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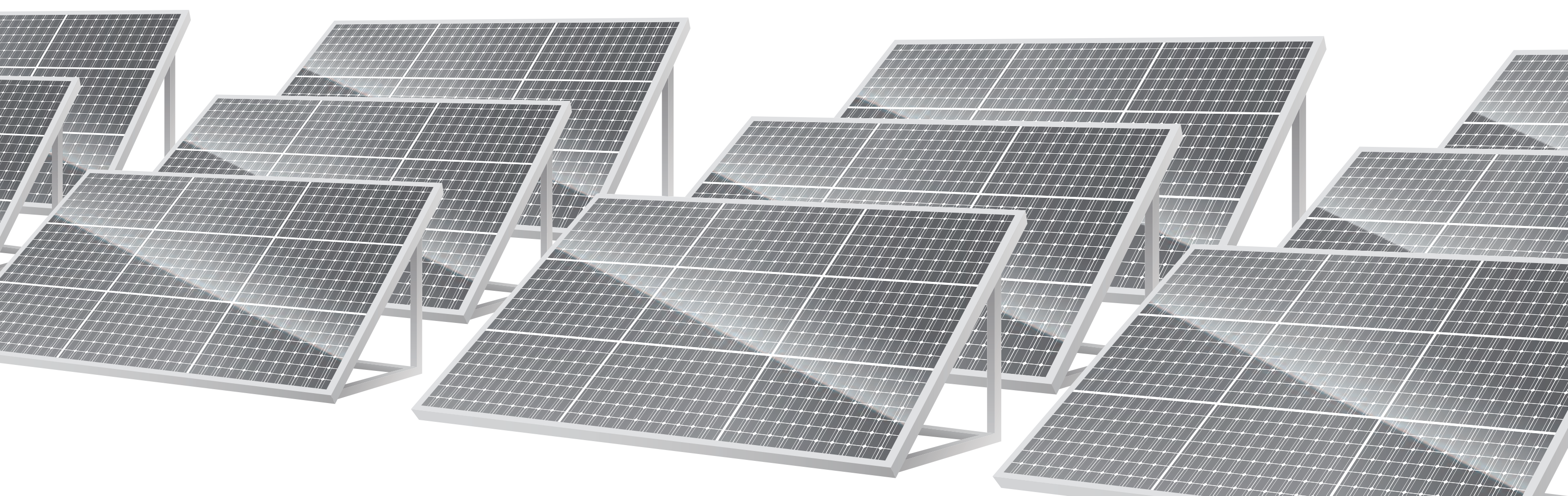

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Regulation of the construction industry in the Philippines

Aris Gulapa, Charmaine Haw-Lim and Melissa Chavez-Dee of Gulapa Law discuss regulation of domestic and foreign contractors in Philippines and how the regime impacts the country's construction industry

The construction industry in the Philippines is primarily regulated by the Construction Industry Association of the Philippines (CIAP), a government agency established through Presidential Decree No. 1746, series of 1980, as amended (PD 1746). The CIAP is composed of *ex-officio* members from different executive departments of the Philippine government such as the Secretary for Trade and Industry, Secretary for Transportation, Secretary for Public Works and Highways, and the Secretary of Department of Labor and Employment. In addition, PD 1746 also requires the appointment of a representative from the private construction sector to be part of the CIAP.

The main functions of the CIAP as provided in PD 1746 include evolving an overall strategy for the optimum development of the construction industry; monitoring and studying both domestic and international construction industries to identify areas where there can be improvement and to recommend and/or implement changes which support the development of the industry; and, formulating criteria for the classification and categorisation of contractors which reflect their contracting capacity and performance capacity (Section 2, PD 1746).

The CIAP implements its policies through the following government agencies which are under its jurisdiction: the Philippine Construction Accreditation Board (PCAB), the Philippine Overseas Construction Board, the Philippine Domestic Construction Board, and the Construction Manpower Development Foundation.

Aside from the CIAP, local government units also regulate the construction and renovation of buildings and structures within their territories by ensuring compliance with minimum safety standards under the National Building Code (Republic Act No. 6541). For the construction of condominiums and subdivisions, on the other hand, these are further regulated by the Housing and Land Use Regulatory Board.

Construction contractor licensing

All foreign and local entities intending to engage in the business of construction are required to secure a licence from the CIAP's licensing arm, the PCAB. The PCAB was formed in 1965 pursuant to Republic Act No. 4566 (the Contractors' License Law). Originally established as the Philippine License Board for Contractors, it was then redesigned as the PCAB upon the issuance of PD 1746. The PCAB performs regulatory and quasi-judicial functions, and is tasked with the registration and licensing of contractors intending to engage in the construction business (see Section 5, Contractors' License Law).

There are two types of licences usually issued by the Philippines' licensing body: a Regular License or a Special License.

A Regular License authorises the licensee to engage in construction contracting within the scope and field of its licence classification for as long as the licence is valid (i.e., renewed annually, and not suspended, cancelled or revoked). The Regular License is reserved for domestic construction firms that are at least 60% owned by Filipinos.

> "If the rules on foreign equity participation in the construction industry remain the same …the Philippines risks losing the benefits of increased competition within the industry"

A Special License, on the other hand, is issued to a joint venture, consortium, foreign contractor or a project owner, authorising the licensee to engage in the construction of a single specific undertaking or project. In practice, the PCAB usually issues a Special License to foreign contractors if the project, which is the subject of the Special License application, is either a foreign financed / internationally-funded project which requires international bidding or allows the participation of foreign contractors, or is a project implemented through Republic Act No. 7718, or the Philippine Build-Operate-Transfer (BOT) Law (see PCAB Resolution No. 214, Series of 1997).

In 2015, however, the CIAP issued Board Resolution Number 08, series of 2015, approving the PCAB's proposed amendments to the Implementing Rules and Regulations (IRR) for the Contractors' License Law. Through said amendment, the PCAB introduced a new licence sub-category under the Regular License category: Regular License with Annotation. Under the revised IRR, the CIAP Regular License with Annotation now allows corporations incorporated in the Philippines, irrespective of foreign ownership, to regularly engage in specific types of construction projects. In view of the introduction of a Regular License with Annotation, Philippine domestic corporations, which are majority or wholly-owned by non-Filipinos, are now allowed to regularly engage in more than one project - subject to several stringent requirements and only for specific types of constructions projects.

Despite the said amendment to the Contractors' License Law IRR, the Philippines' policies and mechanism for issuing licences to foreign contractors are still considerably restrictive when it comes to non-Filipino construction companies. Under the amendments to the IRR of the Contractors' License Law, a foreign contractor may be issued a Regular License with Annotation provided that it is duly incorporated as a domestic corporation and has a capitalisation of at least P1 billion ($20 million) in cash. Further, a foreign contractor issued a Regular License with Annotation may only engage in 'Vertical Projects' (this refers to buildings such as offices or residential condominiums, hotels, malls, hospitals, schools, warehouses and the like; airport terminals, marine terminals, international transport terminals, power generation plants and manufacturing and assembly facilities; tourism resorts, country clubs and golf courses) that have a minimum contract value per single project of at least P5 Billion (around $100 million) and in 'horizontal projects' (this includes roads, expressways and toll road systems; light rail systems, heavy rail systems and monorail systems; water distribution system; bulk water systems; sewage and sewerage systems; power transmission system and power distribution system, telecommunications distribution system, bridges, flyovers, viaducts; overhead carriageways, piers, wharves and interchanges, tunnels, underground carriageways and storm cisterns; dams, dikes, seawalls and breakwater system; and reclamation) that have a minimum contract value per single project of at least P3 Billion ($60 million).

Foreign restriction in the Contractors' License Law

It is interesting to note that the rule expressly reserving the issuance of Regular License for domestic construction firms that are at least 60% owned by Filipinos is only found in the Contractors' License IRR, and not in the actual law itself. This is important in as much as it has been a consistent rule in Philippine jurisprudence that implementing rules of a law may not add to, or detract from, the provisions of the law it is designed to implement. This is because adding or changing some requirement through an implementing rule would have the effect of amending the provisions of law; and this is prohibited as the power to amend a statute is strictly limited to Philippine Congress (see Lim v. Gamosa, G.R. No. 193964, December 2, 2015).

In fact, the Contractors' License Law itself expressly provides that while the PCAB is authorised to issue rules and regulations, it is required to exercise such power for the purpose of carrying out the provisions of the law (see Section 5, Contractors' License Law). That said, until a court of law declares the Contractors' License IRR to be void through a final order, from a practical perspective, contractors would have to follow the same.

Foreign investment negative list (FINL)

In addition to the lack of foreign restriction in the Contractors' License Law, construction activities are also noticeably absent from the Philippines' current FINL.

Republic Act No. 7042, or the Foreign Investments Act of the Philippines, as amended by Republic Act No. 8179 (FIA) governs foreign investments in the Philippines. It provides that foreigners can generally invest up to 100% equity in domestic market enterprises, except in areas of investment listed in the FINL (see Section 7, FIA).

The FINL - the latest version is the tenth - used to restrict foreign equity participation in private domestic and overseas construction contracts (see first regular FINL, Executive Order No. 182 series of 1994, and second regular FINL, Executive Order No. 362, series of 1996). The restriction, however, was removed in the third FINL (Executive Order No. 11, series of 1998). Since then, the closest references to foreign equity restrictions in construction activities in all subsequently issued FINLs are with regard to the 25% cap on foreign equity in entities carrying out: (1) contracts for the construction and repair of locally-funded public works, and (2) contracts for the construction of defence-related structures.

With respect to (1), the FINLs expressly exclude infrastructure/development projects covered in the BOT Law and projects which are foreign funded or assisted and required to undergo international competitive buildings.

In other words, under the FIA and the current FINL, construction companies that plan to engage in construction activities that do not involve contracts for the construction and repair of locally-funded public works, or contracts for the construction of defence-related structures may be 100% foreign owned. This has been expressly acknowledged by the Securities and Exchange Commission (SEC), the government agency tasked with approving corporate and partnership registration in the Philippines (see SEC Opinion dated April 18, 2001, SEC Office of the General Counsel (OGC) Opinion No. 14-27 dated October 2, 2014, and SEC OGC Opinion No. 23-09 dated August 11, 2009).

A construction company may be considered a domestic market enterprise. In this regard, there is a minimum capitalisation required for domestic market enterprises with foreign ownership under the current FINL. Under Philippine law, a 'domestic market enterprise' is one that produces goods for sale, or renders services to the domestic market entirely, or if exporting a portion of its output, fails to consistently export at least 60% thereof. Under the current FINL, foreign ownership of domestic market enterprises with paid-in equity capital of less than the peso equivalent of $200,000 is limited to 40%. So, a domestic market enterprise may be wholly owned by foreigners if its paid-in equity capital is at least the peso equivalent of $200,000. Theoretically, one may argue that construction companies engaged in private construction contracts, infrastructure/development projects covered in the BOT Law, and projects which are foreign funded or assisted and required to undergo international competitive buildings may be wholly owned by a foreign national provided that the $200,000 minimum capitalisation is satisfied. As mentioned above, however, to get a Regular License with Annotation from PCAB, the PCAB prescribes higher capitalisation requirements.

Constitutional issues

Early this year, the Philippine Competition Commission (PCC) raised several concerns regarding the nationality restriction imposed on construction activities. The PCC, which was created under Republic Act No. 10667 or the Philippine Competition Act, was created to promote

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About the contributor

Aris Gulapa owns Gulapa Law and heads the construction and real estate practices. He has assisted sponsors and lenders in relation to important infrastructure and construction projects in Manila, Singapore, Vietnam, and Tokyo. Prior to setting up Gulapa Law in September 2015, Aris was a partner in Makati-based C&G Law, and was an associate in Anderson Mori & Tomotsune, Kelvin Chia Partnership, and SyCip Salazar Hernandez & Gatmaitan.

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Gulapa Law Office (Gulapa Law) was established in September 2015 by Aris L. Gulapa together with Charmaine Haw-Lim, Melissa Chavez-Dee, Angel Machuca, Yasmin Sanchez, Aileen Sanguir, Dake Mandocdoc, and Janine Mesina, who all worked closely with Aris on various cross-border transactions and projects prior to the firm's establishment. From eight lawyers when it started, the firm has almost doubled its size by currently having fifteen lawyers.

Despite having been recently established, G-Law has already been engaged for and is currently working on important government projects. It is currently representing both private bidders and the Government in several infrastructure/construction projects, and assisting foreign clients in their investments in the Philippines and the ASEAN region.

In February 2017, Gulapa Law launched its New York office, Gulapa & Baclay LLP.

Recognitions

International Financial Law Review
- Financial & Corporate Guide, Notable Law Firm (2017)
- Energy & Infrastructure Guide, Notable Law Firm (2016)

The Legal500
- Real Estate & Construction, Tier 1 (2017)
- Corporate/M&A, Projects & Infrastructure, Recommended Law Firm (2017)

Asialaw Profiles
- Competition/Antitrust, Construction & Real Estate, Corporate/M&A, Projects & Infrastructure, Restructuring & Insolvency, Recommended Law Firm (2017)

Asian Legal Business Southeast Asia Law Awards
- Rising Law Firm of the Year, Transactional Boutique Law Firm of the Year, finalist (2017)
- Construction Law Firm of the Year, Energy and Resources Law Firm of the Year, Real Estate Law Firm of the Year, nominee (2017)

Asian Legal Business Philippine Law Awards
- Boutique Law Firm of the Year, winner (2016)
- Rising Law Firm of the Year, Construction Law Firm of the Year, finalist (2016)

Asian Legal Business
- One of the "Firms to Watch" in Asia (2017)

Chambers & Partners Asia Pacific
- Corporate/M&A, Aris Gulapa, Band 3 (2017; 2016)
- Projects, Infrastructure, and Energy, Aris Gulapa, Up and Coming (2017; 2016)

Chambers & Partners Global
- Corporate/Finance, Aris Gulapa, Band 3 (2017; 2016)
- Projects, Infrastructure, and Energy, Aris Gulapa, Up and Coming (2017; 2016)

The In-House Community Counsels of the Year (Asian-Mena)
- Aris Gulapa, Commended External Counsel (2017)

Key People

ARIS L. GULAPA
Managing Partner

Before setting up Gulapa Law, Aris was a partner at Gatmaytan Yap Patacsil Gutierrez & Protacio from October 2011 to September 2015. As a cross-border corporate lawyer, Aris has advised sponsors and lenders in relation to important government projects in Manila, Singapore, Vietnam, and Tokyo. Previously, Aris worked at SyCip Salazar Hernandez & Gatmaitan (December 2003-June 2006); Kelvin Chia Partnership (Singapore and Vietnam offices, July 2006- June 2008); and Anderson Mori & Tomotsune (Tokyo office, July 2008-June 2010). He also worked as research assistant to Harry First, former head of the Antitrust Bureau of the Office of the Attorney General of New York, from September 2010 to May 2011.

RICO PAOLO R. QUICHO
Incoming Partner

After being trained in the oldest law firm in the Philippines (Siguion Reyna Montecilo and Ongsiako) and thereafter putting up his own law firm that specialized in litigation (Quicho & Angeles), Rico will be joining Gulapa Law as the firm's Head of Litigation and Dispute Resolution. Rico has been practising litigation for more than 13 years and has represented leading multinational clients in landmark cases (including, as one of his specializations, corporate rehabilitation and intra-corporate disputes).

CHARMAINE K. HAW-LIM
Incoming Partner

Charmaine is an incoming partner in Gulapa Law. Her areas of practice include general corporate, franchising, infrastructure, litigation and arbitration, and intellectual property. Prior to joining Gulapa Law, she worked at the Asian Development Bank. Previously, Charmaine was an associate at Gatmaytan Yap Patacsil Gutierrez & Protacio and SyCip Salazar Hernandez & Gatmaitan.

and maintain market competition by regulating anti-competitive conduct in the Philippines. In its first policy note issued for 2017, the PCC raised concerns on how the nationality restrictions in the construction industry violate the Philippine Constitution's policy against unfair competition. Article XII, Section 19 of the Philippine Constitution states that no combinations in restraint of trade or unfair competition shall be allowed. According to the PCC, the PCAB's nationality requirement in the granting of licenses, as provided in the Contractors' License Law IRR, 'institutes a substantial barrier to entry of foreign contractors in the construction industry'. Accordingly, the PCC believes that these restrictions imposed on the granting of licences propagates an uneven playing field between local and foreign contractors, which discourages foreign construction groups from venturing into the Philippines.

While we leave the examination of the correctness of the PCC's stance for another day, the PCC's perspective seems to be affirmed by the evident lack of foreign construction groups which have attempted to obtain a Regular License with Annotation. According to the PCAB, since its introduction of the Regular License with Annotation, only two foreign players have applied for and been granted said licence. Further, based on the PCAB's data as reported in the PCC's policy note, out of all the Regular Licenses issued by the PCAB in 2015, only 12% of these were for new applicants (i.e., all other licences issued were renewals by existing domestic construction companies).

Effects of nationality restrictions on the Philippine construction industry

Since the launch of the Public-Private Partnership program in the Philippines, the growth and impact of infrastructure development on the country has been continuous, carrying over to the new government regime. In a recent forum presided over by President Rodrigo Duterte's representatives and consistent with the 'Build! Build! Build!' programme of the current administration, a three-year rolling infrastructure program from 2018 to 2020 amounting to P3.6 trillion was presented. The programme is supposed to cover infrastructure projects for transportation, water resources, sewerage and sanitation, flood management, solid waste management, maritime, social infrastructure, energy, information communications technology and others.

A more diverse, competitive and technologically advanced construction industry would clearly be needed in order for the 'Build! Build! Build!' programme of the current administration of the Philippine Government to be successful. If the rules on foreign equity participation in the construction industry, however, remain the same and the current situation of repeated renewals of existing domestic construction companies persists to be the norm, the Philippines risks losing the benefits of increased competition within the industry, as well as much needed technological advancement that could be contributed by foreign contractors. This is because although the IRR allows foreign players to engage in construction industry in the Philippines through the Special License, or a Regular License with Annotation, the costs and impediments involved in acquiring either one of these licences may dissuade potential foreign entrants to the market.

To illustrate, if a foreign contractor were interested in participating in 10 construction projects in the Philippines, it would have to apply for a Special License on 10 separate occasions. Alternatively, a foreign contractor can apply for a Regular License with Annotation. While it will not be required to file an application for a licence every single time it decides to undertake a project, it would be required to have a minimum capital requirement of around $20 million. Further, a holder of a Regular License with Annotation would only be limited to multi-million dollar 'vertical' and 'horizontal' projects as described in the amended IRR, with no room to participate in smaller scale projects. Accordingly, if a foreign contractor were to consider entering the Philippine market, it would have to weigh its options and choose between the less costly but more laborious option of simply applying for a Special License for each specific project, or the more stable, but exceedingly expensive route of obtaining a Regular License with Annotation.

From a commercial perspective, the requirement to invest the equivalent of approximately $20 Million and incorporate a domestic enterprise in the Philippines, with no assurance of securing the required high value projects it is limited in performing, may serve as a deterrent to foreign construction companies. Evidently, it comes as no surprise that only two foreign contractors have applied for a Regular License with Annotation despite the amendment of the Contractors' License Law IRR. Considering the risks and costs involved, it makes more commercial sense for a foreign player to operate in the Philippines through a Special License despite the burdensome application process.

Thus, while the PCAB has made progress in allowing the entry of foreign players in the construction industry through the introduction of a Regular License with Annotation, it would be beneficial for the country if the rules were further re-examined to accommodate more international players which can bring certain technology and know-how to the Philippine construction space.

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About the contributor

Charmaine Haw-Limis a partner in Gulapa Law. She graduated from Ateneo Law School in and was admitted to the Philippine Bar in 2011. She worked at SyCip Salazar Hernandez & Gatmaitan, C&G Law, and served as consultant to the Asian Development Bank under its Office of General Counsel – Sovereign and Non-sovereign Operations before joining Gulapa Law. Her experience includes assisting in the bidding process, providing advice on legal structure, and assisting in the implementation of government infrastructure projects, including airports.

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About the contributor

Melissa Chavez-Dee is a senior associate in Gulapa Law. She obtained her law degree in 2011 from the Ateneo de Manila University School of Law, graduating with honors. She was admitted to the Philippine Bar in 2012. She worked at C&G Law before joining Gulapa Law. She has experience assisting in the bidding process, providing advice on legal structure, and assisting in the implementation of government infrastructure projects, including airports, terminals, and railways.

Behind The Deal – Andrew Beatson – Bell Gully

Belly Gully partner Andrew Beatson speaks with Adam Majeed about advising Auckland Transport on City Rail Link (CRL), the largest infrastructure project in New Zealand's history, and trends in infrastructure development in the country

How did your firm win the CRL mandate?

We went through the usual competitive tender process. Prior to that, we had been representing Auckland Transport, and its predecessors, for many years on its rail initiatives.

What is Auckland Transport's objective in carrying out this project?

There is a substantial capacity constraint on the Auckland rail network at present, at Britomart Station, which is essentially a cul-de-sac. Creating the CRL unlocks the capacity constraint on Auckland's public transport rail network, effectively doubling it. Imagine if you run a train up a dead end street, but before you can put the next one up there you have to take the first one out. That effectively means that it'll take twice as long for each movement when contrasted with a situation where the train can just continue in the direction that it was originally travelling in rather than having to double back.

Is the project being delivered through the public-private partnership (PPP) model?

No—it's a joint Auckland Council/New Zealand government initiative and will be funded from the public purse.

Why wasn't the project funded as a PPP?

There are two factors to consider. Firstly, CRL is not a complete network, it is only part of a network, so calculating revenue from the project is problematic and performance is dependent upon how the wider network performs (which is controlled by KiwiRail, a state-owned enterprise). Secondly, there is a lot of uncertainty around the final ownership and control structure for the project.

How experienced is your firm in handling projects of this scale?

We are often engaged on projects of scale. For example, we either are or have advised the New Zealand government on all of the central government PPP projects that have been undertaken in New Zealand to date. These include advising New Zealand Transport Authority (NZTA) on its Transmission Gully project and the Department of Corrections on its prisons programme. We advised Crown Fibre Holdings on the nationwide rollout of ultra-fast broadband, wheret he total investment from both the public and private sector was around NZ$2.7 billion. We are also assisting Tainui on its development of Ruakura, including a major inland port, that has an estimated total capital cost of over NZ$3 billion; and we've been advising on a number of the key projects shaping social housing reform. I'd also add in large scale energy projects, electricity generation, and oil & gas; but I do think it's fair to say that CRL stands out for its scale as it is the single biggest construction or infrastructure project in our country's history. It is right up there and beyond, it's definitely a big one.

> "Creating the CRL unlocks the capacity contraint on Auckland's transport rail network, effectively doubling it"

What were the biggest challenges you encountered when trying to get this project off the ground?

Really we started the process with a relatively high level concept and undertook targeted design to overcome designation/consenting roadblocks. However, because funding came on stream faster than many people expected, we switched mid-stream from a high level route protection exercise to facing project commencement deadlines. In particular, advance construction was identified for the area from Britomart to Aotea, to enable a number of other key city shaping projects to be progressed. In other words, when we first started looking at this project it was anticipated that it would have a 20 year time horizon. By the time we were half way through consenting it became apparent that pretty much as soon as we got the designations and regional consents in place, contracts would be let and construction would be commencing. To accommodate the fact that different aspects of the project were at different stages of design development, and to accommodate different construction timelines, consenting was undertaken in stages. When you start to do things in pieces you have to make sure that all the pieces talk to each other. We faced some detailed interrogation from submitters and took the time required to respond to this collaboratively and constructively. There was an additional complication of Precinct's Commercial Bay development over a section of the CRL which is proceeding contemporaneously with that section of the CRL tunnel. Ultimately nearly all issues for the main CRL designations and regional consents were resolved without the need for court determination. That was a pretty huge achievement for a project of this scale.

What stage of development is the project at now?

Work is underway on running tunnels passing underneath the Central Post Office and an adjoining major new commercial development (Precinct's Commercial Bay development), and up Albert Street—a central city arterial road. Tender documents for the works between Aotea and the tunnel portal at Mount Eden are scheduled to be released later in 2017. Designation and resource consent variations are currently being sought to enable changes in design at Mount Eden where the CRL ties into the existing North Auckland rail line. These changes are proving to be quite contentious.

Did your client require much guidance in the initial phases?

Auckland Transport is a sophisticated organisation. I found that from an early stage our approaches to problem solving and pressure points were relatively closely aligned. We had quite similar philosophies, especially as we started with a sketch outline and a lot of time and effort was spent on responding to queries and developing detail around the edges to address particular points of concern raised by submitters, we were on the same page with them on that.

