525 million ECA financing for the ViaSat-2 high-capacity Ka-band communications satellite to be manufactured by Boeing and launched by SpaceX, and anticipated to be the highest-capacity satellite in the world.

As in the case of Europe, the transport sector in North America grew significantly in 2015, moving up two places from 2014 to become the third-largest sector. An example of a notable project within this sector was the US\$5.6 billion ITR concession company acquisition. It was also an important year in particular for PPPs in the US in that they facilitated the implementation of certain key transport infrastructure projects. The project to replace the Central Terminal Building at New York's LaGuardia Airport was noteworthy for being the first time that the PPP model was adopted in the aviation sector in the US. Examples of other significant infrastructure PPP projects in the US in 2015 were the US\$2.1 billion Elizabeth River Tunnels project between Norfolk and Portsmouth in Virginia, Florida's largest transportation project the 'I-4 Ultimate' (widening and reconstructing 21 miles of highway running through Orlando), and the Commonwealth's I-66 Outside the Beltway project (building of Virginia's additional express lanes along 21 miles of Interstate 66). Although the Fixing America's Surface Transportation (FAST) Act, which was passed on 4 December 2015, is a welcome development in the infrastructure space in that it sets aside US\$305 billion in transportation funding for the next five years, this amount should be seen in the context of the big US infrastructure backlog.

Canadian infrastructure projects have generally been moving away from social infrastructure (eg, hospital and school PPPs) to transportation projects such as highway and light rail transport (LRT) PPPs. In order to raise more financing for the increased costs of these largescale projects, publicly listed bond financings are becoming noticeably more prevalent in Canada than private placements since the former attract more investors than the latter. Examples of publicly listed bond financings being used to finance transportation infrastructure projects in Canada in 2015 are the C\$5.3 billion Eglinton Crosstown LRT project in Toronto and the C\$4 billion New Bridge (availability-based payment) PPP project for the St Lawrence Corridor.

LATIN AMERICA

After a drop in 2013, project finance debt volume in Latin America increased for the second year in a row from about US\$34 billion in 2014 to about US\$37 billion in 2015. Deal count also rose by 12 per cent to 112 in 2015. There was generally less activity in the power sector save for renewable energy projects. One highlight was the US\$196.7 million Conejo 122MW solar project in Chile financed only by commercial lenders; this was notable in that traditionally renewables projects in Latin America, in particular those with merchant elements, usually feature the participation of multilaterals. Further examples of renewables projects in the region were the US\$472 million Chapada 1 and 2 wind local project bond deals in Brazil and the US\$205.5 million Tres Mesas wind farm Overseas Private Investment Corporation financing in Mexico. Separately, a US\$197.6 million financing was obtained for the Charrua Transmission Line project in Chile and a US\$2.1 billion financing for the US\$6.2 billion CSP Ceara steel mill project in Brazil.

In addition, a number of infrastructure deals were successfully closed in Latin America, in particular in the transport sector. For example, an US\$847 debt financing was raised for the El Dorado Airport in Columbia and a US\$3 billion construction loan was put in place for the New International Airport of Mexico City. Peru was also successful in putting in place a US\$258 million financing for the Lima Metro Line 1 project and the US\$5.836 billion Lima Metro Line 2 project. For satellites, Hispasat closed a \leq 140 million ECA financing for Amazonas 5 to be manufactured by Space Systems Loral, and to provide coverage over Latin America and Brazil.

Notwithstanding the allegations of corruption affecting the major construction and infrastructure companies in Brazil and the fall in commodity prices, the oil and gas sector saw some activity with 16 international banks providing debt finance, with insurance cover from four ECAs, for the Cidade de Saquarema FPSO in Brazil. However, a lot of the story in Brazil revolved around restructuring of various offshore project assets. Fundamental regulatory changes to the energy industry in Mexico in 2015, including the oil and gas sector, should lead to new opportunities for the development of new oil and gas blocks, which were awarded to international consortia. Round One, once completed in its entirety, will have licensed a huge tract of land for exploration

"Notable infrastructure projects included the US\$3.6 billion Thames Tideway tunnel project."

and production activities and so there is scope for major project development in the near future.

EMEA

Europe

Like North America, project finance activity in Europe remained active, with total project finance debt rising from US\$80 billion in 2014 to about US\$92 billion in 2015. This activity was principally focused on the transport sector, which increased significantly to become the largest sector in terms of project finance debt raised, with renewables (mainly offshore wind farms) following next. Conventional power was a small shadow of its 2014 self.

Notable infrastructure projects included the US\$3.6 billion Thames Tideway tunnel project, which successfully incorporated aspects of the UK water utility framework in conjunction with the public-private partnership model. The Netherlands saw the Ijmuiden sea lock PPP project, noteworthy for being the biggest lock PPP project to date to achieve financial close. France saw the €900 million Calais Port project financed with the longest dated project bonds witnessed so far in the European infrastructure market. Other standout infrastructure deals were the \in 1.6 billion Milan Metro 5 PPP project, which was financed by a combination of institutional investors and commercial banks, the US\$3.8 billion Autoroutes Paris-Rhin-Rhone (APRR) refinancing and the US\$4.65 billion acquisition of Fortum's Swedish regulated power grid by Borealis and Swedish pension funds. The latter brownfield project was notable for obtaining one of the cheapest infrastructure loans of 2015 in Europe (sourced from as many as 19 banks), for its high leverage in a very competitive infrastructure M&A market and for most of the debt being denominated in Swedish kronor rather than in one of the standard global currencies. Turkey also saw some significant infrastructure sector financings as set out below.

Offshore wind dominated activity in the renewable sector in Europe. The 336MW Galloper project was the first large-scale UK offshore wind farm to be financed in 2015 (by £1.37 billion of project debt) and was quickly followed by two more UK wind farms adopting the same scheme. Galloper was also the first UK project to be backed by the €315 billion Investment Plan for Europe.

DONG Energy's 330MW Gode 1 offshore wind farm in the German North Sea represented Europe's first offshore wind project to be financed with a project bond despite the traditional reluctance of institutional investors to finance greenfield offshore wind projects, while the €540 million Baltic 2 project was the first offshore wind holdco financing in Germany. Further examples of offshore wind projects in Europe were the £2.5 billion Beatrice offshore wind farm in the UK and the Hohe See offshore wind farm in Germany. The fact that bond and institutional investors are now willing to finance these large offshore wind structures suggests that the construction risks have become more palatable, as an increasing number of these projects have been successfully completed. Operating issues, however, are beginning to appear which may make bond and institutional investors become more cautious.

Turkey is worth singling out for special attention in view of the number and variety of project financings in the country in 2015, which included energy and infrastructure sector projects. The €1.2 billion Bilkent hospital (availabilitybased) PPP is the largest hospital in Turkey's pipeline of hospital PPPs and was a departure from the Turkish project finance market norm in that €890 million financing was provided solely by commercial lenders who were predominantly local banks. Other noteworthy infrastructure projects were the US\$6.5 billion Istanbul Third Airport PPP project, the €1.2 billion Etlik hospital project and the US\$6.4 billion Gebze-Izmir toll road Phase III PPP project. An example of a significant energy project in Turkey in 2015 is the €970 million Efeler 123MW geothermal project, which involved the European Bank for Reconstruction and Development and is the biggest stand-alone geothermal project in Turkey to date.

The bond market was also tapped as a source of financing in Europe, particularly in the infrastructure sector. In addition to the bond issuances for the Milan Metro 5 PPP project and the Calais Port project referred to above, Ireland's first project bond was used to finance the ϵ_{248} million M11 road PPP project. The project bond market in Spain, for its part, was initiated through the US\$200 million refinancing of the A66 Sociedad Concessionaria Autovia el la Plata deal. The bond markets also feature in the ϵ_{550} million 10-year issuance for Transport et Infrastructures Gaz France and the US\$508 million Gwynt y Mor offshore transmission owner (OFTO) bond in the wilds of Wales.

Middle East and Africa

After a decline in 2014, project finance debt volume and deal count rose in both the Middle East and North Africa (MENA) and Sub-Saharan Africa in 2015. Total debt volume rose from about US\$21 billion to about US\$24 billion in MENA and from about US\$4.5 billion to US\$7.2 billion in Sub-Saharan Africa. Nevertheless, it is evident that continuing low oil prices have had a detrimental impact on the budgets of the Gulf Cooperation Council governments and in some instances this has acted as a stimulus in 2015 to certain Gulf states passing PPP laws and developing PPP frameworks to assist with the funding of future infrastructure projects.

Despite the falling oil prices, we saw some activity in the oil and gas sector. Petrochemical deals included the US\$8.1 billion Petro Rabigh Phase 2 Expansion (comprising a 17-year project financing totaling US\$5.2 billion) and the US\$1.2 billion Chevron/Nigeria National Petroleum Corporation joint venture financing (believed to be the first international joint venture oil financing in Nigeria for both onshore and offshore oil fields). Another noteworthy project was the US\$2.1 billion air separation unit (ASU) project for Aramco's Jazan refinery (under a 20-year build own operate concession) significant for being the biggest industrial gas project and one of the largest 100 per cent Islamic project financings to date. However, plans for a number of potential projects such as the Shell QP joint venture to develop the Al Kharaana petrochemical plant were scrapped.

Setting aside petrochemical projects, the majority of the projects in MENA comprised power and water plants. Power plant developments included the US\$1.8 billion Hassyan 1,200MW coal-fired power project, which was the first coalfired IPP in the Gulf region, using supercritical and ultra-supercritical technology. Other IPPs and IWPs in the Gulf region were the US\$250 million Qurayyat IWP and the US\$620 million Salalah 2 IPP, both in Oman, Salalah 2 being the first IPP to close in Oman since the financial crisis without having any ECA cover. There remains ongoing activity in Oman and a number of new potential power and desalination projects in Kuwait.

Further afield in Africa, the Maamba Colleries 300MW coal fired IPP in Zambia raised US\$830 million of commercial bank financing with support from Sinosure. Sinosure again supported the lenders providing US\$515 million of project financing for a fluidised bed, coal-fired mine mouth power plant in Zambia, which is intended to supply 20 years of power to the Zambia Electricity Supply Corporation. The successful US\$900 million financing of the Azura IPP in Nigeria is expected to be the first of many IPPs in the country.

Renewables projects in the region covered both wind and solar technology. Examples of projects under South Africa's Renewable Energy Procurement Programme (REPP) were Mainstream's 140MW Khobab wind farm project in the Northern Cape and the Ilanga1 100MW parabolic trough plant with a thermal energy storage system (the latter being one of the first

concentrated solar power projects under the REPP and forming part of the 1,100MW Karoshoek Solar Thermal Park). A US\$260 million financing was closed for a 200MW solar scheme in Dubai; we also saw the development of the US\$2 billion Noor 2 and 3 350MW solar projects and the US\$180 million Khalladi 120MW wind farm project, in each case in Morocco, and the financing for the US\$170 million Shams Ma'an solar PV project in Jordan. Egypt also became active in promoting new projects in the renewable sector so, coupled with potential oil and gas sector projects to be developed off the back of significant oil and gas reserve finds, we can look and see if Egypt will now perhaps witness the greatest level of project development since the pyramids!

In the satellite industry, O3B Networks secured US\$460 million in incremental financing, including ECA support, to increase its medium earth orbit constellation from 12 to 20 satellites, with satellites to be manufactured by Thales Alenia Space and launched through Arianespace.

Refinancings were a significant work stream for lenders in 2015 as sponsors in the EMEA took advantage of falling loan margins. Notable examples are the refinancings for the BTC oil pipeline project from Azerbaijan to Turkey and the Dolphin gas pipeline project in the UAE.

ASIA PACIFIC

Although Asia Pacific saw project finance debt volume in 2015 decline for the second year in a row from about US\$82 billion in 2014 to about US\$52 billion in 2015, it was still an interesting year in Asia Pacific as a number of groundbreaking projects were implemented in the region. Pride of place goes to the US\$4.4 billion financing of Mongolia's Oyu Tolgoi copper and gold project for which the financing documents were finally signed in December 2015 despite the huge plunge in commodity prices. It is one of the world's largest mining projects ever (having the potential to account for up to one-third of Mongolia's GDP) with approximately 13 commercial lenders, three ECAs and two multilateral banks participating. The Multilateral Investment Guarantee Agency also stepped in to provide political risk insurance for the commercial banks. The recent signing and scheduled closing in early 2016 may now open the door to more activity in the project finance sector in Mongolia as they strive to implement new power generation and infrastructure projects. The project also demonstrates that if sponsors have confidence in their project and have a group of supportive lenders, then mega-projects can still be implemented even amidst the current low commodity prices. The project participants are anticipating that copper prices are likely to rebound before project completion (full production is expected to be achieved in 2021).

Although there was a cooling-off in activity in the oil and gas sector in the region, with very few debt financings reaching financial close, the

"Australia is worth highlighting as a market where deal flow in 2015 remained healthy across all sectors."

power sector remained active. Noteworthy power projects included Malaysia's Jimah East (Malaysia 3B) 2,000MW coal-fired IPP, where US\$2.14 billion of debt was raised by a sukuk bond issuance. The Philippines, which essentially has a merchant power market, also saw a number of new power plants being developed after many years of limited activity in the project finance sector. The US\$1.22 billion San Buenaventura 455MW power project stands out for being the country's first supercritical coal-fired power plant and for raising the largest all-peso financing in the Philippines to date. Also in the Philippines, December 2015 witnessed the successful closing for the US\$400 million debt financing for a 300MW coal-fired power project in Bataan province, while the onshore bank tranche of the approximately US\$1 billion Kauswagan 4 x 135MW coal-fired power project in Mindanao, Lanao del Norte province closed in September 2015, with closing of the offshore tranche in January 2016. In Myanmar, the successful bidder was appointed for the US\$300 million Myingyan 225MW gas-fired IPP (to be implemented on a build-operate-transfer basis), the country's first internationally competitive tendered power project under a 22-year PPA and will set a benchmark for future projects in the country. Although Myanmar has generated considerable excitement in terms of prospects, the challenge in realising such opportunities remains as a suitable framework for implementing projects in a timely and bankable manner is developed.

The transport sector saw signs of activity in 2015 but, unlike North America and Europe, there was no marked increase in deal count or financing volume. Examples of such transport sector activity were the Sydney Light Rail PPP project, the Toowoomba Second Range Crossing (availability based) PPP project in Queensland and the US\$740 million Mactan Cebu International Airport PPP project in the Philippines, the first successful airport PPP in the Philippines.

Australia is worth highlighting as a market where deal flow in 2015 remained healthy across all sectors. However, the nature of the deals tended towards M&A, refinancings and smaller greenfield projects. The largest transaction in the Australian "Project finance sponsors and lenders can look forward to continued activity adjusting to the ever-changing shift in economic and political dynamics that impact the development and financing of massive projects."

> market in 2015 was the US\$7.4 billion sale of New South Wales electricity distribution company TransGrid to the Spark Infrastructure consortium.

> However, the project bond market is still finding its way in the Asian region. Notable exceptions were the US\$2.14 billion project sukuk bond issue for the Jimah East IPP in Malaysia and three bond issues for projects in India (onshore issuances for CLP Wind Farms and the SP Jammu Udhampur Highway annuity based payment project, and an offshore issuance for Delhi International Airport Ltd).

PREDICTIONS FOR 2016

Project finance has proved itself a resilient way to fund essential infrastructure and commodity projects and there is no reason to believe that this will not remain the case despite bank regulatory changes dampening the appetite of lenders to provide long-term finance.

We would expect the worldwide slowdown in the number of project-financed oil and gas deals, especially LNG, to continue in 2016 as the current state of oil prices, which appear as if they will remain low for the foreseeable future, force oil companies to cut back on capex spending and delay the declaration of FIDs for projects. Low commodity prices may put stress on commodity based projects and could lead to a number of restructurings in 2016. The current market will certainly contribute to financiers being more cautious about lending to such projects. The caution in the debt markets, coupled with the fact that capital expenditure for these projects has begun to be constrained, should lead to a slowdown in new deals. However, as has been the case in past cycles, in the face of falling deal count, engineering, procurement and construction contractors will start to face stiffer competition to win deals, reducing capex costs for sponsors.

Experience demonstrates that commodity prices will inevitably rebound – and the question is when. All these factors combined may result in the development of new and innovative features to address the cyclical movement of commodity prices and otherwise address sponsor needs for debt raising. Despite the challenges, the project finance players are likely to be dynamic in their response to an ever-changing marketplace. Their involvement is likely to extend beyond the narrow scope of greenfield project finance to advising on (and financing) acquisitions of existing infrastructure or commodity projects or in providing additional finance (or face restructuring) of others that have cashflow constraints.

We would also anticipate the trend in asset sales to continue in 2016, potentially leading to terrific opportunities for those with access to capital (including funds) to acquire assets either in auctions or from distressed sellers. The US and Europe have been active and indications are that good acquisition opportunities now present themselves in Latin America and Asia. However, there may well be a price gap on many of these deals between sellers' expectations and buyers' projections of future value. The project structures of highly leveraged shale gas producers in North America will likely come under increasing stress, and we would therefore expect further insolvencies in this sector.

Activity in the North American market is likely to remain with a steady flow of infrastructure and renewable energy projects as well as projects capitalising on shale gas production. Across the pond, the Juncker plan's European Fund for Strategic Investments (EFSI) vehicle could potentially lead to more activity in Europe.

The pipeline for power projects in the Asia Pacific region will likely continue to be strong with bidding for a variety of IPPs with novel features currently taking place.

One significant development which will impact the power sector (in particular in Asia and parts of EMEA) arises from the agreement in November 2015 upon the OECD new rules on official export credit support for coal-fired power plants by the participants to the Arrangement on Officially Supported Export Credits. Under the new rules, which come into effect on 1 January 2017, financing will still be allowed for (i) 'ultra-supercritical' plants irrespective of their size; (ii) up to mediumsize (ie, up to 500MW) 'super-critical' plants in countries facing energy poverty challenges; and (iii) smaller (ie, less than 300MW) 'sub-critical' plants in poorer, developing countries. This development (as intended) will curtail coal-fired power plant development. After the recent COP21 agreement, governments also are under pressure to reduce carbon emissions so it is inevitable that there will be a shift in the type of power generation plants being developed in response. This combination of factors means there is potential to see further substitution of gas for coal and hence an increase in LNG-to-power projects worldwide; this may create a perfect storm as LNG producers seek to create new markets for their product as a result of the expected growth in worldwide LNG supplies from the US, Australia and East Africa. Many banks are also reviewing policies associated with financing coal-related projects (both mining and power generation). An interesting feature globally has been the increased presence of Chinese companies and financiers, who may not be bound by such policies, in implementing and funding coal-fired power projects.

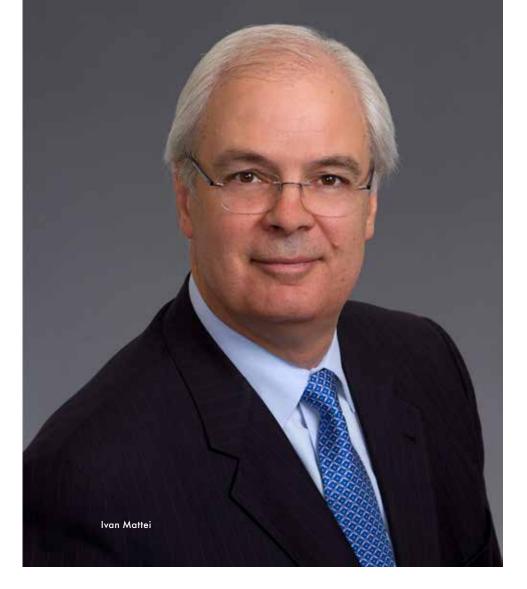
In the satellite sector, there are a number of low-earth orbiting 'smallsat' satellite constellations that, considering the capital expenditures required for these projects, may seek export credit financing to complement other financing sources, including the approximately 700-satellite constellation from OneWeb, SpaceX's announced 4,000 microsat constellation, UrtheCasts 16-satellite imaging constellation and others. Upcoming project financings of geostationary satellites have also been reported: Azercosmos of Azerbaijan, Pasifik Satelit Nusantara of Indonesia and others are reportedly teed up for this year.

There are indications that the US dollar is strengthening. A sustained strong US dollar may well expedite the process of Chinese contractors becoming significant players on the worldwide EPC stage, as well as give Japanese and Korean contractors a competitive advantage over their US rivals. A strong US dollar could also potentially offset some of the effects which falling prices have been having on energy exporters and make capital goods exports from Asia more competitive.

Although the deal flow for renewables will also likely continue in 2016, governments such as that of the UK are beginning to reduce their support for renewables projects and there seems to be a slowdown in government financing using private finance initiative and PPP as a means of implementing and financing major projects. Proposed changes to net metering policies in the US could potentially have a negative impact on solar projects in certain states, but recently agreed that five-year extensions of tax credits for solar and wind projects may help them to remain competitive with other forms of energy projects in the US for longer. The renewables sector may also likely be adversely affected by the drop in thermal energy prices. The renewables sector worldwide, towards the end of 2015, faced a significant development when Spain's largest renewables energy company, Abengoa SA, filed for preliminary protection from creditors on 25 November. Whether or not wide-ranging cuts to renewable power support in Spain in 2015 were a major contributing factor is open to debate. The outcome, however, is that there is now uncertainty over approximately 250 of Abengoa SA's projects spread throughout 50 countries; existing project financings face problems but this could result in distressed sales of many of its solar and wind farm assets in 2016, depending on the outcome at the end of the pre-insolvency protection period.

Iran also has the potential to be a market for project finance due to its huge energy resources and infrastructure requirements, but the legal and regulatory framework may need further development and relaxation in the sanctions regime must of course become settled. Another potential market to look out for is Mexico, where the Fourth Tender (focusing on unconventional resources in the upstream energy sector) is scheduled to take place towards the end of 2016. This in turn could lead to a rapid increase in project development in the midstream and power sectors which, along with ongoing growth in wind and solar renewables, would result in in Mexico becoming one of the major energy players in Latin America.

So project finance sponsors and lenders, and the legal advisers featured in this publication, can look forward to continued activity adjusting to the ever-changing shift in economic and political dynamics that impact the development and financing of massive projects that are essential to meet social needs and the global economy's demand for commodities.



AN OVERVIEW OF US PPP ACTIVITY

Ivan Mattei is a corporate partner and co-head of Debevoise & Plimpton's global infrastructure and project finance group. He has more than 25 years of experience in project finance, joint ventures and M&A, with a particular focus on infrastructure and energy projects and PPP transactions. Mr Mattei is ranked as one of the country's leading lawyers in project finance and public-private partnerships by Chambers Global (2015). More generally, Mr Mattei is recognised as a leading lawyer in projects by Chambers, The Legal 500 and Who's Who Legal, among others, and Chambers USA has noted that: 'He is one of the industry leaders as far as US PPP is concerned.'

Armando Rivera Jacobo is a counsel based in Debevoise & Plimpton's New York office, where he is a member of the corporate department and finance group. He focuses on financing transactions both in the United States and internationally, including project financings, leveraged acquisition and other secured financings and structured financings. While in the past Armando represented sponsors and lenders in the development, construction, financing and operation of natural gas transportation systems and natural gas-fired combined cycle power plants, at Debevoise, he has expanded his practice to include other infrastructure sectors, and to the representation of financial guarantors. Mr Rivera has been named a 'Rising Star' for Project Finance by The Legal Media Group's Expert Guides (2015).

Michael P McGuigan is a counsel based in Debevoise & Plimpton's New York office. He regularly advises project companies, bidding consortia, developers, equity sponsors and other private sector clients on the development and financing of major US infrastructure projects. Mr McGuigan has also co-authored numerous articles in industry-leading project finance publications.

GTDT: What patterns are you seeing in the US PPP market? Are any sectors particularly active at the moment?

Michael P McGuigan: Transportation infrastructure PPPs are likely to remain the volume leader for the foreseeable future, but there has been an increase in the 'social' sector (eg, courthouses and universities), and we also see potential in the water sector. Within the transportation sector, there seems to be the greatest momentum in the rail industry. After some delays and uncertainty in the procurement, the Maryland Purple Line light-rail system is expected to achieve financial close later this year. And within the past few months alone, the Federal Railroad Administration issued a preliminary request for proposals for potential high-speed rail corridors across the country; public stakeholders in New York City, including the New York Metropolitan Transportation Administration and AMTRAK, solicited qualifications and proposals for the multibillion-dollar rehabilitation of Penn Station; and the states of New York and New Jersey, and the federal government, have reached preliminary agreement on a new, US\$20 billion train tunnel under the Hudson River between New Jersey and New York City.

The current 'social' PPP procurements (eg, UC Merced Campus Expansion) will test the viability of the PPP model for delivering social infrastructure projects. One general concern is that many social infrastructure projects may be too small relative to the substantial costs that the private sector ordinarily incurs when pursuing PPP opportunities, particularly when opportunities in other sectors (eg, transportation infrastructure) are more robust. Because of this, the PPP model is probably best suited for social infrastructure projects with a price tag of at least several hundred million dollars.

There are also a number of current water PPP projects under way, including Santa Clara, Miami and Indianapolis International Airport Wastewater. Last year the US Congress authorised the Water Infrastructure Finance and Innovation Authority (WIFIA), but the programme has yet to receive any funding. WIFIA, like the 1998 Transportation Infrastructure Finance and Innovation Act (TIFIA), would effectively borrow funds from the US Treasury at low rates, and provide that money in the form of a loan or loan guarantee to a local government or a private party. Funding of WIFIA would greatly increase the potential for water PPP projects in the US.

In terms of patterns, we have recently seen procurements structured essentially as a 'beauty contest'. In these procurements, the shortlisted bidders are asked to submit indicative proposals for a conceptual project, instead of a substantively complete concession, and the procuring authority will pick the team that it wants to directly negotiate the detailed terms and provisions of the project. Two particular PPPs being procured this way include the Indianapolis International Airport Wastewater project and the Denver Airport Great Hall project. Somewhat similarly, the LaGuardia Central Terminal Building Replacement Project has changed considerably through negotiations with the preferred proposer.