Are there any other challenges you've faced in the development of this project?

The big one is that as detailed design of the project has progressed, there have been changes to the design of CRL, as you'd expect for such a major project. At the same time, we're starting to run into contractual timing constraints while we're working through those changes.

I understand that you're based in Wellington; are there any problems you face when advising on projects in Auckland?

Not at all, most of my team is based in Auckland. We run a national practice line and undertake work throughout New Zealand: actually many of my clients are Auckland-based. With technology and regular travel I would like to think that Auckland Transport is hardly aware of the fact that I reside in Wellington, other than when there are lively discussions about the relative progress of the respective teams in the Super Rugby Championship. I've tested this with Auckland Transport to see whether there are some things we could be doing better, but they've said that they don't even notice that I'm not based in Auckland.

New Zealanders share a strong sense of guardianship (kaitiaki-tanga) for the country's environment; how much of a bearing does the Resource Management Act (RMA) have on City Rail Link?

The RMA provides independent oversight of, and public participation in, designation and consenting processes. Securing the necessary regulatory approvals in a timely manner, including variations as detailed design progresses, is a major factor in advancing a project of this scale and significance. We have to carefully explore various consenting pathways that are available to us and anticipate, assess and respond to issues that are raised. These cover the full ambit of issues that you would expect to arise for projects of this scale, including effects on the natural and built environments, water drawdown, ground settlement, traffic, urban design, heritage, noise, and social and economic concerns.

What trends do you see for transport infrastructure development in New Zealand in the foreseeable future?

Many of New Zealand's urban areas, in particular Auckland, are under considerable pressure from growth. Congestion is a real issue. As constraints on land supply are lifted, and populations grow, this pressure will intensify. I expect there will be a period of sustained and substantial investment in transport infrastructure to accommodate this growth and alleviate existing and projected congestion. Funding remains a significant road block. We look forward to seeing some innovative funding solutions and even greater commitment to infrastructure spending on the part of government. We're growing from a young country into an adolescent and it's causing growth pains.

Are development priorities skewed depending on whether we're talking about the North or South Island?

I think that there are different priorities. It's fair to say that most of New Zealand's population growth pressure is concentrated in the North Island. This results in an emphasis on land supply, transport and electricity infrastructure, housing and commercial development. In the South Island the emphasis is on earthquake recovery, both in Christchurch and Kaikoura. Port infrastructure, natural resources, water allocation and freshwater quality issues are to the fore.

How large is the pool of law firms working in transport infrastructure in New Zealand? Do you come across the same firms often?

There is a reasonably diverse pool of firms working in transport infrastructure—bearing in mind the various modes of travel such as road, rail, air, and sea. Having said that, New Zealand is a small country, so of course we do come across the usual suspects on these projects.

Do you know who else is working on CRL?

Simpson Grierson is working on CRL construction. Buddle Findlay is acting for Auckland Council. I'm also working with Russell McVeagh on CRL at the moment, they act for KiwiRail in an area where we're looking to vary the designation. Generally in infrastructure we see Chapman Tripp and Buddle Findlay on the roading side. We bump into a lot of smaller firms from time to time.

Do international law firms ever get involved in New Zealand infrastructure work?

Yes they do, but generally by supplementing a local offering with relevant strategic and up to date international experience. International law firms generally don't lead these projects. A lot of the bidders for PPPs have used international firms to support their offering (generally Australian). We initially had additional expertise available to us from Allen and Overy (London) when we obtained the early PPP instructions.

What will be the main focus for your firm's projects team in the year ahead?

Our team operates as an integrated and full service package of advisors for projects. We will look to consolidate and enhance our market leading position. PPPs, road and rail will be the main focus. Energy and social housing will also be important, alongside electricity generation and transmission.

Andrew Beatson
Partner

Bell Gully

About the author

Andrew Beatson is a leading environmental and resource management law specialist with New Zealand law firm Bell Gully. He is an experienced projects lawyer and litigator who has been providing strategic advice to clients on all aspects of New Zealand's Resource Management Act and related law for over 20 years.

Behind The Deal – Gun Chul Do – Bae Kim & Lee

Bae Kim & Lee partner Gun Chul Do speaks with Adam Majeed about advising on the development of Songdo, a smart city in South Korea, and the legal markets for projects in the country

How did your firm win the Songdo instruction?

It all started in late 2001 or early 2002. At that time our firm was the first Korean firm that established a dedicated team for construction and real property. Our firm was widely known in the market in that practice area and clients recognised this and approached us.

Have you had previous experience working on anything similar or is this project something unique?

When we first got involved in the project it was somewhat unique. By that time Korea had not commenced any project led by a private company on this scale. When we started to work for our client at the beginning we may say it was unique, but after our involvement in the Songdo project we have been involved in various projects of this scale. For example, we're especially involved in overseas city development projects. We advised an ENC company in Korea that started to develop a new city in an urban area close to Baghdad, Iraq. This is the first post-war city development project to redevelop the whole country. And recently we are involved in a city development project in Kuwait that is led by a government owned company in Korea.

> "When we first got involved in the project it was somewhat unique … Korea had not commenced any project led by a private company on this scale"

Are the mandates of these projects similar in the sense that these new cities in Baghdad and Kuwait are going to be technologically advanced like Songdo?

It's similar in some senses. The Kuwaiti project is very similar to the new Songdo project because the Kuwaiti government intends to develop a state of the art city in an urban area nearby Kuwait City. The Iraqi project is somewhat different because the Iraqi government intends to develop affordable housing as a priority, but the project has some similarities in infrastructure, commercial opportunities, religious facilities, schools and medical facilities. In that sense we may say it's similar but the main purpose of the project is to supply affordable housing.

Going back to Songdo and when you first started, did your client require a lot of guidance in the early stages of the project?

They were materially experienced in their part of development, but the scale of the project is somewhat different. So for the Songdo new city project, they required substantial guidance in the local market, advice on Korean society, the unique characteristics of Korean government entities, and various advice for permit issues. The Songdo project requires various permits and approvals from local and central government. Another aspect is the discussion and negotiations with local government entities that also requires guidance for the local financing of the project. Furthermore, the Songdo project is also an invitation for new foreign investors for each individual project included in new Songdo city, and our client who was fairly experienced in that manner required our involvement from the Korean law perspective.

At what stage of development is the project at and how deep is your firm's involvement?

It's been 15 years since we started our involvement in this project. We may say it's in a later stage of development. As you may recall, due to the subprime crisis in 2008/2009 the project experienced some difficulties. It was delayed a little beyond what had originally been contemplated, but some of the established development projects and immediate issues are handled by our client while the key issues related to the project are handled by us.

What have been the key challenges you have faced during the life-cycle of this project?

The key issue was financing, local financing. Our client mainly procured the funds for the project from local financing institutions, and in the early stages of the project this did not create serious problems. However, the most difficult problem was faced with refinancing the project just after the subprime crisis. Our client finished its main financing some time before the subprime crisis, but due to the crisis the project faced some difficulties in some of the individual projects and the units of facilities were obstructive. So just after the subprime crisis our client needed to refinance the main financing and we had some difficulties at that time because as you may expect the mortgage situation was not that good.

Apart from financing were there any other challenges?

I do believe that it's normal in any project around the world but one challenge was the permit issue. That is the most important issue that our client had to take account of. They had long discussions with local governments in order to obtain the necessary permits, and the local governments wanted to comply with the development schedule only on what was agreed upon by the parties. Due to the subprime crisis, and due to the subsequent depression in the market, it became very difficult for our clients to comply with the originally agreed upon development schedule. So we reopened discussions for the development schedule and it took a long time to renegotiate that.

We've looked at the economic challenges, but will the recent political upheaval resulting in the impeachment of former President Park Geun-hye impact the development of the project?

I don't think it will have an enduring impact on the project's schedule because the clients do believe that the impeachment addresses outstanding risks in Korean society. We believe that it will have a positive impact on the Korean economy, and this was borne by the recent upturn in the stock market. So I think that the impeachment will not have a negative impact on the progress of the project.

I don't think the new government will slow down the project. Although we are facing changes in the government, which will be carried out in the next couple of months, the new government will also try to enhance the economic environment in Korea. I don't think there will be any new policy adopted by the new government that will hinder the progress of the project.

Is there much input from international or other domestic law firms in this project?

A few among the domestic firms advised the opposing parties. Kim & Chang advised the lenders for the financing and Shin & Kim and Yulchon advised on individual projects within the wider project. Among the global law firms, Kelley Drye & Warren advised our clients from the US side. At the very beginning of the project, Hane & Dore, a Boston-based firm advised our client.

How big is the pool of law firms working in social infrastructure in South Korea? Do you tend to come across the same competitors or does it depend on the type of project?

Normally it's the so-called big five firms that are involved in infrastructure development projects in Korea. That's us, Kim & Chang, Shin & Kim, Lee & Ko and Yulchon. Those five firms are the usual players in the market so we periodically face them.

So there's no niche for social infrastructure in Korea and it's the same large firms that are involved in all sorts of practice areas?

Yes. But for overseas development led by Korean companies, I do believe that we are the firm which has the most experience.

In terms of the international firms involved in Korean infrastructure are there a number that you perhaps see more often than others?

Although the international firms are sometimes involved in Korean development projects, it's mainly from the financing side, or the financing from overseas, or they are periodically representing foreign investors that invest in Korean development projects. I may say that they play a small part in the market.

What trends do you see for project development in Korea in the short to mid-term?

In the short to mid-term the key issue will be more complexes consisting of hotels, commercial opportunities and residential opportunities. Another key issue is casino development. It was set by the Park government from 2014, but this sector may be affected by the impeachment of the former President and the arrival of a new government. I expect that the new government will review the overall policies related to the casino industry, but it's another key issue of the Korean property market. Another issue will be the development of large scale malls. The demand for large scale malls is consistently increasing in the Korean market, and there are many large scale projects underway. I expect there to be more in the near future.

What will be the main focus for the projects team in the year ahead?

I think we will focus on two areas. The first one is the domestic market. We are established market players in this industry, so we'll continue to focus on the domestic market including the large scale developments that I just described. Another aspect of our practice would be in overseas real property development. As I've previously experienced, many Korean companies are tending to approach the overseas market for the large scale developments. We expect that the new government will also continue that policy and so there will be more projects led by Korean companies, both private and government owned companies—in the near future. So we'll focus on that sector.

Gun Chul Do
Partner

Bae Kim & Lee

About the author

Gun Chul Do is a recognised expert in developing mixed-use complexes. He has handled various projects related to foreign investment, overseas investment, real estate development, and project financing, including the Songdo International City Development project and the Bismayah New City Development project.

Behind The Deal – Linh Doan – LVN & Associates

LVN & Associates founder Linh Doan speaks with Wai Yee Tsang about advising the Vietnamese government on the MW Hai Duong 1200MW thermal power plant BOT, and recent legislative changes affecting, and challenges to developing, projects in Vietnam

How did the firm win this mandate?

I brought this deal over with me from my previous firm Orrick which had not previously worked with this client. I have been working with this client since 2009.

The power plant was approved by the Vietnamese government in 2011 and originally planned to commence construction in 2014, what caused the delay?

There are several reasons which include the financial crisis and several changes in equity partner which contributed to the year's delay.

How smooth was the coordination between Hai Duong Jaks Power [BOT company] and the Department of Natural Resources and Environment (DNRE)?

The land acquisition under Vietnamese law can be complicated and it has to strictly follow the Laws of Vietnam (without reference to any other laws unlike other project documents). As a result, there were timing issues and the DNRE were expecting the project to complete sooner than it actually did.

Can you describe briefly the entire process and timescale for conducting a power project in Vietnam?

There are two completely different types of process: one is bidding and the other is award/appointment. Most projects in Vietnam are granted through the latter approach, with only one or two having gone through bidding. However, the current appointment process is no longer as straightforward as before: the developers will now be required to go through part of the bidding process under the new bidding law which became effective in 2015. So far, all of the existing projects were appointed under the revised masterplan number seven which was announced prior to the enforcement of this new bidding law. Therefore, no project has yet been selected based on the new regulation.

In the past, for appointments, the developers were only required to conduct the feasibility study and then sign the feasible project agreement with the authorised state body, i.e. the Ministry of Industry and Trade of Vietnam (MOIT). Then the developers will draft and negotiate the concession agreement with the MOIT; the power purchase agreement is negotiated with Electricity of Vietnam (EVN); the VPC contract with the VPC contractor, and the land lease with DONRE. Thereafter, it takes a long time to finalise the project. The developers is also required to sign an investment agreement with the MOIT to confirm all the terms of these contracts and apply for the investment registration certificate, followed by signing all the agreements officially. At that stage the developer can arrange for financing. Sponsors will have approximately 12 to 15 months to arrange the financing, with construction to be commenced thereafter. Developers generally have four to five years, depending on the conditions of the site of the project, to complete the construction and they have to achieve the commercial operation date by certain specified dates - failing to do so leads to financial penalties.

> "The current appointment process is no longer as straightforward as before: the developers will now be required to go through part of the bidding process under the new bidding law"

This is the first project financing to close under Decree 51/2015/ND-CP. How does the decree affect the project financing structure?

Under Decree 51, any contract signed by a state-owned company will not be under the scope of the MoJ's opinion. So the MoJ will only opine in the documents that have already been signed by the Vietnamese government - the government's concern here is the DONRE or the MOIT, but MoJ will not give opinion on the documents signed by the state-owned enterprises such as the PPA or the CSA.

> "I think Decree 15 originally had the intention to resolve how to deal with road projects but it does not appear to have achieved this goal so far"

What is the aim of this decree?

The Vietnamese government does not want to be involved in documents that are not signed by the governmental departments. The state-owned enterprises are now expected to bear their own liabilities. The government also wants to limit its exposure.

It should be a default to opt for project finance, why was the corporate finance even being considered?

Because [the parties were] under time pressure and project finance typically takes at least a year to complete, whereas corporate finance can be completed in three to six months since the sponsors typically provide guarantees. However, the deal was structured for project finance so the parties contemplated refinancing after the commercial operation date.

If you could change one piece of Vietnamese legislation that has an impact on energy or infrastructure projects, what would it be?

Decree 15 - the framework of PPP projects. I think Decree 15 originally had the intention to resolve how to deal with road projects but it does not appear to have achieved this goal so far. In the previous draft, there had been discussions about ways to support road projects but the final draft is silent in terms of providing minimum offtake and guarantee in road or other infrastructure projects. The decree was also originally intended to cover both infrastructure and energy PPPs but, so far, only energy projects are successfully financed on a non-recourse basis due to the availability of PPA as the offtake agreement. Hopefully there will be a scope for revising Decree 15 after the first infrastructure PPP (road or airport) succeeds.

What are the current trends in the energy and infrastructure sectors in Vietnam? What other projects are being undertaken?

A few power projects are in the pipeline, but yet to commence. One is the Quang Tri project – with EGAT (the Electricity Generating Authority of Thailand); Vung Ang 3 with Samgsung; Dung Quat Project with Semcorb. There are also some road and airport projects in Ho Chi Minh City, but I understand these are still in the feasibility stages.

Road projects are also challenging because there is typically no offtake agreement which results in no certainties on the revenue.

What would you say is the biggest challenge facing foreign investors looking at investing in Vietnamese projects?

It depends on the particular sector or area. In power, for example, it takes a lot of time and coordination with different Vietnamese government departments and the developers, therefore, need to reconcile both the interests of the government and the lenders and the sponsors have a more challenging job.

I consider that one of the biggest challenges currently would be the currency risk. In the past, the Vietnamese government would provide 100% protection but that is no longer the case - the central bank purports that it does not have the necessary resources to cater to the growing number of projects in Vietnam and it has to consider its overall resource allocations for other needs.

Linh Doan
Partner
LVN & Associates

About the author

Linh Doan is a leading adviser in the Asian power market. She has worked with government entities, sponsors, lenders and investors on a large number of the most high profile power plant developments and financings in the region, particularly in Vietnam.

Behind The Deal – Stephen Jaggs – Allen & Overy

Allen & Overy managing partner in Bangkok, Stephen Jaggs, speaks with Wai Yee Tsang about advising the sponsors of the Xe-Pian Xe-Namnoy hydroelectric power plant in Laos, and the energy and infrastructure markets in the country and wider region

How did the firm win this mandate? Have you worked with the sponsors before?

Allen & Overy has a long history of working on hydropower projects in Laos. We originally worked for the lenders on the Theun-Hinboun hydropower project which, in 1996, was the first limited recourse power project developed in the county. We then worked on Nam Theun 2 for the various multilaterals and commercial lenders, and after that we started working on Nam Ngiep 1. We also worked for the lenders on Nam Ngum 3 which did not proceed as originally intended, although we worked on that deal for a few years. Ratchaburi Electricity Generating Holding PCL (RATCH) was one of the shareholders in that deal.

We became involved in the Xe-Pian Xe-Namnoy hydropower project because one of the lenders on Nam Ngum 3 was acting as a financial advisor to the shareholders on Xe-Pian Xe-Namnoy, and since RATCH was also involved in Nam Ngum 3, they recommended us to work on that project as well.

What were the unique features of this project?

One of the unique features is the 500kv transmission line and substation which is intended to be shared and used by other projects. This started from the Electricity Generating Authority of Thailand (EGAT) and the Government of Laos having the policy that, instead of having multiple projects with multiple transmission lines going across to Mekong River, they should have one single 500kV line and one substation on the Lao side of the border with a number of different projects connecting to that substation.

There has been a similar set up for a number of different projects in different parts of Lao (the Nabong substation) but that caused a number of issues and delays with projects as the line and substation were originally developed by one project and it was difficult for other projects to gain access and for the different risks relating to shared ownership of the substation and line to be resolved.

The Lao government was keen to avoid the same issues with Xe-Pian but our clients were keen to have a bankable structure that fairly dealt with risk issues amongst any projects that would interconnect and to maintain ownership of the substation and line. We developed, with the government, a structure that will allow for other projects to connect to that substation and to have similar rights to use that substation in an almost automatic way but which keeps ownership with the original project company.

We set up the main terms in the concession agreement to allow the interconnection to happen with the commercial terms being built in the schedule of the concession agreement so that it is basically an automatic process when that shared infrastructure is to be used in the future. Nobody had really done that before in Laos.

> "One of the unique features is the 500kv transmission line and substation which is intended to be shared and used by other projects"

What were the key points raised during the negotiations?

The Government of Laos tends to like to improve deals each time they negotiate a new one – they normally want a better deal from their perspective in every negotiation. The topics raised include: to what extent the government would agree to provide protection against upstream and downstream interference to the water supply for the project, and that is something being negotiated a lot more now because there are more projects having been developed in Laos.

Other issues that tend to be negotiated include to what extent the government will protect you from other types of projects that may be in the same area as you. There are also negotiations about the termination arrangements. For instance, to what extent the Lao government has to pay out to buy the project; in what circumstances would it make a termination payment covering equity; when will it make the payment, etc.

We also spent a significant amount of time working on the financing arrangements for government shareholders (in this case, Lao Holding State Enterprise (LHSE)). Multilaterals have previously provided soft financing for the government shareholder via loans to the MOF, but that is happening less frequently now. One of the banks in the

> "Finding a good project now is getting harder, and that is one reason you see people doing expansion projects and looking to refinance existing projects"

deal ended up providing the equity finance for LHSE which gave rise to some complicated elements that required quite a lot of thought given the overall project financing and issues between the shareholders.

Multilateral and/or ECA support for the equity financing for the government shareholder is less common if the relevant lender isn't also participating in the main project financing, and there have also been a few projects done with private lender financing for the government shareholder. This is possibly because the multilaterals act in a developmental capacity and once a commercial market has been established (as it has for this aspect of the deals) then they tend to be less involved in those aspects.

You worked with DFDL as local counsel on the project. How did this partnership add value for your sponsors?

We have worked on many deals in Laos with DFDL but also work with other law firms. We bring the international perspective and the understanding of issues that the shareholders and banks are concerned about plus we have a lot of experience in negotiating the project documents and getting projects to financial close – so we understand the real bankability concerns. This helps us guide local counsel to make sure that they can consider different options to resolve problems. Laos counsel tend to focus on the local law side of the deal and DFDL have had expat lawyers in Laos for many years so have a lot of experience of these types of projects and the issues, which makes it easier.

What is the split of work between your firm and the local counsel?

We tend to negotiate the project documents (i.e. the concession agreement and PPAs and construction package), the shareholders arrangements and the financing package so negotiate with the off takers, the contractors, the government and the lenders and their legal advisers. Local counsel tend to focus on more granular issues on the concession arrangements (particularly legal benefits and exemptions), Lao law issues generally, the Lao security package, permits and licenses and so on, all of which are critical to a projects success.

Are sponsors experienced in handling deals in the Greater Mekong region?

The Thai developers have more experience just because they have worked on multiple deals in Laos, have relationships with the Thai banks and the Electricity Generating Authority of Thailand (EGAT), and have been involved in the sector for longer.

International players do tend to still undertake more of a leading role, particularly where there are close relationships with the main construction contractor or lenders, or where they have a great deal of experience from developing hydropower projects in other countries.

Obviously, the issues in Laos can be different to other countries and you also have issues with the Thai off taker and the government that need to be carefully managed. In the context of Laos, joint venture structures tend to work well because there are different elements that the various parties can focus on.

What are investors most concerned about when investing in energy and infrastructure projects in Laos?

In terms of power projects, a couple of things. One is finding a good project; it is about finding a good location and geology. Finding a good project now is getting harder, and that is one reason you see people doing expansion projects and looking to refinance existing projects instead to unlock value.

One area of interest is projects that were granted a long time ago but that were not actually being developed. There are, for example, projects that were granted to Russian developers which have not gone anywhere, so developers are trying to acquire some of these existing projects – this is easier said than done though.

The competition among developers is probably higher as well. It used to be a very few niche developers looking into the market. However, now you have a number of people who have successfully developed projects, so naturally these people want to further develop what they already have on the ground.

The other issue concerning government policy in Laos is the reductions in incentives for people to participate in the market. This is partly because there is a lot of competition, but also because there is now less support from the government side as the government sees that it has a fairly successful private sector where the projects can now stand on their feet to a large extent. This can be challenging though as projects still need a fundamental level of support from the government. That is one reason why we spend long hours negotiating concession agreements.

Another issue is the government policy about off take: the projects we worked on all involved EGAT, so the main credit of the deal is the power purchase agreement with EGAT. There is though normally off take to Électricité du Laos (EDL) as well and the form of off take arrangement and PPA can vary from deal to deal. Sometimes in constructing the financing model, the banks do not want to include EDL off take revenue in the financing plan but this is less often now the case (as EDL credit has improved over time) which means more time needs to be spent negotiating a bankable off take with EDL. Government policy was apparently to move only to EDL off take with cross-border government-to-government sales of electricity, but financing this type of project would be challenging and we are still seeing cross-border EGAT off take.

Laos, as an emerging market, has a basic legal system. Has the country benefited legislatively from the experience that international firms bring to the market in the projects space?

I think so. In terms of the development of a legal framework, the development of the hydropower sector has helped a lot as there have been a lot of activities which essentially created the law. In the early deals, there was not much in the background legal framework. So the early concession agreements were much more detailed because you had to deal with the absence of background law and build what you needed into the concession agreement. And then the concession agreements themselves were being passed as if they were legislation. So they were being approved by the National Assembly of Laos with the intention that the documents themselves would have the same force of law as if they were legislation. That was the situation early on.

Deals like Nam Theun 2 and the volume of development that has been happening have helped the construction of the local legal framework. With respect to Nam Theun 2, there was a Law on Secured Transactions passed. That was being developed but the process was accelerated so it would be in place for the Nam Theun 2 financing. The fact that there has been so much activity and more local legal advice helps develop the local legal framework – it is now much different from 20 years ago.

Are there any opportunities within the Greater Mekong region that your law firm is keeping track of?

Laos has certainly been very active in the hydropower sector. Some of the infrastructure projects in Laos are also quite interesting. We are working on a Lao railway project at the moment which aims to join China to Thailand through Laos. As for Myanmar, the market has been progressing slowly during the last year or so. But interesting opportunities in Myanmar include LNG developments, gas and renewable power projects, and other infrastructure (we are actually working on an airport project in Myanmar at the moment, for example, and have worked on a number of financings). Things within the region tend to happen slowly and you have to be patient sometimes. In Myanmar, things have slowed down due to the change of government – there have been changes in the ministers and a number of different ministries have been combined together. For example, the Ministry of Electric Power (MOEP) has now been combined with the Ministry of Energy (MOE). This may have slowed things down a little, but should be better longer term. In addition, the new government priorities were not so much on infrastructure and economic development, but more on other social and political issues. That, however, is changing and things are moving forward nonetheless.

Vietnam has been very active on the power and petrochemical side and our offices in Ho Chi Minh and Hanoi that handle work for developers and lenders and are always busy – deals do though take some time to complete. As for Cambodia, I worked on a transmission project a few years ago that was completed and have been involved on some power projects, but there has been nothing really substantial that we have been directly involved in since the transmission line project. The economy is growing very strongly but I am not sure whether there are any significant deals happening in the power and infrastructure sector that involve international developers or finance. It will be interesting to see how that develops.

Stephen Jaggs
Managing partner (Bankgkok)
Allen & Overy

About the author

Stephen Jaggs is managing partner of Allen & Overy's Bangkok office and the head of its banking and projects practice. He has been at the forefront of the development of the infrastructure and power sectors within the Greater Mekong sub-region and the wider Asia-Pacific since the mid-1990s.

Behind The Deal – Dhani Maulana, Mathew Goerke – Hiswara Bunjamin & Tandjung

Hiswara Bunjamin & Tandjung (HBT) partner Dhani Maulana and senior associate Mathew Goerke speak with Wai Yee Tsang about advising Mitsui on the Kalibaru port project in Indonesia, and the framework for, and challenges to, developing infrastructure in the country

How did you win the mandate? Have you worked on similar projects with this client?

The mandate was won through our association with the Tokyo and Singapore offices of Herbert Smith Freehills (HSF). Hiswara Bunjamin & Tandjung (HBT) has worked in association with HSF for over 15 years. Both firms have a long history working for Mitsui and other Japanese clients.

What is your firm's role on the Kalibaru port project?

This is the first major port infrastructure project with direct foreign investment under Indonesia's new port and shipping regime. As a result, our role was to provide regulatory advice to our clients to formulate the project structure under this new regulatory regime. The Singapore and Tokyo offices of HSF also had a substantial role in drafting the key project documents, including the shareholders' agreement and the construction operation agreement. We also continue to advise the project company in relation to its Indonesian licensing and regulatory requirements.

The shareholder agreement for this deal has some unusual features. Can you explain the mechanisms and what you were aiming to achieve by including them?

The shareholders' agreement for this project was signed between the foreign consortium and a subsidiary of PT Pelabuhan Indonesia II (Pelindo). Pelindo is the key Indonesian state-owned enterprise in the port sector. The foreign consortium is primarily led by Mitsui, and the foreign consortium together holds 49% of the project company, and a subsidiary of Pelindo holds the remaining 51%. It is actually also a subsidiary of Pelindo which was responsible for granting the project company the construction operation agreement for the Kalibaru terminal. Further to that, the foreign consortium is limited by law to a maximum 49% interest in the project company.

One of the key economic reasons for introducing the foreign consortium was to ensure that the foreign party can contribute operational experience and the latest technology to the development of this project. As a result of these legal and commercial considerations, it was necessary for the shareholders' agreement to appropriately and adequately address the balance between the rights and obligations of the foreign consortium on the one hand and of Pelindo, as an Indonesian state owned enterprise, on the other. From our perspective, the shareholders' agreement had to be drafted to ensure that the consortium would be able to meaningfully contribute to the development of the project and ensure that all of the advantages of involving the foreign consortium, such as its operational experience and technology, can be fully utilised by the project. Of course, we also had to ensure that the foreign consortium's investment is protected.

What were the main commercial challenges you faced when drafting the shareholder agreement?

Trying to get the balance right between the competing interests here was the main commercial challenge. The main competing interest here is that Pelindo is a major and successful operator in Indonesian port projects and has control over many major port projects like this. However, Pelindo also acknowledges the benefits of the foreign consortium having certain operational rights to make sure the project operates effectively. The challenge here was to determine where the line on operational rights and supervision was most appropriately drawn.

What was Pelindo's attitude to negotiating the shareholder agreement?

On the whole Pelindo was very well advised, they certainly recognised that the foreign consortium needs investment protection and certain operational rights, and they were accommodating in that regard. It wasn't that Pelindo couldn't have completed the project by itself since it is a very significant enterprise in Indonesia, but it would've been a more difficult project for them to do it alone. Pelindo recognised the value and contribution that the foreign consortium could make.

What were the particular issues that Pelindo was less willing to compromise on at the very beginning?

Pelindo was aware that they needed to access international funds and the latest technology to allow the project to go ahead, so they were encouraging the consortium to be allowed to contribute financially and to ensure that the best technology was utilized by the project. Of course, when it came down to the details in the commercial negotiations on some finer points, Pelindo had their own economic, commercial and political interests at heart. It was a protracted negotiation. Several issues were being raised for technical, operational or legal reasons – however, we feel that a successful and appropriate compromise was finally acheived.

Were there any contentious issues for Pelindo during the negotiation process?

They needed to make sure that the returns from their efforts and investment were sufficient and appropriate. As a state-owned enterprise, Pelindo has the Indonesian Government the Indonesian people's interests at heart, and want very clear reporting lines, supervision and general oversight over the project to make sure the project is delivered on time and on budget. From a commercial perspective, they also wanted to make sure that the economic returns made by the project company to the shareholders were consistent with the kind of returns that Pelindo expected for its involvement in the project. The expectations surrounding economic returns of the parties was another key negotiating point in this case.

What are the key criteria for an infrastructure project in Indonesia to be bankable?

Similar to all infrastructure projects around the world: it is the certainty of economic returns for the project company and shareholders. In Indonesia, infrastructure projects are typically highly regulated, as a result the bankability of a project would be dependent on the actual tariff level, which is regulated, as well as how the tariff can be adjusted in the future. For example, an adjustment in CPI and adjustment for large changes in currency can be very critical in ensuring that you can bank an infrastructure project. Unfortunately, there is some history of Indonesia changing the rules in terms of how the tariff regime can be applied; as a result it can be necessary to get as clear as comfort as possible that the particular economic returns in negotiation will continue to apply for the life of the project, and that, for example, in two years' time the economic fundamentals of the project is not drastically changed and is still economic. This is very much the key risk and criterion for all projects and has particular consequences in the Indonesian context. You also need to manage any currency risk and make sure that Indonesian Rupiah revenue is going to be appropriately managed against typical foreign currency borrowings. In addition, companies have to manage counterparty risk, not necessarily in relation to a port project where typical costs are covered by some of the party's customers, but in projects where the key counterparty is an Indonesian enterprise, you may want to seek a government guarantee or get other credit support and security to make sure the revenue stream is protected in the event of a financial crisis. Another major criterion is to make sure that you can acquire land for the project – in Indonesia, this process is typically conducted much earlier in order to ensure the project is bankable – as banks want to see that you have a clear and uncontested plan for the land acquisition or utilisation strategy. In other jurisdictions banks may be able to take additional risk on land issues, but in Indonesia, given how high profile the issue can be, it is one of the first things parties need to consider. It is indicative that one of the reasons that the Kalibaru project was successful was because it involved the reclamation of the ocean, which did not have to face the same kind of land acquisition or utilization issues.

What framework do your international and local clients tend to prefer when developing infrastructure in Indonesia?

Typically the framework is determined by the regulations applicable to the relevant infrastructure sector. So, in that sense, there can be limited flexibility in terms of the types of frameworks that can be adopted. For international clients, they will almost always be required to establish a foreign investment company in Indonesia. In our experience, and this applies to both local and international clients, often the key to a successful framework is a close working relationship or partnership with the relevant local enterprises. For instance, for the Kalibaru project, it was a foreign consortium with a good working relationship with Pelindo. It was clear that, partly through this good working relationship, there was broad political support for that project.

Do you think the Indonesian government will ever lift these restrictions?

In terms of foreign ownership restrictions, there has been some liberalisation quite recently in the transportation and port sectors and certain elements in the energy sector, particularly renewable energy.

Consistent with the plans of various regional Indonesian governments to upgrade and develop numerous new and existing airports, the Indonesian Negative List announced last year has sought to encourage further foreign investment by increasing the maximum foreign ownership of air transportation supporting business to 67%, up from 49% previously.

The Indonesian government has also recently been focused on reducing port handling times and generally attempting to improve the efficiency for the transportation of goods within Indonesia. In practice, improvements in the relevant sectors have been hampered to date by a maximum 49% foreign ownership restriction which has not always encouraged foreign investors to introduce the latest technological advances into Indonesian companies that they cannot control. However, the Indonesian government appears to have recognised this issue by increasing the foreign ownership cap to 67% for maritime cargo handling services, transportation management services and air cargo expedition services.

As a country with approximately 40% of the world's geothermal reserves, the Indonesian Government has also been actively seeking to support the growth of the Indonesian geothermal sector as part of Indonesia's power infrastructure. All geothermal power plants with a capacity of less than or equal to 10MW are now subject to an increased maximum foreign ownership level of 67%, up from 49%.

How do you think the Indonesian infrastructure sector will evolve in the near future?

There is significant political and public attention given to the infrastructure sector in Indonesia mainly because the public demand is so apparent and so high. For example, early last year, President Joko Widodo signed a presidential regulation which sought to accelerate the implementation of approximately 200 national strategic projects, including 60 dam projects, 17 airport projects, and 13 port projects. There is a real drive to accelerate the infrastructure sector by the central government. But, in the short and medium term, we continue to expect that the sector will face challenges which are inherent across Southeast Asia, particularly in Indonesia. These are: the legal uncertainty especially in relation to project procurement processes; uncertainty in economic returns and tariffs; bankability issues as the Indonesian government is now generally less willing to provide government guarantee to certain projects and sectors; and there are continuing challenges in relation to land acquisition.

Can you describe how your team in Indonesia coordinated with your firm's Japanese office when working on this and similar projects?

It is a very close working relationship. All of the members of the Indonesian team were involved in all elements of the transaction. Of course, some elements are better suited to be run by the foreign lawyers as compared to the local lawyers, such as the strong Japanese language capability from our Tokyo office. Also, some elements of the project documents and project structure are governed by foreign law – lawyers from the Japanese and Singapore offices have contributed beneficial foreign lawyers' experience to these documents and structures. In terms of the local lawyers here, we are uniquely suited to dealing with Indonesian regulatory issues (including in relation to the project procurement process, doing due diligence on Indonesian enterprises and land acquisition/utlisation issues) as well as reviewing transaction documents and structures from the Indonesian legal perspective. We are in a very close association with HSF, therefore almost all our major projects ended up involving other offices to draw on the best range of experience and expertise.

Which piece of Indonesian legislation would you say is the biggest hindrance for foreigners investing in Indonesian infrastructure projects? If you could change the legislation, how would you do so?

We cannot point to a single piece of Indonesian legislation. However, it is the broader regulatory regime applicable to the infrastructure procurement process that is the major hindrance. Quite often, and certainly for this project, there is significant legal uncertainty concerning the procedures and processes adopted by the Indonesian government or state-owned enterprises in awarding major infrastructure projects to the private sector. The Kalibaru project is a clear example. This project started off as a competitive tender and there were numerous foreign and local investors that participated in that process. There was material cost and expense in being involved in this tender process itself, but for various reasons, including the perceived length of time for this process to be undertaken, the tender process was cancelled prior to its completion. So notwithstanding the effort and time put in by the participating investors, no winner was actually awarded under the process. Following the cancellation, the Indonesian president issued a specific regulation in relation to this project to allow the appointment of a single joint venture partner.

If there is one thing that we would change to that regime, it would be to provide greater certainty to investors as to how the procurement process will work in practice; and to ensure that, politically, people from the very top down to the administrative levels are supporting the project, so that the investors will have certainty as to the legal basis for the project procurement and award process.

As local counsel do you try to engage with domestic regulators?

As local counsel we are very often in conversations with regulators at all levels to seek certainty of the legal process that is going to be applied. But the problem in Indonesia is that you can sometimes get conflicting results and opinions on the same issue. We experienced this issue at times during the Kalibaru project. Further, there is only limited comfort that government officials can provide because unwritten policies and procedures can be subject to change at any time.

How attuned is the Indonesian government and regulators to these problems?

The Indonesian president is very focused and aware of these concerns. A large part of his political capital is tied up in trying to resolve some of these bureaucratic issues. The President has implemented several reforms (with various degrees of success) trying to remove red tape, to reduce licensing delays and to eliminate inconsistency between local and regional regulations. From a presidential perspective, there is quite a lot of awareness. But further away from the president's office, there is less awareness of these issues. The regional and local levels of government can still be highly bureaucratic and can see themselves principally as regulators, supervisors and controllers without necessarily trying to actively facilitate new projects or new investment. There can also be a reluctance to entertain some of the economic consequences of the decisions being made.

From a land procurement perspective, for example, politically speaking, compulsorily acquiring people's land can be a difficult task for the local government and not necessarily a popular decision either. But from the broader economic development perspective, it is the right thing to do. More broadly speaking, the government can, at times, be very rigid and rules can be applied in a way not necessarily encouraging foreign investment in the infrastructure sector. We would say that different levels of government have different levels of awareness and ability in understanding and reacting to these problems. President Joko Widodo seems to understand, but lower level government officials don't necessarily have the exposure and experience to fully appreciate how their decisions and attitudes can affect the development of infrastructure in Indonesia.

How heavily do foreign investors' in-house teams rely on local external counsel?

The majority of our clients are highly sophisticated companies. They have strong project and legal knowledge, but the Indonesian regulatory regime is rapidly changing so it can be very difficult for them to stay on top of the relevant regulatory developments. In our experience, foreign investors' in-house teams typically rely on us to understand the latest regulatory developments and to gain insight as to how the latest procedures are being interpreted and enforced. We provide a gateway to latest practice and procedures for in-house counsel that they would not otherwise have. It is in that regard they very much rely on us.

Dhani Maulana
Partner

Hiswara Bunjamin & Tandjung

About the author

Dhani Maulana Dhani leads the energy and projects practice at Hiswara Bunjamin & Tandjung. He is recognised for his experience of advising clients on matters related to major infrastructure and construction projects as well as in the power, renewable energy, mining and oil and gas sectors.

Mathew Goerke
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About the author

Mathew Goerke is a senior associate of Herbert Smith Freehills on secondment at Hiswara Bunjamin & Tandjung. He works primarily in the infrastructure, power and resources sectors and has extensive experience advising on greenfield developments, M&A and other transactions in addition to advising on foreign investment regulatory issues in these sectors.

Behind The Deal – Tay Peng Cheng – WongPartnership

WongPartnership head of energy and projects, Tay Peng Cheng, speaks with Wai Yee Tsang about advising the sponsors, Hyflux and Mitsubishi Heavy Industries, on the 3600 TPD TuasOne waste-to-energy plant in Singapore, and developments in energy and infrastructure and the country's legal market

How did the firm win this mandate and what was your role on the project?

Hyflux is one of our major clients, and we were invited to submit our proposal to be the sponsors' counsel for this project. It was a competitive bid and the clients selected us because of our experience in this area, familiarity with the clients and our fee proposal.

We worked closely with the clients from inception. We assisted them in the preparation and submission of the bid, reviewed and advised on the entire suite of project and financing documents, including at the pre-bid stage, the waste to energy services agreement, EPC and O&M term sheets and the financing term sheet. Upon the clients being successful in the bid, we worked with them in drafting, negotiating and finalizing the various project and financing documents, up to the financial close of the project. It was an intense period but was very satisfying.

Why was the PPP model used for this project?

The PPP model is generally used when the government wishes to manage its risk exposure for public projects in areas where the private sector may have more relevant expertise, and also to create opportunities for the private sector to work with the government on large scale infrastructure projects.

The firm has recently worked on projects in China, Myanmar, Malaysia and Qatar. What challenges have you faced when working on projects in foreign jurisdictions?

One of the biggest challenges is the state of the local law in that particular jurisdiction, and whether it is sufficiently evolved to address the myriad of issues that may arise in such a project. In some cases, the local law may not be sufficiently developed in supporting large infrastructure work or has specific requirements that place uncertainty on the project. What we are used to or familiar with in one jurisdiction may not be applicable in another jurisdiction. So, whilst there may be desire from those governments to attract investment and a wish to follow international practices, the actual implementation may not be so straightforward and risks may be too high. Conditions may be imposed that affect the bankability of the project, and if the project is not bankable, it will be difficult for the project to take off.

Another example relates to land rights. Each jurisdiction has its own specific registration systems, but we have encountered situations of a lack of clarity over who is the actual landowner and whether the land use rights that are given to the concession company have actually been secured.

> "Singapore is positioning itself as the infrastructure hub in Asia, where our expertise in infrastructure building can be exported to the region"

What is the Singapore's strategy for energy and infrastructure development?

Singapore is positioning itself as the infrastructure hub in Asia, where our expertise in infrastructure building can be exported to the region, and our standing as a financial centre will also assist in facilitating financial for projects in the region.

Recent government announcements and moves have been targeted at showing that Singapore, through its experience gained from nation building, is in a position to support infrastructure building in the region. Our professionals have the ability to advise on large scale infrastructure and energy projects, and our companies are ready to invest in or work on such projects.

Singapore has been working with, amongst others, the World Bank and the Asian Development Bank, in relation to projects in the region and is a founding member of the Asian Infrastructure Investment Bank. The support given by the government in this area, and the willingness by the government to back up projects with capital, has opened the door for Singapore companies wishing to venture into the region.

> "The opening of the legal industry to foreign firms has changed the dynamics and we are definitely facing more competition"

Is there a strong appetite from the private sector for energy and infrastructure projects in Singapore?

Strong bidding interest is always seen on projects in Singapore, and this is testament to the strong level of trust that both Singapore companies and foreign corporations have in the energy and infrastructure industry in Singapore.

If you could change one piece of Singapore's legislation that has an impact on energy or infrastructure projects, what would it be?

I don't think there is any single piece of legislation that is so adverse that it cries out for change. Singapore legislation has been fair and accommodating in this area, and promulgated to be in line with the government's policies. However, one area to watch out for would be the imminent imposition of carbon tax, scheduled for 2019. That is likely to have the result of increasing the cost of production for power generation companies in particular, but these companies may be constrained by their inability to pass through such costs in their long term supply agreements.

Have there been any notable recent changes in Singapore's legal market?

The opening of the legal industry to foreign firms has changed the dynamics and we are definitely facing more competition. It is however not a bad thing as we get to learn from each other.

How do you see the relationship between local and international firms in Singapore?

There is certainly mutual respect between firms, but we remain cautious. When we need to work together with an international firm on a project, we work well as a team. However, it takes time to build a trusting relationship, and it is important for us to work with someone we are comfortable with. In projects that we have been worked on together, we feed on each other's expertise. Having said that, with the Singapore legal market opening up, we are facing more competitions from these international firms. We may not be able to say that we have done the same scale of work as what an international law firm may have done in another jurisdiction, but in terms of the quality of work we produce, our clients have said that they do not see the difference between us and them.

We do observe that as the legal market opens up, the international firms that are coming in need to build up a book of business. We have been surprised by clients informing us of the very low quotes that they have received from some firms looking to build up a book of business. We can understand low quotes to build a relationship with a particular client or to get a foothold in a particular industry, but some of the fees that we know of do not appear sustainable in the long run.

Are there any sectors where you feel local firms have a stronger position than internationals?

Infrastructure is one area that the local law firms certainly have the expertise, with many Singapore law firms being involved in most of the local projects. Our firm, WongPartnership, is very highly regarded in this practice and we have the largest construction legal practice in Singapore. We have a deep bench of construction and project specialists with expertise to handle the most complex arbitrations and court proceedings, and front-end work, not only in Singapore but also, in the Asia-Pacific region and the Middle East. For the local infrastructure projects, clients normally do not see a need to engage an international firm, and in fact would prefer a local firm us like to advise them on such projects. There is also active encouragement by our Ministry of Law to the large local corporates to ask them to work with local firms as much as possible.

Why are you cautious about working with international firms?

When you are working with someone new, there is always a period where both of you are getting a feel of each other. There is always the tension between who does which aspect of the work. For firms we are close to, this is less of an issue as they know how we work and they understand that we support each other.

However, there have been occasions in the past where we worked with international law firms looking for Singapore law support, and we found that they would involve us in the initial stage, but after that we will not hear from them for weeks. Thereafter, a final draft of the agreement is given to us a few days before execution, and we are asked to confirm that the agreement accords with Singapore law. In such a situation, it is difficult for us because we were not involved in the negotiations and we do not know why certain clauses were drafted in a particular manner. Clauses that were not in the first draft have appeared, and when we raised the red flag over obvious errors, we get a response along the lines of 'is it absolutely necessary to change this as the agreement has already been finalised?'. That happens when the international law firm tries to keep too much of the pie to itself.

Tay Peng Cheng
Head of energy and projects
WongPartnership

About the author

Tay Peng Cheng has more than two decades experience in contentious matters relating to construction and engineering projects, civil and commercial disputes and property disputes. He is also drafts and reviews contracts for commercial plants and installation.

Behind The Deal – Yutaka Sakai, Teruhisa Toyama – Atsumi & Sakai

Atsumi & Sakai partners Yutaka Sakai and Teruhisa Toyama speak with Adam Majeed about advising the developer building Japan's largest solar facility, the Ukujima 480MW photovoltaic power plant, and the country's growing appetite for clean energy

The Ukujima power plant will be one of the world's largest solar generating facilities. How did the firm win that mandate?

Our firm has been focusing on the renewable energy field since the feed-in tariff (FIT) act was enacted in 2012 and has built a strong reputation in the field through supporting numerous foreign clients to develop renewable energy projects in Japan. Knowing of our experience in the field, the client engaged us as lead legal counsel for all aspects of the project.

Your client previously developed solar power stations in Germany, Italy and Spain; did they need much guidance navigating processes in Japan?

The client has significant experience in the technical field of solar power plants. However, there are many unique laws and rules relating to such projects in Japan, relating not only to the renewable energy business, but also to the electricity business. We have been supporting the client in relation to such laws and rules.

What were the biggest challenges you encountered when trying to get this project off the ground?

The biggest challenge was to secure the rights over the project land. Rural land-ownership in Japan is very fragmented and as the project site is over 6 million metres squared, we needed to lease the land from more than 1000 landowners.

At what stage of development is the project at now?

The client has been negotiating with investors on the terms of the investment, as well as with relevant parties and authorities on construction and other issues. Unfortunately, the negotiations are so sensitive and confidential that we are not allowed to disclose detailed information.

What are the key differences between acting for a developer on a solar project when compared to acting for another party working in a different capacity?

A developer of a solar project is required to coordinate a lot of relevant parties, such as land owners, authorities, construction contractors and investors. The applicable regulations and restrictions on development of land and power plants are strict in the case of large projects. Further, municipal governments usually request a developer to obtain consents of property owners in the neighbourhood of the project site. Therefore, it is important that the municipal government and the neighbourhood are in favour of the project.

It's been a few years now since Japan began offering incentives through feed-in tariffs to encourage investments in renewable energy sources. Is this trend set to continue for the foreseeable future?

> "The biggest challenge was to secure the rights over the project land"

There is still a lot of scope to develop the renewable energy sector in Japan, especially wind power, hydroelectric power, geothermal power and biomass power. Therefore, the FIT system is likely to continue for the foreseeable future.

There's no doubt the Fukushima accident led to an explosion of interest in renewable energy but have there been any signs of this interest abating with a return to conventional energy projects?

From an overall perspective, there is no such sign. Some nuclear power plants restarted to generate power, however, this restart had been predicted because there is not enough fuel buried in Japan and we need to rely on fossil fuels to a certain extent.

There had been some concern among Japan's power utilities complaining of being overwhelmed and blocking access to the grid. How did this impact Ukujima and has the problem been resolved now?

As the utilities published very conservative projections on grid capacity, it had a significant impact when the utilities decided to suspend the interconnection with renewable energy facilities. However, some investors have analysed the impact and reflected it in their investment terms discounting the project value.

Was there much involvement from international or other domestic law firms in this project?

Our firm advised on all legal issues of this project.

"Regarding the solar power business, we anticipate more work in the developing secondary market, including establishment of renewable energy funds"

How big is the pool of law firms working in renewable energy? Do you tend to come across the same competitors time and again or does it depend entirely on the project at hand?

Many law firms, including small ones, are working in this field acting for domestic parties. The pool of law firms acting for foreign developers or investors is somewhat smaller. We are not sure which firms are our competitors because our clients don't disclose the name of other firms when they request our offer letters. However, most of the clients hold a competition when they are considering to engage us for the first time, and then continue to engage us for other projects.

What will be the main focus for your firm's projects team in the year ahead?

Regarding the solar power business, we anticipate more work in the developing secondary market, including establishment of renewable energy funds. We are also building our capacity to advise in other renewable energy fields as they develop.

Yutaka Sakai
Senior partner

Atsumi & Sakai

About the author

Yutaka Sakai's practice focuses primarily on project finance, ship finance, syndicated loans, aircraft leasing and securitisation, assisting financial corporations and other stakeholders with structuring of transactions to meet their needs. He has been involved in numerous mega solar, wind park and biomass projects across Japan.