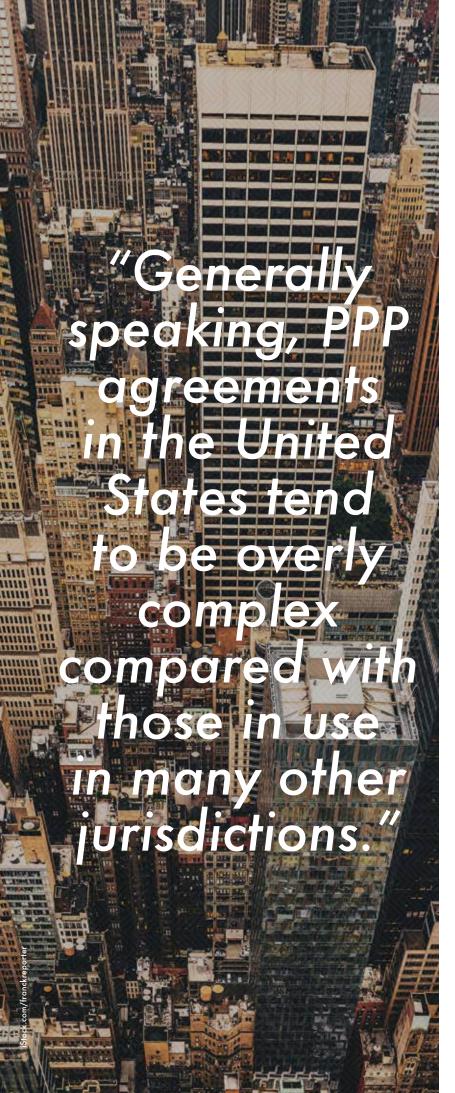
It is also worth observing that a number of recent PPPs in the United States have been (or are expected to be) structured on the basis of availability payments, where the private sector does not take demand or revenue risk. In these transactions, the governmental sponsor makes milestone payments to the concessionaire during the construction period, and continues to make scheduled payments throughout the concession, subject to deductions if required performance standards are not met. The Maryland Purple Line light rail project, the Goethals Bridge in New York, East End Crossing in Indiana, Port of Miami Tunnel and Presidio Parkway in California are availability payment transactions. This model is also being used for social infrastructure PPPs, which have recently become more popular in the United States.

A number of the earlier infrastructure PPPs in the United States (eg, Chicago Skyway and Indiana Toll Road) involved demand or revenue risk. In these transactions, debt service, operations, maintenance and capital expenses, and the private sector's compensation, are payable primarily from revenues generated by user fees (eg, tolls). However, the challenges of projecting traffic and revenues with any meaningful degree of accuracy have become apparent, particularly when users struggle to find value in their direct toll payments and opt for toll-free alternatives. As a result, the actual traffic and revenues for a number of revenue risk projects have fallen well below projections.

It is worth noting that 'shadow tolls' allow the public sector to discreetly shift demand risk to the private sector. Under a shadow toll structure, payments to the concessionaire are determined by the usage of the asset, but the actual users are not required to reach into their own pockets and therefore are not inclined to seek free or cheaper alternatives.

GTDT: What are some of the setbacks and challenges that PPP transactions are facing in the United States to achieve commercial and financial close?

Ivan E Mattei: Unfortunately, political risk continues to be an important factor in the US PPP market. The last midterm elections resulted in postponement and cancellation of several PPP transactions (such as the Houston Justice Complex, the Indianapolis Courthouse and the US Route 460 Corridor Improvements) that had reached advanced stages of procurement. The US PPP market has not yet evolved to a point



where the procurement process is sufficiently institutionalised and professionalised to render it largely immune to the political cycle. Given the very high deal pursuit costs in these transactions, any delay or incremental risk of a failed procurement can operate as a powerful disincentive to participate in future procurements in jurisdictions found to be unreliable.

In the current market, TIFIA funding remains vitally important and the TIFIA Joint Programme Office (JPO) (the office at the US Department of Transport (USDOT) that administers the programme) works hard to ensure a level playing field among all bidders for any project eligible for TIFIA financing. However, in a typical US procurement with four shortlisted consortia, it would tax the resources of the JPO to engage in full due diligence and negotiation with each bidding group. Instead, current practice entails a highly scripted and limited opportunity for bidders to submit comments on a generic TIFIA term sheet. Because there is limited or no meaningful negotiation with the JPO, it is very difficult to adjust the proposed TIFIA terms to the particularities of a given deal by the time bids are due. To a much greater extent than committed bank financing, for example, TIFIA terms are left to negotiation after a financial proposal has been submitted and accepted by the granting authority in the PPP procurement.

GTDT: Which recent PPP transactions have stood out? What made them interesting?

Armando Rivera Jacobo: The US PPP market is still small in terms of the number of PPP transactions achieving financial close in any given year, particularly considering the size of the US economy. For example, during 2015, only three major PPP transactions achieved financial close in the United States: Virginia's I-77 HOT Lanes, the Pennsylvania Rapid Bridge Replacement Project and Ohio's Portsmouth Bypass; that would represent a lowest level in several years. By the time this interview is published, some additional projects may have achieved financial close, such as the much delayed LaGuardia Central Terminal Building Replacement Project and Maryland's Purple Line.

In light of these numbers, one could justifiably take the view that every US PPP project that achieves commercial and financial close is a keynote project, merely by virtue of having done so. That said, if forced to single out only one or two recent transactions, I would probably mention the Pennsylvania Rapid Bridge Replacement Project, which bundled over 500 bridges into a single PPP procurement, and the LaGuardia Central Terminal Building Replacement Project, which will require the private party to continue to operate the central terminal in one of the busiest airports in the US while replacing all existing infrastructure. The Penn Bridges project was a real test of confidence in the Commonwealth of Pennsylvania. Everyone still remembers and talks about the failure of the Penn Turnpike deal several years ago. Not only that, but by itself the deal presents great challenges in risk allocation and management, having to deal with different circumstances in multiple locations. This was not the first time that such a bundle was attempted. Several years ago Missouri tried a similar approach with its cancelled 800 Bridges Improvement Program project, which will give you an indication that getting Pennsylvania's proposal to a happy conclusion was not an easy task.

The LaGuardia Central Terminal Building Replacement project, procured by the Port Authority of New York and New Jersey, is now in the preferred proponent stage, and after much longer than expected negotiations with different stakeholders, the LaGuardia Gateway Partners consortium has now submitted its finalised proposal for review by the Port Authority. The reported estimated value of the transaction is currently set somewhere between US\$4 billion and US\$5 billion. The scope of the project has undergone several changes since selection of the preferred proponent, including the addition of new facilities under a separate regime from the lease of the Central Terminal Building. In addition to the challenge of simultaneous construction and complex operation of the terminal mentioned before, airport PPP transactions have the added complexity of having to consider the interest of airline users, who will be the main source of revenue, and provide a very limited universe of customers (particularly in a domestic only airport as LaGuardia, with flight range limitations).

Finally, we would single out a general category of transactions for 'keynote' status - multi-state procurements. This category includes the Ohio River Bridges, the now cancelled Illiana Corridor, the I-11 and Intermountain West Corridor, the Brent Spence Bridge improvement project and the LaGuardia Central Terminal Replacement project itself (which is procured by a bi-state agency), among others. These projects entail an additional degree of difficulty as different states may have different policies and priorities, ranging from budgetary issues to constituency interests to political circumstances. All parties need to make sure that the development and risks of the project on both sides of the state borders are properly addressed. An imbalance on one of the sides could cause an undesired transfer of risk pricing from one portion of the project to the other, eroding value for money for one of the participating states.

GTDT: How would you characterise the typical PPP agreement in the United States? Is there a tendency towards uniformity?

IEM: Generally speaking, PPP agreements in the United States tend to be overly complex compared

with those in use in many other jurisdictions. This is partly due to an accretion of overlapping, duplicative and sometimes inconsistent provisions in many US concession agreements. This can result when terms from a precedent transaction in one jurisdiction are carried forward into another. In many cases, the new procuring authority and its advisers will add new features and protective provisions to the template. However, the difficult task of paring back features that may be inapposite in the new jurisdiction, or that may conflict with the new terms added to the template, is sometimes not given the priority it deserves. There is also a natural reluctance on the part of government officials to excise seemingly protective language from precedents that may not be necessary in the new transaction. There is sometimes little perceived 'upside' to such streamlining.

One of the side effects of these complex models is that the task of drafting and negotiating the drop-down agreements (eg, design-build contracts, O&M agreements, etc) become correspondingly complex undertakings. Ambiguities or inconsistencies in the concession agreement are, in effect, 'relitigated' in the drop-down negotiations, adding to the costs of pursuing a project.

Many developers and equity investors have come to accept the existing complex PPP model agreements, trusting that the parties understand what is meant and that, in the event of a dispute, authorities will act reasonably. However, as more stringent review by commercial lenders commences to play a role in projects in which cheap bond financing may not be as readily available, it will be interesting to see whether a change towards simplification occurs.

An attempt to create uniformity and standard practices has been undertaken by the Federal Highway Administration, which has published a Model PPP Core Toll Concessions Contract Guide to provide guidance to state governments on possible terms that could be included in model PPP agreements. However, the Federal Highway Administration has stopped short of creating a uniform model PPP agreement.

GTDT: In your experience, are there any particular provisions in recent PPP agreements that deserve special attention?

ARJ: It sounds like a project finance lawyer cliché, but risk allocation provisions are critical; in particular, the definition of relief events and the relief granted for their occurrence. Although one can observe certain trends in recent transactions, these provisions are still the subject of lengthy negotiations that sometimes may drive private parties away from the table. The most critical relief events on which developers and equity investors tend to focus include pre-existing conditions (with special attention to environmental conditions); geotechnical and subsurface characteristics;



utilities and other third-party interests in the project's land; third-party cooperation; and the usual force majeure.

In addition to focusing on the general categories of relief events, bidders continue to spend considerable time dissecting the precise language describing their scope, or the terms on which compensation will be granted. Unfortunately, this language is often vague or ambiguous. Aside from the obvious concern with entering into ambiguous contracts, this can call into question the transparency of the bidding process. A proponent who sees, analyses and quantifies a risk created by unclear language may be at a pricing disadvantage when bidding against a proponent who may not have spotted that risk. Stated otherwise, clarity of language can promote a level playing field in the procurement process.

It seems natural that governmental officials will try to push all of the project risk to the private party as far as possible. Such an approach can provide the public sector with a greater level of certainty about a project's costs. Even in cases where a value-for-money analysis would suggest that the government should retain a given risk, there is a natural bureaucratic aversion to entering into a contract with significant contingencies for which the granting authority may not have budgeted. The fact that this occurs routinely in traditional design-bid-build procurements is not always a persuasive response. If the granting authority aggressively seeks to transfer too much risk to the private party, it will lose part of the economic benefit of the PPP model. Private parties will have to price all such contingencies into their proposals (and the authority will end up paying for them, whether they come to pass or not), driving up project costs and eroding value for money.

Another set of typical risk allocation provisions that deserve special attention are those providing for the rebalancing of the economic deal as a result of changes in the financing assumptions (eg, the terms that will serve as a baseline in connection with any TIFIA financing in transportation deals). The TIFIA JPO engages in very limited direct contact with proponents and is very reluctant to negotiate many details in its term sheets. If proponents are considering using TIFIA financing, they must make sure that the provisions of the PPP agreement that allow them to obtain economic relief because of a change in their base case model as a result of development of, or addition to, the TIFIA terms consider all those assumptions that are key to their valuation of the asset and estimation of their return.

GTDT: How has the law and regulation governing PPP transactions developed over recent years?

MPM: Recent changes to the legal and regulatory landscape in the United States have generally been positive. While the US federal government provides substantial funding, the

planning, development, financing, operation and maintenance of most infrastructure in the United States is largely the province of state and local governments. At last count, 33 states, as well as Puerto Rico and Washington, DC, have some form of PPP-enabling legislation for transportation infrastructure, and a number of the states that do not have such PPP-enabling legislation have PPP bills in various stages of legislative consideration. While these statutes create a framework for utilising PPPs within the applicable state or territory, there is a substantial lack of uniformity in PPP laws from state to state, which is impeding the development of a 'standard' PPP transaction model in the United States. The US PPP market would benefit greatly from a uniform body of PPP laws, but that seems unlikely in the foreseeable future.

At the federal level, in addition to the authorisation of WIFIA (mentioned earlier) and the continued funding of TIFIA and other PPP-friendly programmes (eg, the Railroad Rehabilitation and Improvement Financing (RRIF)), the Obama administration continues to encourage the use of PPPs in transportation infrastructure projects and other sectors. In September 2015, the federal government introduced the Build America Transportation Investment Center (BATIC), which will serve as a national P3 resource for states, municipalities and project sponsors. In addition, a number of US states have also created centres of excellence, committees and similar resources for PPPs.

GTDT: Are investors comfortable with the procurement process in your country?

IEM: I have already mentioned several respects in which the US PPP procurement process gives bidders some pause. Another important consideration not always fully appreciated is the size of the shortlist. In most US PPP procurements, the granting authority reviews qualifications at the request for qualifications (RFQ) stage and prequalifies four bidding groups. In contrast, a typical Canadian procurement will have three prequalified bidders, which is generally viewed in Canada as being sufficient to maintain competitive tension in the procurement. Although the difference may seem small, the incremental probability of incurring unremunerated deal pursuit expenses in the United States (which can run in excess of US\$10 million on a complex project) can act as a disincentive to pursuing US projects. This is particularly important in a market where all of the major players are active internationally and can chose to deploy resources in those jurisdictions perceived to have the lowest political risk and the most efficient and transparent procurement regime.

GTDT: What are the typical sources of financing for PPP projects in your country?

MPM: The financing source that will always be considered first is 'free money', of which there seems to be a lot in the United States. The federal government provides substantial financial assistance for infrastructure projects in the United States through grants and other appropriations. For example, the Federal Railroad Administration has allocated approximately US\$900 million to the Maryland Purple Line project, and the Port Authority of New York and New Jersey has committed approximately US\$1 billion of passenger facility charge revenues to the LaGuardia Airport Central Terminal Building project.

TIFIA has long been the preferred option for financing US transportation PPP projects. TIFIA credit assistance can be in the form of a direct loan, a loan guarantee or a standby letter of credit, and may be used to finance up to 49 per cent of project costs. However, TIFIA funding was recently reduced by Congress, making TIFIA financing even more competitive. As noted above, WIFIA could play a similar role in financing water infrastructure projects if the programme receives funding.

Private activity bonds (PABs) are available for most infrastructure projects where ownership of the asset remains with the state or other governmental authority. PABs are attractive because interest earned on the bonds is exempt from federal and certain state income tax, which translates into lower interest rates on the debt. PABs also tend to carry long maturities, which are sought after by large institutional investors (eg, insurance companies and pension funds).

Bank debt also remains readily available for US PPPs, but the availability of long-term and relatively inexpensive debt financing (eg, TIFIA and PABs), together with the uncertainty of refinancing risk, has narrowed the demand for traditional short-term bank loans in US PPPs. However, the rise of the availability payment structure seems to be creating new opportunities for traditional bank debt in the PPP capital structure. The availability payment regime often involves a substantial payment to the concessionaire at substantial or final completion of the project, which typically occurs five to seven years after financial close, or roughly about the same time that a bank loan would mature. The concessionaire is therefore able to mitigate the refinancing risk associated with short-term bank debt, and to reduce overall project debt early in the life of the project, if it is able to complete the project on time and on budget. Further, the value of the private sector's equity position will be enhanced by a de-risked and de-levered project.

On the equity side of the capital structure, a substantial amount of private equity has been earmarked for infrastructure. It is not uncommon



for PPPs to have a minimum equity contribution, and private equity funds are increasingly also providing debt financing for PPPs. In the United States, the issue is not finding the capital to fund projects – it is finding projects that are ready to make use of widely available capital resources.

GTDT: Looking ahead, how busy do you expect the PPP space in the United States to be over the next couple of years?

ARJ: Less than a dozen PPP projects in the United States are currently at the stage where a preferred proponent has been selected and the winner is working its way towards financial close. This includes transactions such as the the LaGuardia Central Terminal Building Replacement and Maryland's Purple Line. There are half a dozen or so projects for which the proponent shortlist has been issued and that have already received bids and await the award, or are scheduled to receive bids in the relatively near future. This includes the Denver Airport Great Hall P3, Colorado's I-70 East, Virginia's Transform 66 (Outside the Beltway I-66) and the University of California, Merced Campus Expansion. Barring issues with governmental approvals of the final PPP agreements and delays in the procurement schedules, this by itself should create a pipeline of transactions for the next year or two that maintains the current level of activity at par with prior years.

In addition, there are currently many proposed PPP projects, in pre-procurement or RFQ stages, that by their nature should be of significant interest to private parties. This would indicate that a pipeline for an even longer term is being created. Projects of this type that come to mind include a second bundled bridge replacement project in Pennsylvania, Texas' Lone Star Regional Rail Project, and Georgia's I-75 North Managed Lanes.

Furthermore, as previously discussed, more states continue to enact or further develop their PPP legislation, broadening the scope of potential transactions. Moreover, states that have already been successful with their transportation PPP projects continue to expand their PPP programmes to other sectors. We are seeing a growing interest in social infrastructure and water projects, not only from granting authorities but also from developers, equity investors and financing parties. We believe that this trend will continue to the extent that granting authorities hit the sweet spot on the size of project value. States have started to pack their pipelines with these kinds of projects, many of which remain in the viability study stage, but some of which have made it to procurement, or even to commercial close, such as the San Antonio Water Supply project, the Emerald Coast Utilities Authority's waste processing facility, Louisiana's Parish Wastewater facility, the Long Beach Civic Center, and perhaps the most salient one at this time, the UC Merced Campus Expansion.

Despite a slow start and a rollercoaster of activity, the US PPP market is alive and well. We need to recognise that the PPP market is not something new in the United States; many transportation projects date back to the early 1990s. Here at Debevoise we are confident that the activity in the PPP market will continue to grow as more projects mature and provide more evidence that the PPP model both works and, if properly applied, brings benefits to all sides of the equation.



PROJECT FINANCE IN AFRICA – A REGIONAL OVERVIEW

Richard Kramer is a partner in Simmons & Simmons' Tokyo office, focusing on project development and finance. His previous experience includes working with a major New York firm and as a director of the fixed income division of a prominent investment bank. Richard has lived and worked in Abu Dhabi, New York, London and Tokyo and advises the full range of project participants on major project finance and development transactions in the power, infrastructure, and oil and gas sectors. Richard recently returned from a secondment at JBIC. Richard's experience includes advising JBIC; lenders in respect of the financing of the RAF A2 expansion project in Qatar; Qatar Electricity and Water Company; the project sponsor in relation to a 216MW gas-fired power project and associated transmission infrastructure in Cameroon; the lenders in relation to the South African Renewable IPP procurement programme; a consortium comprising BG, PETRONAS, EGPC and

EGRS; Banque Saudi Fransi; and Dolphin Energy Limited.

Rose-Anna Daukes is a managing associate in Simmons & Simmons' London office, focusing on energy and infrastructure finance transactions. This includes advising commercial banks, development finance institutions, export credit agencies and project sponsors on the project financing of power, LNG and infrastructure assets in the UK, and on investing in the region. Rose-Anna's experience includes advising SNC-Lavalin on the divestment of its interest in the Ambatovy Nickel Joint Venture Project; the arrangers in respect of the project financing of the Khobab, Loeriesfontein 2 and Noupoort wind farms; the preferred bidder for an IWPP in Qatar with JBIC financing; and the Topaz Group in respect of the financing of the construction and operation of a hotel in Conakry, Guinea.

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

Richard Kramer & Rose-Anna Daukes: Our practice in Japan is focused on assisting Japanese trading houses, contractors, engineering firms and financial institutions with the development and financing of a wide range of energy, power and infrastructure projects in Africa, the Middle East and South East Asia. For projects in those markets, the participation of Japan Bank for International Cooperation/Nippon Export and Investment Insurance (JBIC/Nexi), coupled with strong support from the national and local governments in which the project is being developed, remains almost essential to not only plug significant funding gaps but also to provide structuring and other strategic support to projects that might otherwise not make it to market.

Of particular note are the proposed revisions to the laws governing JBIC announced in February 2016, which are expected to expand its ability to support project development through a number of initiatives including significant direct investment, arranging and participating in Islamic finance and arranging and purchasing project bonds. Although implementation of these changes will take time, we believe that they will allow JBIC to take a more active role in a more diverse range of projects, which should bode well for the development of projects in Africa.

Not surprisingly, the trend now for almost two years continues to be declining oil prices, which on top of already low commodity prices has seen foreign investors treading ever more cautiously and has put many projects at risk of being uneconomic. An adjustment of oil prices is, of course, an opportunity for net oil and gas exporter economies (for example Nigeria) to diversify their economies, but is also necessarily going to have an impact on foreign investors' funds, and we have seen a number of good projects with big name sponsors fail to reach a final investment decision or stall as companies take stock of the markets and cut spending. So generally, it is fair to say that exploratory activities, most notably in the energy and mining sectors, continue to be impacted significantly by the low oil and commodities prices backdrop, and last year has been particularly challenging for the smaller producers who are more sensitive to these price changes. Fuelled by uncertainty as to how long the current downturn will last and whether this economic stress will deepen, last year saw us advising a number of sponsors on the divestment of their ownership interests in mining assets, and I expect that restructuring and distressed M&A work will pick up pace during 2016 as larger players are forced to downsize project portfolios to generate cash, and opportunistic market entrants seek to take on positions at favourable valuations.

Further, there have been a number of articles in the press this year regarding significant largely commodities investment losses (some reports place these as high as US\$13 billion), which Japanese trading houses are expected to recognise in 2016. While we think that some of those reports are slightly exaggerated, we know first-hand from clients in Tokyo that holding mining assets is causing serious problems at the moment, not just through low commodity prices but also due to the associated development costs. For example, one perennial problem is that many of the most significant projects - such as Simandou, the Guinean iron ore resource - require significant infrastructure investment; investment that is difficult or impossible to support solely through project revenues.

That said, projects involving investment in public infrastructure, for example electricity generation and transmission and transportation, are likely to remain the subject of targeted emphasis and be key drivers of growth in the region. Although things appear to be improving, there remains a shortage of really good, bankable projects, which in turn means that despite steady growth in private sector funding, large successfully project-financed project transactions are likely to remain relatively few without prudent government risk allocations and significant multilateral involvement.

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

RK & RAD: If we look at the last 10 years or so, the extractive industries (oil and gas, and mining) accounted for about 63 per cent of the total project finance debt raised in Africa, which makes sense given where many African countries are in their development. However, it is important to note that Africa itself only accounted for about 3 per cent of the total limited recourse project finance raised worldwide, which is also not unexpected when you consider the huge capital flows into the US market and Australia over that period. The importance of electricity generation and transmission in relation to national infrastructure and project development in other sectors is also significant, with about 17 per cent of total project finance debt raised.

Arguably, the need for increased electrical capacity and transmission is one of the biggest infrastructure constraints to further rapid economic growth in Africa right now. The International Energy Agency estimates that over 585 million people in sub-Saharan Africa alone lack access to electricity. Even countries with rapidly expanding economies like Kenya have an electrification rate of only about 23 per cent, which they ambitiously hope to raise to 70 per cent within the next three years. In North Africa, the Safi Coal Fired Power Plant (1,320MW,



US\$2.094 billion) in Morocco was the largest power deal to achieve financial close in 2014. Safi was particularly significant as it included a JBIC loan in both US dollars and euros, and a Nexicovered tranche and the participation of local and international banks as well as featuring a US\$565 million equity bridge loan denominated in dirham from local banks. JBIC 'cut its teeth' on the 1,365MW Jorf Lasfar, which closed in 2012, and Safi was procured on a broadly similar basis. When you consider that, prior to Jorf, JBIC's previous loan to Morocco was nearly 30 years earlier, it is particularly interesting. The Lamu coal-fired power plant (981.5MW, US\$2 billion), which reached financial close in June last year, will likely do much to address the power shortages in the country once it is up and running. Likewise, the launch of South Africa's 'expedited round' in June 2015 as part of its Renewable Energy Independent Power Producer Procurement Programme (REIPPP) and the announcement of the creation of renewable energy development zones earlier this year are clear recent examples of a

government attempting to address the deepening power shortage in its country.

Alternative energy projects (primarily solar, wind and geothermal) continue to be active and we expect the flow of renewables deal activity in the region to remain significant with appetite in the secondary markets for existing renewables assets also one to watch this year. South Africa led the way again in terms of number of new renewables projects, announcing that 13 projects had been selected for development under the fourth round of the REIPPP. A number of other countries continue their advance into the renewables arena, especially as the price of solar photovoltaics becomes so much more competitive with other types of generation. When it comes onstream in 2017, the Kpone (350MW, US\$900 million) geothermal IPP in Ghana is expected to account for about 10 per cent of Ghana's total installed capacity. Other notable deals include Rwanda's first solar project of 8.5MW launched by Gigawatt Global, which aims to achieve 1000MW capacity across Africa by 2020.

"The main challenge to investment, project development and finance in Africa continues to be political risk."

Finally, putting aside political complexities, the vastness of Africa's geography makes traditional cross-border projects (and some domestic ones) difficult or impractical. Smaller renewables projects, in particular modular solar projects, which can be placed to serve the needs of populations spread across large distances are also likely to see a significant increase. And of course, in complete contrast, there are some mega projects on the horizon like the East African LNG projects, and some potentially huge hydro projects like the long-delayed Grand Inga hydroelectric project, which everyone is waiting to see how they develop.

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

RK & RAD: The trend towards regional development bank and multinational involvement - African Development Bank (AfDB), IFC, World Bank, OPIC, FMO, DBSA and South Africa's Export Credit Insurance Corporation (ECIC) and Africa Finance Corporation - all continue to feature prominently and will necessarily have to continue for the foreseeable future amid lingering reluctance by international commercial banks to lend alone in the continent, and the likely downgrade of certain sovereigns' credit ratings. The successful financial close of the 1,320MW Safi Coal Power project, Morocco, brought in significant JBIC, Nexi and Japanese commercial bank participation. For all larger deals, significant domestic support from key domestic sponsors and national government participation remains very important to achieving financial close.

While local bank participation across the continent is increasing, as a general rule it is starting from a low base and a lot of African commercial banks are still very much constrained in their ability to provide project finance debt due to combination of factors including lack of funding, expertise, restrictive banking regulations and the lack of a significant number of domestic high-quality creditworthy sponsors. However, the markets do adapt to that. For example, in South Africa the local banks have been very active, supported by a number of less traditional lenders such as insurance companies and pension providers, who are interested in lending to the projects to obtain the stable long-term income stream to match their long-term liabilities. Despite concerns over the availability of investor exit protection and the prevalence of small familyrun local companies not typically favoured by PE houses, we are also seeing a swell in fundraising and investment in the region, up noticeably from 2014, by dedicated Africa-focused funds as these types of investors grow more accustomed to the risks associated with doing business in the less saturated African market, take advantage of an expanding middle class and bet on strong growth in sub-Saharan economies.

Many of the main international sponsors, for example GDF Suez, Taqa, AES, Globeleq, Siemens and Sumitomo, will be looking for good projects, typically acting together with strong local or regional sponsors such as Cenpower (Kpone).

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

RK & *RAD*: The main challenge to investment, project development and finance in Africa continues to be political risk, including interference, expropriation, regime change (heightened given 2016 is an election year for many), currency risk (particularly devaluation and associated upward inflation pressures) and economic and regulatory uncertainty. Political risk is, of course, present in any project being carried out in a developing market, and as recent world events have shown, developed economies are not insulated from these risks. We advise clients that essential mitigation techniques include comprehensive due diligence, strong representations and warranties in key transaction agreements and the creation and active involvement of internal compliance and risk management teams at all stages of a transaction.

From the perspective of Japanese trading houses, contractors and engineering firms, though notwithstanding the public emphasis placed on African investment by the Japanese government, the lack of general familiarity and deal experience with African countries continues to mean lower levels of investment than, for example, countries in South East Asia such as Indonesia or Vietnam where Japanese companies, JBIC/ NEXI and commercial banks have been active for over 20 years. In August 2015, the Sixth Tokyo International Conference on African Development (TICAD-VI) initiative, which is sponsored by the Japanese government, will be held in Kenya. The previous TICAD events were always held in Japan and featured a broad showing of Japan public and private sector participants. It will be interesting to see whether the same or greater interest is generated this year.

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

RK & *RAD*: As noted, pending changes to the scope of JBIC's activity could mean big things for Japanese investment in Africa in years to come. Although it may take time to implement, there is a lot of optimism when we speak with JBIC personnel and Japanese trading houses and contractors about these changes and what they could mean in terms of the ability of Japanese companies to invest in less-secure markets.

In addition, about a year ago South Africa introduced a law that allows pension funds to commit up to US\$9 billion to private equity. Similar changes have either been enacted or are in the works, we believe, in Nigeria, Kenya, Namibia, Ghana, Uganda and Senegal. AfDB has long been a strong proponent of private equity investment as a means of enhancing job-creation and improving social and environmental governance among other things; also of note, last year the Carlyle Sub-Saharan Africa Fund raised US\$698 million (40 per cent above its target).

A number of nations including South Africa, Nigeria and Kenya have made efforts to improve accounting standards and strengthen legal institutions, and have also instituted more general financial sector reform. According to the World Bank, Africa enacted more fundamental legislative reforms than any other continent in 2014, and most commentators expected it to maintain its status when official figures were released in 2015.

Most of the significant legal developments have been in the area of legislation designed to increase local content and domestic private sector participation in areas of particular national interest such as oil and gas. Obviously, South Africa has been a leader in many ways with the importance it has placed on its local content commitments, and within the last few years a number of countries including Equatorial Guinea, Mozambique, Kenya and Tanzania have introduced local content policies or LCP legislative reform. While such policies are an important tool for countries to develop a robust and skilled domestic workforce, strengthen local businesses and encourage domestic investment, the lack of clear guidance, difficulty in following such rules due to lack of an existing trained workforce and the scope of application remain significant challenges for successful implementation.

We will also need to assess how the new rules such as Solvency II, which come into force this year to govern the amount of capital EU insurance companies must hold, impact on the level of participation of insurance players in the African market.

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

RK & RAD: As mentioned above, the most significant project finance deals continue to involve the participation of one or more multilateral or regional development banks, usually in conjunction with international and local commercial bank participation. Even in South Africa, where local commercial banks provide the bulk of finance to new projects, there is a significant Development Bank of Southern Africa involvement as well as that of the insurance companies and other non-bank funders. Despite relatively limited focus to date, the confidence of Japanese and Korean sponsors and financial institutions with respect to Africa continues to increase, which we think will open up significant opportunities going forward. For Japan, a strong relationship with Africa is almost essential as it pursues its two fundamental economic aims, namely the export of high-value technology systems, such as high-speed rail, supercritical power, etc, and securing access to key natural resources that it lacks.

The growth of the Islamic finance market (particularly with respect to the issue of sovereign sukuks) has led several commentators to predict that we will see a significant uptick in Islamic financed in African project finance deals over the

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

Similar to being a jazz musician, you must have a sense and feeling for the 'music' to make it work. Similarly, it is essential that counsel develop a real sense for the local legal, political and social dynamics of the country in order to proactively devise practical solutions to issues as they arise.

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

A willingness to understand the local drivers and thought processes of the main project decision-makers and an ability to work with their priorities and interests go a long way to ensuring that the project is completed. A degree of patience is required, of course, but Africa is not unique on that front. Firstin-country projects are complex wherever they are undertaken, and people's perceptions of the risks of doing business in Africa are generally far more pessimistic than the reality. What was the most noteworthy deal that you have worked on recently and what features were of key interest?

We recently advised EBRD and the lenders in respect of the Sokhna Port for the import and storage of gasoil, butane gas and LNG to Egypt, one of the most prominent projects announced in the Suez Canal Development Axis. This was fascinating to work on, and a great example of the sort of challenges presented by first-in-country projects. We also advised Barclays Africa and the other mandated lead arrangers, in respect of the project financing of the 140MW Khobab, 140MW Loeriesfontein 2 and 80MW Noupoort wind farms in connection with South Africa's REIPP round 3 programme. These wind deals collectively received the 2015 Wind Deal of the Year award for Middle East/Africa by *Project Finance International*.

Richard Kramer & Rose-Anna Daukes Simmons & Simmons Tokyo & London www.simmons-simmons.com

next few years. This seems a fair assumption given the number of expressions of interest to date to explore the idea of issuing sovereign sukuks by African Islamic finance jurisdictions (which for many would be debut issuances) during 2016, but will necessarily require a continued focus by African governments on how they can best engineer a more enabling environment for sukuk issuances. The ability of JBIC to sponsor and participate in such offering as a result of legislative changes will support this growth trend.

As for the implementation of long-dated bonds solutions: while this is on the rise in Europe, we think that prevalence of this alternative way of funding Africa projects is still a long way off given the infancy of the vast majority of African bond markets.

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

RK & RAD: With significant deep-water natural gas discoveries and development in East Africa, in particular Tanzania and Mozambique, development stage projects with a high prospect for value creation on a national level are likely to continue while exploratory activities may decrease. We can expect to see projects for public infrastructure, although historically relatively small in comparison to oil and mining projects, take on a bigger slice of the project finance pie. There is also the potential to see strides being made in the outsourcing of governmental development mandates to the private sector

(privatisation efforts being far from new), although we do not expect these to be a panacea to the African power problem.

While few commentators believe that widespread political disruption similar to the Arab Spring are likely to occur in Africa, certain pockets of disturbance – particularly the problems with ISIS and Boko Haram (which is active mainly in Nigeria but also to a lesser extent in Cameroon and Chad) and community opposition like that faced by AIIM's recently cancelled Kinangop wind farm project in Kenya, are a cause for concern in those countries.

In North Africa, Egypt continues to take positive steps along the energy development road, with Japanese funding confirmed for its burgeoning solar sector and related opportunities anticipated for those Japanese companies with battery technology credentials. East Africa seems to be increasingly popular for projects, and not just Kenya but also its neighbouring countries of Uganda, the Ivory Coast, Ethiopia and Tanzania. In terms of sectors, we think renewables will continue to flourish, with lots of relatively small projects. We are also still waiting to hear preferred bidder announcements for South Africa's delayed coal baseload IPP programme, which was expected earlier this year, and it will be interesting to see if these more complex projects can be successfully delivered based on the acclaimed renewables programme model. There will also need to be a significant focus on transmission - in terms of strengthening existing grids but also in starting to think about mini-grids and distributed generation.



PROJECT FINANCE IN AUSTRALIA

Phillip Cornwell is one of the 10 'most highly regarded individuals' in The International Who's Who of Project Finance Lawyers, and recognised in Chambers Asia Pacific 2015 as a 'leading lawyer'. His experience includes the financing of the North West Rail Link PPP, the US\$6 billion QCLNG pipeline acquisition, the WestConnex toll road project, the Sydney Airport acquisition, the Alice Springs to Darwin Railway, the AU\$2.4 billion NCIG Newcastle Coal Loader, the AU\$8.5 billion Australia Pacific LNG Project, the AU\$3.4 billion Wiggins Island Coal Export Terminal and Pan Australia's Phu Kham project, Laos.

Ben Farnsworth has extensive experience acting on Australian and offshore project financings across a wide range of industries. His recent work includes the financings of the US\$20 billion Ichthys LNG Project, the AU\$8.5 billion Australia Pacific LNG Project, the Runruno Gold Mine Project and Otto Energy's Galoc oil field project in the Philippines, Fortescue Metals Group's ECA backed Pilbara expansion, BC Iron's Nullagine iron ore project financing and numerous PPP transactions.

Michael Ryan heads the Allens' project finance group. Michael specialises in project finance transactions and acquisition finance transactions for both borrowers and financiers across the power and utilities, infrastructure, resources, and oil and gas sectors in Australia and throughout Asia. He advised on the AU\$205 million Hallett Hill Wind Farm US PP Refinancing - the first wind farm in Australia to issue debt in the US private placement debt market, the AU\$750 million Ravenhall Prison PPP (borrower role) - currently one of the largest PPPs being delivered in Victoria, the AU\$7.1 billion sale of Queensland Motorways, each of the New South Wales tollroad projects and the project financing of the US\$9 billion Nghi Son Refinery and Petrochemical Project, Vietnam.

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

Phillip Cornwell, Ben Farnsworth & Michael Ryan: Australia remains among the world's busiest jurisdictions for project financing despite the ongoing energy and resources downturn. Last year saw considerable spending on Australian public infrastructure projects, with governments at all levels and of all political persuasions having recognised the importance of rectifying past neglect of this sector. This activity was funded in part by the sale of public assets by state governments, encouraged by the Federal Government's asset recycling programme. This programme includes a commitment by the federal government to provide a 15 per cent 'asset recycling' payment to state governments that sell publicly owned assets and use the proceeds to fund infrastructure. It has provided an incentive for state governments to proceed with divestments despite some public opposition. The privatisation of certain New South Wales energy transmission and distribution businesses have helped put New South Wales at the centre of the infrastructure boom. This funding has been channelled in particular to public private partnerships, which remains an attractive procurement model for state governments with funding constraints. The perceived success of New South Wales' privatisation programme has both raised the bar for other state governments and improved public sentiment towards asset sales.

Both the privatisations and the new spending have been supported by Australia's well-tested and sophisticated project financing market, with strong interest from European and Asian based banks as well as the local banks. Domestic and offshore pension funds and specialist infrastructure funds have provided a ready supply of equity.

An interesting trend that has been talked about in Australia for a few years but actually began to emerge during the past year is the involvement

"An interesting trend that has been talked about in Australia for a few years but actually began to emerge during the past year is the involvement of domestic pension and superannuation funds in providing debt to infrastructure projects on a primary basis." of domestic pension and superannuation funds in providing debt to infrastructure projects on a primary basis. That trend appears limited to providing debt to mature operating projects for now. Retail Employees Superannuation Trust (REST) provided a 15-year AU\$250 million loan to Transurban Queensland in 2015 and we were delighted to help them with what was their first direct debt investment.

The trend of spending on Australian infrastructure projects is set to continue in 2016. Appetite for exposure to returns from Australian projects remains strong and there is a substantial pipeline of infrastructure projects for the coming year, including mega projects such as Victoria's AU\$11 billion Metro Rail project, the AU\$10 billion Sydney Metro project, the AU\$5 billion Western Distributor tollroad project in Melbourne and the Western Sydney Airport at Badgerys Creek, as well as a raft of smaller transport and social infrastructure PPPs.

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

PC, BF & MR: The Australian infrastructure sector dominated project financing deals in 2015, driven by the privatisation of public assets (particularly in New South Wales) and the sale of private infrastructure assets by private sector participants looking to capitalise on strong domestic and international interest for Australian infrastructure assets.

Examples of significant deals in the past year are numerous. A consortium led by Hasting Funds Management paid AU\$10.26 billion for the TransGrid power network in November 2015. The sale of AusGrid is now under way – we have been busy advising the NSW government on these transactions.

The funding package for stage 2 of the AU\$17 billion WestConnex tollroad project in Sydney included an innovative AU\$2 billion concessional loan from the Commonwealth Department of Infrastructure, advised by our firm. This was partly inspired by similar funding models used in transport infrastructure projects in the United States, and driven by the Commonwealth's concern to be seen as a co-investor rather than simply the provider of grant funding. This was the first major road project to receive concessional loan funding from the federal government and demonstrates the desire of Australian governments to find new ways to partner with the private sector to fund infrastructure. The longterm interest bearing concessional loan from the federal government supplemented significant upfront public sector grant funding and private sector debt co-funding. Equity has been retained by the state but is expected to be recycled to help fund stage 3 of the project.

In the private sector, low commodity prices have frozen investment in greenfield energy and resources projects, and have helped prompt a number of asset divestments such as the US\$2.1 billion sale of Apache's Western Australian assets to Quadrant Energy, the AU\$1.78 billion sale of EnergyAustralia's Iona Gas Plant to QIC and the sale by Coal & Allied of its Bengalla and Mount Pleasant coal mine projects in the Hunter Valley, New South Wales.

Politically, a change of prime minister has created a more favourable climate for investment in renewable energy and green shoots are appearing again. The recent announcement by AGL of the establishment of its AU\$3 billion Powering Australia Renewable Fund to fund new large scale renewable power development provides a good sign. We hope that the sentiment converts to real projects during the course of 2016.

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

PC, BF & MR: The infrastructure sector in Australia is highly competitive for both sponsor and financier investors. Domestic and offshore pension funds (particularly from North America), regional infrastructure investors and other international infrastructure specialists have been active in pursuing Australian infrastructure assets. In particular, Chinese state-owned entities were very active in the past year, and were involved in bids to purchase significant Australian assets including the TransGrid electricity transmission and distribution assets and the Port of Darwin.

We have encountered a number of deals now where international investors have partnered with local players to form deeper pools of capital and to access valuable insights on Australia's regulatory framework and financial markets. This strategy proved a success in the acquisition of TransGrid's electricity transmission and distribution assets.

With respect to debt finance, there is strong liquidity in the Australian banking market. The big four Australian banks continue to dominate the Australian project finance market but are facing stiff competition from international banks as well as domestic and international funds (including pension funds).

Japanese banks have maintained their significant presence in the Australian project finance market and the Canadian banks remain active while European banks have made a strong return to the market with the French banks leading the charge.

We have also seen a diversification of funding for operating projects that included debt capital markets, superannuation funds and alternative capital providers. The refinancing of the Hallett II wind farm in South Australia, the first renewable project in Australia to access funding in the US private placement bond market, is a prime



example of this funding diversification. Allens advised the sponsor, Infrastructure Capital Group. In Queensland, a US\$900 million US private placement issuance for Transurban Queensland helped refinance some of the Queensland Motorways acquisition debt. To date, this is the largest US private placement issuance we have seen in Australia.

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

PC, BF & MR: Australia's complex political landscape is the biggest challenge that our clients are presently facing in the infrastructure sector. Changes to state governments have led to revised priorities among, or the abandonment of, certain infrastructure projects. The cancellation of Victoria's AU\$6.8 billion East West Link project is the most significant example of this to date, and there are concerns that the opposition in the Australian Capital Territory is threatening a similar fate for the Capital Metro project should it gain power.

Other challenges that our clients face include tighter capital management rules for banks, which mean that the major banks in this market shy away from the longer tenors that infrastructure projects tend to demand. This is exacerbated by the fact that bank funding dominates the project finance market in Australia, with domestic debt capital markets still relatively immature and illiquid.



Pension funds and superannuation funds can play a role to plug the funding gap but, outside of funding mature infrastructure projects, it still remains early days for them to play a significant role.

The energy and resources sector is still facing difficult times as prices for key commodities such as iron ore, coal, and oil and gas continue to weaken. This has made significant greenfield project financings in this sector, including new LNG investment, challenging in the short term. On the other hand, acquisitions of energy and resources assets have become increasingly attractive to investors looking to capitalise on the decline in commodity prices and the Australian dollar. Also, the Australian-dollar gold price has climbed to near record highs which makes gold mining investment in Australia comparatively attractive.

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

PC, BF & MR: Australian governments continue to focus on investment in infrastructure and recognise the need to facilitate private investment in infrastructure.

Leading the way, the federal government has committed AU\$43.9 billion to its Infrastructure

Investment Programme and AU\$5 billion to its Northern Australia Infrastructure Facility. The Asset Recycling Initiative, which was introduced by the federal government in the 2014–2015 budget, continues to incentivise divestment in public assets by the states and territories. Key assets for sale include the Port of Melbourne in Victoria, the Port of Fremantle in Western Australia and AusGrid's electricity transmission and distribution assets in New South Wales.

These initiatives have attracted significant overseas interest in Australian infrastructure assets, which has led to increased scrutiny of Australia's Foreign Investment Review Board. Strict Foreign Investment Review Board rules already apply to foreign investors. For example, there were limits on the amount of foreign equity permitted in bids for the TransGrid electricity transmission and distribution assets. Public concerns about foreign investment, particularly in residential property and agricultural land, have prompted a comprehensive rewrite of the legislation regulating foreign investment, the Foreign Acquisitions and Takeovers Act, which came into effect in December 2015. However, this tightening of foreign investment regulation is considered unlikely to have a material impact on the ability of foreign investors to participate in Australian infrastructure projects.

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

PC, BF & MR: Investment in Australian projects has become increasingly competitive, particularly in the infrastructure sector. Equity investors comprise domestic and offshore pension funds, infrastructure investment specialists and sovereign wealth investors including, in more recent times, Chinese state-owned entities.

Similarly, bank debt liquidity remains very strong from both domestic and international banks. Banks face competition from non-bank debt providers such as increasingly acquisitive domestic and international pension funds, however, the considerable volume of equity investment opportunities in the infrastructure project pipeline will likely mean that pension funds and superannuation funds will remain selective with their debt participations.

As in many other countries, the viability of creating a bonds framework to assist greenfield infrastructure projects to access the debt capital markets has been much debated, but remains unsolved to date. Nonetheless, most infrastructure financings are structured to permit domestic and international debt capital markets participation post construction or acquisition, and 2015 saw a group of Australian power and infrastructure operating projects access debt capital markets for

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- Track record is important. Nothing succeeds like success. Commercial understanding. Our teams have a 'deal mentality' to get things done with a minimum amount of fuss.
- Depth of talent is going to be important given the volume of work in Australia. Clients need to know that the firm can deliver from senior partner to junior associate.

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

Having a good understanding of the various project financing structures that have been successful in this market. Particularly in infrastructure financing, risk allocation between sponsors, financiers and government is constantly shifting. Understanding what the Australian bank market will accept is crucial. What was the most noteworthy deal that you have worked on recently and what features were of key interest?

Allens advised the Commonwealth Department of Infrastructure and Regional Development on the AU\$2 billion concessional loan financing of stage 2 of the WestConnex Motorway Project. WestConnex is a complex integrated transport scheme expected to cost AU\$17 billion over 10 years, and is the largest transport project ever undertaken by any Australian government. It is aimed at addressing the growing transport needs of Sydney through capacity improvements on existing roads and new sections of motorway.

The project was funded by a combination of Commonwealth and New South Wales state government debt, grant and equity funding and private sector debt funding. The project structure was developed to attract private sector equity and additional debt funding post-completion to replace public sector debt and equity and recycle public sector funding capacity.

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the first time, including Transurban Queensland and the Victorian Desalination Plant.

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

PC, BF & MR: Government and private sector asset sales will remain the primary focus of the Australian project finance market over the next year. There is a significant pipeline of large scale asset sales, which will entail substantial reinvestment in new infrastructure. For example, the New South Wales poles and wires sales have helped underwrite major new projects like the Sydney Metro and stage 3 of the WestConnex toll road project.

Project financings for PPPs and infrastructure will be supported by Australian governments' willingness to adopt new government funding models to reduce borrowing costs. Upfront capital funding, co-lending and buy-back of debt after construction completion by government has become a common feature of Australian PPPs.

Another potential fillip to investment is the effort to curb high bid costs (and their restraint on competition). Unsolicited proposals have grown in popularity, in part due to the reduced cost of procurement, and there has been much discussion of relaxing the requirement for bids to be fully financed at the time of tendering. The NorthConnex tollroad project in Sydney, announced in early 2015 (and currently under construction), provides a strong example of how the unsolicited proposal model can deliver new projects.

There should also be significant merger and acquisition activity in the energy and resources sectors due to the fall in the Australian dollar and commodity prices. In the energy sector, Origin Energy and Alinta Energy look set to continue their efforts to sell a number of energy and wind generation assets. Similarly, a number of further coal mining assets seem likely to come to market.

The renewables sector is beginning to heat up again following confirmation of the Renewable Energy Target and the change of prime minister. The Australian Capital Territory Wind Auction II has generated some activity in the renewables sector (with Hornsdale II Wind Farm in South Australia and Sapphire Wind Farm in New South Wales picking up allocations in that auction) and Ergon Energy will be receiving bids from wind and solar projects in coming weeks for an additional 150MW in renewable energy generation. Meanwhile, the recent announcement by the Victoria government of a renewable energy certificate auction process to be conducted in 2016 further illustrates the building momentum in that sector.

Australian project financing looks set for another very strong year.



PROJECT FINANCE IN BENELUX

Andrew Petry is a partner in the Simmons & Simmons projects team and specialises in financing energy and infrastructure (E&I) companies and projects. He has a broad range of experience in the E&I sector, with particular emphasis on project finance, PPPs, refinancings and acquisitions in the power, renewables, liquefied natural gas (LNG), transport, accommodation and waste-water sectors. Andrew's clients are energy companies, financiers, project sponsors, borrowers, public sector entities and infrastructure funds. He is fluent in English, German and Dutch.

At Simmons & Simmons, Marieke Driessen specialises in advising on financial transactions in the fields of capital markets, structured finance and banking. She has broad experience in managing international primary and secondary securities offerings, securitisations, repackagings and credit facilities. She also advises on derivatives, financial structures and regulatory matters. She represents large international corporations and financial institutions.

Andrea Chao specialises in project development and procurement law at Simmons & Simmons. She has a wide range of experience in both real estate and construction, advising contracting authorities, contractors and lenders on PPP/PFI projects. Such projects include infrastructure, governmental housing, industrial facilities, healthcare facilities and waterworks, and generally have political sensitivities. Andrea also deals with DBFM(O), DBM(O), EPC, O&M and alliancing contracts.

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

Andrea Chao: The Benelux countries, which for the purposes of project finance effectively means the Netherlands and Belgium, are mature markets. In relation to the different types of projects, we see project financing being applied in both a governmental and non-governmental context. When discussing governmental projects, more and more local governments are choosing project finance. To a certain extent, particularly in Belgium, the need for off-balance treatment can be a determining factor, but the benefits of whole-life cycle costing are also well understood and recognised as being a crucial element of the value for money calculation. Having said that, we have recently seen Belgium PPP projects becoming subject to scrutiny owing to, among other reasons, budget overruns and quality issues. Eurostat has been looking into this off-balance treatment and has indicated, for example, that the Tram de Liège project should be included on the government balance sheet because 'a majority of risks and rewards have not been sufficiently transferred to the partner and therefore remain with government'. Other points of critique regard the deviations from fairly global approaches, lack of transparency and the choice to start off with a major PPP programme rather than with several smaller projects.

Marieke Driessen: There is strong and stable 'deal flow' in the Dutch project finance market, with many infrastructure projects being successfully closed. Both of these factors have attracted international institutional liquidity to the Dutch market, meaning many project finance deals have an international perspective. The large Dutch banks, who are active in the project finance arena, are also international players in this field and the market has also seen a rise in international institutional debt providers, such as MEAG, Allianz, BlackRock, Deka and AG Real.

Andrew Petry: For many years the only game in town was traditional bank lending, and attempts to fund transactions with monoline wrapped bonds or other structures were, for several reasons, not successful. Following the financial crisis, many of the banks were resilient and continued to fund projects but at the same time institutions such as ING and NIBC were at the forefront of developing alternative structures (PEBBLE and Commute), elements of which were picked up by the EIB and influenced its PBCE product. Apart from PBCE, these alternative structures have more or less fallen by the wayside. Some institutional funders apply a managed account approach, sourcing debt in the secondary market for projects that have reached completion, and others behave more like bank

lenders, save that they provide a fixed interest product and require a make-whole payment on cancellation or prepayment. The Benelux region has been one of the most productive for new PPP projects in recent years and has therefore attracted considerable investment from banks and institutionals alike. What appears to be happening is that on the one hand the market is very hot but on the other it has also settled down in the sense that it accommodates bank, institutional and institutional managed funds in familiar project finance style structures, often lending alongside one-another.

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

MD: Over the past few years we have seen a significant number of project financed deals in respect of infrastructure, governmental offices, renewables, LNG terminals, refineries, petrochemicals storage, healthcare facilities and data centres. In relation to renewables, the focus is now very much on the upcoming offshore wind projects in the Netherlands. However, we also see a consistent focus on onshore wind (despite local political objections in certain areas in the Netherlands) and other technologies, such as solar, geothermal energy and different innovative forms of hydropower (including storage of energy through energy islands or lakes). In the Netherlands this is stimulated by the government, and made possible by subsidies, who need to meet the renewable energy target set by the EU.

AC: In addition, there is an increased focus on water safety, with the different lock projects in the Netherlands and Belgium, and the Delta programme. Governments are looking to promote 'energy dykes', which integrate renewable generation capability into dyke projects. To date, there have not been any project financings of energy dykes. Lenders are particularly cautious with these types of water project, because if such building structures fail the consequential damages can be enormous. Generally speaking, the authorities in the Netherlands understand these concerns, but there is an expectation that they will provide sufficient assurance for contractors and lenders to be able to enter this market. We also see parties focusing on the global issue of energy storage with, for instance, the collaboration between Tesla and Eneco to construct the powerwall, and two Belgian energy islands (artificial doughnut-shaped islands offshore that generate electricity by pumping water near Wenduine and Zeebrugge), which appear to be on hold

AP: The Breda court's PPP financing closed last summer, and received a lot of attention both in



and outside of the Benelux. This was a relatively straightforward 30-year accommodation PPP; however, it involved a comparatively complex lending group that mixed institutional fixed interest debt, bank fixed interest debt and floating/swapped bank debt with different combinations of lenders in different tranches which had knock-on effects on the intercreditor discussions and resultant documentation.

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

AP: EIB, SMBC and the German Landesbanken have remained active, but so have BNG, Dekabank and Rabobank. Increasingly, there is a broader range of banks active in this sector, including DZ Bank and NIBC. ABN AMRO is rebuilding its project finance capability and is currently focusing on renewables. We also see a great number of public sector banks, such as KfW, EIB, BNG (related to the Dutch municipalities) and NWB

(related to Dutch water boards). Funders looking to expand their involvement in renewables include Triodos and ASN Bank. In Belgium, we see BNP and Belfius and, as mentioned before, institutional lenders are also more commonly being selected. On the sponsor side, financial investors such as Macquarie, John Laing, DIF, PMV and 3i are active as well as pension funds such as PGGM and APG. Construction and industrial sponsors include parties such as Besix, CFE and Denys from Belgium, international parties such as FCC, Hochtief and ISS, and Dutch companies such as BAM, Facilicom, Heijmans, Strukton, Van Oord and VolkerWessels. Parties such as Imtech and Ballast Nedam have also been very active on this market, but have since been hit with bankruptcy/ severe financial challenges, also caused by arduous progress on the Dutch A15 PPP project.