Teruhisa Toyama
Partner

Atsumi & Sakai

About the author

Teruhisa Toyama's practice focuses on renewable energy, securities litigation (fraudulent accounting, etc.), corporate disclosure polices, tax law, funds, risk management, compliance, international trade, and commerce law. He is also a certified public accountant with extensive knowledge of accounting and auditing.

Behind The Deal – Desiree Woo – Milbank Tweed Hadley & McCloy

Milbank of counsel Desiree Woo, who is advising on the GNPower Dinginin power plant – the Philippines first super-critical coal-fired power plant – speaks with Wai Yee Tsang about the country's project development market

What is the significance of this project for the Philippines?

This project is the first super-critical coal-fired project in the Philippines, and could mark the tail end of the development of the mega thermal or coal-fired projects in the Philippines with foreign investors.

The power sector is turning to renewables. Most of the European banks, French banks in particular, no longer participate in coal projects, and American banks prefer not to do coal projects either. Chinese banks are still quite interested in the sector but it may not be the Philippines' policy to focus on coal anymore. Many of the projects in the pipeline will be renewable energy.

The balance between demand and supply of power within the Philippines is closer to equilibrium. Moreover, the Philippines started liberalising its power market way back in 2007 and therefore the country is quite advanced compared to other emerging markets in Asia. Since the Philippines is close to meeting its power balance, they can now begin to optimise the fuel mix and can afford to focus more on projects of smaller scale which are cleaner, such as solar, hydro and wind; whereas five to 10 years ago they would aim for big thermal projects of over 1000MW.

What trends have you noticed in project development in the country?

Infrastructure projects in the Philippines now are basically developed in PPP mode. For the power sector, it went through a BOT phase but after privatization was completed, power generation projects have been developed by the private sector.

The relatively new thing now is the FIT – feed in tariff. It is a tool that a number of countries have been using to steer power development towards renewables. It is usually a more generous tariff that allows developers to have more certain cash flow in order to invest in renewable projects. The FIT has been in place in the Philippines since July 2012 and the government keeps recalibrating it from time to time. The Electric Power Industry Reform Act (EPIRA) of 2001 was the piece of legislation that started the power sector privatization and the Renewable Energy Act of 2008 triggered the redirection to renewables.

Do you tend to see more foreign or domestic sponsors involved in energy projects in the Philippines?

In the past we have seen a number of foreign investors exit Philippines IPPs such as Sithe Global, and private equity firm like Denham Capital, who were the original sponsors of the Mariveles project. Japanese trading houses and utilities, Korean utilities and foreign IPPs like AES still have assets in the Philippines.

> "Since the Phillipines is close to meeting its power balance, they can now begin to optmise the fuel mix and afford to focus on projects of a smaller scale which are cleaner"

In the last five years or so we have seen more and more domestic family conglomerates showing growing commitment to the market. Some started investing many years ago, like Aboitiz Power, First Gen, and others more recently, like Ayala's AC Energy and San Miguel's SMC Global Power. Certainly the EPC contractors and lenders from China are still interested in the Philippines but only for the right projects as they prefer larger projects utilising Chinese equipment. Hence you tend not to see the Chinese EPC contractors in the smaller renewable projects or geothermal projects. Given they are Chinese SOEs, their interest will also be affected by geopolitical factors.

How bankable have Philippines projects been recently?

Foreign investors tend to insist on international standard financing and project documentation. Philippine domestic developers have a large market share and they are able to get financing from the domestic banks which have a great deal of liquidity and can easily support projects over $1 billion. It is only when it comes to perhaps a quantum of around $3 to 4 billion (although this varies) that developers have to look outside of the Philippines.

For deals financed by Philippine banks with Philippine sponsors, it is understandable for them to prefer Philippine law governed documents and to accept Asian style project documents if the counterparties are also Asian. One way to look at it is, if you do Philippine law financing documents then you may be limiting yourself to Philippine lenders, which could be fine at closing. But there may be a need later on for the Philippine banks to sell down to overseas banks who would prefer English or New York law governing documents. Another consideration is that, even if the Philippine banks do not need to look overseas for sell down, the borrowers who are part of conglomerates may have other businesses; if they keep borrowing from the same banks, they will run up against the single borrower limit. The ability of the borrower to transfer their energy and power development loans to international banks may become helpful as they can free up that amount from the single borrower limit with local banks for their other businesses. For instance, if their local businesses are real estate or food and beverage, those domestic businesses tend to reach out to local banks for Peso financing; but if they also own power plants with documents complying with international standards and are New York or English law governed, then those will be more readily transferable to international banks. In other words, the power business can give a window of opportunity to manage the single borrower limit. Of course the power plants are domestic too but if the tariff and the deal are structured in such a way that international banks can come in and take over from the local banks, that will give them a way out. So it is a bit of strategic thinking down the road.

Do Asian lenders need a lot of handholding when doing business in the Philippines?

The Asian policy banks are well-versed in project financing; for example, JBIC and KEXIM have been lending on limited recourse basis for a long time already. In China, the commercial banks such as Bank of China tend to be relatively more experienced.

How active are Asian lenders in the Philippines?

As JBIC typically wants to see sovereign support from the government, it has not been very active in recent years as there is no Philippine government guarantee since privatization of the power sector.

There are not too many loans from KEXIM probably because the Korean EPC contractors and investors are not very active in the Philippines. In addition to Chinese banks, we also see Malaysian and Singaporean commercial banks coming in. They don't have huge exposure though as it is much easier for the Philippine sponsors to go to their domestic relationship banks which have so much liquidity.

What attracts foreign investors to the Philippines?

The market is mature in that developers who are already there are experienced. The local banking market is vibrant and has liquidity. The regulatory and legislative processes are transparent. The Department of Energy makes available current information about power projects under development and in the pipeline, so it is easy for foreign investors to look into what is going on. However, given how dominant the local IPPs have become, it may be difficult for foreigners to get into the market. Power sales have become market driven with open access and the WESM, the Wholesale Electricity Spot Market. Most newer power projects don't have just a single PPA; in the Philippines you have to find your own customers, they are distributed utilities (DUs) – the largest being Meralco covering Metro Manila and other provinces, electric cooperatives or contestable customers, depending on whether you have a retail electricity supplier license. So the marketing function is key. That is another reason why local players are so dominant: they have good relationships with the customers. The legal and court system is relatively good and the government agencies are transparent. Over the years, the Philippines has made progress in containing corruption so it is not an overriding issue for investors any more. The regulatory landscape and court system in the Philippines have US influence. For example, the Securities Regulation Code of the Philippines is patterned after US securities laws. It is therefore familiar to foreign investors who know the US system.

What deters foreign investors from investing in the Philippines?

Bureaucracy is always an issue, especially when there is a change of leadership in a particular agency. Another constraint limiting the involvement of ECAs (Export Credit Agencies) is the lack of sovereign guarantee which isn't on offer in the Philippine power sector.

Is there any legislation you would change to encourage more foreign investment in the Philippines?

The one area foreign investors are sometimes concerned with is the need to convert and repatriate foreign currency outside the Philippines. There is still a registration system where you need BSP (Central Bank of the Philippines) approval in order to convert Pesos to USD in the official bank market. It is not a difficult process, and the foreign investors are comfortable with this system.

What projects will your team be focusing on in the coming year?

We hope to work on the second unit of the Dinginin project. We are hoping that some of the larger renewable energy projects, like hydro projects, will move forward because for smaller projects with Philippine sponsors and Philippine financing, the parties probably do not need international counsel, and they will be well taken care of by domestic law firms. We also sense that the Chinese banks are returning to the Philippines in 2017, so we hope to build on our longstanding relationship with them on new projects or refinancing of existing projects.

Desiree Woo
Of counsel

Milbank Tweed Hadley & McCloy

About the author

Desiree Woo is of counsel in Milbank's Hong Kong office and has a leadership role in the firm's global project, energy and infrastructure finance group in Greater China. She was previously resident in the firm's Los Angeles office before relocating to Hong Kong.

Behind The Deal – Zhang Xiaolian – King & Wood Mallesons

King & Wood Mallesons partner Zhang Xiaolian discusses her role advising on the first metro public private partnership (PPP) in Urumqi, Metro Line 2, and the legal market for infrastructure projects in China with Adam Majeed

How did your firm win this mandate?

We acted as the legal counsel to the investor consortium in this project. The leading party of the consortium is Beijing Infrastructure Investment (BIIC). We had previously acted as the legal counsel to investors on the Metro Line 4, the Metro Line 14, and the Metro Line 16 projects in Beijing. At that time we had frequent working contact with the BIIC as they were on the other side as the government's representative. During that time our experience and expertise as legal counsel for the investors was noted and appreciated by the BIIC team. When the BIIC decided to invest outside Beijing and participate in the Line 2 project in the XinjiangUygur Autonomous Region, they approached us and we became the legal counsel of the consortium through a competitive selection process.

Why was the PPP model preferred for this project?

This project was initiated by the Urumqi government. But it is useful to talk about the general purposes of the government in carrying out PPP projects first. The PPP model is a major economic reform task determined by the Chinese government for several purposes, including for example, the transformation of government functions; improving national governance capabilities; stimulating market vitality; creating new points for economic growth; accelerating a new pattern of urbanisation; and also establishing a modern fiscal framework. This Line 2 project was initiated by the Urumqi government and has been listed by the Ministry of Finance as one of the third batch of demonstration projects in China. The Ministry of Finance has a set of criteria for choosing a demonstration project. For example, the project must be in compliance with law; it must pass the value for money test; the financial affordability assessment; and it must have demonstrative value. The Line 2 project has met all such criteria and was included as one of the demonstration projects in China.

How experienced is your firm in handling projects of this type?

Our firm has participated in quite a number of representative projects in the urban railway transport sector and have extensive project experience. For example, we acted as the legal counsel to investors in projects like Beijing Line 4, which was the first PPP project in China in the urban railway transport sector. After that we participated in Beijing Line 14 and Beijing Line 16. In Shenzhen, we worked as legal counsel to the investor in Line 4 and Line 5. In Hangzhou, we worked as legal counsel to the investors in Line 1 and Line 5. Last year we also acted for the investors in the Qingdao Line 1 project. We have also acted as legal counsel to the government. For example, in the Zhengzhou Line 3 (phase 1) project, Chongqing Line 3 project, Hangzhou to Haining intercity railway, and Dalian cross-sea transport project, which consists of cross-sea bridge and subsea tunnel and will link the downtown and the development zone of Dalian. In addition, we also participated in many PPP projects in other sectors, for example, highways, hospitals, tourism projects and some regional land development projects.

> "The major challenge the investors encountered was how to determine the corporate governance of this company..."

Who are the participants in the consortium and were there any challenges in establishing it and ultimately the project company?

The consortium has three members. The leading member is BIIC and the other two members are the China Railway Construction Company and Beijing MTR Construction Administration Corp. Because all the members of the consortium have extensive experience in the investment, financing, construction and construction management of metro projects, the establishment of the consortium went smoothly. However, because this project was the first time that these three members had formed a consortium together, the main challenge during establishment was to work out an optimal cooperation model and determine the reasonable allocation of roles to members and their rights and interests at the different stages of the project. After the consortium won this project they were required to set up a project company with a company owned by the local government - Urumqi Metro Group. This company is representative of the government and holds 49% equity in the project company. The major challenge the investors encountered was how to determine the corporate governance of this company - the critical issue for which was determining the role the government's representative would play in the project company. So there has been a lot of discussion and negotiations around this critical issue.

> "We believe that transport infrastructure in China will continue to develop very rapidly in the short-term"

What stage of development is the project at now and did your client require much guidance in the initial phases?

The project is under construction now. According to the schedule it is expected to commence operation in 2020.

As said above, the members of the consortium have extensive experience in certain aspects of metro PPP projects, but it's the first time for these three parties to invest together, so during the initial phases there was still a lot of discussion and communication between us and the clients. We also provide suggestions based on our previous experience in similar projects. For example, BIIC used to act as a representative of the government in projects in Beijing, but now they had changed their role to act as an investor. So their focus is very different from before and we are required to provide many suggestions and advice based on our experience working for investors.

Are there any other challenges you've faced in the development of this project?

This is the first metro project in China that adopts a complete PPP model (construction + operation) and a subsidy model of operation kilometer (subsidy calculated according to the kilometers run by trains) and quite different to that of other projects we've worked on before, and therefore there's not much reference we may use in this project. In the process of providing legal services, we need to be very careful about the impact such a new model may have on the investment, the investment recovery, and also the risks of this project. In addition, because this project is the first one conducted by the local government, they're handling it very cautiously and there's a lot of communication required between the consortium side and the government.

Have there been any social or political risks the parties have encountered considering that the project is being developed in an autonomous region of China?

As far as we can see, compared to many other cities, the Urumqi government has more consideration for security issues in this project. But other than this, so far the investors have not encountered any other social or political risks.

What trends do you see for transport infrastructure development in China in the short to medium term?

We believe that transport infrastructure in China will continue to develop very rapidly in the short term, according to a three year plan for construction of major transport projects jointly issued by the National Development and Reform Commission (NDRC) and the Ministry of Transport. From 2016-2018, approximately Rmb4.7 trillion will be invested in over 300 major transport projects including railways, roads, waterways, airports and metro systems.

How large is the roster of law firms working in transport infrastructure in China? Do you come across the same firms regularly?

To our knowledge there's no official data about this. But from the projects we have participated in, we often come across two or three domestic law firms, such as JunHe and Dacheng. We worked on several projects with JunHe before where we worked on different sides of the project respectively.

How involved are international firms in Chinese infrastructure work? Global firms tend to act for Chinese clients in outbound matters, but how much input do they have in the domestic market?

So far in all the domestic Chinese PPP projects we've participated in, we've never come across any international firms. I think there may be several reasons. One reason is that they're not allowed to practise Chinese law now; and the second reason is that, in domestic PPP projects, the players are government and investors (most investors are Chinese companies, not foreign investors), therefore, the international law firms don't have an advantage in this market.

What will your firm's infrastructure practice be focused on in the coming year? Will it be work of a domestic nature or will there be more work under the Belt and Road Initiative?

Our practice will focus on both sides. On the one hand, for the domestic market, the next few years are expected to be a golden time for infrastructure projects and PPP projects in China. So we continue to develop our domestic practice in this sector. On the other hand, the Belt and Road initiative is very important (the Belt and Road Forum for International Cooperation will be held in Beijing in May). We believe that the Belt and Road initiative is going to bring a lot of investment opportunities for both Chinese and foreign companies and investors. So we look forward to finding more business opportunities in both areas.

Zhang Xiaolian
Partner
King & Wood Mallesons

About the author

Zhang Xiaolian specialises in infrastructure projects, M&A, corporate, FDI, outbound investment of Chinese enterprises, and distressed assets and NPLs. She covers industries ranging from metro, toll roads and bridges, water and wastewater plants, automobiles, manufacturing, commercial retail and franchise, healthcare, financial services, and technology.

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Energy & Infrastructure practice overview
Economic Laws Practice ("ELP") is a leading full-service law firm, headquartered in Mumbai, India, established in 2001 by eminent lawyers from diverse fields who envisioned a firm that would bring to the table a unique blend of professionals, ranging from lawyers, chartered accountants, cost accountants, economists to company secretaries, enabling the firm to offer seamless cross-practice legal services, through top-of-the-line expertise to clients.

ELP's USP in India from the perspective of offering comprehensive services across the entire spectrum of transactional, advisory, litigation, regulatory, and tax matters. The firms areas of expertise include Banking & Finance; Competition Law & Policy; Corporate & Commercial; International Trade & Customs; Litigation & Dispute Resolution; Private Equity & Venture Capital; Securities Laws & Capital Markets; and Tax.

With six offices in India, ELP has a team of 175 qualified professionals working closely with leading national and international law firms in the UK, U.S., Middle East and the Asia-Pacific region, providing an extensive and seamless pan India and global service offering to clients.

ELP's vision is people centric, primarily reflected in the firms focus to develop and nurture long-term relationships with clients by providing optimal solutions in a practical, qualitative and cost efficient manner. Our in-depth expertise, immediate availability, geographic reach, transparent approach and the involvement of senior partners in all assignments has made ELP the firm of choice for our clients.

Achievements:
- Top Tier for Projects & Energy - The Legal 500 Asia-Pacific 2017
- Leading Firm for Projects, Energy & Infrastructure - Chambers Global & Chambers Asia-Pacific 2010 to 2016
- Tier 2 for Energy & Infrastructure - IFLR1000 Energy & Infrastructure Guide 2015 & 2016
- Highly Recommended for Energy & Natural Resources; and Infrastructure - Asialaw Profiles 2017
- Experts from the team have been recognized for their expertise in Construction - Who's Who Legal

Sector expertise
ELP has carved a niche for itself in the Energy and Infrastructure market in India. We provide integrated legal solutions covering all issues from the inception of a project to financial close continuing through design, construction, equipment supply, operation and management solutions to clients from various sectors including:
- Hospitality
- Mining
- Oil & Gas (upstream and downstream)
- Real Estate & Construction
- Social infrastructure (hospitals, schools, public buildings and developments)
- Transport (road, rail, sea and air ports)
- Telecommunications networks
- Utilities (sewage, waste and water)

ELP has the distinction of being one of the few Indian law firms to provide advice to multi-national clients as foreign counsel in other jurisdictions Energy (renewable and traditional energy, generation and distribution.

ELP's Infrastructure services:

- Due Diligence reviews (transactional, financial, environmental, tax and compliance related issues);
- Concession Agreements, Implementation Agreements, and State Support Agreements;
- Power Purchase Agreements/Power Conversion Agreements, Fuel supply;
- Financing Documentation including Facility Agreements and Security and Contractual Comfort Agreements;
- Joint Venture, Share Subscription and Shareholders Agreements and Business Transfer Agreements;
- Verification of title to underlying property, sale deeds, lease deeds and development agreements and other conveyance deeds in relation to acquisition of rights, interest or title in the underlying property;
- Engineering, Procurement and Construction contracts;
- Risk strategy advice and all aspects of risk allocation and management and the unique features of risk allocation and management structures in both privately financed and state funded infrastructure transactions; and
- Compliance with all applicable laws such as project specific regulations, investment laws, company law, indirect taxes, developmental regulations, environmental regulations, labour, corporate, exchange control and other commercial laws.

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IFLR 1000
ENERGY AND INFRASTRUCTURE
HIGHLIGHT DEAL ADVISER
2017

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Agus Ahadi Deradjat, aderadjat@abnrlaw.com

Quick facts
Ali Budiardjo, Nugroho, Reksodiputro ("ABNR") was established in Jakarta in 1967. The firm is one of Indonesia's largest independent full-service law firms. ABNR is principally engaged in the provision of legal services to foreign companies, banks and international institutions operating or setting up business in Indonesia, as well as to Indonesian enterprises contracting with foreign companies and institutions or with other Indonesian companies.
The commitment ABNR makes to clients is to provide broad-based, personalized service from top- quality teams of lawyers with international experience in groundbreaking deals and projects. The firm's reputation has been recognized around the world by independent industry surveys and law firm guides. Being one of the first law firms in Indonesia, ABNR has a long history of innovation in complex financial cross border matters. The award reflects ABNR's uncompromising commitment to providing the highest standard of legal services, and confirms its preeminent position in the Indonesia legal market.
ABNR has a number of partners and foreign counsel who have been recognized in by Chambers Asia, Chambers Global, The Asia Pacific Legal 500, The Asia Law Profiles and IFLR 1000 as leading individuals in their fields. A number of the firm's lawyers actively participate in the reformation of the judicial system, academic and university life, and are the authors of numerous publications, thus contributing to the evolution and dissemination of the law in Indonesia. The firm maintains an office in Singapore to extend its Indonesian legal services to foreign clients with regional headquarters there.

Main practice areas:
- Corporate & Commercial
- Banking & Finance
- Capital Markets
- Project Financing
- Investment Law
- Mergers & Acquisitions
- Mining & Energy
- Oil & Gas
- Restructuring & Bankruptcy
- Infrastructure
- Maritime Law
- Aviation Law
- Environmental Law
- Labor Law
- Real Estate
- Forestry & Plantations
- Telecommunications & IT
- Litigation & Alternative Dispute Resolution
- Hospitality
- Antitrust and International Trade

Energy and Infrastructure practice overview
We have played a major role in the financing of most of the significant Indonesian power projects in the last decade, including those involving traditional fossil fuel plants and geothermal power stations. Our advice has included project finance aspects including financing structures involving BOT and BOO, and issues relating to government guarantees. We have been involved in gold, copper and coal mining projects, and advise on the regulatory and licensing framework of these industries, including issues relating to the latest generations of contracts of work. We also assist mining service companies with contracts and compliance with tender procedures.

Sector expertise
- Energy (renewable and traditional energy, generation and distribution)
- Mining
- Oil and gas (upstream and downstream)
- Transport (road, rail, sea and air ports)
- Telecommunications networks
- Utilities (sewage, waste and water)

Recent matters advised on
- Advising the lenders for the financing of Cirebon Expansion;
- Advising the sponsors for Takalar power project;
- Advising the lenders for the financing of Sengkang expansion;
- Advising lenders for Kalimantan Selatan Project;
- Advising a consortium on the bid for Java 5 & Java 7 Project;
- Advising sponsors on Java 6 & Java 9 Project;
- Advising a consortium on the acquisition of Tanjung Jati A project;
- Advising lenders for Tanjung Jati B 5 & 6 Project;
- Advising lenders in 2000 MW Central Java Project;
- Advising lenders for the financing of Muara Laboh and Rajabasa (Geothermal);
- Advising PT Tanggamus Electric Power in Semangka Hydro Power Plant in Tanggamus District of Lampung;
- Advising lenders for the Rantau Dadap Geothermal Power Plant;
- Advising the lenders for the financing of Sarulla (Geothermal);
- Advising the lenders for the Wampu Hydropower Projects.
- Advising IFC in the financing of the $830 million Panca Amara Utama ammonia plant in Sulawesi, Indonesia

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Swee-Kee Ng (Corporate & Commercial)
Rodney Gomez (Engineering & Construction, Dispute Resolution, Mediation, Arbitration)
Pamela Kung (Financial Services – both Islamic and conventional)
Rajasingam Gothandapani (Shipping, Dispute Resolution)
Anand Raj (Tax)

Sector expertise
Energy, Mining, Oil and gas, Social infrastructure, Transport, Telecommunications networks, Utilities, Agriculture, Automotive, Aviation, Construction and materials, Fisheries and aquaculture, Food and beverage, Forestry, Government and public policy, Healthcare, Industrials, Natural resources, Real estate, Shipping, Tourism

Recent matters advised on
Our **clients**:
1. **Oil and gas - Saudi Aramco** JV with Petronas, **PCC Exol, PCC Rokita, Elpis Sp. z o.o.** (Poland) JV with Petronas Chemicals;
2. **Energy - SunPower, SunEdison and Hanwha Q-Cells** in solar, **Tanjung Bin Energy Sdn Bhd** (coal);
3. **Railways – Prasarana Malaysia Berhad** and Scomi Transit Projects - Kuala Lumpur Monorail Fleet Expansion Project Third Supplemental Agreement;
4. **Ports – MMC Corporation Bhd** acquisition of interest in port concession companies;
5. **Highways - CIMB Investment Bank Berhad** - financing for Maju Expressway (RM1.43 Billion Islamic & conventional financing);
6. **Property – China Railway Engineering Corporation** (M) Sdn Bhd's joint acquisition with another of 60% equity interest in Bandar Malaysia Sdn Bhd;
7. **New Townships - Malaysian Resources Corporation Berhad** - Management and EPCC contracts for new township;
8. **Schools:**
- **Shattuck St. Mary with Forest City** – development of boarding school for 2000 students;
- **International School of Kuala Lumpur** - construction of new campus building;

9. **Gas Distribution- Gas Malaysia Berhad** in its IPO, RHB Investment Bank Berhad for Gas Malaysia financing;
10. **Urban Renewal - Malaysian Resources Corporation Berhad** - restoration and regeneration - Bukit Jalil Sports Complex.

WONG PARTNERSHIP

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Energy and Infrastructure practice overview
As a full service law firm, WongPartnership prides itself on its twin strengths in transactional work and dispute resolution, and is recognised as a legal powerhouse involved in landmark M&A and capital markets transactions, as well as complex and high-value litigation and international commercial arbitration matters.

Our Infrastructure, Construction & Engineering/Energy & Projects Practices are Singapore's market leaders. We have the expertise to handle contentious and non-contentious work and act as counsel in major arbitrations and court cases internationally and domestically. We are well-positioned to advise clients on all aspects of construction and project work, including the drafting of various forms of construction and project documentation, including FIDIC forms of contract. We have been involved in numerous headline-grabbing and prominent infrastructure and PPP projects.