MD: Both the Netherlands and Belgium have significant renewables programmes, with the largest proportion of this generation capacity being biomass and energy from waste, followed



by wind. The focus in both Belgium and the Netherlands is directed towards wind. In the Netherlands, the Gemini project closed in Q4 of 2014 with six more offshore projects in the pipeline. Recently a hiccup occurred in respect of the Dutch legislative framework that is required to get such projects off the ground: the proposed Gas and Electricity Bill did not pass the First House of parliament. This Bill arranged for TenneT to be appointed as transmission system operator of the relevant parts of the offshore grid: a crucial element of these projects. Currently, a new bill has been proposed and is set to be discussed by the House shortly. We also expect multiple onshore wind parks to be developed, similar to existing projects such as Noordoostpolder (this was project financed) and Zuidlob (no project finance involved). Belgium is developing wind farms (both on and offshore) with completed projects including Belwind, C-Power and Northwind. For a project such as Gemini, with an investment value of almost €3 million, or the Belgium offshore wind projects, the involvement of export credit agencies and the EIB was crucial to achieve funding. We also see an rapidly increasing appetite in the development and purchase of solar projects.

AC: Almost from the start of the financial crisis, the Dutch government stepped up the pace of bringing projects to market, closed a significant number of the projects over this period and still have more in the pipeline. In the Netherlands, the Directorate-General for Public Works and Water Management and the Central Government Real Estate Agency have been the principle departments in bringing forward and closing these projects, with the majority of their PPP projects relating to highways and buildings with, more recently, a series of inland and sea-locks being realised. In Belgium, De Lijn, the Flemish transport authority, has been very active in procuring tram and bus depot projects. The prison and schools sectors have been active, as has offshore wind. Furthermore, a highways tolling project has been procured. Most projects are procured in Flanders, and also sometimes in

Brussels or by the central government. Even so, there have been some projects in Wallonia, such as the Liege tram PPP.

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

AC: At the moment we see a lot of projects being brought to market. This has stretched the capacity of the contracting sector, which, after a number of years with a limited availability of projects, has become much more selective about bidding. This is due, in large part, to high bidding costs, so there is a greater emphasis on focusing tendering capacity on those projects that are considered to offer the best prospects of a successful bid. If governments wish to stimulate sufficient competition, they should, in my view, work harder to standardise project documentation; ensure a fair balance of risk between parties; and limit as much as possible the preparatory work that is necessary before preferred bidder status is awarded.

MD: One issue that has been much debated in the Dutch PPP market is the requirement that funders offer a price at best and final offer (BAFO) that is held for a period long enough to close the financing. To all intents and purposes, this precludes a bond financing other than where an institutional investor can underwrite at an agreed price. BAFOs have been split to allow the technical aspects of a bid to be evaluated before the financial offer is submitted and evaluated. Renewables projects have different issues, especially when based on technologies that do not have a 'tried and tested' operating history, and legislative frameworks that still need to be put in place, resulting in potential timing issues. Another area that is important, particularly in the Benelux countries, is the impact that objections filed by third parties can have on a project. These can be from local residents or interest groups or even the losing bidders. As the Benelux is relatively densely populated, it is important to observe and align the interests of such third parties to the greatest extent possible.

AP: One other trend we see is authorities requiring more and more information on what happens behind the veil of the SPV/ProjectCo. Such requirements will include copies of agreements with lenders and subcontractors, but also due diligence and update reports. We not only see this with the typical PPP projects, but also with the upcoming Dutch offshore wind projects, where the government requires detailed insight in the financials of the proposals. The Belgian project De Lijn actually goes all the way and requires a minority stake in SPV/ProjectCo, which could easily throw up conflict issues that would not be easy to resolve. The procuring authorities are politically committed to their projects, and to ensure these will attract bidders they tend to be sensitive to criticism and regularly organise meetings to consult the market on proposals. Our general experience in this regard in the Netherlands is that the authorities listen to criticisms and will react constructively, if not always in the way the private sector would like. This is also true in Belgium, but perhaps to a somewhat lesser extent.

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

AP: The EU has been developing the Europe 2020 Project Bond Initiative, and also the Juncker programme in order to stimulate more investment in European infrastructure projects. The EU hopes to attract more institutional investors for longterm debt, and support projects that otherwise would not be funded. It remains to be seen what impact this may have. Certainly, both Belgium and the Netherlands have been very popular destinations for investment since the crisis and the funders' view is generally that they would have been happy to fund a greater number of projects in the Benelux during the crisis. It is therefore unclear whether this fund will benefit Benelux projects.

MD: There is a lot of focus on the Belgian and Dutch offshore wind projects. We have learned that consortiums require 'larger tickets' to get on board with the Dutch projects and that more parties will be willing to lend than are needed. The competition for the available subsidies will increase, so projects must become more costefficient.

One legislative development in the Netherlands is the Offshore Wind Energy Act and the proposed amendments to the Electricity Act. The act aims to stimulate investment in the development of several new offshore wind farms in the range of 350-700 megawatts, with one aspect being the transfer of certain risks to the public sector through Tenne T. These risks include choice of location, construction of the offshore grid connection and plot decisions regarding spatial planning arrangements. In addition, the subsidy will be connected with the permit. As mentioned earlier, third parties filing objections is always a concern. When applying for a permit, a sponsor has still to decide upon its suppliers and equipment. Such decisions will have an environmental impact, and could allow for further objections. We also see other concerns relating to, for instance, the timing of the planning procedure; timing issues with the construction of the grid; and the extent to which third parties can actually be

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Price remains important to clients, but clients should look behind the numbers and ensure the lawyers who they meet at the pitch, and on whose reputation and presentation they award the work, will actually be fully engaged on the project. A good projects lawyer needs to master a very wide range of skills, have an understanding of the total project and the relevant legal framework and know when to involve specialist colleagues. Projects lawyers should be proactive problem-solvers who, when necessary, are not afraid to propose solutions that are not orthodox, without losing sight of practical and political sensitivities.

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

Getting a solid business case is – if not the most – certainly a very important factor. Such a business case requires a steady and committed cash flow. How the cash flow will be structured is based on

prevented from appealing the choice of a certain turbine.

AC: We have also seen a Europe-wide legislative trend that SMEs need to be able to participate in projects, and not as sub-subcontractors but as key subcontractors as part of a consortium or as the main contractor. This requirement could lead to projects becoming less, rather than more, integrated. The question is whether, as a result, they remain viable from a project finance perspective. Furthermore, three new procurement directives have come into place, which need to be implemented in the different EU countries shortly. One interesting aspect is that the tender of concessions is further regulated, which provides governments with sometimes much-needed guidance and certainty on the applicable rules. We are also looking forward to seeing how the European Commission will react to the fact that in the current bill for the amendment of the Dutch Tender Act the institution of a tendering authority has not been included, although it is required under these directives, therefore resulting in a breach by the Netherlands.

the sector and may include subsidies, guaranteed off-take or availability-based payments. In addition it is important to take the NIMBY factor into account: a project must be solid from a planning and regulatory point of view, to limit the possibilities of a project being delayed or derailed.

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

In the Benelux it is probably the Breda Courts financing. This project is noteworthy because of the comparatively complex lending group, which mixed institutional fixed interest debt, bank fixed interest debt and floating/swapped bank debt with different combinations of lenders in different tranches. This mix of lenders and types of facilities had to be knitted together from an intercreditor point of view.

Andrew Petry, Marieke Driessen & Andrea Chao

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

MD: We have already spoken about some of the trends we are seeing. Especially the involvement of institutional investors as debt or equity providers. This is an interesting development that should be followed. This trend also means there is increased demand for fixed-interest rate loans. It should be noted that fixed-rate lenders have different views in relation to delays, termination and the steady flow of payments, as compared with commercial banks.

AC: It will be interesting to view the new deals coming to market, as it is clear, particularly with a number of the upcoming projects, that the government or principal is looking for technical innovations, especially when it comes to renewables and water safety projects.

AP: Dutch and Belgian PPP projects allow lenders only limited security packages. With the Dutch offshore wind parks, security is also very limited, due to the fact that the Dutch Civil Code does not apply to the part of the continental shelf on which they stand and under which mortgages

"The EU hopes to attract more institutional investors for long-term debt, and support projects that otherwise would not be funded."

and other security rights are granted. The most important security will therefore relate to pledging relevant permits and subsidy decisions. Within what is allowed, since the start of the crisis we have seen that lenders in general require more or more effective security, such as higher bank guarantees, to deal with insolvency risks of their counterparties, or more equity to be provided. This will especially be the case if they are dealing with contractors whose track records do not provide enough comfort.

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

MD: We are keen to see which projects will actually be brought to market over the coming years. At this moment there is a significant amount of deal value in the pipeline, consisting of infrastructure projects; governmental offices and water safety projects; the expansion of several airports; investment in social housing projects; the construction of data centres and optical fibre networks; and healthcare facilities. In addition, there are several renewables projects expected, with new technological innovations. AC: Local municipalities, provinces and water boards are exploring project finance possibilities, sometimes with the help and encouragement of central government. Such projects will include schools, sports parks, local infrastructure, local facilities and governmental buildings. We are not sure whether these projects will always have enough 'deal value' to make project finance an attractive solution. In this respect, standardisation could definitely help make these projects more viable from a project finance perspective. In addition to the 'classic' project agreements, we are also seeing other types of integrated project agreements emerge, such as alliance contracts. The next step will be to project finance such alliancing projects. This will require a new approach from lenders, because during the design phase of an alliance project, the scope of the works, and therefore the investment, will be decided at this stage, rather than upfront.

AP: Benelux contractors are looking abroad for projects, in the first place mainly within the Benelux countries and Western Europe, but now also beyond EU borders. Such projects regularly require project financing to be arranged by the contractors. This, therefore, is set to become a new source of projects for Benelux lenders, who are very familiar with such contractors.



Head of the capital markets, banking and finance, and infrastructure practice groups at TozziniFreire Advogados, Antonio Felix de Araujo Cintra has extensive experience in capital market operations, financings, securitisations, project finance and foreign investment. In 2014, his team advised AES Tietê and AES Sul Distribuidora Gaúcha de Energia, and assisted three Máquina de Vendas group companies with 393 million regis of debt issuances.

The head of TozziniFreire Advogados' government contracts and projects/administrative law practice group, Claudia Elena Bonelli has significant expertise in public-private relations and her broad experience in the infrastructure sector covers bids-related issues. contracts and administrative covenants, public service concessions, public-private partnerships and governmental permits. She has worked on many of Brazil's largest infrastructure projects.

PROJECT FINANCE IN BRAZIL

As head of TozziniFreire Advogados' energy practice group and co-head of the defence and aerospace practice, Pedro Seraphim advises clients on all aspects of energy project development, for traditional and renewable sources. His work includes corporate and regulatory issues and the structuring of financing agreements and project contracts. Norte Energia (Usina Belo Monte), Comgás, AES Brasil, ERB and SAAB are among Pedro's clients.

Heloisa Ferreira Andrade Scaramucci's practice focuses on the energy and ethanol sectors and on infrastructure projects. She has extensive experience of greenfield and brownfield projects, including facilitating project financing. Highly respected for her knowledge of regulatory, corporate and contractual issues, Heloisa also has significant involvement in mergers and acquisitions and her clients include AES Brasil, Comgás, Voltalia and ERB.



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

Antonio Felix de Araujo Cintra, Claudia Elena Bonelli, Pedro Seraphim & Heloisa Ferreira Andrade Scaramucci: The year 2015 was another difficult one in Brazil for most types of projects. The unfolding of the large corruption investigation involving Petrobras and several of its local and international suppliers and contractors has continued and opened ramifications that weakened the political support of the federal government. The economy of the country also suffered from international and self-made problems, which resulted in a drop of the countries GDP. All of this resulted in higher interest rates, a shortage of credit and a general decrease in the investment rates in sectors, including infrastructure. One major impact from the crisis was the important decrease of funds available for the Brazilian Development Bank (BNDES) to finance new projects in the country.

All of the above factors continued to negatively impact the project finance sector. Not many projects were being implemented. Although TozziniFreire has been involved in some of the few infrastructure projects that are moving forward, mainly in the ports and airport sectors, most of them have not yet reached the actual financing stage. We are, however, starting to see some movement in this area, with some of the multilateral institutions looking closer to some projects and starting to sign term sheets to begin due diligence and negotiations of the agreements. We therefore believe that 2016 may see the return of some activity in the project finance sector in Brazil.

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

AFdAC, CEB, PS & HFAS: In spite of the reduction in disbursements mentioned in the previous question, the BNDES still dedicated an important portion to key sectors in the economy. Energy projects, for example, received the most significant portion: 21.9 billion reais (a 15 per cent growth compared to 2014). This growth is primarily due to wind power projects, which alone attracted 6.1 billion reais, 85 per cent more than the 3.3 billion reais received in 2014.

Logistics also had a significant growth of 20 per cent, with 20 billion reais in disbursements



in the period. There was a significant focus on urban mobility, with 8.5 billion reais representing 30 per cent growth against the 6 billion reais of 2014. Roads were also on the agenda, with loans to the concessionaire of BR-50 (MGO Rodovias) and Rodovias Centrais do Brasil SA (Concebra), concessionaire of the BR-060, BR-153 and BR-262 highways, in the aggregate amount of 4 billion reais.

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

AFdAC, CEB, PS & HFAS: On the financing side, the BNDES still dominates the scene. The BNDES has been the key force driving infrastructure investment in Brazil for many years, offering terms and conditions (and rates) that have been driving private banks off the long-term market. Disbursements by BNDES in the last 10 years have been at an average of 85 billion reais per year. As the BNDES is funded by the Brazilian Treasury, many question how long the BNDES will be able to keep up this role. A bigger question is: when the time comes for the BNDES to reduce its dominance, how will the BNDES and the Brazilian government manage the transition towards private bank financing? In reality, 2015 has already showed a certain slow down, as disbursements by the BNDES were reduced from 187.8 billion reais to 135.9 billion reais (almost 30 per cent).

On the sponsor side, there are all kinds of companies involved in projects, but the main players in the large projects are the construction companies. Factors like a strong balance sheet, together with an ultimate interest in providing engineering, procurement and construction activities in these projects, have made construction companies a key element for enabling the government to implement projects that are important for the infrastructure needs of the country. However, this strategy seems to be in its final days, given the alleged corruption cases that are being uncovered by the investigation on Petrobras unveiled in 2014, and all its developments in 2015.

For a long time, the presence of these strong construction companies, with sometimes overly close ties with the government, has kept international construction companies as no more than a timid presence in Brazil. Our feeling is that now will prove to be the right moment for international construction companies to enter the Brazilian market.

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

AFdAC, CEB, PS & HFAS: Despite the political and economic challenges and Brazil's rating downgrade by the major rating companies, there are still some important facts that make Brazil an interesting target for new projects, and create a good window of opportunities in Brazil. Brazil has a long history of democracy with periodical elections never contested, strong controlling governmental bodies, an improved legal system (including specific regulatory frameworks for the relevant infrastructure areas) and an anticorruption law, as well as increasing public control over illegal activities. However, several hurdles still exist and there are various challenges for the sponsors in the implementation of projects, depending on the nature, location, sector and the players' profile.

The current biggest challenges are probably related to Brazil's loss of investment grade, the increasing cost of capital, currency devaluation and financial difficulties in most of the biggest private companies in Brazil. However, this also creates interesting opportunities, particularly for foreign investors that look for medium-to-longterm return.

Other challenges include regulatory, tax, environmental, financing and compliance issues.

In the regulatory area, the challenge is to understand the complex framework in each sector, its potential changes over time and their impact on the project. For example, the power sector regulation has changed dramatically since the end of 2012, and these changes, together with adverse climate conditions, brought the country to a situation close to a power rationing. This fact, together with the economic crisis, resulted in an overall reduction of power consumption and a surplus of contracted power by distribution companies in the short term. That said, the government is now reviewing certain policies to attract more investments, and to foster the implementation of new projects to meet the demand at more realistic tariffs.

The infrastructure sector led disbursements by the BNDES in 2015, and the power sector represented approximately one-third of the disbursements in infrastructure. For 2016, the BNDES has announced that it will continue to focus on infrastructure projects, particularly in the power sector.

One of the biggest challenges for Brazil when achieving a mature transportation and logistics system is the fact that its current regulatory framework involves various governmental entities and agencies playing different and sometimes overlapping roles in the transportation sectors.

Some efforts to increase inter-modality and overcome this fragmentation have been made by the federal government, such as setting up the Planning and Logistics Company (EPL) to assist the government in planning the integration of the nation's logistics system. The EPL was also conceived as an additional agent in the implementation of strategic transportation projects.

This planning is guided by the Brazilian Logistics Investment Plan (PIL), a nationwide programme fostering economic development by means of logistic integration. So far, the PIL has been more successful with roads and airports. A second phase of the PIL was released by the federal government on June 2015. The first auction was carried out in December 2015, and involved the concession of port terminals located in public ports in the southeast and northern regions of Brazil. The second auction, involving port terminals located in the state of Para (in the northern region), was planned for April 2016. The next round of airport concessions is expected to start in the first semester of 2016, comprising the international airports of Fortaleza, Salvador, Florianopolis and Porto Alegre. In terms of highway projects, the Federal Court of Audits has already approved the concession of the so-called 'Rodovia do Frango', a highway that crosses part of the states of Santa Catarina and Paraná.

Other significant challenges are related to environmental licensing, tax planning and dealing with national content requirements that exist in some sectors and are a requirement for obtaining BNDES financing.

Finally, compliance matters are becoming increasingly important in Brazil, particularly with high-profile investigations such as the 'Car Wash Investigation' involving Petrobras and several of its local and international suppliers and contractors. The impact resulting from violations of anti-corruption or antitrust laws can be huge and may force changes in the profile of the main actors of the infrastructure sector in Brazil.

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

AFdAC, CEB, PS & HFAS: The Ministry of Finance is leading an initiative called 'PPP+', which aims at setting up a fast track for investments in strategic projects to be selected and approved by a special commission.

This initiative comprises various suggestions of legal changes, including: (i) a project structuring chief is to be identified for each and every project, to be responsible for following up the project during all of its phases; (ii) there should be a special public consortium, comprised of all entities involved in the issuance of authorisations and permits required for the project implementation, or any entity with authority to intervene in such

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

The three things are the capability to provide specialised advice on all involved areas (full service), a good track record on the specific industry of the project, and an ethical approach. Complex projects involve several different areas, and the right multidisciplinary team with experience in the relevant industry will put the client in the position to have an accurate picture of the issues and risks involved and how to mitigate them. An ethical firm is also crucial to provide the comfort that there will be no compliance issues or conflicts of interest by the counsel.

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

There are several legal issues to be considered and addressed depending on the nature, location and industry of the project, and the investor's profile. Generally, the most important ones are the regulatory issues involving the project, the tax impacts and any possible incentives, the environmental licensing requirements and associated investment obligations, the project suppliers or off-takers, compliance matters involving the project, and financing alternatives and requirements. Financing and exchange rate risks, particularly in the current scenario, are also key. What was the most noteworthy deal that you have worked on recently and what features were of key interest?

The year 2015 was tough for projects. Many of the projects with which we are involved are struggling to survive the economic and political crisis that the country is facing, and this is obviously affecting the negotiation of project contracts and project financing.

One important project we developed last year was assisting one of Brazil's major power transmission companies in its preparation to participate in an auction for new transmission concessions. We were responsible for structuring and negotiating several contracts with a unique framework for mitigation of risks related to the construction and the financing of the project.

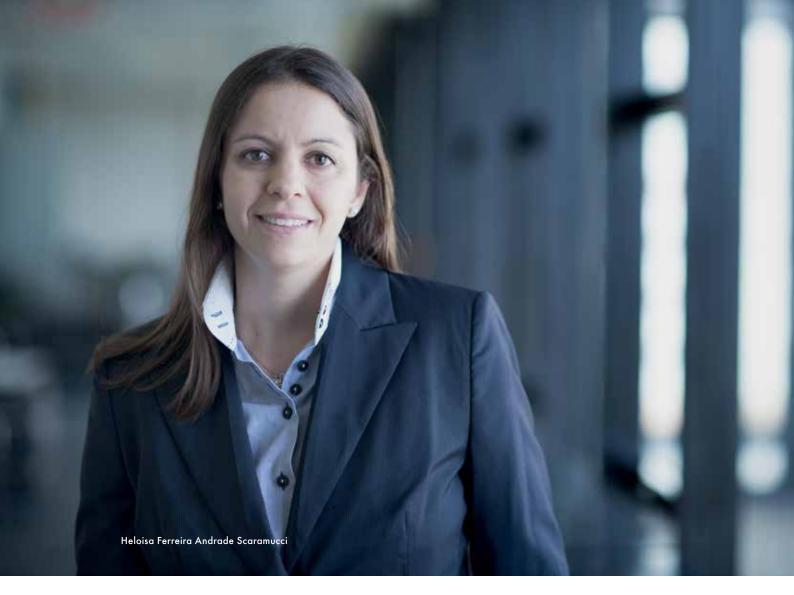
Special features of this mitigation mechanism were created, taking advantage of the fact that the EPC contractor was to become a partner in the project's special purpose company. These features were reflected not only in the EPC agreement, but also in the shareholders' agreement.

Antonio Felix de Araujo Cintra, Claudia Elena Bonelli, Pedro Seraphim & Heloisa Ferreira Andrade Scaramucci TozziniFreire Advogados São Paulo www.tozzinifreire.com.br

implementation; (iii) modification of project aspects can only be effective after submission to public consultation and calculation of additional costs to be incurred, instead of the concessionaire being obliged to implement changes and seek economic-financial rebalance after having undertaken the commitment to incorporate such changes; and (iv) there should be a specific mechanism to allow public entities to hire project development services without the need of a specific public procurement proceeding, aiming at improving project quality.

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

AFdAC, CEB, PS & HFAS: The Petrobras investigation and the actions of the Brazilian Ministry of Finance to reduce the fiscal deficit will continue to be the main factors of change for the forseeable future. The contractors and suppliers involved in the Petrobras investigation (many of the main construction companies in Brazil) may, if found guilty, suffer several penalties and even be barred from contracting in the public sector in Brazil. Many of them are already in the process of selling assets and cutting down their operations due to reduced credit ratings and difficulties in refinancing their debts. The importance of this fact, to project finance as a whole, is that such companies are not only large contractors of Petrobras but are also part of economic groups that play a very important role in the infrastructure sector as a whole, with investments in energy, sanitation, toll roads, ports, urban mobility and so forth. Many of such projects are already in the market and their purchasers will probably be the new players in the Brazilian infrastructure and project finance arena. Petrobras has also started a major movement of sale of assets both in Brazil and abroad. In addition to that, it is expected that the federal government will reduce the amount of frequent capitalisations of the BNDES. As mentioned before, in recent years, private banks were not able to compete with the BNDES because of the heavily subsidised rates it offered. It is expected that the role of the BNDES will be reduced, and new players coming from the private sector (either local or international banks), as well as multilateral agencies, may fill that gap.



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

AFdAC, CEB, PS & HFAS: We expect that 2016 will continue to be an atypical year in Brazil. The investigations involving Petrobras and its suppliers will continue to unfold and the full consequences of such matter are still uncertain. At this point in time, several former officers and managers of Petrobras and controlling shareholders, directors and officers of contractors and suppliers of Petrobras are serving provisional prison sentences. The next step of the investigation will focus on members of Congress and other government officials and politicians.

This whole matter has started to adversely impact the implementation of some important infrastructure projects in the country, because of the general uncertainty and more specifically due to a credit crunch that is affecting the companies under investigation. Banks are understandably more cautious when evaluating the risks of extending credit to such companies, which are some of the main players in most of the infrastructure sectors in Brazil (involved in projects related to energy generation and transmission to ports and airports, urban mobility, sanitation and virtually everything else).

The other side of this coin is that, as the old saying goes, crisis brings opportunities for those who are prepared to act. There are two main types of opportunity. The first derives from the credit crunch, which is causing some private sector companies to start to sell their assets in different sectors. Willing investors may be able to find good assets, many of them already operational, in the market during the course of this year. The second opportunity may arise if the federal, state and municipal governments move ahead with their plans to grant concessions or public-private partnerships of public services. This may involve projects in urban transportation, sanitation, waste management, toll roads and other areas. Considering that the large local companies are straining under the present circumstances in Brazil, there will probably be room for new international players to enter the market.

Finally, it is worth mentioning again that the actions of the government to reduce the fiscal deficit will likely reduce the possibility of the BNDES to provide funds to project finance in Brazil. This may open a space that may be filled by private sector financial institutions, either Brazilian or foreign, and by multilateral institutions.



PROJECT FINANCE IN CANADA

Joseph R Palin is co-chair of Dentons' banking and finance practice group in Canada and a regional lead of Dentons' global banking and finance practice group. With over 25 years of experience in structuring and completing domestic and international corporate debt financing transactions, Joe regularly acts as lead counsel to lenders (and lending syndicates) and debtors involving complex financing structures. Joe has extensive financing experience in the upstream and midstream oil and gas sector, the oil and gas service sector and the power project sector. His project financing asset classes include wind power; solar power; hydro projects; co-generation; combined cycle and simple cycle gas-fired power projects; midstream gas processing projects; and pipeline projects.

William (Bill) K Jenkins advises clients with respect to the structuring and implementation of joint ventures, mergers and acquisitions, equity and debt financings and other corporate finance transactions. Bill has twice acted as lead counsel in connection with project financings recognised by Project Finance as the Oil and Gas Deal of the Year for the Americas: the US\$1.78 billion limited recourse credit facilities established to fund Enbridge's Southern Lights project and the US\$3.8 billion limited recourse project financing for Alliance Pipeline. Bill was the presiding member of the national partnership board of Dentons Canada from 2009 to 2015 and participated in the formation of Dentons, serving as the first global vice chair of Dentons from Canada from 2012 until the end of 2015.

"The most significant deals to close in 2015 were the Bull Creek wind power project and the Site C worker accommodation project."

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

Joseph R Palin & Bill Jenkins: The frantic project finance deal flow of 2013 and 2014 subsided and the sector returned to a more measured level in 2015. Ontario, Alberta and British Columbia contributed to activity in the Canadian project finance sector, with Ontario leading the way. The last few renewable power projects that were awarded contracts under the Ontario Feed-in Tariff Program (FIT Program) between 2010 and 2012 progressed to financing in 2015. We acted on two projects that were supported by contracts under the FIT Program. First was the Grand Valley III project, representing a syndicate of lenders in connection with a C\$121 million project financing of a wind-power project located near Grand Valley, Ontario. The Grand Valley III project was a 40MW wind-power project developed by Veresen Inc and others. Second, we acted for the lenders to the SparkleLight solar project with an installed capacity of 10MW and a C\$66 million project financing. The SparkleLight project was sold by Canadian Solar to BluEarth Renewables, which saw the project financing term converting at the time of the sale. The project finance sector in Ontario was also buoyed in 2015 with the work involved in coordinating commercial operations for financing deals that closed in 2014. According to the Canadian Wind Energy Association (CanWEA), over 870MW of new installed wind energy capacity reached commercial operations in Ontario alone in 2015, including the 270MW K2 wind power project developed by Capital Power, Pattern Energy and Samsung Renewable Energy and the 180MW Armow wind power project developed by Pattern Energy and Samsung

Renewable Energy. In Alberta, we advised the lenders in connection with the C\$75 million project financing for the 29.2MW Bull Creek wind project near Provost, Alberta.