We are consistently recognised by leading legal directories and chosen by our clients as the go-to firm on all aspects of construction and project work.

Sector expertise
Energy, Oil and gas, Social infrastructure, Transport, Telecommunications, Utilities

Recent matters advised on
- Project Jewel, Singapore's S$1.47 billion airport;
- Refinancing of Singapore Sports Hub's S$1.33 billion project, the world's largest PPP sports infrastructure;
- Award-winning Singapore's second Changi NEWater Plant project;
- Award-winning Singapore's largest waste to energy PPP Project;
- Chilled water plant project in Chongqing, China;
- Mer Vue Developments in a landmark decision in a claim for building defects.

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Hyungsuk Lee, hyungsuk.lee@bkl.co.kr
Gun Chul Do, gunchul.do@bkl.co.kr

Quick facts

- **Team structure:** BKL's Energy and Infrastructure practice group consists of leading experts in Energy, Project Financing, M&A, Construction and Real Estate practice area.
- **Number of lawyers dedicated to Energy and Infrastructure work:** Approximately 100 lawyers
- **Regional/global networks and memberships:** BKL has seven overseas offices in four countries. Also a Korean member of the World Law Group.

Energy and Infrastructure practice overview

BKL has long been serving many of the foremost names in power, gas and oil in Korea and alsosponsors and investors in a host of energy dealsinvolving transactional and regulatory complexities. BKL has been developing overseas IPP projectsand related project financing mostly sponsored by KEPCO and its power generating subsidiaries.

BKL is also highly specialized in city development projects consisting of various aspects of real estate developments and is well-known in the market as the market leader in these areas.Our specialization in this area is a result of our involvement in the New Songdo International City Development, Midan City development in Incheon Free Economy Zone and Bismayah New City Development in Iraq.

Sector expertise

Energy, Oil and gas, Social infrastructure, Transport, Government and public policy, Natural resources, Real estate

Recent matters advised on

- Advised ***The Export-Import Bank of Korea*** on USD 3.1 billion Financial Support in the Construction of UAE's Nuclear Power Plant;
- Advised ***Korea Electric Power Corporation ("KEPCO")*** on the USD 570 million sale of overseas resource assets to its power-generating subsidiaries;
- Advising ***Korea Land & Housing Corporation ("LH")*** on The South Saad Al Abdullah New Town Development Project in Kuwait ("SSAC"), which is a major national project in Kuwait.

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Energy and Infrastructure practice overview

Our dedicated group of specialist energy lawyers is one of the most experienced in the Vietnam market with an impressive client list that includes some of the best-known names in the industry.

We know the upstream oil and gas industry inside-out. In addition, the development, financing and acquisition of gas-fired and coal-fired BOT power projects has been a strategically important foothold for the firm.

Sector expertise

Upstream oil and gas, LNG and pipelines, IPP power projects and utilities, Renewable energy, Refining and petrochemicals, Mining and metals, Social infrastructure, Transport, Telecoms, Public private partnerships

Recent matters advised on

- Advised international oil companies on a complex "first of its kind" multi-billion US Dollar oil and gas development project in Vietnam;
- Advised an international energy company on various regulatory matters on its proposed oil and gas farm-in and joint venture arrangements;
- Advised international clients on numerous bankability issues and project documentation for a multi-billion US Dollar 1,200MW coal-fired BOT power project;
- Advised on the construction aspects of a US$2.4bn 1,200MW Duyen Hai 2 BOT coal-fired power project;
- Advised the sponsors on Nghi Son 1 and Thai Binh coal-fired power projects, each 600MW;
- Advised in relation to the Vietnamese law aspects of a multi-billion US Dollar JICA-funded Ho Chi Minh City MRT Line 1 project (Ben Thanh - Suoi Tien section);
- Advised a Japanese EPC contractor on FIDIC Conditions of Contract for the construction of a cable stayed bridge relating to Vietnam's North-South ExpresswaY project (Ben Luc - Long Thanh section).

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IFLR 1000 ENERGY AND INFRASTRUCTURE HIGHLIGHT DEAL ADVISER 2017

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Luu Hoang Ha, Partner, ha@vilaf.com.vn
Kevin Hawkins, Partner, kevin.hawkins@vilaf.com.vn

Energy and Infrastructure practice overview

VILAF has the largest team of energy and infrastructure partners, counsels, and senior associates in Vietnam. The firm have consistently been engaged in high-profile energy and infrastructure projects, longer than any other Vietnamese law firm.

VILAF has been advising sophisticated international clients including JBIC, Sumitomo Corporation, Marubeni Corporation, K-Exim, Talisman Energy, Murphy Oil, etc.

In 2016, VILAF won the Project Finance Deal of the Year Awards from both IFLR and ALB for the Vinh Tan 1 BOT Thermal Power Project.

Following the change of Vietnam's policies to encourage renewable projects initiated in early 2016, VILAF has been engaged to advise, in confidence, several foreign investors and foreign private equity funds in negotiating the investments in solar and wind power projects in Vietnam.

Sector expertise

Energy, Mining, Oil and gas, Transport, Aviation, Real estate

Recent matters advised on

- Advised ***JBIC*** as the arranger and other international lenders in the financing of Vung Ang 2 BOT power project;
- Advised ***Sumitomo Corporation*** as the sponsor for the Van Phong 1 power project;
- Advised ***CPECC*** in acquiring a JV equity interest in Jaks Hai Duong BOT power project;
- Assisted ***Sumitomo Corporation*** as the primary contractor in the Ho Chi Minh City Metro Line 1 Project, Vietnam's first metro line project;
- Advised Japanese sponsors in the Nghi Son 2 power project;
- Acted for the Sponsors for the Vinh Tan power station complex in Binh Thuan province, consisting of Vinh Tan 1, Vinh Tan 2 and Vinh Tan 3;
- Advised ***K-Exim*** and ***K-Sure*** in the arrangement for the financing of the Nam Dinh 1 BOT power project; and
- Advised ***Marubeni Corporation*** for the negotiation of the EPC Contract with EVN in the Thai Binh 1 power project.

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Partner

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LinkedIn

Biography
Alexander is a partner within the Banking & Infrastructure group, and specialises in project development and project/infrastructure finance, PPPs, and acquisition and leveraged finance transactions. He works with project sponsors, arrangers, financiers and investors.

As well as ranking in IFLR1000, Alexander is recognized by Chambers Asia-Pacific 2017 for Project Finance and by Best Lawyers 2018 for Construction/Infrastructure Law, Project Finance and Development Practice.

Recent matters advised on
- Advising ***Veolia*** on its bid to build, operate and maintain a water treatment plant at Springvale Mine.
- Advising ***HSBC Hong Kong*** on EMR's acquisition of the Golden Grove mine.
- Advising ***Syrah Resources*** on all their project and project financing needs.
- Advising sponsors and financiers on a number of large student accommodation projects.
- Advising ***Palisade Investment Partners*** in respect to its successful bid to become commercial partner in the operation and development of the Sunshine Coast Airport and associated debt financing.
- Advising ***Trustpower Limited*** and ***Tilt Renewables Limited*** on the financing for the recently demerged renewable asset business.
- Advising the lenders to the Synergy Greenfield Renewable Fund.

Sector specialisations
- Energy
- Mining
- Social infrastructure
- Transport
- Utilities
- Banking and finance

Association memberships
- Law society of Victoria
- Dean's Advisory Council, Melbourne Law School

Academic qualifications
- LLM (International), 2006, Monash University
- Bachelor of Science & LLB (Hons), 2002, Monash University
- Graduate Diploma of Applied Finance, 2012, FINSIA/Kaplan
- Infrastructure in a Market Economy, Harvard University's Kennedy School of Government

Xiaolian Zhang
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LinkedIn

Biography
Ms. Zhang, a partner with King & Wood Mallesons, is specialized in infrastructure projects, M&A, corporate and distressed assets and NPLs.

Ms. Zhang assisted clients in infrastructure projects in China and Asia including metro, toll roads and bridges, railway (high speed), water and waste water, heating supply, waste disposal and recycling, and energies. She supports clients on all aspects of projects from structure planning, due diligence, bidding procedure, consortium formation, project documents, negotiation, establishment of project company and ongoing project support.

Recent matters advised on
- Advised ***MTR HK*** on forming a JV with Beijing Infrastructure Investment Co., Ltd. (BIIC) and Beijing Capital Group Company Limited to participate in the RMB 15.3 billion Beijing Line 4 PPP project (the first PPP project in transport sector in China);
- Advised ***Beijing MTR Corporation Limited*** to participate in the RMB 44.5 billion Beijing Line 14 PPP project and the RMB 49.5 billion Beijing Line 16 PPP project;
- Advised investor consortium (led by BIIC) on bidding for and winning the RMB 16.2 billion Urumqi Metro Line 2 PPP project from Urumqi government.

Sector specialisation
Energy, Transport, Utilities

Practice areas
PPP/PFI, Restructuring and insolvency

Bar admissions
Chinese Bar Association

Academic qualifications
LLB, Peking University, 1994

Languages:
English, Chinese

Dang Duong Anh
Managing Partner

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Biography
To many clients and peers, Dang Duong Anh is one of the most reliable and result-oriented Vietnamese lawyers. Dang Duong Anh's broad experience covers foreign direct investment, corporate and M&A, infrastructure & energy projects, project finance, tax, real estate and property, mining, automobile and telecommunications.

Recent matters advised on
- Advised ***CSG*** in a JV with Vinacomin in the development of the Vinh Tan 1 2x600 MW Coal Fired Power Project on a BOT basis in Vietnam. This project won the Project Finance Deal of the Year 2016 award from IFLR and ALB;
- Acted for the sponsors and the project company in the development and financing of the Vung Ro Refinery Project with annual capacity of 8 million tons in Central Vietnam;
- Advised the consortium of senior lenders, in connection with the financing of the Phu My 3 BOT Power Project a combined cycle gas generated BOT power project in Vietnam;
- Advised ***Tan Tao Group*** in the Kien Luong 1 Power BOO Project; and
- Advised ***IMPSA*** in relation to their business structuring and share acquisition in US$1,300 million wind farm project with PetroVietnam Power.

Sector specialisation
- Power, Energy, Mining
- Telecommunications networks
- Automotive
- Aviation
- Construction and materials
- Real estate

Practice areas
- M&A
- Private equity
- Project development
- Project finance
- Real estate finance

Languages
English, Vietnamese

Bar admissions
Hanoi Bar

Network memberships
AmCham, LIL, the Lawyer Network, Incham, Five Star Law

Academic qualifications
- LL.B, Hanoi Law University, 1995
- LL.M, Fordham University, School of Law, U.S., 2005

Vo Ha Duyen
Chairperson

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Biography
Duyen is a leading lawyer in Vietnam recognized by IFLR, Legal 500, Chambers, and Asialaw, primarily advising foreign investors, PE funds and financial institutions in cross-border M&A transactions, financing transactions and infrastructure projects. She is a Fulbright scholar and is admitted to practice in both Vietnam and New York State.

Recent matters advised on
- Advised ***Chow Tai Fook*** and ***VMS Investment*** in the acquisition of a controlling interest in USD4 billion integrated real estate, casino and hotel Nam Hoi An project of VinaCapital;
- Advised ***Mondelez International*** in its USD370 million acquisition of the food business of Kinh Do Corporation;
- Advised ***China Development Bank*** in a US$580 million facility agreement to finance Thang Long thermal power project;
- Advised ***Bank of Tokyo-Mitsubishi UFJ***, Ltd as lead arranger in relation to a USD300 million syndicated term facility agreement to PetroVietnam to finance its oil & gas project and a USD510 million syndicated facility agreement to finance La Son - Tuy Loan express-way project; and
- Advised ***ANZ*** on the sale of its Vietnam retail and wealth business to Shinhan Bank.

Sector specialisations
- Energy
- Aviation
- Banking
- Financial services
- Food and beverage

Practice areas
- Banking
- Capital markets: Equity
- M&A
- Private equity
- Project finance

Bar admissions
- Vietnam
- New York

Association memberships
- Amcham
- International Bar Association
- Vietnam Business Lawyers Club

Academic qualifications
- Tax LL.M., with Honors, University of Michigan Law School
- LL.M., Fulbright Scholar, Temple University School of Law
- LL.B. Ho Chi Minh City Law School

Ha Luu Hoang
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Biography
Ha has more than 20 years of legal practice having advised and represented Fortune 500 companies, international organizations, and Vietnamese Government Agencies in many of the most complex transactions and disputes in the Vietnam's energy and natural resources sector involving complex legal, political, diplomatic considerations.
He has been instrumental in drafting major regulations affecting Vietnam energy sector.

Recent transactional highlights
- Advising project sponsors on the development and financing of the South Vietnam Petrochemicals Complex Project (USD 4.5 billion);
- Advising project sponsors on the development of a proposed refinery in the Central Vietnam (multi-billion USD);
- Advising an ***independent US oil company*** on the acquisition of upstream assets in Vietnam;
- Advising a ***European energy company*** and a Japanese energy company on their gas commercialization and sales.

Practice areas
- M&A
- Capital markets: Equity
- Private equity
- Project development
- Project finance

Sector specialisations
- Oil & Gas
- Energy
- Industrials
- Mining
- Natural resources

Bar admissions
Hanoi

Association memberships
- Member, International Bar Association
- Vietnam Director, Association of International Petroleum Negotiators
- Member, AmCham Vietnam Energy Committee
- Founder, Vietnam Energy Lawyers Group
- Member, Hanoi Bar

Academic qualifications
- LL.B., Hanoi School of Law, (1995)
- LL.M., Warwick University School of Law, UK's Chevening Scholarship, 1999

Tran Tuan Phong
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Biography
Phong is recommended as a top-tier lawyer in Banking & Finance, Capital Markets, Corporate/M&A and Infrastructure & Energy by many reputable legal directories such as Chamber Asia, Legal 500, IFLR1000 and AsiaLaw. Market sources declare that Tran Tuan Phong is "*very well-known for business law*" (Chambers Asia 2017).

Recent matters advised on
- Advised ***K-Exim*** and ***K-Sure*** in the financing of the Nam Dinh 1 Power Plant in Vietnam;
- Advised a ***Japanese consortium*** in bidding to sponsor the Nghi Son 2 Thermal Power Plant in Vietnam. This is the first power plant to be tendered by the Vietnamese government for foreign participation after the Phu My 2.2 and Phu My 2.3 power plants in 2002;
- Advised the sponsors in the development, financing and operation of a Power Plant in Vinh Tan, Binh Thuan, Vietnam;
- Advised ***Sumitomo Corporation*** in a JV with local sponsors in the development of the Van Phong 1 Power Plant on a BOT basis;
- Advised the Chinese project sponsors in a JV with Vinacomin in the development of the Vinh Tan 1 Power Plant on a BOT basis.

Sector specialisation
Energy, Oil and gas, Aviation, Banking, Healthcare

Practice areas
- Asset finance
- Banking
- Capital markets: Debt
- Capital markets: Equity
- Investment funds
- M&A
- Private equity
- Project development
- Project finance

Languages
Vietnamese, English

Bar admissions
Hanoi Bar

Network memberships
AmCham, APLMA, IBA, VBLC, VBF

Academic qualifications
- LL.B, Hanoi Law University, 1995
- LL.M, Tulane University (US), 2002

Australia

Australia is a net exporter of energy and has traditionally been among the top coal producers in the world. However, as the unpopularity of coal gains traction in a post-Paris world, the country may potentially be facing an energy crisis and internal divisions over its energy policy.

In May last year, South Australia shut down its last coal-fired power plant, and this led to a huge spike in electricity prices that caused a crisis for industrial users and translated into moderate price increases for ordinary households. The state government decided to set a 50% renewables target in a context where renewable energy – excluding hydroelectric power – makes up 11% of Australia's total electricity generation. This has led to a backlash against green energy and concerns over the lack of coordination between climate policy and energy policy on the one hand, and state policy and federal policy on the other. And this is not surprising in a country with eight legal systems, each with its own court and parliament that inevitably provides a multi-layered and painstaking regulatory approvals process that keeps its law firms busy.

Furthermore, many have claimed that Australia's ill-thought-out infatuation with renewable energy has produced a situation where an energy rich country faces an energy crisis as business in Australia is reluctant to fund new power stations, but business in Japan is willing to buy Australia's high quality coal to fuel energy plants. As blackouts were faced by residents in South Australia and warnings were issued in areas such as New South Wales too, the South Australian government moved to issue an emergency energy package that included the establishment of a state-run new gas power plant and a proposed 100MW battery storage system for renewals.

Despite all this, it's not all doom and gloom from the perspective of the Australian economy. Mining has long been the driving force for Australia's economic growth and suffered with the global collapse in commodity prices; however, Western Australia's resources sector has increased in value by 4% for the first time in three years. Furthermore, there is hope that Australia's next mining boom may be driven by so-called tech metals used for renewable energy and high-technology.

The situation has been far less chaotic in the infrastructure space with heavy investment, depending on which territory is in question, in transport and social infrastructure. Infrastructure Australia, an independent statutory body with a mandate to prioritise and progress nationally significant infrastructure, has produced a priority list of 100 projects, with over a third in New South Wales followed by Queensland and Victoria. The PPP (public-private partnership) model is favoured, and below you will see that many of these projects are well underway with many of the country's top law firms champing at the bit. Among the large infrastructure projects we see the A$6 billion Melbourne metro project; the Herston Quarter A$1.1 billion redevelopment; the A$11 billion Sydney metro project; and WestConnex.

DEAL DATA

The deals that matter. The lawyers that led them.

Below is a selection of energy and infrastructure deals taken from IFLR1000 Deal Data.

For more information and to browse the full database for the Asia-Pacific region please visit: http://www.iflr1000.com/Search/Deals

Sydney automated rapid transit system

Jurisdiction:
Australia

Deal type:
Project development

Industry sectors:
Transport

Firms:

Ashurst
Party: Transport for New South Wales (Sponsor)
Allens
Party: NRT Consortium (Project developer)
Henry Davis York
Party: MTR Corporation (Project developer); United Group Rail Services (Operator)

Overview:

- An A$11 billion Sydney automated rapid transit system is under construction in Sydney, New South Wales, Australia.
- It is Australia's largest-ever public transport project and has two core components: Sydney Metro Northwest – formerly the 36km North West Rail Link under construction and will open in the first half of 2019; and Sydney Metro City & Southwest – a new 30km metro line linking with Metro Northwest at Chatswood, and then under Sydney Harbour, through the CBD and south west to Bankstown. It is due to open in 2024.
- It is part of the government's solution to clearing the city's public transport bottlenecks, and is expected to provide a quality of rail service never before seen in Australia.
- Working together with major upgrades to the Western Line, Sydney Metro aims to deliver the capacity to increase the number of trains entering the CBD across the entire Sydney railway system from 120 to 200 in the busiest hour of the day.
- The project also supports key priorities of the 'Plan for Growing Sydney' – a NSW Government plan to sustain strong growth for Sydney, improve its productivity and competitiveness and foster higher living standards.

High-capacity metro trains PPP

Jurisdiction:
Australia

Deal type:
Project development; PPP

Industry sectors:
Transport

Firms:

King & Wood Mallesons
Party: Bank of China (Lender); Bank of Communications (Lender); HSBC (Lender); ICBC (Lender); Intesa Sanpaolo (Lender); Mizuho Bank (Lender); UOB (Lender): Westpac; (Lender)
Ashurst
Party: Downer (Concessionaire); EDI Rail (Concessionaire); CRRC Changchun Railway Vehicles Downer (Concessionaire); Plenary Group (Concessionaire)
Herbert Smith Freehills
Party: Victorian Government (Grantor)
Clayton Utz
Party: Downer (Concessionaire); EDI Rail (Concessionaire); CRRC Changchun Railway Vehicles Downer (Concessionaire); Plenary Group (Concessionaire)

Overview:

- The high capacity metro trains (HCMT) project will deliver 65 seven-car trains by 2023 for use on the Cranbourne Pakenham and Sunbury lines, and two dedicated maintenance facilities.
- The PPP contract with Evolution Rail was executed in November 2016, and it is the first time that the PPP model has been used for rolling stock procurement in Victoria, and one of only a handful of pure rolling stock PPPs in the world.
- This PPP constitutes the biggest order of new trains in Victoria's history and is a significant project for each member of the consortium.
- It is part of the Victorian Government's vision for an improved, world-class transport system.
- The Victorian Government's A$2 billion investment in the HCMT Project is the largest investment in new rolling stock in Victorian history.

Victoria level-crossing removal programme

Jurisdiction:
Australia
Deal type:
Project development
Industry sectors:
Transport
Firms:
Clayton Utz
Party: VicRoads (Project developer); Level Crossing Removal Authority (Project developer)

Overview:
- The programme is a fundamental feature of the Victorian government's infrastructure strategy, having committed to the removal of 50 of the most dangerous and congested level crossings on the metropolitan rail network.
- The Level Crossing Removal Authority (LXRA) and VicRoads initiative involves a capital investment of $6 billion.
- LXRA are working on the removal of 9 level crossings between Caulfield and Dandenong including associated signalling, power upgrade and track and civil works, along with other works on the Caulfield to Dandenong rail corridor.
- VicRoads are engaged on all aspects of 10 level crossing removal projects: Glen Iris, Ormond, McKinnon, Bentleigh, Blackburn, Mitcham and projects in St Albans and Bayswater.
- Apart from improving safety and traffic flow, the programme is a crucial step in transforming Melbourne's public transport system into an international-style metro, with more trains running more often.

Melbourne Metro PPP

Jurisdiction:
Australia
Deal type:
Project development; PPP
Industry sectors:
Transport
Firms:
Minter Ellison
Party: Capella Capital (Concessionaire); LendLease Engineering (Concessionaire); John Holland (Concessionaire); Bouygues Construction Australia (Concessionaire)
Ashurst
Herbert Smith Freehills
Party: Victorian Government (Sponsor)
Clayton Utz
Party: Melbourne Metro Rail Authority (Grantor)

Overview:
- The Melbourne Metro A$6 billion public-private partnership (PPP) is a metropolitan rail infrastructure project currently under construction in Melbourne, Australia.
- It involves the construction and maintenance of twin 9km tunnels running between South Yarra and West Kensington, including 5 new underground metro stations at Domain, CBD South, CBD North, Parkville and Arden.
- It is presently the most significant project in the Victorian PPP market, and is the largest public transport project in the state's history.
- Involves highly complex construction, requiring tunnelling underneath the Yarra River and the CBD and crossing existing rail tunnels
- The metro tunnel aims to create 4,700 jobs and free up space in the City Loop to run more services in and out of the city on lines across the network, benefiting passengers across Melbourne.
- The Victorian Government's investment in the project is the largest investment in the Victorian rail network since the Melbourne Underground Rail Loop was constructed in the late 1970s and early 1980s.

Australian National University student accommodation development

Jurisdiction:
Australia

Deal type:
Project development

Industry sectors:
Social infrastructure

Firms:

Minter Ellison
Party: Macquarie Capital (Sponsor); HRL Morrison & Co (Sponsor); Party: Spotless Services Consortium (Sponsor)
Henry Davis York
Party: Australian National University (Grantor)
Ashurst
Party: Australian National University (Grantor)

Overview:

- Australian National University (ANU) has signed a 30-year concession agreement with HRL Morrison and Co for nine student residences to house 3,760 students on campus.
- The project is the largest PBSA transaction by value that has been entered into in Australia, with an estimated value of A$3-4 billion.
- The concession arrangement also involves the private sector paying a substantial upfront payment of A$500 million to the University to purchase the right to receive student rents and other revenues derived from that student accommodation over a 30 year concession period.
- The contract includes a new 500-bed student residence, currently under construction, which has been procured by ANU and had to be taken into account in the project, as the new residence will form part of the project company's responsibilities over the next 30 years.
- The long-term arrangement ensures the University retains full ownership of the residences, notwithstanding that the project company takes the revenue risk on student rents without any direct occupation support from ANU. ANU will have continued responsibility for student accommodation operations. Facilities maintenance will be carried out by Spotless as a subcontractor to the project company and Spotless will also carry out a range of initial improvement works at the residences.
- The transaction will also serve as a precedent for Universities looking to realise value from their student accommodation portfolio and represents a new and valuable capital source for universities looking to raise funds outside the more traditional debt markets.