British Columbia saw some activity in the project finance sector last year as well, with some energy-related P3 infrastructure projects and a handful of renewable power projects that were awarded contracts by BC Hydro from the last power call in 2010 finally reaching financial close. We acted for BC Hydro on the C\$470 million Site C Worker Accommodation Project, which will provide worker accommodation for upwards of 1,600 workers in connection with the construction of the C\$8 billion BC Hydro Site C hydro project in northeastern British Columbia.

Also, continuing with the theme in 2014, 'mini-perm' (construction financing plus three to five years post-construction) deals continued to approach their maturity dates. The projects that were refinancing in early 2015 had the luxury of accessing the bond market, but towards the end of the first quarter, the bond spreads were widening and project owners were falling back to the bank market for refinancing solutions.

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

JRP & WKJ: The renewable power sector was the most active for project financings in 2015 by far, with the last of the FIT Program-backed power projects obtaining financing and over 1,500MW of installed wind energy capacity reaching commercial operations across Canada, according to CanWEA. In British Columbia many of the projects to close were hydro projects, consistent

with the historic dominance of hydroelectric power in BC. The BC project sizes varied from the small C\$11 million Canoe Creek hydro project, which involved local First Nation sponsorship, to the C\$491 million Boulder Creek and Upper Lillooet River hydro project developed by Innergex and Ledcor, both of which will sell power to BC Hydro under long-term Power Purchase Agreements. The oil and gas sector has been reeling from the global commodity price collapse, with seemingly no bottom in sight. As such, the oil and gas industry did not contribute much to the project finance sector in 2015. The mining industry was again quiet in 2015, however we advised the lenders to Imperial Metals in connection with the commissioning and start-up of the Red Chris gold and copper mine developed by Imperial Metals, which produced its first copper concentrate in February 2015.

The most significant deals to close in 2015 were the Bull Creek wind power project and the Site C worker accommodation project. Bull Creek was significant because the financing was based on the power purchase agreements between the project and several of Alberta's rural school boards through an agreement reached with the Alberta Schools Commodities Purchasing Consortium. The Site C worker accommodation project was notable for the use of a public-private partnership and a project finance structure for part of the procurement for the C\$8 billion BC Hydro Site C hydro project, with the rest of the project being done as a traditional utility procurement. We advised BC Hydro on not only the project financing, but also on all aspects of the procurement and construction of the dam project.

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

JRP & WKJ: On the renewable power project side, Pattern Energy and Samsung Renewable Energy were very active, with the closing of the K2 and the Armow wind power projects in Ontario. BluEarth Renewables was again very active in 2015, closing the Bull Creek financing and the SparkleLight acquisition. BC Hydro is the dominant player driving renewable energy activity in British Columbia, as both the offtaker of power from independent power producers (IPPs) and as developer of the Site C dam project. Historically, the project finance groups at the Canadian chartered banks have project sponsors well covered and 2015 was no exception, with Bank of Montreal, National Bank of Canada and Royal Bank of Canada all having strong years leading, arranging and syndicating the deals that closed in 2015. Institutional lenders played a significant role in financing projects in Canada as well, with the Caisse from Québec and ManuLife taking the lead on the two Innergex BC hydro projects that closed in 2015.



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

JRP & WKJ: Sponsors are facing a number of challenges in the short term. In the Ontario power project sector, the scaled back FIT Program is now only available for small projects (less than 500kW). For large renewable power projects, Ontario proceeded with the procurement of 455MW through its Large Renewable Procurement (LRP) process. Ontario evaluated the proposals submitted in response to the LRP and awarded 16 contracts: five wind, seven solar and four hydro projects. Those sponsors that were not offered a contract through the LRP process will need to look elsewhere to fill up their project development pipeline. In BC, developers are uncertain when BC Hydro might next move forward with a call for power. BC Hydro has not issued a call for power since 2010, and has given no indication of when it next proposes to do so. In the meantime, smaller projects of up to 15MW through BC Hydro's current standing offer programme are being considered by several developers. In the oil and gas sector, the colossal commodity price collapse has made many of the originally planned oil sands, pipeline and LNG projects uneconomic. Some have been postponed and others have been cancelled. LNG supply competitors from the USA and Australia are developing new LNG export capacity to meet global demand, while regulatory

delays related both to First Nations stakeholder interests and environmental concerns over gas project development in BC have caused some Canadian LNG projects to languish. Objections by environmental groups, First Nations residents in close proximity to projects and other interested parties have been very strong in some locations and regardless of whether or not they succeed in defeating a project, they can cause delays and add tremendous costs to the development of a project and in some cases, may discourage the financing of a project. Over the past several years, First Nations have been more active in asserting their rights to be consulted and, where appropriate, accommodated when projects may interfere with traditional activities on lands where First Nations previously enjoyed those activities. The Supreme Court of Canada, in the Tsilhqot'in Nation decision, held that the concept of aboriginal title may be established for some First Nations, which continues to strengthen the resolve of some First Nations and has already resulted in greater focus by project developers in the consultation and accommodation process with First Nations.

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

JRP & WKJ: The addition of renewable power capacity to the generation mix in Canada has slowed in recent years. Ontario and Quebec have historically been the most favourable jurisdictions for developers in Canada, offering government-backed or utility-backed long-term power purchase agreements with fixed prices. The 455MW LRP procurement in Ontario, which was awarded in March 2016, and the Quebec 6MW wind power procurement process (set to close in 2017) are helpful but limited. Although the pace has slowed, there will be significant opportunities for project financing in 2016 and later for those projects that have been awarded power purchase agreements under the LRP programme.

Alberta is currently the brightest light for project development and project finance in Canada. The new provincial government elected on 5 May 2015 has since announced its plan to transition the existing power market away from coal towards a mix with more renewable and natural gas power generation. The government's plan calls for renewable power to form 30 per cent of the installed capacity in Alberta by 2030 (renewable power in Alberta now accounts for only 9 per cent of the total installed capacity), with the balance of the power generation from natural gas (required for baseload and smoothing). The details of how renewable power projects will be incentivised are still pending, and these details will have a key impact on the pace of development. Initial details, including Alberta's procurement strategy, are anticipated in May 2016.

Aside from the power sector, 2016 will prove a significant year for Canada's nascent LNG export industry. Several projects have either completed or are close to completion of their approval processes and, depending on market conditions, could be in a position to make final investment decisions in 2016. If the final investment decisions are positive, this will start the ball rolling on complex, multibillion-dollar project financings.

Finally, the March 2016 Canadian federal budget announced an C\$11.9 billion, five-year infrastructure plan, which will include funding for upgrades and improvement to public transit systems and water and wastewater infrastructure. These priority projects will provide significant and immediate opportunities for project participants and project finance lenders. For instance, in the case of public transit, water and wastewater projects, the federal government is proposing to fund 50 per cent of eligible project costs, leaving the balance to be funded by provincial governments and the private sector. With Canada already a leader in public-private partnerships, the legal structures already exist in Canada for a rapid deployment of these funds and execution of new projects.

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

JRP & WKJ: Strong, established sponsors continue to have a dominant presence in Canada and continue to look for opportunities to acquire projects from smaller developers that have initiated them. Companies such BluEarth Resources, Capital Power, Enbridge, Suncor, Invenergy, Boralex, Northland Power and Algonquin Power are expected to remain active in the power sector in 2016. Companies like Enbridge and Trans Canada are expected to remain active in the oil and gas sector, albeit at much more moderate levels given the current low commodity prices. We are also seeing increased involvement of First Nations in the development of projects, not only as affected stakeholders, but as owner participants. Several First Nations have settled land claim disputes with the Canadian federal government and have substantial funds to deploy in project equity investments. On the debt side, the widening of spreads for project bonds resulted in fewer project bond deals and we expect that this trend will continue for 2016. Domestic Canadian banks such as Bank of Montreal, National Bank of Canada and Royal Bank of Canada filled the void left with fewer project bond deals. In some cases, these banks agreed to extend terms, increase leverage and reduce pricing to refinance mini-perm deals that were approaching maturity,

THE INSIDE TRACK

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

First, each project financing transaction is different and comes with its own unique set of complexities, which are often not obvious at the outset. Accordingly, clients should look for experienced project finance counsel that has a proven track record of innovative problem solving and getting deals closed. Second, clients should look for practical counsel that is able to separate real risks and issues from academic or hypothetical risks and issues. Third, projects are multidisciplinary by their nature so it is important for clients to have access to a team that has expertise in the relevant disciplines in the appropriate jurisdiction and a thorough understanding of the industry.

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

There are many important factors that clients need to consider in order to complete a successful project finance in Canada, including early stage community and, if applicable, First Nations engagement and consultation. Too many projects have experienced undue delays as a result of local community

reflecting the progression of projects from construction to established operations. Foreign banks, such as MUFG and Sumitomo Mitsui Banking Corp, remained active in the project finance sector, competing with Canadian banks on pricing and term. Life insurance companies such as ManuLife and Sun Life have been and will continue to be significant sources of debt capital for project sponsors, as long-term projects fit well with the long-term financing products these institutions offer to match their long-term insurance payment obligations. In short, we expect that even if the project bond market does not rebound in 2016, there will be healthy competition among the domestic Canadian banks, foreign banks and institutional investors, to provide project sponsors with a menu of project finance choices for their projects.

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

JRP & WKJ: We expect that the project finance market will continue to remain busy over the next 12-24 months, but at reduced levels from the highs we have seen in the previous two or three years.

Projects granted contracts through the Ontario LRP will begin to look at financing alternatives and a round of refinancing transactions for miniperm deals will sustain project finance activity in Ontario for 2016. In addition, the ongoing and First Nations objections and appeals. In addition, clients need to understand the regional differences in Canada and the nuances in each region. For example, the Province of Quebec deals with First Nation consultation and accommodation for projects in a different manner than other provinces, so what is required by a sponsor in one province may not be applicable for a similar project in another province.

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

The Grand Valley III wind power project financing was particularly interesting. As a result of environmental approval delays, Veresen (the sponsor) was running into a deadline under the PPA, so quick execution on the project financing was critical. The sponsor and the lenders were quickly mobilised, and through hard work and perseverance the deal closed 12 weeks after the kick-off. In the end, the project was completed ahead of schedule and under budget.

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interest of the Ontario Independent Electric System Operator (IESO) in power storage and in the development of a capacity market may provide sponsors and lenders with new project development and project finance opportunities.

In Alberta, we are anxiously awaiting the recommendations of the Alberta Electricity System Operator (AESO) to be provided to the provincial government in early May 2016. The AESO recommendations are to set out the detail of how the provincial government will support the development and implementation of additional renewable generation to the generation mix by 2030 so that renewables will account for 30 per cent of the installed capacity in Alberta. With prolonged low oil and gas prices, we expect that there will be fewer project development and project finance opportunities in the oil and gas industry.

BC will continue to grow in the next 12 to 24 months, with some of the remaining renewable power projects with existing PPAs proceeding and perhaps some smaller projects taking advantage of the standing offer programme. However, more significant activity is expected to come from P3 infrastructure projects encouraged by the recently announced federal support, and potentially from the LNG sector if regulatory, First Nations and environmental hurdles can be overcome in time for sponsors to make final investment decisions.



PROJECT FINANCE IN INDONESIA

Benny Bernarto is a corporate and commercial lawyer based in Norton Rose Fulbright's Jakarta office. His practice focuses on general corporate work; energy and natural resources; infrastructure; mergers and acquisitions; and foreign investment, including the healthcare sector.

Benny has extensive experience in infrastructure and power projects and the associated project financing: among others, the 670MW coal-fired power plant in Banten, West Java and the Sarulla geothermal power project, which was awarded Indonesian Energy Deal of the Year 2014 by Asian Legal Business. He has been recognised by Asialaw Profiles as a Recommended Individual (2014), and by IFLR1000 as a Rising Star and Leading Lawyer (2012–2013).

Nadia Soraya is a banking and finance lawyer based in Norton Rose Fulbright's Jakarta office. Her main industry sectors are energy, infrastructure and financial institutions.

Nadia handles a wide range of finance and corporate transactions including project finance; general banking and finance; and mergers and acquisitions. She has particular expertise in the power and natural resources sectors, where she has advised on a number of significant project financings. She works for large banks and in the oil and gas, power and mining industries.

"Reliable power, water supplies, roads, seaports and airports are a priority for the Indonesian government."

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

Benny Bernarto & Nadia Soraya: As South East Asia's largest economy and a vast equatorial archipelago of 17,000 islands extending 5,150km (3,200 miles) east to west, between the Indian and Pacific Oceans in South East Asia, with a population of approximately 200 million people, Indonesia is in great need of expediting the development of its infrastructure. Reliable power, water supplies, roads, seaports and airports are a priority for the Indonesian government. Although these infrastructures are basic, they are critical to supporting the economy of Indonesia.

In 2015, the government allocated 290 trillion rupiah (approximately US\$220 billion) for infrastructure development, primarily to support the development and construction of, among other things, 2,650km of road, 1,000km of freeways, 2,159km of railways, 24 new seaports, expansion of 59 existing seaports, and 15 new airports.

Back in 2014, the government also announced its five-year plan to build a 35,000MW power plant, to be completed by 2019. This programme received a mixed reaction from the public and from players in the electricity industry, considering the number of challenges that would be faced in particular by PT PLN (Persero), the state utility company, as the primary off-taker of electricity in Indonesia, and also by independent power producers in developing and implementing power projects. Power projects, in particular those that have been and are to be developed by independent power producer companies, have mostly attracted investors and lenders in the project finance sector. Independent power producer projects such as Paiton, Cirebon, Sarulla and Banten are just a few examples of power projects in Indonesia where development was financed by way of project financing. Tanjung Jati B is the first power project financed by way of a finance lease.

With the exception of Sarulla, which is a geothermal power plant, the other power plants mentioned above are large coal-fired power plants, each having capacity of not less than 600MW (the Paiton power plants complex, for example, has a maximum generating capacity of around 4,000MW).

Project financing in Indonesia, however, is still a developing market. This is particularly true because only recently have key infrastructure projects other than in the power industry been open for private investment. In the past, the development of key infrastructure projects was still pretty much owned or controlled by the government through the relevant state-owned enterprises, and their development was mostly funded by state funds, the situation of which has limited the ability of other infrastructure projects in Indonesia to adopt a project finance scheme.

It is, however, unfortunate that government programmes to develop key infrastructure projects have been hindered by long delays caused by various issues such as the procurement process, which causes deficiencies in government-allocated infrastructure budget spending and difficulties in completing the land acquisition process. There have also been other external factors affecting the development of projects, such as the regional economic slowdown and the drop in oil and commodities prices.

In response to this and in an effort to expedite development, since September 2015 the Indonesian government has unveiled 11 economic stimulus packages. These packages aim to boost economic growth in Indonesia through deregulation, tax incentives and by making room for foreign investment. In particular, these packages should be useful in supporting and realising the government's intention to develop infrastructure projects including the development of 35,000MW power plant capacity within five years, mentioned above.

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

BB & NS: In Indonesia, the infrastructure sector (the power sector in particular) is the industry that has been the most active in project finance transactions in Indonesia for the last 20 years. One of the primary goals of the government over the last 10–15 years has been to boost and expedite the development of infrastructure.

The previous administration launched the Master Plan for the Acceleration and Expansion of Indonesia's Economic Development (MP3EI), with the intention of attracting more investment and transforming Indonesia into one of the 10 major economies in 2025. From a regulatory perspective, this is also shown by the issuance in 2005 of a regulation on public-private partnerships:

"One of the primary goals of the government over the last 10–15 years has been to boost and expedite the development of infrastructure." Presidential Regulation No. 67/2005 (which was replaced by a new regulation issued in 2015) and various PPP projects announced and tendered out by the government during the last 10 years. Still in the electricity sector, in 2006, the administration announced stage one of a fast-track programme followed by a second programme in early 2010 whereby each programme aimed to accelerate the development of 10,000MW power plant capacity.

Unfortunately, to date, most of the projects declared under the PPP scheme and the fasttrack programme have been postponed, delayed or converted to pure government infrastructure projects. There have been various obstacles hindering the Indonesian government from tendering out and therefore initiating projects, and preventing investors from completing or even participating in infrastructure projects.

With the current government administration's emphasis on infrastructure development, the issuance of PPP regulations in 2015 was a key infrastructure reform intended to correct the earlier paralysis and therefore expedite the development of infrastructure projects by adopting a more effective and efficient approach.

Despite all of the challenges, at least two large power projects managed to achieve financial close during 2013 and 2014: the 670MW Banten coal-fired power plant and the 330MW Sarulla geothermal power plant. The significance of the Banten power plant is that it is the first independent power project in Indonesia financed in the international debt markets without government support.

While the Sarulla geothermal power plant is, to date, the largest geothermal power plant in Indonesia, it is no surprise that the roll-out of the 35,000MW plan is making the power sector the most active industry in the development of infrastructure projects, resulting in future power sector project financing transactions being even more active than at present. For the most part, this is driven by the fact that project finance schemes have been used in the early generation of power projects developed by independent power producers, such as the Paiton project, which created a precedent for future projects developed by the private sector.

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

BB & NS: In terms of project sponsors, project finance transactions in Indonesia have mainly been dominated by international developers, including those from Japan and South Korea. To name a couple, Sumitomo and Marubeni are two of the most active international project sponsors with existing projects already in operation and expansion in progress.

As for domestic sponsors, Medco, through PT Medco Energi International and PT Medco



Power Indonesia, has been active in developing power projects in Indonesia, most recently with its involvement in Sarulla. PT Medco Energi International is a member of Sarulla Operations Ltd, being the operator of the Sarulla power plant. Sarulla Operations Ltd consists of Japanbased Itochu, Kyushu Electric, US based Ormat Technologies and PT Medco Energi International. The US\$1.17 billion project is probably the first renewable project financed under limited recourse project finance to have closed, which took more than 15 years. The financing agreements were signed with the Japan Bank for International Cooperation (JBIC) and the Asian Development Bank (ADB), serving as the lead structuring banks, and six commercial banks.

Export credit agencies dominate the debt financing market for sponsors and project companies. The extensive involvement of export credit agencies in the project financing market in Indonesia is not surprising for various reasons, including the inevitable necessity for the offshore supply of large equipment required for the development of the projects, as local suppliers are still unable to provide the required large equipment.

In addition, the competitive pricing offered by export credit agencies and multilateral lending agencies have, to our understanding, been attractive to sponsors, although the requirements applied by these agencies may have been more stringent than those of the commercial banks.

JBIC, Korea Eximbank (KEXIM), ADB and the International Finance Cooperation (IFC) are some of the most active export credit agencies and multilateral lending agencies providing debt financing services. The involvement of export credit agencies in a project is also determined by the identity of the primary project sponsor or sponsors. In the case of the US\$730 million financing for the Banten plant, the project is owned by PT Lestari Banten Energi, a subsidiary of the Malaysian Genting group. The lenders for the project are Malayan Banking Berhad, Exim Bank of Malaysia, CIMB Bank, Citibank and RHB Bank.

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

BB & NS: Challenges vary from client to client, both when participating in a government procurement for projects and in implementing the project once awarded.

That being said, there is a general perception that land acquisition, coupled with the deficiency in or absence of a regulatory framework surrounding the development of infrastructure projects, are the biggest challenges faced when

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

An international counsel with the ability to build good synergy between Indonesian and international legal counsels, as well as other advisors of the client. Affiliation with an international firm is an important factor; A good track record in assisting sponsors in

project finance projects; and

Counsel with good knowledge of the industry being financed.

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

The most important factors are availability of the land that will be used for the project, the location and the type of land title. The land acquisition process is often lengthy and cumbersome. The client is expected to deal with issues surrounding the land acquisition process that are beyond the control of the investors and the government.

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

Representation of a consortium bidder for the Jawa 7 IPP Project, where features that were of key interest include (i) the proposed involvement of PLN by having equity participation in the project; and (ii) the provision of land by PLN, which means less complexities for the sponsors in implementing the project. The bid for the project was submitted to PLN in late 2015 (the bid winner has yet to be announced).

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participating, initiating and implementing projects in Indonesia.

However, clients should also carefully consider certain other factors when planning and implementing projects. Mechanisms and procedures for tendering; procurement procedures; finalising contractual arrangements; coordination; and interactions between various authorities including ministries, agencies and central, provincial and regional governments whose roles in the development of infrastructure have been growing since decentralisation in 2001, all need to be refined to improve implementation of these infrastructure projects.

Public consultation also plays an important role in project development, and this is recognised by the government as shown by its inclusion in the relevant public-private partnership regulation, although it has only been briefly contemplated. More detailed provisions need to be set out in various implementing regulations to ensure that public consultation takes into account the general public's opinion on an infrastructure project.

A poorly conducted (or absence of) public consultation process before the implementation of the project will result in dissatisfaction of parties participating in and surrounding the projects, and would likely lead to public protests and demonstrations against the projects as well as the possibility of a land dispute initiated in the project location (regardless that the land procurement is conducted by the government).

The Central Java 2 x 1,000MW coal-fired power plant project (Batang Power Plant) is an

example of a PPP project that has been delayed substantially due to environmental and land acquisition issues.

The PPP regulation requires financial close to be completed within 12 months after the execution of the PPP agreement. This will require additional effort by the government in simplifying the process to obtain licences and permits required for PPP projects. For example, currently a power plant project requires no less than 50 licences from various authorities, including the central and regional government, depending on the location of the project.

It is estimated that the project company will have to spend no less than 900 days to process and obtain those licences, not only because the licences must be processed and obtained from various authorities but also because certain licences can only be applied for after the issuance of other licences.

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

BB & NS: Since September 2015, the Indonesian government has introduced 11 economic stimulus packages. These packages aim to boost economic growth in Indonesia through deregulation, tax incentives and by opening space in foreign investment. The latest economic stimulus package

(ie, the 11th package) focuses on curtailing Indonesia's logistics costs, reducing dwelling time at Indonesian harbours and improving the investment climate of Indonesia.

The realisation and implementation of these stimulus packages will require the government to issue a number of more detailed laws and regulations that will also bridge the deficiencies in or lack of infrastructure regulatory framework. A specific regulation addressing licensing issues surrounding infrastructure in the power sector has also been issued recently. Among other things, it aims to simplify the number of licences that will need to be obtained and also the procedures involved in issuing the licences. Foreign investment in Indonesia is conducted under the auspices of the Capital Investment Coordinating Board, and that authority is working to halve the number of licences and permits required and to expedite the processing time to 256 days (approximately 10 months).

Provided that the regulations required to implement the economic stimulus packages can all be issued in a timely manner consistent with the announced stimulus packages, they are expected to boost project finance activity in various sectors. Indeed, although still at an early stage, we have seen some positive activity in the tendering process of power projects in the first quarter of 2016.

As quoted in the *Jakarta Post*, earlier this year, President Joko 'Jokowi' Widodo has reiterated his commitment to building infrastructure on the outskirts of developed areas and in villages outside Java, allocating 313.5 trillion rupiah of the 2016 state budget to promote equitable development, especially in remote and border areas. On more than one occasion, the president has reiterated the importance of infrastructure development such as dams, reservoirs and ports to increase the competitiveness of national products.

The prevailing public-private partnership regulation provides a more expansive list of infrastructure in comparison to the previous regulation, which was more limited to the 'common' infrastructure such as transport, water resources, irrigation, oil and gas, electricity (including geothermal), telecommunication and waste management. The list has been extended to include, among other things, energy conservation; renewable energy (not limited to geothermal); education, sports and art facilities; tourism; correctional facilities; healthcare; and housing.

Further regulations are necessary to implement these additional infrastructure projects, and we expect the government to issue them in the near future.

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

BB & NS: With IPP projects being one of the most active sectors for project finance, export credit agencies and multilateral lending agencies play a major role in financing them. As described above, the active involvement of export credit agencies is not surprising as historically local suppliers have been unable to provide large equipment for projects. As in the past most large equipment, in particular long lead items, were only available through export, it is natural that export credit agencies have taken a major role in the financing of infrastructure projects.

For example, for the 330MW Sarulla geothermal power project, which reached financial close in 2014, financing agreements were signed with JBIC and ADB, who served as the lead structuring banks, and six commercial banks, as well as ADB in its capacity as implementing entity of the Clean Technology Fund and the Canadian Climate Fund. The project obtained construction and term loans under a limited recourse financing package of direct loans from JBIC and ADB, as well as loans from the commercial banks backed by political risk guarantees from JBIC.

To our knowledge, other sources of finance such as capital markets, insurance companies and pension fund investors have yet to be introduced in the Indonesian market to finance an infrastructure project. Project finance structures still follow the basic project finance concept with (limited) recourse to the project sponsors and heavy reliance on sponsor support.

We have not seen a project where lenders have agreed to no recourse to the project sponsors. The negotiations on commercial terms and risk allocation are partially driven and influenced by the good relationship between sponsors and lenders, and on whether the project is entitled to any form of fiscal support from the government, such as viability gap funding or a government guarantee.

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

BB & NS: The Indonesian government has earmarked 313.5 trillion rupiah for infrastructure development in the 2016 state budget – the highest budget ever allocated to the country's infrastructure development (compared to 290 trillion rupiah in the 2015 state budget). This accounts for around 15 per cent of the total state budget. The government's infrastructure budget has risen sharply in recent years, being a positive indication of the government's intention to improve infrastructure facilities. The increase "Since September 2015, the Indonesian government as introduced 11 economic stimulus packages." in infrastructure has been made possible by additional fiscal space created by the diversion of energy subsidies to capital expenditures.

The government was troubled by the lack of infrastructure spending by the relevant ministries. To our understanding, this lack of spending was primarily caused by bureaucratic red tape and a lack of policy coordination during the first half of 2015. Nevertheless, infrastructure spending grew during the second half of 2015 with the implementation of the economic stimulus packages and the issuance of various regulations to support those packages, which, among other things, aimed to ease the tender process for key infrastructure projects and speed up land clearance, so there is room for optimism.

The government issued Islamic bonds (sukuk) in 2016 to help finance next year's infrastructure projects. They will also seek foreign loans and inject capital into state-owned companies to fund the projects. Projects that had been tendered out and then postponed are now back in play. The current administration aims to reactivate various projects that were postponed, including toll road projects such as the Trans-Sumatera Highway (a US\$23 billion highway to connect the northern and southern ends of Sumatera).

Overall, while we have seen clear signs of improvement, other factors such as the slowdown in China's economy and plunges in oil and commodity prices could play important roles in determining the degree of success of Indonesia's current infrastructure programme.



PROJECT FINANCE IN JAPAN

Naoaki Eguchi is head of Baker & McKenzie's banking and finance practice group in Tokyo and is a member of the Asia-Pacific banking and finance steering committee. He focuses his practice on project finance, infrastructure PPP, PFI and acquisition finance. His practice also covers finance with export credit agencies, real estate finance, limited recourse loans, distressed loan transactions, structured finance and securitisation. Mr Eguchi has significant experience representing Japanese and foreign financial institutions and sponsors.

Gavin Raftery is the head of Baker & McKenzie's global acquisition finance group and is a member of the global banking and finance steering committee, Asia-Pacific regional banking and finance steering committee and the Tokyo office's management committee. He focuses his practice on acquisition finance, project finance, export and trade finance, derivatives, emissions trading, carbon finance, securitisation and other structured finance transactions, FinTech and financial product development. Mr Raftery acts for Japanese and international clients on transactional and regulatory matters.

Yasuhisa Takatori is a partner in Baker & McKenzie's Tokyo banking and finance group. He focuses his practice on banking and finance law, project finance and ECA finance. Mr Takatori has substantial experience advising on project finance, PFI, acquisition finance, asset liquidation, finance lease and other structured finance transactions.



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

Naoaki Eguchi, Gavin Raftery & Yasuhisa Takatori: In 2013, the private finance initiative (PFI) promotion department of the Office of the Cabinet announced an action plan for the fundamental reform of private finance initiative and public private partnership (PFI/PPP), setting a target amount for domestic PFI/PPP projects of between ¥10 trillion and ¥12 trillion (including between ¥2 trillion and ¥3 trillion for concession style projects (ie, projects in which the operating rights of government-owned facilities are assigned to a private company, and the private company recoups its investment through service fees charged)) for the 10-year period beginning from 2013. This is a significant increase, considering that during the previous 14 years from 1999 to 2013, the total amount was ¥4.1 trillion. The action plan stresses the importance of the treatment of aging infrastructure, disaster prevention/ mitigation, and leveraging of standalone-type PFI/PPP projects not reliant on tax as a source of funding.

As for projects outside the area of PFI/PPP, electrical power projects – including renewable energy projects – play an important role in the domestic project finance market. There has been an increasing focus on renewables such as solar power and wind power as energy source

alternatives to nuclear power and fossil fuels, and, in 2012, Japan introduced a feed-in tariff (FIT) scheme for the purchase of power generated by renewable energy sources. The introduction of the FIT scheme has secured the prospects of recouping investments in renewable energy power generation projects, and as a result the number of such projects, particularly photovoltaic (PV) power generation projects, has increased dramatically (as of October 2015, the total electrical power generation capacity certified under the FIT scheme amounts to approximately 75,490MW), and project financing for such projects has increased accordingly. Furthermore, as part of the liberalisation of the electrical power market beginning in April 2016, Tokyo Electric Power Co, Inc and other regional utility companies (which have essentially held monopolies over power production and transmission) have been encouraged to outsource the operation of new thermal power generation projects. Accordingly, there has been an increase in the number of thermal power generation IPP projects operated by the private sector in recent history.

The demand for project finance is expected to continue - particularly for PFI/PPP projects and electrical power generation projects. However, the majority of social infrastructure developments and renewable energy projects are small to medium in scale, and the concession and standalonetype projects for which large-scale projects are anticipated are limited in number. Given this situation, the domestic project finance market is limited in scale, and many Japanese banks are also actively participating in offshore project finance transactions. In particular, the Japanese government has adopted a policy to enhance assistance through official development assistance loans and export credit agency financing, aiming to achieve infrastructure export in the amount of approximately ¥30 trillion in 2020 (compared to ¥10 trillion in 2010) as set forth in the 2013 Cabinet decision 'strategy for the revitalisation of Japan'. In addition, in 2015, the Japanese government announced a policy regarding 'quality infrastructure' including the investment of US\$110 billion over the next five years in Asia in collaboration with the Asian Development Bank to develop 'quality infrastructure', a 30 per cent increase over the previous level of investment. In accordance with these government policies, it is anticipated that there will be an increase in project finance transactions related to infrastructure projects in developing countries, particularly in the ASEAN community. Traditionally, major banks such as the Bank of Tokyo-Mitsubishi UFJ, Ltd, Sumitomo Mitsui Banking Corporation and Mizuho Bank, Ltd were the major Japanese players participating in overseas project finance markets. However, recently multiple regional banks and other financial institutions have also expanded into this area.

"Project financing in Japan has traditionally been used primarily for infrastructure development projects."

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

NE, GR & YT: With respect to PFI/PPP projects, the majority have been service payment-type social infrastructure development projects (primarily for educational and cultural facilities, medical facilities, government offices and rehabilitation facilities, etc), ranging in value from a few hundred million yen to a few billion yen. It has been said that many of these PFI-type social facility development projects merely defer the payment of infrastructure development costs by the government using tax as a source of funding, and PFI/PPP's original purpose of utilising private sector know-how to efficiently develop social infrastructure and provide less expensive and better quality services to the public, is not being sufficiently achieved.

Save for the Haneda Airport development project, there are hardly any standalone-type PFI projects where the operator bears market risks, such as demand risk and price fluctuation risk, without using tax as a source of funding. On the other hand, the government has set a specific numeric target for the advancement of projects based on the concession scheme introduced in 2011 (in addition to the target amount for total value described above), including six airport projects, six water or sewage system projects and one road project by the end of FY2016. To date, the Sendai Airport and Kansai International Airport/Itami Airport concession projects have seen significant progress. In addition, the national government amended the PFI Act in September 2014 to provide for a scheme for deploying national government employees to concession operators with a view to boosting the development and performance of concession projects. As of February 2016, concession plans were announced for Takamatsu Airport and for toll roads in Aichi Prefecture, and the promotion of concession-type projects is expected to continue in the future.

In addition to the sectors described above, the PFI Act lists a wide variety of sectors as targets for PFI projects such as railways, ports, rivers, parks, rental housing, waste treatment facilities, information and communications facilities, tourist facilities, research facilities, vessels, aircraft and satellites, and in the future, PFI/PPP methods may be employed in a wider range of fields.

Moreover, while the number is still limited, there have been cases of project financing for infrastructure projects executed outside the scheme of the PFI Act, such as tourist facilities including Universal Studios Japan (1999) and the



public-private cooperation for the reconstruction of Nakano Sun Plaza (2004).

In the field of power generation, project financing for PV power producers has been increasing under the FIT scheme. However, the government has been decreasing the pricing under the FIT scheme and reviewing the related schemes in order to address over-concentration in the PV power generation market and to promote offshore wind power, biomass energy, geothermal energy and other renewable sources. As such, in terms of 'greenfield projects', these types of renewable power projects are expected to increase and eventually exceed PV power generation.

Furthermore, as described above, in anticipation of the liberalisation of Japan's domestic power market beginning in April 2016, the number of thermal power generation IPP projects that rely on project financing is increasing. For example, the generation of power at coal-fired plants has long been bottlenecked by environmental issues. However, the Ministry of Environment has recently relaxed its attitude and adopted a policy to approve the development of coal-fired plants under certain conditions. These and other IPP projects are expected to be on an availability payment basis, with electricity utilities as off-takers.

It is worth noting that project financing in Japan has traditionally been used primarily for infrastructure development projects. While there has recently been some discussion on the mining of methane hydrate around the Sea of Japan, progress remains at the surveying stage and potential commercialisation is expected to take a number of years.

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

NE, GR & YT: The primary sponsors of PFI/ PPP projects have generally been domestic construction companies, trading companies and real estate companies. However, in relation to the large-scale concession-type Kansai International Airport/Itami Airport project, foreign enterprises including the Macquarie Group, as well as overseas airport operators such as the operator of the Changi Airport in Singapore and that of Heathrow Airport in the UK showed strong interest. The concession right to operate the Kansai International Airport/Itami Airport was ultimately awarded to a consortium led by ORIX Corporation and the French firm Vinci Airports.

Among renewable energy projects, due to the high FIT price, overseas renewable energy companies are actively involved as sponsors, in addition to domestic sponsors such as the trading companies, SoftBank Corp and ORIX Corp. In the future, these entities are expected to engage in next-generation renewable energy projects, such as offshore wind power and biomass energy as alternative investments to solar power. As for thermal power IPP projects, the existing electricity utilities, gas companies, trading companies, new power producers and suppliers are expected to act as sponsors.

Regarding non-Japanese sponsors involved in Japan's infrastructure projects, the Macquarie Group has been active in this field, and it is displaying a strong presence including serving as a financial advisor to the TOKYU Group, which won the bid for the Sendai Airport concession project. It should be noted that infrastructure projects in fields such as power generation, passenger transportation, railways and water systems are regulated under the Foreign Exchange and Foreign Trade Act of Japan, and prior notification is required for foreign sponsors to invest in these businesses. Japan does not have particularly strict foreign investment regulations, but, in the past, there have been discussions about strengthening regulations on foreign investments. For example, when the Macquarie Group increased its equity holding in the operating company of Haneda Airport, and when the Children's Investment Fund tried to increase its shareholding in J-Power Systems Corp. In the latter case, the Ministry of Economy, Trade and Industry actually requested that the proposed increase be reconsidered. Save for these exceptions, there have been no particular moves to regulate foreign investments, and foreign investments are normally allowed, without any problems, after the passage of the 'no

action period' of approximately two weeks, after the submission of the prior notification under the Foreign Exchange and Foreign Trade Act.

As for lenders, in addition to major private sector financial institutions such as Mizuho Bank Ltd, The Bank of Tokyo-Mitsubishi UFJ Ltd and Sumitomo Mitsui Banking Corporation, the Development Bank of Japan (DBJ), which is a public financial institution, is active in both PFI/ PPP projects and power generation projects. Of these projects, major banks and the DBJ tend to play a central role in state and large-scale projects, and regional financial institutions tend to play a central role in regional projects. Except for certain limited cases, participation by overseas lenders in domestic PFI/PPP transactions has been limited. This is not necessarily due to schematic hurdles, but may be due to the fact that sufficient debt liquidity is maintained with domestic banks. However, recently, an increase in foreign lenders lending especially to international sponsors for PV power generation projects has been observed, along with an increase in the number of international sponsors.

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

NE, GR & YT: Among PFI/PPP projects, facility development-type PFI projects have relatively low project risks, but also have low profitability. In addition, with regard to regional projects that constitute the vast majority of domestic PFI projects, many municipalities are inexperienced with PFI. They also are not incentivised to use PFI for facility developments, as financing public projects through municipal bonds is less expensive and they have a less-complicated structure. Thus, PFI projects that are attractive as investment targets have been rare. From this standpoint, there is growing attention being given to concessiontype projects. As mentioned above, multiple airport concessions are expected to be conducted after Sendai Airport and Kansai International Airport/Itami Airport. Other important areas are water and sewage system projects and toll road projects, though it should be noted that in order to establish concession rights to toll roads, amendments to laws allowing operators to collect fees for the use of toll roads will be required (while a bidding procedure for a toll roads concession project in Aichi Prefecture is in progress, this is an exceptional case as this project is based on a special law).

Among renewable energy projects, a drop in the number of new PV power generation projects is anticipated, due mainly to increasing difficulty in securing land for large-scale PV projects, and a downward trend in the FIT price (while with regards to PV power generation there recently have been new innovations such as waterbased PV plants, it is still unclear to what extent these will be used). In the future, an increase in alternative power sources such as offshore wind power, biomass energy and geothermal power is expected. However, for offshore wind power, issues such as environmental impact assessment, the treatment of fishery rights and the installation of transmission wiring and submarine cables suitable for wind power generation remain. As for biomass energy and geothermal power, issues such as fuel procurement risks and development restrictions based on the Natural Parks Act and other laws could also be a concern. These items require attention from a bankability standpoint.

Thermal power generation IPP projects to be outsourced by regional electricity utilities such as Tokyo Electric Power Co Inc will be on an availability payment basis, and while the sponsors will not bear any market risk, they will take the credit risk of the electricity utilities (which are structured as a normal joint stock company rather than a public agency) as off-takers.

Also, the underdevelopment of power grids (both in terms of wide-area interconnection and capacity) has led to some issues for the domestic power industry as a whole. In particular, one issue arising with the recent surge of PV power generation is that certain electricity utilities with insufficient interconnection capacity (with respect to PV power generation, seven utilities including Hokkaido Electric Power Co Inc and Kyushu Electric Power Co Inc, and, with respect to wind power generation, two utilities being Hokkaido Electric Power Co Inc and Tohoku Electric Power Co Inc) are permitted to enforce limitless output restrictions, without providing compensation, for demand/supply adjustment if the amount of power transmission reaches a predefined threshold amount. This is expected to create material development challenges, including the bankability of such projects.

"In the future, an increase in alternative power sources such as offshore wind power, biomass energy and geothermal power is expected."

THE INSIDE TRACK

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

(i) Knowledge of and longstanding experience working in the local market; (ii) government connections which bring firsthand knowledge of front line market issues; and (iii) a well-balanced team of local and international experts with proficiency in handling complex matters on a dual-language basis.

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

A clear understanding of local market practices and expectations and how they differ from other markets is crucial to successfully implementing a transaction in Japan. What was the most noteworthy deal that you have worked on recently and what features were of key interest?

We are advising the sponsors, United Corporation, Renova Inc and Kuni Umi Asset Management Co Ltd, on the development of a 20MW woody biomass power plant in Mukaihama, Akita City, Akita Prefecture. This project will require an investment of approximately ¥12.5 billion. Hokuto Bank Ltd and Shinsei Bank Ltd led a syndicated loan with local financial institutions, the Green Finance Promotion Organisation invested in preferred equity and Akita Prefecture will provide an interest-free loan. The plant will be the largest power generation facility of its kind, using only woody biomass as fuel in Japan's Tohoku region.

Naoaki Eguchi, Gavin Raftery & Yasuhisa Takatori Baker & McKenzie (Gaikokuho Joint Enterprise) Tokyo www.bakermckenzie.co.jp

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

NE, GR & YT: Regarding PFI/PPP projects, the guidelines were recently revised to simplify procedures applicable to facility development-type PFI projects, which may lead to an increase in regional PFI projects. In the field of concessions, certain types of concession projects including airports, water and sewage systems, with the applicable regulations in place are gaining momentum. With respect to toll roads, a bidding procedure for the concession related to a toll roads project in Aichi Prefecture is in progress, as mentioned above.

Pursuant to the 2013 amendments to the PFI Act, a public-private infrastructure fund was established with the government's injection of ¥10 billion in 2013 to assist certain market riskbearing PFI/PPP projects such as standalone-type PFI projects and concession-type projects. It is anticipated that contributions of risk money such as subordinated loans and investments will be the catalyst for private sector funds in the market risk-bearing type PFI/PPP projects. Recently, it has been determined to provide such support to the Kansai International Airport/Itami Airport concession project.

With respect to the power generation sector, the FIT price will be modified annually, and minor adjustments to the scheme for the establishment of renewable energy power production projects will continue. For example, the Ministry of Environment is currently preparing rules for environmental impact assessments for the introduction of offshore wind power generation projects. In addition, with respect to the Hokkaido and Tohoku districts, where the expansion of wind power generation projects is expected due to their strong and stable winds but where a lack of transmission capacity has been identified, the Ministry of Economy, Trade and Industry has designated these areas as Specified Wind Power Intensive Development Zones and has begun transmission grid developments. There has been a growing interest in the progress of these efforts.

Furthermore, electricity market reform, including the deregulation of the market and the separation of power production and transmission/ distribution is currently in progress, and grid management and power transmission/distribution businesses along with privately operated thermal power generation IPP projects are on the increase. Electricity company bonds were the main mode of financing for these businesses. However, these may be replaced with project financing by private banks and the DBJ in the future.

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

NE, GR & YT: As described in question 3, the main sponsors for project finance transactions in Japan are domestic enterprises, and the main lenders are domestic commercial banks and the DBJ. However, we have seen an increase in foreign investors in renewable energy projects and large-scale concession-type projects.

Facility-type PFI projects usually involve post-construction completion financing where the completion of construction is one of the conditions precedent to financing. After the completion of construction, debts may be collected from the purchase price to be paid by public authorities, and thus normally no sponsor support for ongoing business risks is required. Given the low risk profile, a debt-equity ratio of approximately 9:1 is seen in many cases. As for force majeure risk, this is typically borne mostly by the public sector, with only a small portion being borne by private operators. Regarding regulatory change risk, the public sector will generally bear the risk of changes in specific laws and regulations directly related to a project, while the private sector bears the risk of changes in other general laws and regulations.

On the other hand, while there are only a few cases of stand-alone PFI projects in Japan, government support for revenue risks is generally not expected. For example, no government support for revenue risks has been given in the Sendai Airport concession project. However, in airport concession projects such as Sendai Airport and Kansai International Airport/Itami Airport, force majeure risk not covered by insurance is borne by the government (in the case of the Kansai International Airport/Itami Airport, project, by a government-affiliated operating company), and an approach similar to that taken in facility-type PFI projects is adopted for regulatory change risk.

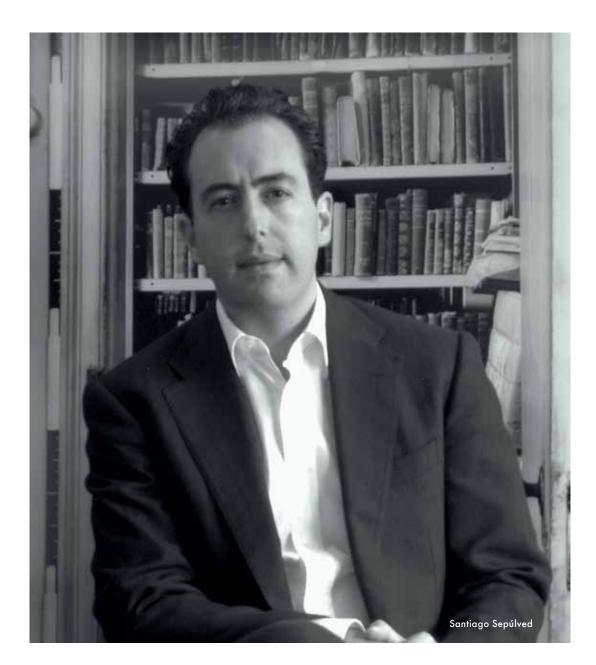
Most new thermal IPP projects are expected to operate on an availability payment basis with electricity companies as off-takers, and hence no revenue risk support is envisaged. However, depending on the creditworthiness of the EPC contractor, construction completion support may be required. Furthermore, although off-takers have strong relationships with the government, they are ordinary joint stock companies, and their creditworthiness should be taken into account.

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

NE, GR & YT: As described above, the first airport concession project in Japan was consummated in 2015, and multiple airport concession projects including those for Shizuoka Airport, Takamatsu Airport and Fukuoka Airport are expected in the future. Furthermore, with respect to toll roads, a bidding procedure is in progress for a toll roads project in Aichi Prefecture which will be the first toll roads concession in Japan. This is expected to be realised in FY2016. In addition, an increase of concession-type projects in the fields of water and sewage systems and toll roads is anticipated.

In the field of renewable energy, where the domestic PV market is already crowded, there are decreased prospects for new investments. On the other hand, however, onshore wind power, biomass and small-scale water power productions are gradually increasing. Following this trend, a shift toward geothermal energy and offshore wind power production is expected. However, these alternative energy sources have higher business risks compared to PV power production and it may take time for standard practices to be established. It should be noted that, while no dramatic increase in new investments for PV power generation is expected, the acquisition and restructuring of existing PV power plants is currently on the increase as investors look to capitalise on the stability provided by the favourable pricing levels previously secured under the FIT scheme.

In addition, the Tokyo Stock Exchange has opened a market for listed infrastructure funds investing in renewable energy projects and concession projects, and with the development of such markets, we hope to see an increase in the number of financial investors investing in infrastructure projects, as well as the development of a secondary market for domestic infrastructure. In addition, infrastructure investments as alternative investments by institutional investors such as the Government Pension Investment Fund, which manages approximately ¥139 trillion (as of December 27) of public pension funds, and insurance companies are receiving increasing attention.



PROJECT FINANCE IN MEXICO

Santiago Sepúlveda leads Creel, Garcia-Cuellar, Aiza y Enriquez, SC's project development and finance practice, and has ample experience representing Mexican and transnational clients in the structuring, development and financing of large energy, telecommunication and infrastructure projects in Mexico. In addition to his recognised project finance expertise, Mr Sepulveda regularly represents private equity funds investing in natural resource, energy and infrastructure projects with all M&A, regulatory and legal aspects of the transactions. He represented KKR in a landmark US\$2.1 billion sale-leaseback and financing transaction with Pemex, and is currently representing Howard Energy Partners in the development and financing of a firstof-its-kind natural gas pipeline in Northern Mexico.

"We expect significant growth in project finance work triggered by the recently enacted Energy Reform."

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

Santiago Sepulveda: Project finance is well established in Mexico, especially in the oil, gas and power industries, as well as in the transportation and water sectors. Over the last decade, project financing has become the preferred method of funding large infrastructure in Mexico.

During the past year, Mexico has seen an interesting shift in the project finance sector, mainly resulting from the Energy Reform enacted in 2014 and implemented during the course of the last 18 months. The Energy Reform essentially eliminated the long-standing state monopoly in the oil, petrochemical and power generation sectors, and opened such industries to private investment, including foreign investment.

The recent shift in the project finance sector was not necessarily the result of the Energy Reform allowing the development of oil, gas or power projects, since these have been financed for many years as part of projects linked with government concessions and contracts granted by Mexican state-owned companies such as the Comisión Federal de Electricidad (CFE) and Petróleos Mexicanos (Pemex). Rather, the shift has come by way of private parties developing new projects that are intended to take advantage of newly opened sectors and fill the void in areas that have been critically underserved, such as midstream services in the oil and gas industry, and transmission facilities in the power industry.

We expect significant growth in project finance work triggered by the recently enacted Energy Reform, mainly in the oil, gas and electricity sectors, but also in more general areas of infrastructure. In the past year, we have been able to capitalise our long-standing reputation as a full-service firm with expertise in complex and innovative transactions, and have been engaged by important private equity firms such as KKR, First Reserve and Blackrock to advise them in a variety of projects being developed in Mexico.

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

SS: Over the past years, Mexican project finance transactions have concentrated on the power generation and natural gas sectors, as well as in the development of water and transportation infrastructure projects. Historically, most of these transactions have been anchored around government concessions for toll roads and airports, or contracts granted by CFE and Pemex.

Since its enactment, the Energy Reform has revolutionised the Mexican project finance market, and we certainly anticipate significant growth as the new projects being developed require funding to reach conclusion.

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

SS: From the sponsors' side, Mexican projects have typically attracted the main industry players from Europe, the US and Japan, and more recently Korean companies, while China has yet to form a consistent presence. Often, these foreign companies form consortiums with local companies to ensure local content and knowhow. Interestingly, we are now seeing important participation from specialised private equity firms that have started to lead in very relevant transactions derived from the opening of the oil, gas and power sectors as a result of the Energy Reform.

Large infrastructure projects in Mexico are typically financed from a variety of sources. Typically, international commercial banks from the US, Europe (mostly Spain and France) and Asia (ie, Japan and Korea) form financing clubs with Mexican commercial banks and team up with development banks (both Mexican and from the sponsors' jurisdictions), import-export agencies and multilaterals (ie, World Bank, Inter-American Development Bank) to finance infrastructure projects in Mexico.

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

SS: The most significant challenges in developing infrastructure projects in Mexico typically derive from the multilayered regulatory framework that requires obtaining a large number of permits from different regulatory authorities that operate under different standards and in an uncoordinated fashion. This complex regulatory scenario requires a lot of experience and expertise from the sponsor's advisors in order to navigate the process in a time-efficient manner that minimises the effects on the project. Fortunately, lenders have come to understand these issues and the market has developed standards to address them.

On the other hand, while project financing structures are quite mature and have been repeatedly used to finance infrastructure projects, there are still some issues with the effective enforcement of lender rights when foreclosure is triggered. Nevertheless, recent legislative changes have been implemented in Mexico to strengthen security and the enforcement actions available to lenders, and these have been well received by the market.

THE INSIDE TRACK

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

First, the counsel selected must not only be an expert in project financing but also part of a larger firm that can seamlessly provide the same level of expertise in other areas that are relevant for the project, such as real estate, labour, tax and environmental matters. Second, since complex project financing has many phases, counsel must have ample experience beyond financing, which includes designing and implementing international consortium arrangements, as well as undertaking all of the project's regulatory and commercial requirements. Finally, counsel needs to demonstrate innovative thinking to address the particularities of each project.

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

In my experience over the past 20 years, every successful project in Mexico invariably has at its core a sponsor that is willing to understand and adapt to the particular nuances of the Mexican market, instead of trying to implement structures from other regions. As mentioned above, the Mexican project finance sector is well established and has developed structures that offer the required security and certainty to all parties involved.

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

For over a year we worked with KKR in structuring and implementing an extremely complex US\$2.1 billion sale-leaseback transaction for Pemex, that not only required negotiating the sale-leaseback documents with Pemex but also structuring the cross-border acquisition financing through a combination of a credit facility and a bond issuance.

Santiago Sepúlveda Creel, Garcia-Cuellar, Aiza y Enriquez, SC Mexico City www.creel.mx

"The most significant challenges in developing infrastructure projects in Mexico typically derive from the multilayered regulatory framework."

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

SS: The Energy Reform represents a radical change in the Mexican regulatory landscape, and its implementation is in the initial stages. The Mexican authorities responsible for the oversight of the energy sectors have been working hard to issue all the laws, regulations, directives and norms that form the new regulatory framework, and to review and approve all the permit applications that have been presented for new projects.

Therefore, given the importance and breath of the Energy Reform, at this point we do not expect any significant legal or regulatory changes that may give rise to new opportunities in project development and finance.

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

SS: Generally, Mexican project finance transactions have enjoyed sustained support from international and Mexican commercial banks, with some reliance on development banks to anchor the debt financing. However, we have recently seen alternative sources of finance coming into play, including the placement of project bonds in the international markets, as well as the participation of insurance companies and pension fund investors taking a share of a project. Interestingly, the past year has seen many specialised funds being formed with the specific purpose of investing in new energy-related projects that arise from the Energy Reform.

Traditionally, the financing of Mexican large infrastructure projects anchored on government concessions or contracts has been structured with limited recourse (or even no recourse) to the project sponsors. However, medium-sized or private project financings often rely on sponsor support, with lenders giving weight to relationship lending principles.

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

SS: As mentioned above, the expectation is to see significant growth in project finance work triggered by the Energy Reform, mainly in the oil, gas and electricity sectors. On a parallel track, as energy-related projects gain momentum, we also anticipate growth in other infrastructure areas such as telecoms, airports and toll roads that will be required to serve the growth resulting from the energy projects.