Ararat 420MW wind farm

Jurisdiction:
Australia

Deal type:
Project development, Project finance

Industry sectors:
Energy

Firms:

Norton Rose Fulbright
Party: Sumitomo Mitsui Banking Corporation (Financiers); Clean Energy Finance Corporation (Financiers); Export Development Canada (Financiers)
Herbert Smith Freehills
Party: Renewable Energy Systems (Project developer)

Overview:

- The Ararat 420MW Wind Farm is one of the largest wind farms developed in Australia and was developed by Renewable Energy Systems (RES) with total investment of A$450 million.
- In February 2015, the wind farm was awarded the Australian Capital Territory (ACT) government feed-in-tariff through a highly competitive reverse wind auction where a significant portion of the wind farm's output was contracted to the ACT.
- The project was negotiated in the context of ongoing uncertainty about the Renewable Energy Target and uncertainty regarding the Clean Energy Finance Corporation's mandate to invest in wind projects.
- It is the first wind farm in Australia to be project financed on a partially merchant basis, and it was also the first wind project that Export Development Canada has funded in Australia.
- The 240MW wind farm in Victoria started generating electricity on 30 August 2016, with the first five of the project's 75 GE turbines producing 23 MWh a day.

Badgingarra 130MW wind farm

Jurisdiction:
Australia
Deal type:
Project development
Industry sectors:
Transport
Firms:
Ashurst
Party: APA Group (Sponsor)

Overview:
- A 130MW wind farm is in development in Western Australia.
- The potential output of the farm could power more than 80,000 homes per year.
- The farm is a strategic addition to APA Group's growing portfolio of renewable energy assets, and is adjacent to the 80MW Emu Downs Wind Farm and 20MW Emu Downs Solar Farm, creating a 230MW renewable energy precinct.

Balla Balla port

Jurisdiction:
Australia
Deal type:
Project development
Industry sectors:
Transport
Firms:
Ashurst
Party: Pilbara Ports Authority (Project developer)

Overview:
- Pilbara Ports Authority is developing a brand new A$1.5 billion port known as Balla Balla.
- It is predicate on a state agreement between the State of Western Australia and the proponent for a new 160km railway.
- The port will be Western Australia's first transhipment port for iron ore export, and is likely to be the first project financed port developed at a time when iron prices have hit all-time lows.
- The port of Balla Balla is being created by the port authority for the developer to construct a 50 million tonnes per annum export facility to be operated on an open access basis.

Adelaide Private Hospital

Jurisdiction:
Australia
Deal type:
Project development
Industry sectors:
Healthcare
Firms:
Minter Ellison
Party: DB Engineering (Project developer)
Allens
Party: Capital Metro Agency (Project developer)
Norton Rose Fulbright
Party: Calvary Healthcare (Project developer)
Herbert Smith Freehills
Party: Commonwealth Bank of Australia (Lender)

Overview:
- Calvary A$300 million Adelaide Private Hospital is a project for the development and construction of a 12-storey 350-bed hospital, to be developed in joint venture between Commercial & General Group and John Holland Group.
- It will be the largest private hospital project built in South Australia and will be operated under a long-term lease by Calvary Health Care.
- Calvary will relocate its hospital and day surgery from Wakefield St to the new 45,000sqm building, as well as its rehabilitation hospital from Walkerville.
- The new facility is expected to open by the end of 2018 and will include relocation of the state's only privately operated 24-hour emergency centre from Wakefield St.

Canberra Metro PPP

Jurisdiction:
Australia
Deal type:
Project development, PPP
Industry sectors:
Transport
Firms:
Henry Davis York
Party: DB Engineering (Main contractor)
Clayton Utz
Party: Capital Metro Agency (Project developer)

Overview:
- Capital Metro is a light rail system under construction in Canberra– the main city of the Australian Capital Territory (ACT).
- The initial line is planned to link the northern town centre of Gungahlin to the city centre, and will have 13 stations that are expected to be completed by early 2019.
- The project was developed by the Capital Metro Agency with responsibility transferred to a new organisation, Transport Canberra, from 1 July 2016. The new organisation combined the Capital Metro Agency with the city's bus operator, ACTION, and the line will be delivered under a public private partnership (PPP).
- The core contractor to operate and maintain the Canberra Metro Light Rail PPP is DB Engineering.

Carmichael coal mine

Jurisdiction:
Australia
Deal type:
Project development
Industry sectors:
Mining
Firms:
Norton Rose Fulbright
Party: POSCO Engineering & Construction (EPC Contractor)
Herbert Smith Freehills
Party: Adani Mining (Project developer)
Baker & McKenzie
Party: Adani Mining (Project developer)

Overview:
- The Carmichael coal mine is a proposed thermal coal mine with a A$16.5 billion ($12.2 billion) investment in the north of the Galilee Basin in Central Queensland, Australia.
- The mine is proposed by Adani Minin, a subsidiary of India's Adani Group, which will be conducted by both open-cut and underground methods.
- POSCO was appointed to two major Engineering, Procurement and Construction (EPC) contracts for the delivery of infrastructure to service the project, comprising of a new A$1 billion port terminal at Abbot Point, which will have capacity for 40 Metric tonnes per annum initially with an expansion to 70 mtpa in its second phase; and the $2 billion, 388km greenfield standard gauge rail line component of the mine project.
- The intended scale of the Carmichael Project is unprecedented in the Australian coal industry, and it is expected to be the largest in Australia and one of the largest in the world, with expected production of approximately 60 million tonnes per annum.
- On the July 29, 2014, federal Minister for Environment, Greg Hunt gave approval for the mine to proceed, but on August 5, 2015, the federal Department of Environment and Adani signed consent orders in the Federal Court to set aside approval of the Carmichael project.
- The mine has courted controversy in relation to its claimed economic benefits, its financial viability, plans for government subsidy, and the damaging environmental impacts.

CityLink – Tullamarine widening (CTW)

Jurisdiction
Australia
Deal type:
Project development
Practice area:
Project development
Industry sectors:
Transport
Firms:
Clayton Utz
Party: Department of Treasury and Finance (Grantor); VicRoads (Sponsnor)
Herbert Smith Freehills
Party: Transurban (Project developer)

Overview:
- The CityLink – Tullamarine widening (CTW) involves upgrading the CityLink-Tullamarine corridor from the West Gate Freeway to Melbourne Airport by the construction of additional lanes, a new bridge over CityLink and the Craigieburn train line, and the implementation of a new managed motorway system to reduce congestion, improve safety and increase the road's capacity by up to 30%.
- The project is being delivered in two sections – the Melbourne Airport to Bulla Road section, which is being delivered by VicRoads, and the Bulla Road to Power Street section, which is being delivered by Transurban.
- Construction on the project began in October 2015 and is expected to be completed by the end of 2017.

Darling Downs 110MW photovoltaic power plant

Jurisdiction:
Australia
Deal type:
Industry sectors:
Energy
Firms:
King & Wood Mallesons
Party: Origin Energy (Project developer)
Corrs Chambers Westgarth
Party: RCR Tomlinson (EPC contractor)

Overview:
- Darling Downs is the development of a utility scale photovoltaic (PV) solar plant located approximately 45 km from the town of Dalby in south-west Queensland.
- It is one of the largest PV projects in Australia and at 110MW, the solar farm will have enough power to provide for approximately 32,000 homes each year.
- Development approval was granted in December 2015, and it will involve the installation of approximately 400,000 solar panels with completion in 2018.

Gold Coast light railway

Jurisdiction:
Australia
Deal type:
Project development
Industry sectors:
Transport
Firms:
King & Wood Mallesons
Party: CPB Contractors
Corrs Chambers Westgarth
Party: Queensland Government – Treasury Commercial Group
Allens
Party: GoldLinQ (Project company)

Overview:
- The Gold Coast light railway, also known as G:link, is in stage two that involves the design and construction of 7.3km of a new light rail which will connect the existing light rail system at Southport to heavy rail at the Helensvale station.
- It is one of the larger public transport projects in Australia and the biggest transport infrastructure project ever undertaken on the Gold Coast.
- The 7.3km route runs from Helensvale heavy rail station adjacent to the Gold Coast Line, then adjacent to the Smith Street Motorway to connect with stage one at the Gold Coast University Hospital light rail station.
- Construction commenced in April 2016 to ensure the light rail extension is delivered and operational prior to the 2018 Commonwealth Games.

Herston Quarter redevelopment

Jurisdiction:
Australia
Deal type:
Project development, Concession
Industry sectors:
Healthcare; Construction and materials; Social infrastructure
Firms:
Piper Alderman
Party: Watpac (Project developer)
Minter Ellison
Party: Cushman Wakefield; Australian Unity (Project developer)
Ashurst
Party: Hospital Property Trust (Grantor)

Overview:
- The Herston Quarter, located within Queensland's Herston Health Precinct, is undergoing a $1.1 billion development to create a health, ageing and research destination.
- To kick off the Herston Quarter urban renewal, construction firm Watpac was awarded a A$325 million contract by Australian Unity to construct the Specialist Ambulatory Care Centre and Stages 1 to 3 of the Herston Quarter development project.
- Initial works to be undertaken include the relocation of existing site services and decommissioning of redundant services, with construction then to commence on the new Specialist Rehabilitation and Ambulatory Care Centre (SRACC building) for Metro North Hospital and Health Service.
- The building will provide 35,157 square metres of facilities and feature a Sky Bridge Link to the Royal Brisbane and Women's Hospital.
- Watpac will also deliver the Spanish Steps, which will extend from Herston Road into the main public realm, dedicated car parks underneath the SRACC and the Spanish Steps, major infrastructure upgrade works and associated road upgrades.

Ichthys LNG plant

Jurisdiction:
Australia
Deal type:
Project development
Industry sectors:
Oil and gas
Firms:
Clayton Utz
Party: INPEX Operations Australia (Sponsor)
Allens
Party: Total; INPEX Corporation (Sponsor)
Allen & Overy
Party: Ichthys LNG (Project company)

Overview:
- The Ichthys LNG Project is a joint venture between INPEX group companies, Total, CPC Corporation Taiwan and the Australian subsidiaries of Tokyo Gas, Osaka Gas, Kansai Electric Power, JERA, and Toho Gas.
- First discovered in 2000, the project is one of the most significant oil and gas developments in the world with an operating life spanning four decades.
- Gas from the Ichthys Field, in the Browse Basin offshore Western Australia, will undergo preliminary processing offshore to remove water and raw liquids, including condensate. The gas will then be exported to the onshore processing facilities in Darwin via an 890 km pipeline.
- The onshore contract value is approximately A$15 billion and total project value is A$37 billion.
- The Ichthys LNG Project is expected to produce up to 8.9 million tonnes of LNG and 1.6 million tonnes of LPG per annum, along with approximately 100,000 barrels of condensate per day at peak.

Moree 70MW photovoltaic power plant

Jurisdiction:
Australia
Deal type:
Project development
Industry sectors:
Energy
Firms:
Herbert Smith Freehills
Party: Fotowatio Renewable Ventures (Project developer)
King & Wood Mallesons
Party: Australian Renewable Energy Agency (Financiers); Clean Energy Finance Corporation (Financiers)

Overview:
- Fotowatio Renewable Ventures (FRV), a global solar power company, is developing a 70MW photovoltaic solar plant 10 km south of Moree in New South Wales, Australia.
- Moree Solar Farm will be the first large-scale solar plant in Australia to use a single-axis horizontal tracking system, where panels follow the sun across the sky to capture sunlight and maximise power output.
- The solar farm will have a capital value of A$164 million, and will be partially funded through a A$101 million funding grant from the Australian Renewable Energy Agency (ARENA) and a A$47 million loan from the Clean Energy Finance Corporation (CEFC).
- It is the first large scale renewable project to receive both ARENA and CEFC support.

National broadband network

Jurisdiction:
Australia
Deal type:
Project development
Industry sectors:
Technology and telecommunications
Firms:
Ashurst
Party: NBN Co (Project developer)
King & Wood Mallesons
Party: Telstra (Project developer)

Overview:
- The national broadband network is the largest-ever telecommunications infrastructure project in Australian history, and it is due to be completed four years ahead of time at a saving of A$30 billion.
- The project itself is an Australian national wholesale open-access data network project, with both wired and radio communication components, being rolled out and operated by NBN Co.
- It entails the replacement of the existing copper cable telephony network which is approaching the end of its life, and addresses the rapidly growing demand for internet access to support a growing range of services and provide broadband access to 93% of the Australian population at 100 Mbit/s.
- By 2020 it is expected that all the infrastructure would have been built that enables all homes, businesses and communities across Australia to access high speed broadband.

Perth Airport expansion

Jurisdiction:
Australia

Deal type:
Project development

Industry sectors:
Transport; Aviation

Firms:
King & Wood Mallesons
Party: Perth Airport (Sponsor)
Baker & McKenzie
Party: Built Environs (Project developer)
Allens
Party: Main Roads Western Australia (Sponsor)

Overview:
- Perth Airport has been actively transforming and developing its airport into a world class facility at A$1 billion.
- This is one of the most significant expansion projects in Perth that includes three new terminals, fuel system re-location, construction of new central logistics buildings, and procurement and installation of screening equipment.
- Perth Airport has been participating in construction agreements for the new domestic terminal development, including ancillary works and fit out of the domestic terminal, expansion of the existing domestic terminal and expansion of the international terminal, capital restructure and funding arrangements.

Port of Melbourne A$9.7 billion privatisation

Jurisdiction:
Australia

Deal type:
Private acquisition; Privatisation

Industry sectors:
Transport

Firms:
Minter Ellison
Party: Department of Treasury and Finance (Seller)
Herbert Smith Freehills
Party: Lonsdale Consortium (Buyer)
King & Wood Mallesons
Party: ANZ (Financiers; BAML (Financiers; Scotiabank (Financiers); BTMU (Financiers); BNP Paribas (Financiers); DBS Bank (Financiers); ICBC (Financiers); ING (Financiers); NAB (Financiers); Natixis (Financiers); SMBC (Financiers); Bank of China (Financiers); CIBC (Financiers); CCB (Financiers); CBA (Financiers); EDC (Financiers); Socgen (Financiers)

Overview:
- Lonsdale Consortium has acquired the 50-year lease of the Port of Melbourne for A$9.7 billion from the Victorian government.
- The transaction was one of the largest infrastructure deals in Australian history and one of the largest in Asia-Pacific in 2016.
- The port is a critical component of the supply chain that supports the Victorian and national economies, and the transaction proceeds will fund the removal of 50 of Victoria's worst level crossings and construction of the Melbourne Metro, West Gate Distributor and other important transport initiatives.
- The transaction involved 2.5 years of planning and execution, unprecedented public scrutiny including review by a Parliamentary Select Committee, and prevailed through a change in state government and changes in foreign investment regulation.
- The project also included the design and construction of the A$1.6 billion third international container terminal development.
- The successful bidder for the port lease, the Lonsdale Consortium, was comprised of the Future Fund, QIC, Global Infrastructure Partners and OMERS.

Queen's Wharf

Jurisdiction:
Australia

Deal type:
Project development

Industry sectors:
Social infrastructure; Entertainment

Firms:
DLA Piper
Party: Destination Brisbane Consortium (Project developer)
Corrs Chambers Westgarth
Party: State of Queensland (Sponsor)
Clayton Utz
Party: Destination Brisbane Consortium (Project developer)
DibbsBarker
Party: Far East Consortium (Bidder)

Overview:
- Queen's Wharf is a project for the development of an iconic integrated resort on circa 9 nine hectares of land in the Brisbane central business district.
- The project involves the construction and 99-year operation of an integrated resort, the construction of four towers—including three residential towers—a pedestrian bridge, the refurbishment of the Treasury Casino building into a retail precinct and hotel, as well as the construction of entertainment, retail and public areas.
- The winning Destination Brisbane Consortium is made up of Star Entertainment Group, Chow Tai Fook Enterprises, and Far East Consortium.
- It is among the largest projects in Australia and with the integrated resort is expected to be completed in 2022.

Queensland Curtis LNG plant

Jurisdiction:
Australia
Deal type:
Project development
Industry sectors:
Oil and gas
Firms:
Clayton Utz
Party: Tokyo Gas Australia (Sponsor)
Herbert Smith Freehills
Party: China National Offshore Oil Corporation (Sponsor)

Overview:
- Queensland Curtis LNG Project, one of the leading coal seam gas (CSG) projects in Australia, operated by QGC, a BG Group company.
- The plant has an output of 8 million tonnes of LNG a year.
- This $34 billion LNG project is one of the world's ten largest energy projects, and will be the world's first to turn coal CSG into liquefied natural gas (LNG).
- In 2015 the first gas was delivered to purchasers at the Curtis Island LNG facility.

Sydney light railway PPP

Jurisdiction:
Australia
Deal type:
Project development, PPP
Industry sectors:
Transport
Firms:
Ashurst
Party: Transport for New South Wales
Norton Rose Fulbright
Party: Banco Santander (Lender); Commonwealth Bank of Australia (Lender); United Overseas Bank (Lender); Credit Agricole CIB Australia (Lender); The Bank of Nova Scotia Asia (Lender);
Corrs Chambers Westgarth
Party: Acciona Infrastructure (Project developer); Transdev (Project developer): Alstom Transport (Project developer); Capella (Project developer)
Minter Ellison
Party: Acciona Infrastructure (Project developer); Alstom Transport (Project developer)

Overview:
- The Sydney light rail network is a tram or light rail system serving the Australian city of Sydney, New South Wales (NSW) that presently consists of a single 12.8 km line of 23 stations.
- The Sydney A$2.1 billion light railway PPP (public-private partnership) includes the design, construction, operation and maintenance of a new light rail line including CBD and South East Light Rail project (CSELR), and the operation and maintenance of the existing Inner West Light Rail line during the same period.
- The new CSELR light rail line will extend along a 12 km route from Circular Quay along George Street to Central Station, through Surry Hills to Moore Park, then to Kensington and Kingsford via Anzac Parade and Randwick via Alison Road and High Street.
- The project is the first light rail PPP in New South Wales and CSLER is expected to deliver economic benefits of $4 billion to the NSW economy and create 10,000 jobs.

Tailem Bend and Collinsville North solar power plants

Jurisdiction:
Australia
Deal type:
Project development
Industry sectors:
Energy
Firms:
DLA Piper
Party: Equis Funds Group (Project developer)
Allens
Party: Snowy Hydro (Project developer)

Overview:
- The Tailem Bend and Collinsville North are twin large-scale solar power plants in Australia, with a combined total generation capacity of over 200MW.
- The projects are being developed by Equis Funds Group, Asia's largest independent renewable energy developer and investor.
- The Tailem Bend project includes a 127MW solar farm and a 132/3KV substation alongside a Snowy Hydro owned 28.8MW diesel-fired power station that will purchase all of Tailem Bend's power for at least 22 years.
- The initial development of a 100MW solar project in Collinsville North is also due to commence later in 2017.

Toowoomba Second Range Crossing (TSRC)

Jurisdiction:
Australia
Deal type:
Project development
Industry sectors:
Transport
Firms:
Clayton Utz
Party: Queensland Government – Treasury Commercial Group (Sponsor); Department of Transport and Main Roads (Sponsor)
Ashurst
Party: Nexus Infrastructure consortium (Project developer)
Maddocks
Party: Nexus Infrastructure consortium (Project developer)

Overview:
- The Toowoomba Second Range Crossing (TSRC) is a bypass route that takes heavy vehicle traffic around Toowoomba rather than through it.
- The A$1.6 billion project is one of Queensland's highest priority infrastructure projects, and has been given the largest Australian Government commitment to a single regional road project in Queensland history.
- The 41 km highway will bypass the city of Toowoomba, and improve traffic conditions and road safety in the region, in particular reducing the number of heavy vehicles travelling through the Toowoomba city centre.
- Construction is expected to be complete in late 2018 after which Nexus is contracted to operate and maintain the road for 25 years.

WestConnex motorway PPP

Jurisdiction:
Australia
Deal type:
Project development, PPP
Industry sectors:
Transport
Firms:
Clayton Utz
Party: Roads and Maritime Services (Originator)
Allens
Party: WestConnex Delivery Authority (Originator)
Ashurst
Party: WestConnex Delivery Authority (Originator); Sydney Motorway Corporation (Originator)
Minter Ellison
Party: CIMIC Group's Leighton Contractors (Project developer); Samsung (Project developer); Dragados Joint Venture (Project developer)
King & Wood Mallesons
Party: Goldman Sachs (Lender); UBS (Lender); Macquarie Capital (Lender)

Overview:
- WestConnex, Australia's largest urban road project, with a total value of A$17 billion, has moved into its second stage.
- The project is a 33km motorway programme being delivered through a series of projects in three stages over a period of 10 years.
- The design and construction contract of stage one was awarded to a joint venture of CIMIC Group's Leighton Contractors and Rizzani De Eccher that was tasked to widen the existing M4 motorway and extend it with twin tunnels.
- Stage two was procured on a PPP (public-private partnership) basis and involves the construction of twin tunnels and double the capacity of the M5 East corridor. The design and construct contract was awarded to the Leighton Dragados Samsung joint venture.
- Although delivered as a PPP, the debt finance was procured separately from the procurement of the design and construct contract.
- The construction is financed through A$1.5 billion in private sector senior debt and a A$2 billion Australian Government concessional loan structured as a subordinated loan.
- The senior lenders are Commonwealth Bank of Australia, National Australia Bank, Westpac and Credit Agricole.

Western Sydney Airport light railway

Jurisdiction:
Australia
Deal type:
Project development
Industry sectors:
Transport
Firms:
King & Wood Mallesons
Party: Transport for New South Wales (Project developer)

Overview:
- The Western Sydney Airport project is a light rail project initiated by Transport for New South Wales as part of the development of Western Sydney Airport at Badgerys Creek.
- The light rail line will run between Westmead, Parramatta and Carlingford, with 16 proposed stops across 12km.
- Construction is due to start in 2018 with the first stage to be completed by 2023, but it is unclear how the light rail will intersect with the planned underground Sydney Metro West.

Western Sydney Stadium

Jurisdiction:
Australia

Deal type:
Project development

Industry sectors:
Social infrastructure

Firms:
King & Wood Mallesons
Party: Infrastructure New South Wales (Project developer)

Overview:
- The Western Sydney Stadium is an A$300 million project to construct a 30,000-seat rectangular stadium at Parramatta, in western Sydney.
- The construction of the stadium is a high profile project for New South Wales and is part of the A$1.6 billion stadia strategy to improve sporting infrastructure in the state and create 1,200 jobs during construction.
- Site establishment work was completed in January 2017 with stage two of the planning application expected in 2017, and the stadium is expected to be completed in 2019.

White Rock 400MW wind farm

Jurisdiction:
Australia

Deal type:
Project development

Industry sectors:
Energy

Firms:
Norton Rose Fulbright
Party: Goldwind Australia (Project developer); White Rock Wind Farm (Project company)
Herbert Smith Freehills
Party: Goldwind Australia (Project developer)

Overview:
- Goldwind Australia and White Rock Wind Farm are developing the White Rock Wind Farm, which will be the largest wind farm in New South Wales.
- The project will have operation of up to 119 wind turbines, which would result in up to 400MW of renewable electricity being generated.
- Stage one of the project will consist of 70 turbines, producing 175MW of electricity, enough to power 75,000 homes annually.
- Construction of the wind farm began in mid-January 2017.

Woolgoolga-Ballina Pacific Highway

Jurisdiction:
Australia

Deal type:
Project development

Industry sectors:
Transport

Firms:
Clayton Utz
Party: Roads and Maritime Services (Grantor)

Overview:
- The Woolgoolga to Ballina project will upgrade about 155km of highway, starting approximately 6 km north of Woolgoolga and ending approximately 6 km south of Ballina.
- It is Australia's largest regional infrastructure project.
- The road will allow for a higher speed limit up to 110 km an hour and reduce travel time on the route from 130 minutes to around 105.
- Roads and Maritime Services (RMS) is utilising the delivery partner procurement model for this project, which is the first time this model has been implemented to deliver such a project in Australia.