PROJECT FINANCE IN THE MIDDLE EAST – A REGIONAL OVERVIEW

Haitham Hawashin is a partner at Simmons & Simmons' Dubai Office. He has extensive experience in corporate and infrastructure project finance and debt and equity capital markets transactions. He has worked internationally, advising on debt, equity capital markets and structured products transactions. He has advised on many headline transactions, including sovereign debt issuances and renewable energy projects. He is recognised as a 'foreign expert abroad' by Chambers and his recent experience includes advising IFC, EIB, EKF and other lenders in connection with the project financing of the 117MW Tafila Wind Farm project; and Abu Dhabi National Chemicals Company in connection with the development of a terminal and tank farm.

Adrian Nizzola has over 30 years' experience in the oil and gas industry. He was general counsel to Qatar Petroleum (QP), its affiliates and subsidiaries, and to other Qatari entities, providing senior legal support for over 17 years, and continues to advise QP and the State of Qatar. *Chambers* recently listed Adrian as a leading authority on oil and gas projects in Qatar.

Philip Stevens is a supervising associate based in Simmons & Simmons' London office, and specialises in international energy and infrastructure project development and project finance. He was based in the Simmons & Simmons Abu Dhabi office from 2012 to 2014. He has advised regional and international developers, governments and financiers on transactions in the Middle East, Europe, North America and Africa. Philip has advised clients in the power, oil and gas, renewables, transport and waste sectors.

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

Haitham Hawashin, Adrian Nizzola & Philip Stevens: The main trend over the past year has been the decline in international oil prices. While this has been felt around the world, the impact in the Middle East has been more pronounced on the basis that oil still provides the main revenue source for the majority of local governments in the region. For example, oil revenues account for about 90 per cent of export earnings and about 80 per cent of total government revenues in Saudi Arabia.

We have seen multiple knock-on effects in the local project finance market, the most significant of which has been the general tightening in local liquidity, which is largely the result of a reduction in government deposits in local banks. Interest rates have also risen: the overnight Emirates Interbank Lending Rate (EIBOR) rose from an average of 0.095 in January 2015 to 0.218 in January 2016. In Saudi Arabia, the three-month Saudi Interbank Offered Rate (SIBOR) rose from 0.862 in December 2014 to 1.333 in December 2015.

This has translated into higher interest rates, shorter tenors and reduced debt-to-equity ratios on offer from lenders.

Despite this, the local project finance market remained robust in 2015 (albeit not growing at as fast a rate as it was this time last year). According to market statistics, around US\$24 billion was raised in project finance transactions during that year – only slightly down on the five-year average of US\$27 billion.

This demonstrates the resilience of the local market, particularly for well-structured deals in traditional sectors such as energy. Continued demand for project finance is largely due to the critical need for expansion of local infrastructure and diversification of local economies to meet the needs of a rapidly expanding population – these trends remained unchanged in 2015. Further, the reduced ability of governments to self-fund major projects themselves has opened a space for private sector involvement through project finance.

In terms of key markets, Saudi Arabia continued to be the largest in the region as it attracted around US\$15 billion in total project financing according to market statistics. The UAE was the second-largest market in 2015, attracting US\$3.3 billion in project finance investment.

As for key players, Japan's Sumitomo Mitsui Financial Group was the leading project finance arranger in 2015, arranging US\$2.3 billion according to market statistics. This builds on a trend in recent years of increased Japanese involvement in Middle Eastern transactions.

The second major trend of 2015 was the renewed focus on Iran in light of the lifting of international sanctions there. The sheer size of the Iranian economy (the second largest in the Middle East after Saudi Arabia), combined with the urgent need for large-scale investment, presents an opportunity that cannot be ignored by the project finance market. Iran is reportedly planning hundreds of billions of US dollars in investment in the energy, power, transport, mining and industrial sectors, but is not in a position to fund any major projects directly. In 2015, Simmons & Simmons teamed with Deloitte and Atieh Associates (a local Iranian firm) to host a series of webinars in relation to the opening up of the Iranian market. The programme attracted significant interest from our clients across the financial institutions and energy and infrastructure sectors, and is indicative of the growing optimism surrounding opportunities in Iran. We do not expect to see a well-developed local project finance market spring up overnight; however, 2015 certainly saw Iran emerge as an exciting key market to watch in the future.

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

HH, AN & PS: We have seen significant project activity in the energy and infrastructure sectors. As set out above, this activity is due to the continued rapidly expanding population in the Gulf Cooperation Council (GCC) placing increased demands on critical infrastructure such as the supply of power, water, transportation, public housing, and healthcare and education facilities.

We are seeing an increased willingness by governments to fund projects through publicprivate partnerships (PPPs) as the public sector alone can no longer independently fund the necessary infrastructure development, particularly in light of the continued decline in oil prices.

We expect to see a continued commitment to PPPs in the GCC and to see further significant PPP projects in the future as PPP models are becoming increasingly sophisticated and robust.

In terms of recent deals, it is worth highlighting the US\$3 billion Facility D IWPP in Qatar in relation to which we have been advising Mitsubishi Corporation as lead project developer. The combination of a well-established asset class (power/water), strong government support and Japanese involvement (in both developer and lender roles) make this an excellent example of the type of deal that has continued to attract project finance in 2015.

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

HH, AN, PS: Local, regional and international sponsors and banks have been active in investing



in and lending in relation to GCC projects. As set out above, Japan's Sumitomo Mitsui Financial Group was the leading project finance arranger in 2015.

Saudi Binladin Group is probably one of the most active GCC sponsors in the Saudi market in terms of the value of contracts under execution, followed by the Al-Shoula consortium. Saudi Aramco, SABIC, ACWA Power and Saudi Electricity Company are also very active.

In terms of international sponsors, South Korean sponsors (such as Daelim, SK Engineering & Construction, Samsung Engineering and Doosan Heavy Industries & Construction) dominate the Saudi market followed by Spanish and Italian sponsors.

In the UAE, local sponsors such as Mubadala, Masdar, IPIC and many of the government-related entities (GREs) such as Abu Dhabi National Oil Company (ADNOC) and ChemaWEyaat dominate the local sponsors or UAE-headquartered jointventurers list. Having said that, the downturn in the construction market in previous years has seen many international sponsors exit the market, allowing local sponsors to gain prominence.

In Qatar, the likes of Qatar Petroleum (QP), Kahramma and Qatar Electricity & Water Company (QEWC) lead the local sponsor list. Recently, Nebras Power was formed as a joint venture between QP, Qatar Investment Authority and QEWC to seek out and implement power and water projects in the region and Africa.

In terms of international lenders, HSBC, BNP Paribas, Société Générale, Standard Chartered Bank, Barclays and The Bank of Tokyo-Mitsubishi are very active in the GCC.

As for GCC lenders, Qatar National Bank is the biggest project lender in the GCC. Local banks in the UAE are also very prominent, with the likes of the National Bank of Abu Dhabi, Emirates NBD and Dubai Islamic Bank winning key roles.

In Saudi, the top local project finance lenders include Banque Saudi Fransi, National Commercial Bank, SABB and Riyad Bank.

The top international project finance lenders in Saudi include Credit Agricole, Société Générale, Standard Chartered Bank and KfW. Having said that, US-dollar lending is on the decline largely driven by the sophistication of the local banks and the country's need for riyal-funded projects.

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

HH, **AN & PS**: The ability to secure and maintain long-term true 'project finance' (ie, fully non-recourse) is becoming more challenging, if not impossible.

In recent years, loans granted by regional and foreign banks to provide PPP infrastructure financing have been significant, largely due to the government's willingness to back these loans.

However, global liquidity issues have meant that the credit markets have lost their appetite for long-term project finance deals. Tight credit conditions have even caused certain leading banks to invoke 'material adverse change' exit clauses in recent times, seeking to walk away from deals that have become less viable.

As a result, banks are increasingly becoming more selective with the projects that they will fund and are seeking risk-sharing arrangements that will satisfy all parties. Such risk-sharing arrangements include short-term lending with guarantees from the project sponsors as well as revenue guarantees from governments. This means that to secure financing, sponsors are increasingly reaching out to governments to secure sovereign guarantees or putting their own balance sheets at risk by deviating from fully nonrecourse project finance schemes.

With dependence on external funding for the development of essential infrastructure, we have seen that GCC governments are becoming receptive to the commercial realities facing banks and sponsors alike and are increasingly willing to grant sovereign guarantees and, in some cases, to make favourable secured offtake commitments in concession agreements in order to secure financing and ensure bankability.

Other key challenges include:

- sovereigns now seek to cap their exposure and liabilities in respect of projects they are sponsoring, which is obviously not well received by international banks and, in particular, Export Credit Agencies;
- successful government sponsors are becoming more aggressive by pushing for uncommercial terms, which has led to a number of transactions being delayed;
- significant bottlenecks continue to delay projects in obtaining regulatory approvals – environmental impact assessment approvals being the most noteworthy;
- international and local banks and international sponsors imposing compliance with westernstyle codes of conduct and practices including compliance with Equator Principles, FCPA, OFAC and the UK Bribery Act;
- delays in being able to move equipment through ports and securing labour force in some jurisdictions – an issue that has resulted in calls to introduce a GCC initiative to facilitate freedom of movement for equipment and labour force;
- enforcement of foreign judgments, particularly in jurisdictions that have not put in place clearly defined laws and regulations to give effect to this; and
- the inability to create certain types of liens on certain types of assets (such as a general fixed

and floating charges or even a share pledge in certain jurisdictions), which then necessitates introducing heavily structured alternative security structures.

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

HH, AN & PS: As government revenues continue to be squeezed by lower oil prices, PPPs are once again being considered as a way to finance largescale development projects, particularly in the energy and infrastructure sectors.

However, there are currently significant barriers to the broader adoption of PPP in the GCC due, in some part, to a lack of international investors and a lack of lender confidence, and an absence of comprehensive PPP-specific legislation and policy.

Many PPP projects have been successfully executed in the absence of dedicated PPP laws. However, jurisdictions such as Saudi, the UAE and Qatar, where there is a need for PPP infrastructure development, may benefit from the increased investor confidence that a clear PPP legal regime can attract.

PPP laws enhance investor confidence by:

- establishing a clear legal basis for a project by eliminating the potential for conflicting laws and legislation;
- establishing clear procurement rules and procedures – transparent eligibility criteria reassures potential bidders that they may have a reasonable chance of winning the bid;
- requiring the relevant authority to carry out an analysis of the economic benefits of the project's technical and economic feasibility, prior to tendering a project, giving confidence to investors that the government is not going to pull out of the project halfway through the tendering process as the government has thoroughly considered the need for the project prior to tendering; and
- regulating how project agreement disputes are settled and allowing for waivers of sovereign immunity, as a significant area of concern for investors is the enforceability of contracts against the government. Investors will usually require certainty that foreign judgments and arbitral awards given in accordance with a PPP project agreement will not be subject to a further round of litigation in the courts of the host country.

In the GCC, Oman, Bahrain and Kuwait have the most developed PPP laws while the regimes in Qatar, the UAE and Saudi are less developed.

While there is no federal legislation in the UAE that applies specifically to PPPs, several of

THE INSIDE TRACK

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

Depth of PPP and project finance experience (both lender and borrower counsel experience), negotiation skills and regional/ local knowledge.

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

An understanding and appreciation of local law and culture is imperative when structuring and executing projects in the GCC, particularly through PPPs. Given our 20 years in the region, presence in UAE, Qatar and Saudi, and multilingual capabilities, we are well placed to assist our clients in this regard.

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

We are advising Mitsubishi Corporation and TEPCO as lead international developer in connection with the project financing of a 2,400MW/130MIGD Facility D Independent Water and Power Project, Qatar. The project will be the first of its kind in Qatar to utilise reverse osmosis technology on a large scale, and will be the first privately financed IWPP in Qatar to involve an international developer since the Ras Laffan C plant reached financial close in 2009.

Simmons & Simmons is advising Mitsubishi and TEPCO, as well as the borrower Um Al Houl Power on all legal matters in connection with the Project. Financing will be provided by a consortium of international and local lenders led by the Japanese export credit agency, Japan Bank for International Co-operation. The Simmons & Simmons Doha, Abu Dhabi and Tokyo teams have also provided specialist input across a range of complex project and finance agreements.

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the Emirates have specific legislation relating to procurement of works and projects by government entities. There is speculation that the UAE is considering the development of a dedicated PPP law and a centralised government unit to oversee all PPPs in the near future, in anticipation of the further use of PPP financing.

As noted above, Kuwait has one of the more developed PPP regimes, having enacted a dedicated PPP law in 2008. Kuwait recently passed a new PPP law to improve gaps in the existing PPP regime and implement lessons learned during PPP projects executed in previous years. The law is proposed to be more flexible and conducive to attracting foreign private investment and, significantly for lenders, is said to allow the project company to encumber the project assets (other than land) as part of the security package. As a result, there is likely to be increased investor interest in coming years in Kuwait.

In some GCC countries, a number of initiatives were introduced requiring the use of local SMEs in respect of project developments, particularly for local content. While this is a welcome step towards stimulating local economies, a number of concerns have been raised by project sponsors, including delays in the procurement process and general issues relating to meeting international best standards. GTDT: What trends you have been seeing in terms of range of project participants? What factors have influenced negotiations on commercial terms and risk-allocation? Are there any particularly innovative features?

HH, **AN & PS**: Generally, project finance in the region is becoming more complex as more diverse sources of funding are required for many projects.

In terms of the traditional market, global banks that have historically been active participants in the GCC project finance market have now reduced lending due to their internal credit, liquidity and capital adequacy issues. Accordingly, although global banks are still involved, there is an increased reliance on credit and financial support from local and regional banks. However, as set out above, local banks are now facing liquidity issues of their own in light of the continued decline in global oil prices.

International regulatory standards on bank capital adequacy, stress-testing and market liquidity risk have reduced the willingness of many banks, both local and international, to allocate capital for project finance. The commercial banking sector's overall appetite to take and hold large project loan assets has reduced. Capacity and capital adequacy issues remain. Accordingly, with banks no longer able and willing to do all the heavy lifting on project financing, sponsors are now, more than ever, under increased pressure to generate project finance in a variety of forms.



Specialist energy and infrastructure funds, private equity firms and institutional investors are increasingly active as alternative private sector capital. Policy banks, multilateral government agencies and export credit agencies are also playing an increased role in direct lending. For major projects, ECAs will continue to have a significant role. In many cases this is also driven by sovereign-to-sovereign relationships. For example, JBIC (which is part of Japan Inc) has been regularly involved in many development projects in the region as Japan is heavily reliant on GCC oil supplies. In the wake of Fukushima, there has been a notable upward trend in Japanese investment in the region.

Private-sector investors are also looking to the capital markets to obtain additional and cheaper sources of financing and to reduce dependence on bank loans. One avenue for entering capital markets is to raise funds in capital markets through sale of corporate bonds or sukuks (a path that PPPs can also take with the project company issuing bonds or sukuks). A good example of this was the decision by the Oman Electricity Transmission Company to raise US\$1 billion in international debt markets through a corporate bond issuance in 2015.

We expect that this year several US-dollar bonds and sukuks will be issued out of Dubai, given the Emirate's infrastructure projects such as Expo 2020. We also anticipate that bond and sukuk issuances will increase in Saudi with the opening of the stock market to foreign investors. GTDT: What are the major changes in activity levels or new trends you anticipate over the next year or so?

HH, **AN & PS**: In the coming years, we expect a growing number of infrastructure refurbishment projects built as assets in the early-to-mid-2000s to require upgrading. For example, a number of the early IPP/IWPPs in Oman and Abu Dhabi are already nearing the end of their original 20-year concession terms.

As mentioned above, we expect to see a continued trend in the GCC of the execution of projects by way of PPP, particularly in the infrastructure space as populations continue to expand and government ability to self-fund remains reduced due to lagging oil prices.

Also as mentioned above, Qatar 2022 and Dubai Expo 2020 should drive a number of project finance deals. In Qatar, we expect to see a major shift to implementation phases after many years of planning for development projects.

Resource competition (such as labour and goods) between UAE, Qatar and naturally Saudi is expected to put a lot of pressure on many of the projects developing at the required pace.

Finally, we expect to see continued growing levels of interest in the opportunities created by the lifting of international sanctions on Iran at the start of this year, particularly in the oil and gas, power and transport sectors.



PROJECT FINANCE IN THE UNITED KINGDOM

Andrew Petry is a partner in the Simmons & Simmons projects team and specialises in financing energy and infrastructure (E&I) companies and projects. He has a broad range of experience in the E&I sector, with particular emphasis on project finance, PPPs, refinancings and acquisitions in the power, renewables, liquefied natural gas (LNG), transport, accommodation and waste-water sectors. Andrew's clients are energy companies, financiers, project sponsors, borrowers, public sector entities and infrastructure funds. Apart from working on UK transactions he works on transactions in many parts of the world, but in particular often acts on transactions in the Netherlands where he established the offshore finance practice of a 'magic circle' law firm while based there between 2001 and 2006. He is fluent in English, German and Dutch and regularly works in these three languages. GTDT: What have been the trends over the past year or so in terms of deal activity in the project finance sector in your jurisdiction?

Andrew Petry: Arguably London remains the most important centre in the world for energy and infrastructure finance and all associated services: this of course includes legal services. Being part of an E&I team at an international law firm based in London, and at the same time having team members spread throughout our 22-office network, helps me and the team win roles on transactions from almost any corner of the globe. Inevitably though, the markets on our doorstep are easier to service and for those of us based in London a significant proportion of our work comes from the UK market, which is the subject of this interview.

Before doing this interview, I did a quick online check on all the deals that had been reported as having been completed in the UK over the past year or so. One thing that struck me was that, despite a very significant decline in the use of PFI/ PPP for government infrastructure procurement, the UK has continued to deliver a large number of E&I finance opportunities in both the public and the private sector, and these have been in almost every conceivable asset sector, indicating that the UK continues to deliver an active and attractive investor market.

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

AP: If we start with PPP/PFIs, the UK continues to benefit from its reputation as the inventor and leading market for the use of PPP/PFI techniques. This reputation was supported by the publication of 'PF2: A User Guide' in December 2012, which replaced the previous guide, 'Standardisation of PFI Contracts Version 4'. The new guide is intended to embody a set of principles that addresses the weaknesses identified by the UK's previous coalition government in New Labour's implementation of PPPs and is intended to rebalance a perceived imbalance in the relationship between the public and private sectors. Despite the change in government in May 2015 and PF2, there has been no change in the general public sector hostility towards PPP/PFI and no serious debate on the topic has taken place in the UK over the last year that I am aware of.

Despite this, a few new PPP transactions continue to come to market including hospital financings, schools PPP transactions under the Building Schools for the Future programme, waste PPPs and road PPPs, with the sizeable Midland Metropolitan Hospital PPP and the Isle of Wight Waste PPP both reaching financial close in 2015. The £1.1 billion Ministry of Defence's UK Military Flying training system (fixed-wing) project also reached financial close this year on "One of the most hoteworthy fransactions of 2015 was a quasi-PPP waste water transaction." which Simmons advised the Ministry of Defence, and a rotary wing version of the transaction is due to follow in the near future. On the social infrastructure side, there continues to be investment in social housing and in university accommodation on a PPP basis.

One of the most noteworthy transactions of 2015 was a quasi-PPP waste water transaction. Thames Tideway is a £4 billion 'super-sewer' project and unusual in that it was procured by the privately owned Thames Water, with the UK government providing guarantees in the form of full compensation to debt and equity totaling £4.8 billion, with maximum potential support in certain scenarios reported to amount to £10.4 billion.

The new conservative government has continued to look favourably on major rail investment projects, re-affirming their commitment to the High Speed Two (HS2), which is designed to link London more effectively to the north of England. HS2 is scheduled to be developed in two phases: a first phase connecting London to Birmingham and a second phase connecting Birmingham to Leeds and Manchester. The reported price tag varies, but some reports state that it is likely to cost £70 billion to £80 billion, up from \pounds 50 billion (all at 2011 prices). Simmons & Simmons advised the government on the core contracts for HS2 and continues to advise a number of government departments on multibillion-pound outsourcing transactions. Even though HS2 has not yet commenced, there is already an HS3 being mooted that will connect Leeds with Manchester.

The Crossrail project (around £15 billion), which will link central London on a fast west-east axis with Reading, Heathrow, Essex, Kent and the wider south-east, is now well advanced and services are due to commence on the central section by late 2018. This will be followed by a phased introduction of services along the rest of the Crossrail route over several months. There is already talk of a Crossrail 2 project intending to serve stations throughout the South East, linking South West and North East London, as well as destinations in Surrey and Hertfordshire. This project will cost substantially more than Crossrail and is already causing political controversy with calls for the northern high-speed rail projects to be given preference. There is also a large investment programme via government-owned Network Rail in railway stations, including an investment of over

£1 billion in the north of England, redevelopments of Manchester Victoria Station and London Bridge Station as well as the electrification of the West Coast Main Line.

Looking at non-directly government procured sectors, the most active sectors have been the on and offshore wind sectors, and also earlier in the year a significant volume of activity in the greenfield ground-mounted solar PV sector. The former coalition government continually adjusted subsidies available for different renewables technologies, and for the power sector more generally on the stated basis that they wished to act as a catalyst for industry and help the country achieve the 2020 target of 15 per cent energy consumption from renewable sources. First of all, this saw the renewables obligations certificate (ROC) system being adjusted on a technologyby-technology basis to encourage less popular technologies into the market banding, and then the Energy Act 2013 replacing ROCs entirely with a new and more efficient 'contracts for difference' (CFD) mechanism of support (with sub five megawatt renewable facilities still continuing, for the moment, to benefit from a feed-in tariff (FIT)).

The new conservative government removed many of the subsidies for renewables in 2015 soon after taking office. In Swansea Bay, the mooted tidal lagoon has been delayed considerably and is being reconsidered, in large part because of the guaranteed power price of £168 per MWh being sought. A number of offshore wind projects continue to be funded, including most prominently the 336MW Galloper offshore wind farm where we represented one of the shareholders. However, the hitherto most successful sectors of onshore wind and large ground-mounted solar are no longer producing any volume of greenfield transactions. The Treasury's Levy Control Framework (LCF) acts as the ultimate budget for these support schemes, and the size of the capped annual budgets within the LCF is predominantly responsible for setting the scale and pace of renewables investment.

The UK is also currently committed to new nuclear, for which EDF were awarded an abovemarket tariff of £92.50 per megawatt hour to encourage their development of new nuclear plants at Sizewell and Hinckley Point, but the sector is being beset by delays.

Two related sectors that have shown high levels of activity sectors are the secondary sales and refinancing sector. Trading energy and infrastructure assets to meet the growing demand of institutional investors for what they term as part of their 'alternative asset' portfolio is big business, as is refinancing transactions often with funds provided by institutional infrastructure debt funds.

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

AP: The UK remains one of the most open economies to foreign investors, and as a result attracts investors from all around the world. We have seen numerous transactions where overseas institutional buyers have funded or acquired infrastructure in the UK. Examples of overseas investors investing in UK infrastructure include NS (the Dutch railways company), DONG Energy and EDF and a long list of funds and fund managers

"Institutional funders and specialist debt funds are increasingly buying up the debt on operational projects."

including the big Canadian and Australian funds such as Borealis, Macquarie, CPDQ, First State, Brookfield, Ontario Teachers and Hastings as well as major European investors such as Allianz, Deutsche Bank, Meridiam, MEAG and many others. Asian interest is also high with Chinese contractors and investors having successfully been courted to involve themselves with the UK's nuclear new-build programme.

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On the debt side, institutional funders and specialist debt funds are increasingly buying up the debt on operational projects either by deploying their own funds or investing on a managed account basis. Many of these funders are also moving into funding greenfield projects with some institutional funders overcoming in large part the issues of inflexibility that have traditionally put them at a disadvantage when compared with banks. EIB remains an active funder, as do a number of the long-term bank lenders such as BTMU and SMBC from Japan, and a number of the German Landesbanken. These lenders have been rejoined by a number of banks that had withdrawn from the market including the big French banks, but some banks are re-entering the long-term lending market on the basis that they are only able to do so by managing thirdparty institutional funds in a way that is similar to some of the new institutional lenders.

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

AP: Currently the biggest challenge for our infrastructure equity provider and sponsor clients is finding investible transactions. The majority of secondary investors wish to buy off-market and sell in competitive auctions, but if everyone seeks to do this it becomes unsustainable. Some institutional or funds investors need to find very large transactions to make their involvement worthwhile, and therefore good opportunities for them can be few and far between. This has been the case for some time now, but over the past year debt has only become cheaper and there has been record fundraising in the sector, which means even greater resources competing for the assets that do come into play.

Lastly, it is worth mentioning the regulatory challenges that the Basel III and Solvency II regimes create for the banks and institutional investors respectively. The industry typically argues that neither regime suits the long-term debt funding of energy and infrastructure projects because insufficient weight is placed on the historically low default rates and the historically high recovery rates from those loans that have defaulted. Both regimes continue to evolve. A further cloud on the horizon involves the base

THE INSIDE TRACK

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

Clearly price is always important, but a client needs to look behind the numbers and ensure they are getting the lawyers they need. Often those whom the client meets at the pitch meeting and on whose reputation and presentation the client bases their choice of adviser will be much less evident during the project.

The team a client hires should also be part of a wider a team that is able to support the chosen counsel in the whole range of potentially relevant non-core skills. At the same time, a good projects lawyer needs to master a very wide range of skills, and while they should involve specialist colleagues as appropriate, they should never totally abrogate responsibility for the specialist aspects of a piece of advice to colleagues.

A client should think carefully about the kind of lawyer who will complement the clients team the best. Projects lawyers should be proactive problem-solvers who are not afraid when needed to propose solutions that differ from what is orthodox. Some clients prefer their counsel to lead and drive forward a transaction, but very many prefer to have external counsel perform more of a support role to the in-house team. A good lawyer should be able to perform both kinds of roles and fit seamlessly into the wider client team. What are the most important factors for a client to consider and address to successfully implement a project in your country?

The UK is, for the most part, very open and welcoming of foreign investment and is a popular investment destination. The UK has, however, also been a market innovator and therefore investors should not underestimate how UK regulatory regimes and the politics of infrastructure investment can unexpectedly evolve and have an impact on deal flow and how transactions are structured. This has been true in the past year in the renewables space, but is true of other sectors too.

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

As far as UK deals are concerned, the Ministry of Defence's UK Military Flying training system (fixed wing) project was a particularly notable project, as was the Galloper offshore wind project, both of which were led by other partners in the firm but on which I worked. I led a number of the smaller financings in the UK in the renewables sector that have been interesting, such as the leveraged acquisition financings of multiple thousands of rooftop solar installations and a workout of a waste-to-energy asset.

Andrew Petry Simmons & Simmons London www.simmons-simmons.com

erosion and profit shifting (BEPS) proposals, which are being developed under OECD auspices that also do not currently suit long-term infrastructure funding because of the likely adverse impact on the ability of investors to use subordinated debt as quasi-equity in transactions.