Australia

Project finance transactions which reached financial close in 2016
(Data provided by IJ Global)

Name	Transaction type	Sector	Sub sector	Value
ACT Law Courts PPP	Primary Financing	Social & Defence	Justice	$2.16 billion
Canberra Light Rail (Capital Metro) PPP	Primary Financing	Transport	Transit	$537 million
Canunda Wind Farm Refinancing 2016	Refinancing	Renewables	Onshore Wind	$19 million
Clare PV Solar Plant (100MW)	Primary Financing	Renewables	Photovoltaic Solar	$134 million
Coranar Black Coal Mine Refinancing	Refinancing	Mining	Coal	$39 million
Cranbourne-Pakenham Rail Upgrade PPP	Primary Financing	Transport	Heavy Rail	$1.03 billion
Dalrymple Bay Coal Terminal Refinaning 2016	Refinancing	Transport	Ports	$260 million
Emu Downs PV Solar Plant (20MW)	Primary Financing	Renewables	Photovoltaic Solar	$37 million
Gold Coast Rapid Transit Phase II PPP	Additional Facility	Transport	Heavy Rail	$464 million
Hawaiki Cable	Primary Financing	Telecoms	Mobile	$52 million
Hobart International Airport Refinancing 2016	Refinancing	Transport	Airports	$146 million
Hornsdale Wind Farm Phase 2 (100MW)	Primary Financing	Renewables	Onshore Wind	$147 million
Ichthys LNG Additional Financing	Additional Facility	Oil & Gas	LNG	$600 million
Kiata Wind Farm (30MW)	Primary Financing	Renewables	Onshore Wind	$75 million
Kidston PV Solar Plant Phase 1 (50MW)	Primary Financing	Renewables	Photovoltaic Solar	$94 million
Lakeland PV Solar Farm (13MW) and Storage Solution (1.4MW)	Primary Financing	Renewables	Photovoltaic Solar	$32 million
Lane Cove Tunnel Toll Road Refinancing 2016	Refinancing	Transport	Tunnels	$159 million
Logon Enhancement	Primary Financing	Transport	Roads	$612 million
Macarthur Water Filtration Plant Refinancing	Refinancing	Water	Treatment	$57 million
Moomba Adelaide Pipeline System Acquisition Refinancing	Refinancing	Oil & Gas	Midstream	$205 million
Mount Emerald Wind Farm (189MW)	Primary Financing	Renewables	Onshore Wind	$299 million
Musselroe Wind Farm Refinancing (168MW)	Refinancing	Renewables	Onshore Wind	$197 million
New Cavalry Adelaide Hospital PPP	Primary Financing	Social & Defence	Healthcare	$137 million
Northern Territory Airports Refinancing 2016	Refinancing	Transport	Airports	$315 million
Northern Territory Secure Facility PPP Refinancing	Refinancing	Social & Defence	Justice	$451 million
Nyngan and Broken Hill PV Solar Plants Refinancing	Refinancing	Renewables	Photovoltaic Solar	$155 million
Pelican Point Refinancing 2016	Refinancing	Power	Gas-Fired	$112 million
Queensland Airports Additional Facility 2016	Additional Facility	Transport	Airports	$695 million
Sapphire Wind Farm (260MW)	Primary Financing	Renewables	Onshore Wind	$439 million
Single Housing LEAP Phase 2 Refinancing PPP	Refinancing	Social & Defence	Social Housing	$537 million
Sydney Cross City Tunnel Acquisition Refinancing	Refinancing	Transport	Tunnels	$208 million

Australia

Project finance transactions which reached financial close in 2016
(Data provided by IJ Global)

Name	Transaction type	Sector	Sub sector	Value
Tilt Renewables Wind Assets Refinancing	Refinancing	Renewables	Onshore Wind	$584 million
Ulluru Electricity Distribution Network	Additional Facility	Power	Transmission & Distribution	$343 million
Victoria Power Networks	Additional Facility	Power	Transmission & Distribution	$700 million
Victorian Comprehensive Cancer Centre (VCCC) PPP Refinancing	Refinancing	Social & Defence	Healthcare	$771 million
Victorian Desalination PPP Refinancing 2016	Refinancing	Water	Desalination	$663 million
Webb Dock Container Terminal	Primary Financing	Transport	Ports	$299 million
White Rock Wind Farm Stage 1 (175MW)	Primary Financing	Renewables	Onshore Wind	$219 million
Woolnorth Wind Farm (140MW) Refinancing	Refinancing	Renewables	Onshore Wind	$100 million

China

China has customarily had a penchant for conventional energy. Coal and oil have been the staple diet for China's voracious appetite for energy. The country is the biggest producer and consumer of coal in the world and is the largest user of coal-derived electricity, while it also stands as the fourth-biggest oil producer in the world. Despite this central authorities have taken strategic initiatives to push back from the status quo and China's 13th Five-Year Plan has raised ambitions for a low-carbon future, with a sense of urgency to moving away from fossil fuels and diversify its supply to include nuclear power, natural gas, hydroelectricity and other renewables.

Central authorities have keenly ordered a stop to the growth of coal power plants despite the resistance of local authorities mindful of the need to create jobs and the plan aims for more industry consolidation. The National Energy Administration issued a directive in April 2016 curbing construction of new coal fired plants throughout the country that was followed up in January 2017 by the National Energy Administration (NEA) cancelling a further 103 coal power plants, abandoning 120GW of future coal-fired capacity. However, despite such ambition – according to the National Bureau of statistics (NBS) – the country's coal output rose 1.9% in March this year from a year earlier to 300 million tonnes, which is the first increase since March 2015.

It's a familiar story with oil, despite all the ambition from central authorities, the country didn't hesitate in taking advantage of the falling oil prices to accelerate its strategic petroleum reserve builds. Chinese crude imports rose by 16% last year as the country rivalled the US as the world's biggest oil purchaser; and while the country doesn't officially report its Strategic Petroleum Reserve (SPR) volume, it is estimated to be around 400 million barrels in total, with a capacity of around 500 million barrels.

For some time to come, as China looks to play a bigger role in international affairs and address overcapacity, infrastructure is going to be headlined by One Belt, One Road (一带一路), China's development strategy focused on Eurasia through the land-based Silk Road Economic Belt (SREB) and the sea-based Maritime Silk Road (MSR).

One essential component of the One Belt, One Road strategy is the $62 billion China–Pakistan Economic Corridor (CPEC) – a collection of infrastructure projects under construction throughout Pakistan -that became partly operational in November 2016 when Chinese cargo was transported overland to Gwadar Port for maritime shipment to Africa and West Asia.

The government has also made a recent policy development to promote public-private partnerships (PPPs) to fund roads, bridges and railways to subdue debt growth and attract companies to projects. PPP projects are well underway in a diverse range of sectors including the Beijing line 16 subway project, the Foshan-Qingyuan-Conghua highway project; the Urumqi metro line 2 project; and the ZTE Huaian Smart City project to name a few.

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Beijing Daxing International Airport

Jurisdiction:
China

Deal type:
Project development

Industry sectors:
Transport; Aviation

Firm:
Global Law Office
Party: Capital Airport Holding Company (Project developer)

Overview:

- Beijing Daxing International Airport is a planned new international airport serving Beijing.
- It is being built in Daxing District and parts of Guangyang District in Langfang, Hebei, located 46km south of the city centre.
- The new airport is expected to serve Beijing, Tianjin and Hebei and will cover an area of 2,680 hectares.
- At Rmb40 billion ($11 billion) this is the biggest airport investment and construction project in China, and it is being developed by Capital Airport Holding Company—a subsidiary of China Airport Construction Group Corporation of CAAC.
- Construction on the airport began December 2014, and the projected completion date for the new airport is September 2019.

Beijing Line 16 subway PPP

Jurisdiction:
China

Deal type:
Project development

Industry sectors:
Transport; Aviation

Firms:
JunHe
Party: Beijing Municipal Commission of Transportation
King & Wood Mallesons
Party: Beijing MTR Corporation (Project developer)

Overview:

- Beijing Line 16 PPP subway project is a rapid transit rail line in Beijing with a route that runs 50 km in far western Beijing, parallel and to the west of Line 4.
- Metro Line 16 is an important line connecting the north and south of Beijing and has an overall investment of Rmb47.4 billion ($6.9 billion).
- The line is managed by the Beijing MTR Corporation and uses eight-car high-capacity wide-body A-size trains.
- Construction began in December 2013 and the first phase opened to passengers on 31 December 2016.

Xinglongkou-Yanqing (Xingyan) Expressway PPP

Jurisdiction:
China

Deal type:
Project development; PPP

Industry sectors:
Transport

Firms:
JunHe
Party: Beijing Municipal Commission of Transport (Project developer)

Overview:

- The Beijing Rmb14 billion Xinglongkou-Yanqing (Xingyan) PPP Expressway will link the North West 6th Ring Road to the north of the Yingchengzi interchange toll station on the Beijing-Tibet Expressway, over a 42.4 km expressway.
- About 3,846.65 mu of land is expropriated for the construction of the mainline section, about 1,270.85 mu for the interchange section, with a total of about 4,584.5 mu for the whole line.
- The project originally planned to use public funds and debt financing, but now the PPP model is being used.
- The Beijing Municipal Government appointed the Beijing Municipal Commission of Transport to implement the PPP.
- In the project, the Beijing Capital Highway Development Group contributed 25% of the total investment and social investors contributed 26%.

Beijing Sewage Treatment and Reclaimed Water Utilisation plant

Jurisdiction:
China
Deal type:
Project development
Industry sectors:
Social infrastructure
Firms:
Zhong Lun Law Firm
Party: SDIC Fund (Lender)

Overview:
- The Beijing Rmb40 billion Sewage Treatment and Reclaimed Water Utilisation Concession Project is a project to invest, finance, build and operate the facilities of sewage treatment and reclaimed water utilisation in Beijing's central urban area.
- Under Beijing's Three Year Action Plan of accelerating the construction of facilities of sewage treatment and reclaimed water utilisation, Beijing Municipal Government and the Beijing Water Management Bureau selected Beijing Drainage Group to perform these tasks.
- Beijing Drainage Group introduced a financial investor to co-found a fund to invest in the construction project of sewage treatment, reclaimed water utilisation and sludge disposal, which was completed in December 2015.
- The total fund scale for phase one of the project amounts to Rmb10 billion ($1.4 billion).

Foshan-Qingyuan-Conghua Highway PPP

Jurisdiction:
China
Deal type:
Project development; PPP/PFI
Industry sectors:
Transport
Firms:
Zhong Lun Law Firm
Party: PowerChina Road Bridge Group (Project developer)

Overview:
- The Foshan-Qingyuan-Conghua Highway PPP Project is located in Guangdong's Guangzhou and Qingyuan cities.
- The length of the project is approximately 86 km, and it has approximately Rmb11 billion ($1.5 billion) in total investment.
- On 21 July 2015, Qingyuan Transportation Bureau signed an investment agreement with the winning bidder, and on 25 December 2015, Qingyuan Transportation Bureau signed a concession agreement with the project company.

Hangzhou Dajiangdong Industry Concentration Zone road PPP

Jurisdiction:
China
Deal type:
Project development; PPP/PFI
Industry sectors:
Transport
Firms:
Zhong Lun Law Firm
Party: PowerChina Road Bridge Group (Project developer)

Overview:
- The Hangzhou Dajiangdong Industry Concentration Zone PPP Road Project encompasses nine roads and affiliated facilities, organised into 11 sub-projects.
- It is the first transportation infrastructure project in Zhejiang province that will be delivered through the public-private partnership (PPP) model.
- Dajiangdong Industry Concentration Zone is located in the capital city of Zhejiang province, and is regarded as a newly-emerging, fast developing economic zone like Lujiazui in Shanghai.

Hangzhou-Haining Intercity Railway PPP

Jurisdiction:
China
Deal type:
Project development; PPP/PFI
Industry sectors:
Transport
Firms:
King & Wood Mallesons
Party: Haining Municipal People's Government (Project developer)

Overview:
- The Hangzhou-Haining Intercity Railway PPP project is a Rmb14 billion project in development that will cover 48 km connecting 13 stations in total.
- It is one of the first batch of national model public-private partnership (PPP) projects of the Ministry of Finance and the first PPP project invested by China's government-enterprise cooperative investment fund in Zhejiang Province.
- The intercity railway project is included in the National Development and Reform Commission's PPP projects list and is of important demonstration significance.

Hanzhong Xingyuan New District

Jurisdiction:
China
Deal type:
Project development
Industry sectors:
Social infrastructure
Firms:
Zhong Lun Law Firm
Party: PowerChina Xi'An Investment (Project developer)

Overview:
- The Hanzhong Xingyuan Rmb12.3 billion New is a large social infrastructure project in south west Shaanxi province.
- The first phase of development is made up of many projects for the Xingyuan New District including water system management, municipal roads, landscape, and resettlement housing construction, with a total investment of approximately Rmb8.5 billion.
- The second phase is shanty towns renovation and cultural tourism facilities construction, with a total investment of approximately Rmb3.8 billion.

Inner Mongolia Daihai Power Generation upgrade

Jurisdiction:
China
Deal type:
Project development
Industry sectors:
Energy
Firms:
Jin Rui Law Offices
Party: Inner Mongolia Daihai Power Generation (Project developer)

Overview:
- The Inner Mongolia Daihai Power Generation Rmb2 billion upgrade project is aimed at improving the capacity to produce power and protect the environment.
- The reconstruction of the boiler, turbine and generator, will increase capacity to 640MW compared with the current 600MW while consuming less coal and causing less pollution.
- The project is part of the Chinese government's strategy to restructure power enterprises and strengthen the ability to protect the environment.

Ocean Park water park

Jurisdiction:
Hong Kong

Deal type:
Project development

Industry sectors:
Social infrastructure

Firms:
Baker & McKenzie
Party: Ocean Park Corporation (Project developer)

Overview:
- Ocean Park Corporation is developing a new water park, Water World that is expected to open in 2018.
- The Water Park has been approved by the government and allocated financing of approximately HK$2.3 billion ($295 million).
- The Water Park will be an all season park with 25 attractions.

Qian'an Sponge City PPP

Jurisdiction:
China

Deal type:
Project development; PPP

Industry sectors:
Social infrastructure

Firms:
JunHe
Party: Beijing Dayue Consulting (Project developer)

Overview:
- Sponge City Construction was an initiative launched by the Chinese government as an approach to tackle water related problems in the cities of China.
- The Qian'an Sponge City Construction PPP Project concerns wastewater treatment, water supply, river restoration, municipal transportation, country parks, information platforms and other facilities.
- The municipal government decided to undertake this project under a public-private partnership (PPP) model.
- The concept of a sponge city was born in 2013 and refers to cities that are like sponges: with an infrastructure that collects excess rainfall and integrates flood control in urban planning.

Qingdao Metro Line 1 PPP

Jurisdiction:
China

Deal type:
Project development; PPP

Industry sectors:
Transport

Firms:
King & Wood Mallesons
Party: China Merchants Bank
Zhong Lun Law Firm
Party: Qingdao Municipal Government (Project developer)

Overview:
- Qingdao Metro is a metro system in the city of Qingdao, Shandong province in China—the first line, Line 3 (north section), began operation on 16 December 2015.
- Qingdao Metro Line 1 will be one of the major routes of the Qingdao metro system, with its overall length of 60 km.
- This project adopts the public-private-partnership (PPP) and has a total investment of Rmb11 billion ($1.6 billion).
- Ultimately, there will be 16 lines in total with a combined length of 836 km, and all work is expected to be completed by 2050.

Shanghai Jiading Nanxiang sewage plant PPP

Jurisdiction:
China
Deal type:
Project development; PPP
Industry sectors:
Social infrastructure
Firms:
JunHe
Party: Water Utility Bureau of Jiading District(Project developer)

Overview:
- The Shanghai Jiading Nanxiang Sewage Disposal Plant PPP Project concerns the development of an underground wastewater treatment plant underneath an urban park.
- The plant will use the advanced anaerobic-anoxic-oxic (AAO) treatment technology to purify water and meet discharge standards.
- When completed, the plant will be able to treat 50,000 cubic metres of sewage a day in the first phase and 150,000 cubic metres a day when fully built.
- It is among the first batch of PPP projects in Shanghai after the initiation of the public-private partnership model (PPP) and enactment of new PPP regulations.

Shenzhen International low-carbon city

Jurisdiction:
China
Deal type:
Project development; PPP
Industry sectors:
Energy
Firms:
Jin Rui Law Offices
Party: Shenzhen International Low-Carbon City Comprehensive Energy Co

Overview:
- Shenzhen International Low-Carbon City Distributed Energy Project is a flagship for China-EU cooperation on sustainable urbanisation.
- It aims at building a brand new city with low carbon emissions, and being the first national intelligent energy demonstration project meeting European standards.
- This is the first domestic distributed energy project involving the sales and distribution programme approved by the National Energy Administration under a PPP.

Tangshan Fengnan PPP

Jurisdiction:
China
Deal type:
Project development; PPP
Industry sectors:
Social infrastructure
Firms:
Zhong Lun Law Firm
Party: China Ge Zhou Ba Group (Project developer)

Overview:
- Tangshan Fengnan PPP is a large social infrastructure project with a total investment of approximately Rmb13.9 billion that will be developed in four parts.
- The four parts are: infrastructure construction of an economic development zone near the harbour; the first phase of the Binhai New City Project; port railway construction; and shanty town renovation.
- The People's Government of Tangshan Fengnan District opted for the public-private partnership (PPP) to be the mode of delivery for this project, and chose China Ge Zhou Ba Group through public tender.

Urumqi Line 2 Metro PPP Project

Jurisdiction:
China
Deal type:
Project development; PPP
Industry sectors:
Transport
Firms:
King & Wood Mallesons
Party: Beijing Infrastructure Investment (Project developer); China Railway Construction (Project developer); Beijing MTR Construction Administration (Project developer)
Dentons Beijing Offices
Party: Urumqi Municipal Construction Committee (Project developer)

Overview:
- The Urumqi Metro is a metro system under construction in Urumqi, capital of the Xinjiang Autonomous Region in China—it has submitted plans for 7 lines totalling 211.9 km in length with a total estimated cost of Rmb31 billion ($4.5 billion).
- The Urumqi Rmb2.3 billion Line 2 Metro project is the first metro PPP project in Urumqi and it is one of the demonstration projects of the Ministry of Finance.
- Line 2 will connect the downtown area and the newly developed high-speed rail district of Urumqi improving the overall convenience of Urumqi's public transportation network making passenger journeys faster and easier.
- The project aims to modernise Urumqi's transportation network and support the One Belt and One Road development strategy proposed by China.

Wenjin Industrial New City PPP

Jurisdiction:
China
Deal type:
Project development; PPP
Industry sectors:
Social infrastructure
Firms:
JunZeJun Law Offices
Party: Bureau of Municipal and Rural Construction of Xinzhou District (Project developer)

Overview:
- The Wenjin Industrial New City PPP Project is an urban development project in the administrative area of Xinzhou District, Wuhan City.
- The project covers 27 square km and the public sector chose China Fortune Land Development as the private partner after competitive consultation.
- The project adopts a regional comprehensive development operation method, which combines overall area planning, land consolidation, infrastructure and public utilities project investment, and investment promotion.

Wuhan eco-smart city PPP

Jurisdiction:
China
Deal type:
Project development, PPP
Industry sectors:
Social infrastructure
Firms:
JunZeJun Law Offices
Party: Wuhan Economical and Technological Development Zone Eco Smart City

Overview:
- The Wuhan eco-smart city PPP Project is located in the South Eastern part of the Wuhan Economic and Technological Development Zone, with an estimated total investment of Rmb2.5 billion.
- It is made up of 15 subprojects that include road construction, road drainage construction, park landscaping, and dredging.
- The project adopts the design-build-finance-operation-transfer (DBFOT) where the project company established by the public and private sectors would obtain the construction and operation rights from the implementing organisation authorised by the government, and be responsible for the finance, design, construction, and operation of the project.

Zhengzhou Metro Line 3 PPP

Jurisdiction:
China
Deal type:
Project development; PPP
Industry sectors:
Transport
Firms:
King & Wood Mallesons
Party: Zhengzhou Metro (Project developer); Zhengzhou DRC (Project developer)

Overview:
- The Zhengzhou Metro Line 3 project is one of the second batch model PPP projects selected by the Ministry of Finance of China.
- It will have a length of 25 km and 31 stations and will be the backbone of Zhengzhou City Centre with a total investment of Rmb21 billion.
- The Line 3 Project introduces the World Bank loan and project implementation incorporates the World Bank's experience in infrastructure investment and financing and project management.
- This project combines PPP procurement and the general contractor procurement to ensure integration of project investment, construction and operation, and maximise the benefits of the PPP model.

Zhongshan-Kaiping Highway and Xiaolan Feeder Highway

Jurisdiction:
China
Deal type:
Project development; PPP
Industry sectors:
Transport
Firms:
Zhong Lun Law Firm
Party: PowerChina Road Bridge Group (Project developer)

Overview:
- The Zhongshan-Kaiping Highway and Xiaolan Feeder Highway Project is a major project for Guangdong Province, spanning 150 km from Zhongshan city (Hengmen Island in Nanlang town) to Shenzhen.
- The project tenderers Jiangmen Transportation Bureau and Zhongshan Transportation Bureau selected the project bidder through public tender.
- This project utilises a BOT+EPC model and on 28 March 2015, the project tenderer and successful bidder signed the investment agreement.

Zhuhai City Yuhai gas power plant

Jurisdiction:
China
Deal type:
Project development
Industry sectors:
Energy; Oil and gas
Firms:
Jin Rui Law Offices
Party: Zhuhai City Yuhai Electric Power (Project developer)

Overview:
- The Zhuhai City Yuhai Rmb3.2 billion Natural Gas Cogeneration Project is scheduled to produce 3.3 billion KW of power, and 5.91 million GJ of heat annually.
- It aims at reducing pollution and facilitating power supply to Zhuhai in Macau.
- Gas power projects are less popular when compared to Thermal power in China, so this project takes environmental factors into consideration.

ZTE Huai'an Smart City PPP

Jurisdiction:
China
Deal type:
Project developmen; PPP
Industry sectors:
Social infrastructure
Firms:
JunHe
Party: Zhongxing Telecommunication Equipment Corporation (Project developer)

Overview:
- ZTE Huai'an Smart City PPP Project is an urban development vision to integrate information and communication technology (ICT) and Internet of things (IoT) technology in a secure fashion to manage the city's assets.
- The Huai'an government has applied the public-private partnership (PPP) mode into the overall construction of the smart city, which is now a popular model in China.
- ZTE—China's largest listed telecommunications equipment supplier—and the project contractor will establish a joint venture project company together with the government, and the project company responsible for development and construction.
- The project will facilitate smart education, smart healthcare, smart transportation, city safety, smart environmental protection, smart community, smart travel, metro cards, smart services, and enterprise technology.

China

Project finance transactions which reached financial close in 2016
(Data provided by IJ Global)

Name	Transaction type	Sector	Sub sector	Value
Asia Clean Capital (ACC) Rooftop Solar Portfolio	Portfolio Financing	Renewables	Photovoltaic Solar	$40 million
Yanjin Sanchuan Hydro Power Plant (48MW) Refinancing	Refinancing	Power	Hydro	$42 million
Yunnan Hydro Power Plant (48MW)	Primary Financing	Power	Hydro	$42 million
Yunnan Hydro Power Plant (48MW) Refinancing	Refinancing	Power	Hydro	$44 million

India

India has experienced rapid economic growth over the past 10 years, yet there is a severe shortfall in infrastructure, electricity and transport links, in particular. It is estimated that approximately $1 trillion is needed to meet demand; however, foreign investors have historically faced challenges such as unpredictable regulations, foreign investment caps, and prolonged delays for getting project approvals. In addition, resolving disputes in the legal system is infamously slow, and generally is it difficult to enforce arbitration agreements.

Prime Minister Narendra Modi enacted reforms in 2013, implementimg a new land acquisition law with reduced bureaucracy.

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APSEZ Vizhinjam International sea port PPP

Jurisdiction:
India
Deal type:
Project development, PPP
Practice area:
Project development, PPP/PFI
Industry sectors:
Transport
Firms:
Cyril Amarchand Mangaldas
Party: Adani Ports and Special Economic Zone (Projet developer)

Overview:
- The Kerala government has accepted private multi-port operator Adani Ports and Special Economic Zone's (APSEZ) bid to build the Vizhinjam International multi-purpose sea port.
- APSEZ is India's largest private port operating firm. The first phase of this project was expected to cost Re7,525 crore ($1.17 billion), and Adani Group will invest Re2,454 crore ($382 million) and has sought Rs1,635 crore ($255 million) from state and central government.
- This is the first PPP port project which received the viability gap funding from the government of India and the government of Kerala.
- It is the first time the concession authority has guaranteed the termination payments to the lenders by offering encumbrance on the project site in favour of the creditors of this project.
- Vizhinjam will be APSEZ's ninth port facility. This port will be outside the control of the union government and will therefore be free to set its own rates.

IL&FS Tamil Nadu Power 3600MW thermal power plant

Jurisdiction:
India
Deal type:
Project development
Industry sectors:
Energy
Firms:
HSA Advocates
Party: IL&FS Tamil Nadu Power Company (Project Developer)

Overview:
- The IL&FS Tamil Nadu Power is a developing greenfield thermal power project that in two phases – phase one (two 600MW units) and phase two (three 800MW units).
- For the first phase, the company proposes to set up a 1200MW (2x600 MW) power plant based on imported coal with subcritical technology.
- The project received environmental clearance in 2010 but faced delay due to an order by the National Green Tribunal (NGT) in June 2012. On 16 November 2014, the NGT cancelled the green clearance for the project.
- Both units built in phase one are operating, but phase two is on hold.