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

AP: There is a general consensus in the political sphere that infrastructure investment is good for the economy, and the new conservative government is committed to grand schemes such as developing the Northern Powerhouse and to a number of large infrastructure projects such as a new generation of nuclear power plant,

major rail infrastructure, the roll-out of highspeed broadband, smart metering and other initiatives. What has not changed is the hostility in government to private finance and PPPs. There is a growing crisis in NHS Trusts, the education sector and other areas of the state where PPPs were used to fund infrastructure. The new infrastructure was typically warmly welcomed when it was procured, but now, as budgets for these entities are either cut or need to stretch further, they find that they are not able to raid maintenance budgets or to decide to mothball their infrastructure without the cost of their change of mind as to the nature of the infrastructure needed to provide their services being painfully apparent.

Apart from the continuing shift away from PPP/PFI, one of the most important changes is in the power sector, with the implementation of CFD. Follow-on auctions from the first auction in Q1 2014 have been slow in coming, but the government states it is committed to running further auctions during this Parliament.

We have seen activity in the biomass and energy-from-waste sectors plus emerging interest in tidal energy and other sources. However, these will find it hard to compete with the more established renewable energy sources for CFD support, and the switch to a CFD mechanism may, therefore, prove restrictive for a UK focus on regenerating the energy and infrastructure sectors. The risk that the UK will have insufficient powergenerating capacity in the coming years remains a serious one. The likelihood that the new nuclear generation capacity will be ready later than hoped for is high, and therefore filling the generation gap is becoming a more critical issue. Solutions may involve extending the life of existing nuclear and coal plants, more international interconnectors and a resurgence in the use of gas-fired plants as the price of LNG and gas comes down.

At the time of writing, Brexit is also a source of uncertainty. Should the UK vote to leave the EU, the EIB will likely have to amend its investment policy for the UK. However, more generally speaking, no one really knows what the consequences would be despite many assertions to the contrary on both sides of the debate. The one thing that both sides of the debate do agree on is that there will be a period of uncertainty which arguably started the moment the referendum was announced. Uncertainty is never good for longterm investment decisions.

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

AP: Contract terms are becoming looser, and equity bridge loans and debt service reserve facilities and other financial enhancements that reduce the cost of funding at the expense of some lender comfort and security are commonplace again. Another issue is the fragility of some of the developers' and contractors' balance sheets, which can be an inhibiting factor for the sector.

The Thames Tideway transaction is notable for the way in which the government support was structured, but the market consensus appears to be that the transaction was a one-off.

As mentioned earlier, the increasing involvement of institutional money on the equity and the debt side is having an impact on the how transactions are being structured with fixed interest debt funding and make-whole provisions becoming more common. Some of the assets that were bought by closed-ended funds in the mid-2000s are coming to market as the funds need to realise their investments with other funds seeking to develop strategies to hold on to their assets through extension and continuation fund strategies.

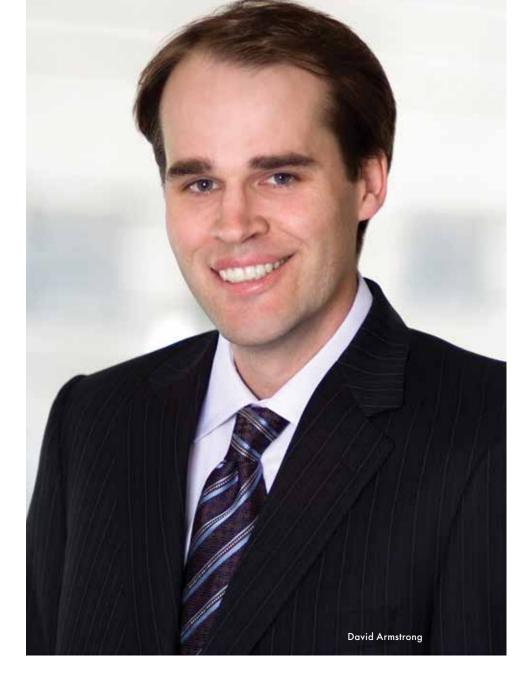
GTDT: What are the major changes in activity levels or new trends you anticipate over the next year or so?

AP: The UK's growth rate has been reducing, and the performance of the eurozone continues to inhibit growth in the UK. The possibility of Brexit is already adding to the uncertainty, and therefore the markets are likely to become difficult in the coming year and beyond. On the other hand, there is a pressing need for new economic infrastructure that the current government appears to be determined to deliver, so we expect there to be continuing activity particularly in the power, offshore wind, rail and secondary markets sector.

The much-discussed Juncker Plan went live in January 2016. This €315 billion EU stimulus package aimed in large part at infrastructure is being implemented via the European Investment Bank by way of a first-loss insurance tranche. The idea is that the EIB is encouraged to lend to projects it would not otherwise have considered lending to, on the basis that the first-loss tranche is reinsured by funds made available in part by the Commission. It is to be presumed that the potential extent of the impact the Juncker Plan on the level UK infrastructure investment in the UK is bound up with the outcome of the Brexit vote, which makes it another potential Brexit-related variable.

The decline in the oil price means that investment in the North Sea is largely on hold. Whether cheaper gas means that the gas generation sector is able to make a comeback remains to be seen, but the whole sector is under stress, leading to M&A opportunities and restructuring activity.

One exciting prospect would be the commercialisation of a technological breakthrough in electricity storage technology. Battery technology is being marked as a solution, including at a retail level, but no technology has yet appeared as the decisive breakthrough technology. When such a technology does emerge, which I believe is only a matter of time, it will significantly increase the attractiveness of renewables and lead to a change in the way our power markets operate.



PROJECT FINANCE IN THE

UNITED STATES

Skadden partner David Armstrong and associates Adam Griffin and Megan Kultgen focus primarily on the representation of commercial and investment banks, as well as borrowers and issuers, in leveraged and other finance transactions, including project financings, acquisition financings, leveraged leases and other senior secured lending transactions, with a principal focus on the energy and industrial sectors.

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

David Armstrong, Adam Griffin & Megan Kultgen: Skadden's energy and infrastructure projects group advises clients on a broad range of project finance and other energy-related transactions in the United States, as well as in international markets. We will focus here on project finance transactions in the United States, as opposed to US investing and lending worldwide, but we note that, in 2015, US investment in international project finance transactions remained rather robust. According to Project Finance International, US project finance bank loans totalled approximately US\$56.5 billion in 2015, which represented a slight drop from the US\$60.1 billion of bank loan financings reported for 2014, but was still robust compared to the years subsequent to the financial crisis. The continued activity in 2015 of the commercial banks in US markets led to a large collective drop in project bond and term loan B project financings. In the US, there were approximately US\$10.8 billion of project bond issuances (down from approximately US\$12.3 billion in 2014), and, in North America, there were 10 total term loan B project finance transactions for a total of US\$3.3 billion (as opposed to approximately US\$9 billion in 2014). Market volatility in the latter half of 2015 also caused a significant slowdown in transactions, and some of the figures from 2015 are bolstered by very large liquefied natural gas (LNG) export facility financings, most of which closed in the early months of the year.

Across all US project finance transactions in 2015, the oil and gas sector accounted for almost 40 per cent of the total transaction value (both debt and equity) by dollar volume, and the power sector accounted for approximately 45 per cent of the total transaction value (approximately US\$33.7 billion of the total deal volume), with renewables accounting for the largest portion of that share (approximately US\$20.6 billion in deal volume), in each case as reported by IJGlobal. The transportation sector accounted for approximately 13 per cent of the total transaction value of US project finance transactions, with mining, social defence, telecoms and water accounting for the remainder of all transactions. As in 2014, a deep field of commercial banks was active in the US project finance market, including many European commercial banks, which had returned to active roles in US project finance in 2014 and in the immediate prior years.

Broadly, slumping oil prices throughout 2015 and the general market volatility in the latter part of the year affected all areas of the US project finance sector – from oil and gas to renewable power. That said, a few major trends for the year were the continued development of LNG export facilities, increasing investment in natural gas-fired power generation facilities, particularly in the high-demand markets of PJM and ISO New England, and the continued growth and proliferation of renewable energy, which experienced some significant setbacks in 2015 but remains a robust market for investment in the long term.

Turning first to the oil and gas sector, 2015 turned out to be a turbulent year for many oil and gas developers, as increasing downward pressure on those commodities affected all areas of the sector. However, while several industry players have begun to experience financial difficulty, the LNG export facilities, which have garnered much attention in recent years and are both long-term and large-scale in nature, continued to be a primary driver of the US project finance market. Cheniere Energy continued development of its Sabine Pass project and commenced construction of its Corpus Christi LNG export facility, including an US\$11.5 billion debt financing that closed in May 2015. Additionally, the debt financings for the Cameron LNG and Freeport LNG projects were two of the larger and more novel project financings completed in 2015.

In addition to the US's transition to being an exporter of natural gas, increased domestic supplies of the commodity coupled with capacity performance rules and the coming retirement of many coal-fired power generation projects in high-demand power markets such as PJM and ISO New England has led to increased activity in M&A transactions related to, and development of, natural gas-fired power generation facilities. Several natural gas-fired power generation facilities are under construction or in development stages in these markets, including the planned CPV Towantic facility. Several experienced project sponsors, including LS Power, Panda Power Funds and The Carlyle Group, bought or sold projects, began development of new projects or refinanced existing projects in 2015. For example, The Carlyle Group purchased the 583MW Rhode Island State Energy Center from Entergy in December 2015, which was financed in the term loan B market. In October, Panda Power Funds closed a hybrid US\$710 million debt package (consisting of both a term loan A and a term loan B facility) for the 1GW natural gas-fired Hummel project in PJM.

In the renewable energy sector, several trends from 2014 continued into 2015. Throughout the first half of 2015, developers continued to rely on yieldcos, which are public holding companies that rely on steady cash flow generated by stable operating renewable energy projects to provide yield to their investors, as a source of capital and growth. Solar industry developers SunPower Corporation and First Solar formed the first joint venture yieldco, 8point3 Energy Partners, in May, and, throughout the first half of 2015, the yieldcos that were launched in 2013 and 2014 soared to new heights and several other developers continued to explore the model. Additionally,



'warehouse' facilities (which were originally developed solely as a mechanism to house pre-COD projects that sponsors planned to sell to yieldcos) began to take on a life of their own. In May, SunEdison worked with First Reserve Corporation and a group of lenders to create a US\$1.5 billion warehouse to fund construction of clean energy projects acquired from First Wind. Subsequently, SunEdison and several other developers have explored or closed warehouses and similar facilities that hold renewable energy projects that often have project-level debt or tax equity financings associated with them. However, in the latter half of the year, market scepticism regarding the ability of yieldcos to continue to source quality, cash-flow generating projects, increasing downward price pressure coming from depressed commodity prices and decreasing costs associated with renewable energy development, and general market volatility placed significant

strain on yieldcos and on sponsors and developers of renewable power generation projects. This was despite the permanent extension of the investment tax credit (ITC) in late 2015, which was very well received in the solar industry.

Finally, the decreased volume of term loan B transactions is seen as, at least partially, a result of increased use by purchasers of balance sheet cash to finance acquisitions and the increased availability of bank debt, particularly with respect to quasi-merchant natural gas-fired power generation projects.

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

DA, **AG & MK**: The US energy and infrastructure sector features a broad range of both domestic

and international investors and sponsors. As previously mentioned, the financings for the large LNG export facilities being developed in Texas and Louisiana were also some of the largest transactions of 2015 (this was the case in 2014 as well). Freeport LNG closed a series of debt and equity financings in 2015 for three liquefaction trains with a total project cost of US\$14 billion and total commitments (across no fewer than seven separate transactions) in excess of US\$15 billion. Cheniere Energy's Corpus Christi debt financing totalled US\$11.5 billion, and the project is expected to have a total capital cost of US\$15.4 billion. The expansion and related refinancings of Cheniere's Sabine Pass LNG facility totalled US\$4.6 billion, and Cheniere also closed a working capital facility for the project of US\$1.2 billion in 2015.

Turning to the renewable energy sector, the US\$420 million IPO of the 8point3 Energy yieldco was a novel transaction, as it was the first vieldco to be formed as a joint venture between SunPower Corporation and First Solar. Additionally, as we previously noted, warehouse financings (in their various forms) became increasingly popular in 2015. SunEdison's warehouse facilities with First Reserve and Goldman Sachs each contain a total capacity of over US\$1 billion. Several developers have turned to various forms of warehouse financings as an additional source of capital - and they range from holdco and portfolio financings to mezzanine debt transactions that provide back-leverage for multiple projects, which often already have some combination of project-level debt and tax equity. Finally, residential and small commercial or industrial solar developers have continued to find creative ways to finance transactions that would otherwise be too small to interest the large commercial banks that are accustomed to utility-scale power and project finance transactions. For example, many of these developers, including SolarCity, Vivint Solar and others, have been able to take advantage of both economic and geographic scale to form tax equity funds with investors, which house operating residential or small commercial or industrial solar projects. The total investment by tax equity investors in these transactions, which customarily take the form of several tranches as projects reach operations, is typically in the US\$50 million-US\$100 million range.

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

DA, AG & MK: Not surprisingly, the sponsors of the large LNG facilities discussed above were some of the largest US project finance market participants in 2015. Cheniere Energy led all project finance sponsors, with a total deal volume of approximately US\$21.7 billion spread across four transactions. IFM Investors and Freeport LNG Development, both of which are investors "2015 turned out to be a turbulent year for many oil and gas developers, as increasing downward pressure on those commodities affected all areas of the sector."

in the Freeport LNG project, were the secondand third-largest sponsors by dollar volume in 2015, and their total transactions accounted for approximately US\$6.6 billion and US\$4.6 billion of financing, respectively.

Several domestic sponsors in the power industry were active in 2015. In the renewable space, SunEdison continued its rapid growth from 2014 throughout the first half of 2015. Its total volume of project finance transactions in 2015 was just shy of US\$2.5 billion, spread across several transactions, and SunEdison and its vieldcos were also involved in a number of M&A and other notable transactions. First Solar and SunPower combined forces to form the 8point3 Energy yieldco, and other traditional players in the renewable energy markets, such as SolarCity in residential solar, have continued to play a large role in renewable energy development. However, as widely publicised, all of these solar developers have experienced significant headwinds in the latter part of 2015 and into 2016. In fact, NRG Energy, which was an early entrant into utilityscale solar and other forms of renewable energy development and which launched the first vieldco in 2013, spun off its green energy assets into a separate public company in autumn 2015.

In the traditional power sector, several seasoned sponsors were active in the market, as LS Power and Panda Power Funds closed a number of financings and refinancings throughout the year, including Panda's US\$718 million combined term loan A/term loan B facility for the 1GW Hummel project in PJM (which is, interestingly, on the site of a retired coal-fired power generation facility).

Among the commercial banks involved in US project finance, MUFG continued to dominate the market, with over US\$3.6 billion in transaction volume spread across 43 transactions, according to *IJGlobal*. Rounding out the top 10 most active commercial banks were ING Group, Sumitomo Mitsui Financial Group, Crédit Agricole Group, Mizuho Financial Group, Santander, Société Générale, Morgan Stanley, Goldman Sachs and Bank of America Merrill Lynch. Several of these banks were arrangers on the most significant transactions of 2015. For instance, MUFG, Sumitomo, Mizuho Financial Group, ING Group, Crédit Agricole Group, Morgan Stanley, Société Générale, Goldman Sachs, BAML and several other large banks involved in US project finance were involved in Cheniere's Corpus Christi project financing. All of the major banks participating in the project finance market in 2015 were involved in a broad variety of deals across the oil and gas, power and infrastructure sectors. The large US insurance companies, pension funds and institutional investors are also active in the project bond market, both in Rule 144A/Reg S transactions and in more traditional private placements, and institutional investors provide capital for the term loan B market, which saw much less activity in 2015 as compared to 2014.

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

DA, AG & MK: As mentioned earlier, 2015 began with a continuation of the robust activity from 2014 across the oil and gas (particularly LNG), power and infrastructure sectors. However, in the latter half of 2015 and going into 2016, the energy sector has begun to feel the effects of sustained low prices for oil and other commodities, increased uncertainty regarding global economic and geopolitical conditions, and the market volatility that has created turmoil across all sectors, notably in the oil and gas and renewable energy sectors.

While the United States is a mature project finance market, the energy and infrastructure sectors in which project finance is most prevalent are heavily regulated and increasingly complex. In the oil and gas sector, sustained low prices for oil have strained many companies that were able to turn profits in the upstream and midstream sectors due to fracking innovations in recent years, and some have even begun to seek bankruptcy protection.

In the power sector, the introduction of capacity performance rules in markets like PJM and ISO New England, which is an outgrowth of the polar vortex of a few years ago, and the continued emphasis on developing cleaner energy have led to increased investment in natural gasfired generation. Similarly, despite the challenges faced by yieldcos and renewable energy companies in general in the latter part of 2015 and early 2016, the extension of the ITC and increasing

"We anticipate the continued spread of activity in the distributed generation energy space and for community solar to increase in popularity." reliability of these forms of power generation will likely lead to continued, albeit possibly more subdued, growth in industries such as wind and solar electric generation.

All sectors of the US market must navigate increasingly complex regulatory structures, which exist at the federal, state and local levels of government. In addition, as evidenced by the advent of yieldcos and warehouse financings in the renewable energy industry, increased innovation across all platforms in the energy industry has led developers and sponsors to seek out increasingly creative and complex means of financing their projects. That complexity, while creating large opportunities, comes with its own challenges, and companies must continue to strike a balance between growth and sustainability in what has become a rather challenging market environment.

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

DA, AG & MK: As noted, the LNG export and solar power generation industries were two of the more active industries within the US project finance market in 2015, particularly in the first half of 2015. Each of these industries is subject to considerable regulation, and each is subject to recent proposed legislative changes that may significantly impact the development of projects within those industries. Turning first to the LNG export industry, in late January 2015, the US House of Representatives passed the LNG Permitting Certainty and Transparency Act (LNG PCTA), designed to expedite regulatory approvals for LNG export to countries that do not have a free trade agreement with the US. The US Department of Energy (DOE) has issued a final decision on a very small percentage of the applications for such approvals, thereby limiting the number of countries and customers to which LNG exporters can sell their product. Although DOE approval is a necessary step in the development of an LNG export project, it is but one of many. Accordingly, the LNG PCTA (and corresponding bills in the US Senate) will not have a dramatic effect on the development of LNG export projects. However, it could lead to earlier investment decisions by potential exporters and may be a signal of further legislative changes to come. That said, given the extreme decline in oil prices, the sustained level of those low prices and the lack of movement on the legislation in the US Senate, it no longer looks like such legislative changes will expedite projects and open the market to new participants in the near future. Nevertheless, Cheniere Energy became the first US exporter of shale gas as LNG in February 2016. Additionally, the Federal Energy Regulatory

THE INSIDE TRACK

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

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

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

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

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

One of the more noteworthy (particularly at the time of its closing) transactions we have worked on recently is the US\$1.5 billion SunEdison warehouse facility with First Reserve that was designed to finance the construction of development assets acquired by SunEdison from First Wind. One of the novel features of this warehouse was the ability to incur debt to finance an open-ended pool of assets, with the financing of projects being subject only to majority lender approval if they met prescribed criteria. Since the closing of the SunEdison/First Reserve warehouse, there have been many variations on the structure in the market, and it can certainly be considered a trend for 2015.

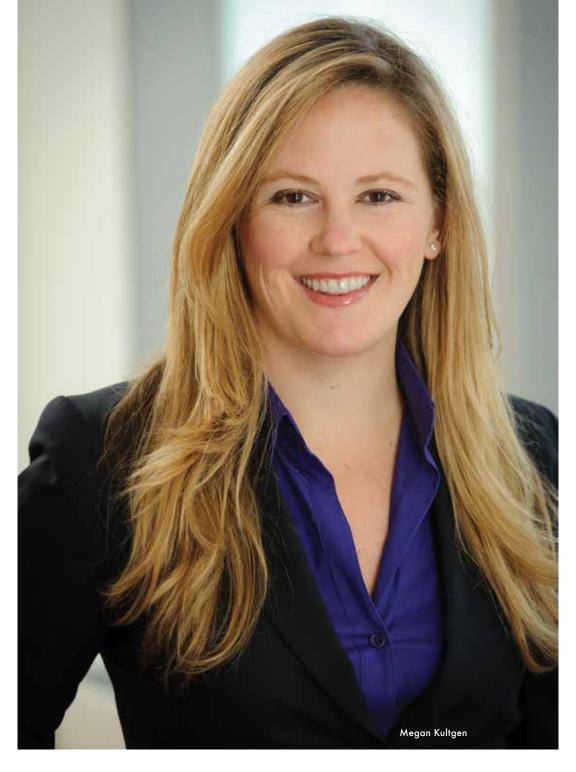
David Armstrong, Adam Griffin & Megan Kultgen Skadden, Arps, Slate, Meagher & Flom LLP Toronto & New York www.skadden.com

Commission's Office of Energy Projects recently approved the expansion of Cameron LNG's liquefaction project.

Turning next to the solar power generation industry, as discussed, the permanent extension of the ITC (which gives purchasers a tax credit equal to 30 per cent of their basis) used by the solar industry has provided a good deal of stability to the market and should result in a return in focus on domestic development rather than a shift in spending to emerging markets. That said, however, ongoing regulatory battles over net metering and rate structures remain, and investors are increasingly focused on state-bystate net metering policies given the growth in installed residential capacity and corresponding sales back to the grid as a large part of the positive economics for participating. Net metering, where, for instance, excess solar energy generated during daylight hours by a residential customer from his or her rooftop panels is delivered to the local grid at retail rates and used to offset energy provided by the utility to the residential customer at night, is one approach that makes using solar panels economically appealing. However, utilities contend that net metering is unfair because the system decreases the amount of energy sold by the utility, while the cost to maintain infrastructure and the grid are not incorporated into what rooftop solar customers are charged. That said,

potential changes in the net metering rules could reduce the rates at which power is sold back to the grid. Nevada and Hawaii already have reduced rates from 100 per cent of prevailing retail rates to wholesale pricing, which many analysts think will be the trend over the long term. California regulators, on the other hand, have voted to keep retail rates in place, but to revisit the decision in 2019, and Pennsylvania recently finalised rules to allow customers to produce up to 200 per cent of their annual electricity consumption and receive retail rates for electricity they send back to the grid. As additional states consider their net metering policy, there is also a question as to whether states will make any revised policies retroactive or will exempt customers who already have solar panels from the regulation.

A third example is the Clean Power Plan, which President Obama announced in August 2015, but which the Supreme Court stayed implementation of in February 2016, pending further judicial review. The Clean Power Plan sets emission standards for power plants, and specific goals for states to decrease use of coal-fired electricity generation and increase reliance on renewable energy and natural gas. Originally, states were supposed to provide the Environmental Protection Agency with their compliance plans by autumn 2016; however, with the legality of the Clean Power Plan under judicial



review, some states are choosing to refrain from creating such a compliance plan for the time being.

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

DA, AG & MK: As previously mentioned, the US project finance market remained strong in 2015, with loan volumes at approximately US\$56.5 billion, dropping only 6 per cent from 2014 (which was a very robust year). Power deals led the activity. On the lending side, the sources and structures of funding remained diverse across all industries in the project finance space, with strong involvement from both European commercial banks and Japanese banks, as well as Canadian and US regional banks taking a continued prominent role.

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

Given the breadth of the US project finance market, it is difficult to discuss with any specificity the innovative structures and relevant risk allocations being used and applied. Instead, we will focus for illustrative purposes on solar yieldcos and tax equity, where we have seen a great deal of innovative activity, with yieldcos, warehouse facilities, partnership flips, inverted (or pass-through) leases and a few securitisations. The first half of 2015 saw the continued rise of yieldcos, with solar developers using them as a way to fund project development. However, as discussed above, the market turned away from yieldcos in the second half of the year. There was also a rise in the use of warehouse facilities as a capital source for renewable energy projects, which were intended to be a shorter-term means to provide construction financing or hold projects before dropping them down into yieldcos; however, with the yieldco market drying up, warehouse structures are beginning to be used for other purposes.

Additionally, in 2015, partnership flips and inverted leases continued to provide a consistent source of tax equity investment into the solar space. In a partnership flip, the solar developer and the tax equity investor form a joint venture and the allocation of upside (profits, cash, tax benefits) flips between the parties during the life of the investment. With an inverted lease, the solar developer leases projects to the tax equity investor and assigns its rights under the power purchase agreement and related agreements to the investor, who then contracts the servicing of those projects back to the solar developer or its affiliate. Historically, the inverted lease structure has been more attractive than the partnership flip in a scenario where owner-level debt is contemplated, as a foreclosure on a project owned by a partnership flip during the ITC recapture period would result in recapture, so tax equity investors would typically seek complete forbearance from the lenders. In contrast, a foreclosure on a project owned by a lessor in an inverted lease during the recapture period results in recapture only if the project is transferred to a disqualified person, so investors seek a limited forbearance, which has been viewed more favourably by lenders in the market. That said, in 2015, several solar securitisations were completed, including in a

partnership flip structure. Some of the risk in the partnership flip structure was mitigated by the introduction of insurance to cover tax basis risk. This insurance covered one of the major risks in the deal, which arguably made investors more comfortable in opening themselves up to another risk – foreclosure exposure. Furthermore, with basis risk covered by insurance instead of the sponsor interest in the partnership to indemnify for that risk, more money remains in the system and lessens the chance of default on debt (therefore indirectly mitigating foreclosure risk).

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

DA, AG & MK: With the aforementioned extension of the renewable tax credits and the Clean Power Plan (if the regulation goes forward) setting state targets for carbon emission reductions, there is more certainty in the renewables sector, though uncertainty with respect to how each state will address net metering remains. Nevertheless, with the extension of the tax credits, we anticipate activity levels in the solar and wind tax equity space to remain similar to 2015 levels (as opposed to the flood of deals we would have expected in 2016 had the credits not been extended) and for the partnership flip to remain the most popular structuring tool. That said, we do think it is possible that the tax credit extension may attract new tax equity investors into the market. Furthermore, we anticipate the continued spread of activity in the distributed generation energy space (with low natural gas prices having a dampening effect on utility-scale project activity, but not impacting distributed solar) and for community solar to increase in popularity. In the commercial and industrial space, investors are becoming increasingly more comfortable with commercial PPAs and finding more efficient ways to diligence the projects. In addition, we expect a trend toward greater standardisation to the documentation and diversity in the pools to allow some noninvestment-grade credits to participate. Also, individual states are continuing to pass legislation permitting community solar, which opens up the market to a great number of additional participants.

As discussed, 2015 saw a large number of LNG export terminal financings. While we anticipate some power plant financings in 2016, we expect the trend to be much more toward the renewables sector.

The year 2015 was a strong one in the bank debt market and we expect that trend to continue in 2016. Likewise, we expect the term loan B market to remain less active and the investmentgrade project bond market to remain constant.

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