Kolkata Port Trust Sagar Island port

Jurisdiction:
India
Deal type:
Project development
Industry sectors:
Transport
Firms:
Dhir & Dhir Associates
Party: Kolkata Port Trust (Project Developer)

Overview:
- Union government-owned Kolkata Port Trust signed an agreement with the West Bengal government to set up a new port at Sagar Island through a joint venture between the two.
- It will be the first port to be built by the Union government in 14 years, and will be developed through a special purpose vehicle set up under the Companies Act, under which Kolkata Port Trust will hold 74% equity and West Bengal government will acquire a 26% stake in it.
- The first phase of the project is expected to start commercial operation by 2019.
- This is one of the biggest greenfield port projects in India as the Ministry of Shipping aims to cater to the increasing need and demand for cargo handling facilities especially in the east and northeast part of India.

Panta Jayaprabha Hospital PPP

Jurisdiction:
India
Deal type:
Project development; PPP
Industry sectors:
Healthcare
Firms:
Trilegal
Party: International Finance Corporation (Financial advisor)

Overview:
- The state government has provided a 33 year lease to Medanta Group to develop the Panta Jayaprabha Hospital.
- This is the first health PPP in Bihar and it set the trend for more hospital PPPs in the region. The region itself faces a significant lack of public health services and health infrastructure.
- The hospital is scheduled to be complete by the end of 2019.
- The International Finance Corporation (IFC) was the advisor to the Government of Hihar.

ReNew Power renewable energy programme

Jurisdiction:
India
Deal type:
Project development
Industry sectors:
Energy
Firms:
Allen & Overy
Party: Asian Development Bank (Lender)

Overview:
- ReNew Power Ventures (ReNew), an independent power producer in India, received $390 million in long-term secured debt financing from Asian Development Bank (ADB) to develop solar and wind power projects.
- The funding will assist seven special purpose vehicles owned by ReNew, and the solar projects will have a total capacity of 398MW in Jharkhand and Telangana, and wind power will have a capacity of 311MW in Andhra Pradesh, Gujarat, Karnataka and Madhya Pradesh.
- This is the first transaction which includes resources from ADB and Leading Asia's Private Infrastructure Fund (LEAP). LEAP is a funding arrangement established by Japan International Cooperation Agency (JICA) and is administered by ADB.

Sagar Mala

Jurisdiction:
India
Deal type:
Project development
Industry sectors:
Shipping; Transport
Firms:
Juris Legal
Party: Government of India (Sponsor)

Overview:
- Sagar Mala is a government initiative that aims to improve India's maritime infrastructure through moderninsing existing ports, as well as setting up new ports.
- Under the Sagar Mala project, there will be at least six new ports built.
- The current Indian government will try to implement the projects before completion of its tenure in May 2019.

Tata Power $1.42 billion acquisition of Welspun Renewables Energy

Jurisdiction:
India
Deal type:
Private acquisition
Industry sectors:
Energy
Firms:
AZB & Partners
Party: Tata Power Company (Acquirer)

Overview:
- Tata Power signed an agreement with Welspun Energy to acquire the latter's green energy portfolio for Re10,000 crore ($1.4 billion).
- The purchased portfolio is 88% solar and 12% in wind projects.
- Welspun Renewables is wholly owned by Welspun Energy which is co-owned by the listed Welspun Enterprises. The company operates approximately 1,140MW of renewable power projects including the largest solar projects in India.
- Barclays and JM Financial are the financial advisors.

India

Project finance transactions which reached financial close in 2016
(Data provided by IJ Global)

Name	Transaction type	Sector	Sub sector	Value
Indira Gandhi International Airport PPP Refinancing 2016	Refinancing	Transport	Airports	$522 million
Kadapa Hetero Wind Farm (40.5MW)	Primary Financing	Renewables	Onshore Wind	$38 million
Kalsubari Wind Farm (12MW)	Primary Financing	Renewables	Onshore Wind	$12 million
Mandal-Jharasangam Wind Farm (31.5MW)	Primary Financing	Renewables	Onshore Wind	$36 million
Mukarba Chowk-Panipat Section NH-1 PPP (71.4KM)	Primary Financing	Transport	Roads	$347 million
NH-2 Agra-Etawah Highway Extension PPP	Primary Financing	Transport	Roads	$374 million
Nilgiri Wind Farm (10MW)	Primary Financing	Renewables	Onshore Wind	$10 million
NRSS XXIX Transmission Lines PPP	Primary Financing	Power	Transmission & Distribution	$447 million
Ostro Andhra Wind Farm (98.7MW)	Primary Financing	Renewables	Onshore Wind	$123 million
Ostro AP Wind Farm (98.7MW)	Primary Financing	Renewables	Onshore Wind	$123 million
Sterlite Transmission Lines (400KV) PPP	Primary Financing	Power	Transmission & Distribution	$58 million
Tamil Nadu PV Solar Plant (216MW)	Primary Financing	Renewables	Photovoltaic Solar	$223 million
Telangana PV Solar Power Plant (25MW)	Primary Financing	Renewables	Photovoltaic Solar	$31 million
Welspun Solar PV Plant - Bihar (40MW)	Primary Financing	Renewables	Photovoltaic Solar	$36 million

Japan

Despite making up only 2.1% of the global population, Japan is the fourth largest consumer of energy in the world; the third-largest oil consumer and net importer; and the third biggest coal importer.

Apart from coal, the country lacks natural resources and imports large amounts of crude oil, natural gas, and other energy sources such as uranium. It buys 80% of its oil from OPEC: especially, Saudi Arabia, Kuwait, United Arab Emirates, and Iran; and most of its coal comes from Australia and the United States.

At one time Japan relied on nuclear power to meet about 30% of its electricity needs; however, after the Fukushima nuclear disaster in 2011 coupled with ever-growing environmental concerns, the general public became fervently opposed to the use of nuclear energy and all nuclear reactors were progressively shut down for safety concerns.

Because of this renewable energy was seen as one of the solutions to address the shortfall and environmental concerns and the government moved quickly to enact an attractive feed-in tariff regime to encourage development of renewable energy projects.

Perhaps Japan was too ambitious as the process has been far from smooth. The government's goal of having renewables provide 22% to 24% of Japan's energy needs by 2030 has been met with resistance from utilities and concerns about the costs of renewable energy projects at a time when fossil-fuel imports are cheap. For example, the Ukujima Mega Solar project, one of the world's largest photovoltaic solar generating facilities, hit a roadblock when Japanese energy company Kyushu Electric said in late 2014 that it would not buy any electricity from any new solar plants only to change its mind over a year later.

Renewable projects also face other challenges. There are regulatory hurdles including pullback in government-mandated prices for the purchase of solar power by utilities, and solar power is overrepresented. Additionally deregulating the power market has forced utilities to seek low-cost fuels as they fight for customers. Japanese companies now plan to increase the number of coal-fired power stations in the country by almost 50% in the next 12 years.

Japan is constantly on the lookout for creative solutions for its energy security. One such solution is known as 'fire ice' or 'flammable ice' (methane hydrate). Japan has been studying the potential recovery of methane hydrate lying in its seabed and has been running production tests with the hope that it can start commercial production of gas from methane hydrates by 2023.

In the infrastructure space Japan's Prime Minister Shinzō Abe has planned to spend ¥6.2 trillion ($61 billion) on infrastructure, which is part of a ¥28 trillion ($254 billion) stimulus package to revive the world's third-biggest economy and speed its exit from deflation. The Tokyo Summer Olympics in 2020 is a trigger for this new wave of infrastructure investment, as the country looks to double the number of overseas visitors to 40 million, speed up the completion of a Nagoya-Osaka maglev link, expand ports to accommodate large cruise ships, boost airport capacity in the Tokyo area and regional economies, strengthen transportation hubs, and aid projects overseas. Already the government has supported initiatives to improve the legal and regulatory framework of PPPs (public-private partnerships), and this led to special legislation to adopt a new type of PPP to privatise infrastructure, such as airports, water supply, sewage facilities, and toll roads by way of concession.

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Ukujima 480MW photovoltaic power plant

Jurisdiction:
Japan

Deal type:
Project development

Industry sectors:
Energy

Firms:
Atsumi & Sakai
Party: Photovolt Development Partners (Project developer)

Overview:

- A $2 billion project to develop a 480MW photovoltaic power plant on the island of Ukujima, Sasebo City, Nagasaki Prefecture is in progress.
- The project is being developed by Photovolt Development Partners GmbH (PDPG), a German developer, with local partners.
- The project site is over 6 million m2 and in 2013, a facility approval under the feed-in tariff scheme was obtained from the Ministry of Economy, Trade and Industry (METI).
- In 2015, the Ukujima Mega Solar Project obtained grid connection approval from Kyushu Electric Power for the capacity of 400MW.
- The project aims to boost the local economy, support the creation of jobs, tax revenues, tourism and education, and electricity produced from several sites will be fed into an internal grid network and delivered to Kyushu Electric Power via a high-voltage, direct current submarine cable, which is unprecedented in Japan. The project is seen as a key part of the EU's Energy Union and is part of a drive towards moving the continent away from a reliance on Russian gas.
- The European Investment Bank (EIB) is providing €339 million in finding for the project.

Yokohama-machi 500MW photovoltaic power plant

Jurisdiction:
Japan

Deal type:
Project development

Industry sectors:
Energy

Firms:
Atsumi & Sakai
Party: Photovolt Development Partners (Project developer)

Overview:

- The Yokohama-machi $1.6 billion 500MW 500MW photovoltaic power plant being built in Yokohama Town, Mutsu City, Aomori Prefecture.
- The project is being developed by Photovolt Development Partners (PDPG), a German developer, with local partners.
- 500MW is the largest capacity ever established in Japan, and the project is among the five largest solar power generation plants in the world.
- This project is led by the municipality, Yokohama Town, Mutsu City, which prepared a basic plan to use farm lands destroyed in the 2011 earthquake under a new law.
- The project aims to boost the local economy, support the creation of jobs, tax revenues, tourism and education, during the construction phase and the projected 20 years of operation.
- The electricity produced from several sites will be fed into an internal grid network and delivered to Tohoku Electric Power via a high-voltage power cable, which is unprecedented in Japan.

National Cerebral and Cardiovascular Center PPP

Jurisdiction:
Japan
Deal type:
PPP
Industry sectors:
Healthcare
Firms:
Atsumi & Sakai
Party: Mitsubishi Research Institute (Sponsor)

Overview:
- The National Cerebral and Cardiovascular Center in Osaka, Japan, is planning a public-private partnership (PPP) project (design and build) to relocate and rebuild the national medical centre.
- The Hospital and Research Institute will be integrated in one building for further improvement, and relocation to the former Suita Marshalling Yard site near the Shin-Osaka Station is slated for 2018.
- The number of hospital beds at the new location will be 550, with the number off outpatients being 700 per day.

Yokohama MICE facilities PFI

Jurisdiction:
Japan
Deal type:
PFI
Industry sectors:
Social infrastructure
Firms:
Atsumi & Sakai
Party: Mitsubishi Research Institute (MRI) (Project developer); The City of Yokohama (Project developer)

Overview:
- The City of Yokohama has launched a project to build meetings, incentives, conventions and exhibitions (MICE) facilities at an area adjoining Pacifico Yokohama to ensure further development of its international competitiveness.
- The new facilities will be constructed by the private finance initiative (PFI) method at No. 20 Block in Minato Mirai 21 Central District, just next to Pacifico Yokohama.
- This project aims to strengthen the city's MICE functions, and boost local economy, promote cultural and social diversity, and enhance city's competitiveness and brand image.

Osaka airport rights PPP

Jurisdiction:
Japan
Deal type:
Project development; PPP
Industry sectors:
Aviation
Firms:
Clifford Chance
Party: Vinci Airports (Concessionaire)
Freshfields Bruckhaus Deringer
Party: New Kansai International Airport Company (Concession company)

Overview:
- Japan has launched a concession for the airport rights in the Osaka region.
- The concessionaire company, formed by the winning consortium made up of ORIX Corporation and Vinci Airports, signed a 44-year concession agreement for the operation of the two airports – Kansai and Osaka (Itami) International.
- The transaction is likely to serve as a template for future privatisations planned in the Japan infrastructure sector.
- Over the concession term, the company will pay ¥2.2 trillion ($18 billion) to NKIAC – New Kansai International Airport Company, a wholly owned subsidiary of the Government of Japan.
- This project was procured under the recently established public-private partnership (PPP) legal framework and is Japan's largest PPP to date.

Aichi Prefecture toll road PPP

Jurisdiction:
Japan
Deal type:
Project finance; Project development
Industry sectors:
Transport
Firms:
Nishimura & Asahi
Party: Aichi Road Corporation
Baker & McKenzie
Party: Maeda Corporation Group

Overview:

- The Aichi Prefecture toll road public-private partnership (PPP) concession was implemented by the Aichi Prefectural Road Public Corporation.
- The Maeda Corporation Group, a consortium led by the Maeda Corporation and consisting of Mori Trust, Daiwa Lease, Daiwa House Industry and Central Highway, was awarded a concession to operate Aichi Toll Roads, and syndicated financial institutions extended loans on a project finance basis to the concessionaire for the financing of the initial down payment of concession fees.
- The group offered a price of ¥138 billion ($1.3 billion) for the concession rights to operate the toll roads.
- This was the first large-size project financing transaction for a concession based toll road project under the PFI Act in Japan.

IGCC Nakoso/Hirono IPP

Jurisdiction:
Japan
Deal type:
Project finance; Project development
Practice area:
Project finance; Project development
Industry sectors:
Energy; Oil & Gas
Firms:
Nishimura & Asahi
Party: TEPCO (Sponsor); Mitsubishi Power Corporation (Sponsor); MHI (Sponsor); MELCO (Sponsor)
Baker & McKenzie
Party: Development Bank of Japan (Lender); Mizuho Bank (Lender); Sumitomo Mitsui Banking Corporation (Lender); Bank of Tokyo-Mitsubishi (Lender)

Overview:

- The integrated coal gasification combined cycle (IGCC) independent power producer (IPP) project includes two state-of-the-art IGCC power plants in Fukushima.
- Due to become operational in 2020, the nameplate capacity of each power plant is 540MW, and it was the first project financing, and largest in domestic history, transaction in Japan for an IGCC power plant, a next generation clean coal technology that is recognised but unproven.
- The deal aims to support the revival of Fukushima after the Fukushima earthquake in 2011.

Japan

Project finance transactions which reached financial close in 2016

(Data provided by IJ Global)

Name	Transaction type	Sector	Sub sector	Value
Akita Katagami Wind Farm (66MW)	Primary Financing	Renewables	Onshore Wind	$137 million
Aomori Solar PV Plant (9.5MW)	Primary Financing	Renewables	Photovoltaic Solar	$29 million
Cameron LNG Vessel - Rosewood	Primary Financing	Oil & Gas	LNG	$192 million
Cameron LNG Vessel - Tea Tree	Primary Financing	Oil & Gas	LNG	$192 million
Chitose Solar PV Power Plant (38.8MW)	Primary Financing	Renewables	Photovoltaic Solar	$94.3 million
Fukuroda PV Solar Plant (31.59MW) Refinancing	Refinancing	Renewables	Photovoltaic Solar	$102 million
Fukushima IGCC Power Plants (1080MW)	Primary Financing	Power	Co Generation	$2.75 billion
Hayato PV Solar Power Plant (16.7MW)	Primary Financing	Renewables	Photovoltaic Solar	$61 million
Higashi Hiroshima PV Solar Power Plant (18.6MW)	Primary Financing	Renewables	Photovoltaic Solar	$60 million
Hiraizumi PV Solar Plant (13MW)	Primary Financing	Renewables	Photovoltaic Solar	$37 million
Hirono PV Solar Plant (24.78MW) Refinancing	Refinancing	Renewables	Photovoltaic Solar	$78.8 million
Hokubu Sludge Treatment Center Refurbishment	Primary Financing	Water	Treatment	$56.4 million
Ichinoseki Solar Park (26MW)	Primary Financing	Renewables	Photovoltaic Solar	$88.9 million
Karumai East Solar Plant (80.8MW)	Primary Financing	Renewables	Photovoltaic Solar	$243 million
Kita-Awaji Solar Plant	Primary Financing	Renewables	Photovoltaic Solar	$33.7 million
KOBELCO Moka GTCC Power Plant (1200MW)	Primary Financing	Power	Co Generation, Gas-Fired	$678 million
Minamisoma PV Solar Plant (59.8MW)	Primary Financing	Renewables	Photovoltaic Solar	$168 million
Nagi PV Solar Plant (14.1MW)	Primary Financing	Renewables	Photovoltaic Solar	$38.4 million
Nanao PV Solar Plant (27MW)	Primary Financing	Renewables	Photovoltaic Solar	$75.6 million
Ohorayama Wind Farm (33MW)	Primary Financing	Renewables	Onshore Wind	$116 million
Sendai Okura PV Solar Plant (32MW)	Primary Financing	Renewables	Photovoltaic Solar	$115 million
Shiraoi PV Solar Plant (18.9MW)	Primary Financing	Renewables	Photovoltaic Solar	$55.2 millon
Suwa Solar PV Power Plant (47MW)	Primary Financing	Renewables	Photovoltaic Solar	$370 million
Tempoku Wind Farm (30MW)	Primary Financing	Renewables	Onshore Wind	$81.1 million
Tomakomai Solar PV Power Plant (38.4MW)	Primary Financing	Renewables	Photovoltaic Solar	$113 million
Yamada-cho Solar PV Power Plant (30MW)	Primary Financing	Renewables	Photovoltaic Solar	$104 million

Mongolia

A few years ago there was a lot of talk about Mongolia's growth on the back of a mining boom. The country is sometimes referred to as the Saudi Arabia of coal on account of its vast coal resources, of which it holds 10% of the world's reserves. However, the country's economy has stalled as growth fell from 17% in 2011 to 1% last year, and the World Bank expects it to fall into the red this year. As mining is crucial to the country's economy, a plunge in commodity prices adversely affected it and this was accompanied by the government's inconsistent policies on foreign-run mines that generate most of its export earnings.

As a result, the country is on the brink of receiving its first tranche of a $5.5 billion bailout package supplied by the International Monetary Fund (IMF) and others. The package includes a $425 million IMF loan and low-interest money totalling $3 billion from lenders such as the World Bank, Asian Development Bank, Japan, and South Korea, with the remainder being made up by extending a 15-year currency swap deal with China.

As 80% of Mongolia's electricity comes from coal-fired power plants, the economic stabilisation package is much needed, but the bailout plan requires the country to implement fiscal reforms for greater budget discipline, maintain a flexible exchange rate and build a stronger regulatory environment.

Landlocked and expansive, there is still huge potential for infrastructure work in Mongolia as the country is still largely undeveloped, and China's Belt and Road Initiative may be a great investment opportunity for the country. Chinese construction companies are active in Mongolia's road and infrastructure development projects, and will work on new airport highways, city bridges and suburban road construction and the redevelopment of slum districts in Ulaanbaatar. The country's capital may be favourable to the development of an economic corridor linking China, Russia and Mongolia in order to boost transportation connectivity and economic cooperation. This has materialised as Mongolia's Steppe Road project involving railways, roads, energy, natural gas and crude oil pipelines to revive a pre-modern transport network that facilitated trade between China and Russia, and the country's capital may have an important role in linking this to the Belt and Road initiative.

There are still some interesting projects underway in Mongolia. Not too long ago Rio Tinto struck a deal with the Mongolian government for the $5.4 billion expansion of the Oyu Tolgoi copper and gold mine after two years of tough negotiations. More recently, Mongolia's prime minister urged Rio Tinto, and its Canadian subsidiary Turquoise Hill, to speed up work on the mine, a project that could potentially account for a third of the country's economy. Other projects include the $1 billion CHP5 heat and power project, which is the country's first IPP (independent power producer), and the $6 billion 1800km freight rail network that's meant to be the main transport for Mongolia's rich mineral resources to international markets.

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Oyu Tolgoi copper and gold mine

Jurisdiction:

Mongolia

Deal type:

Project development; Project finance

Industry sectors:

Mining; Natural resources

Firms:

Shearman & Sterling

Party: Erdenes Oyu Tolgoi (Project company)

Sullivan & Cromwell

Party: Rio Tinto (Project developer)

Milbank Tweed Hadley & McCloy

Party: Export Development Canada (Lender); International Finance Corporation (Lender); BNP Paribas (Lender); ING (Lender); Societe Generale (Lender); European Bank for Reconstruction & Development (Lender); US Ex-Im (Lender); Export Finance & Insurance Corporation of Australia (Lender); ANZ (Lender)

Overview:

- The second phase of the copper and gold project in Mongolia marked one of the largest mining lending deals in 2015.
- Project finance worth $4.4 billion was secured for the project.
- The decision for the deal to proceed to the second phase was made more than a year ago. At the time where commodity prices were declining, the sponsors—13 lenders, export credit agencies and multi-laterals—Rio Tinto and Turquoise Hill Resources continued to have confidence in this project.
- Prior to kicking off to the second phase, the project encountered various disputes with the Mongolian government, and as a result the agreement of the loan was delayed until August 2015.
- The project financing will be provided by the Export Development Canada, the European Bank for Reconstruction & Development (EBRD), IFC, US Ex-Im, and Export Finance & Insurance Corporation of Australia, along with commercial lenders BNP Paribas, ANZ, ING, Société Générale Corporate & Investment Banking, Sumitomo Mitsui, Standard Chartered Bank, Canadian Imperial Bank of Commerce, Crédit Agricole, Intesa Sanpaolo, National Australia Bank, Natixis, HSBC, MUFG, and multilateral banks KfW IPEX-Bank and Nederlandse Financierings-Maatschappij voor Ontwikkelingslanden (FMO).
- The Multilateral Investment Guarantee Agency (MIGA) provided political risk insurance for the commercial banks.
- The containing reserves and resources would make Oyu Tolgoi phase two one of the world's largest copper-gold deposits.
- Oyu Tolgoi would have a transformative effect and impact on the nation and the people of Mongolia, and when it reaches its full production in 2021, the International Monetary Fund estimated that Oyu Tolgoi would generate up to a third of Mongolia's GDP.

Mongolia

Project finance transactions which reached financial close in 2016
(Data provided by IJ Global)

Name	Transaction type	Sector	Sub sector	Value
Oyu Tolgoi Copper-Gold Mine Expansion	Primary Financing	Mining	Base Metals, Precious Metals	$5.8 billion
Tsetsii Wind Farm (50MW)	Primary Financing	Renewables	Onshore Wind	$128 million

New Zealand

New Zealand is heavily invested in renewable energy, with 40% of its primary energy needs met by clean sources and 70% of its electricity coming from hydro and geothermal power and wind. Despite its abundance of natural resources, the country is still a net importer of energy, in the form of petroleum products as 60% of its primary energy still comes from non-renewable hydrocarbon fuels. Nevertheless, the country has set itself a target of being powered by 90% renewable energy by 2025, and Genesis will shut down its last two coal-fired units at the Huntly power station in December 2018.

New Zealand has five major generators that produce 95% of its electricity: Genesis Energy, Mighty River Power, Meridian Energy, Contact Energy, and TrustPower. The country has faced an oversupply of electricity with the competitive electricity sector marred by uncertainty. So the government moved ahead with partial privatisation under its mixed ownership model (MOM). Furthermore, New Zealand wasn't insulated from the slump in commodity prices as a number of large global energy players have divested their assets in New Zealand. For example, Chevron's downstream operations offloaded its assets in New Zealand to petrol retailer Z Energy for $556 million; and recently Royal Dutch Shell signed a deal to divest its stake in a natural gas field to the local venture partner, Todd Energy.

Infrastructure is very active in New Zealand, especially in transport and social infrastructure, including schools and prisons. The National Infrastructure Unit was established in 2009 to deliver the government's objectives relating to infrastructure, and in 2015 it came up with a thirty year plan to address historic underinvestment. Furthermore, New Zealand's most populous city Auckland has come up with a unitary plan for the next 30 years to improve transport and address housing shortages. A lot of these projects are already in motion and the preferred method of delivery is through public-private partnerships (PPPs).

Projects include the City Rail Link, which is the largest project for New Zealand's largest city. Social infrastructure projects include the Schools III PPP project, the Waikeria Prison project, and the Auckland Prison PPP project. The government's Roads of National Significance (RoNS) programme includes the Transmission Gully PPP and the project to extend the state highway north of Auckland as part of the Upper North Island Strategic Alliance. There has also been a lot of work in Christchurch following the 2011 earthquake, with the city experiencing a construction boom as it is now designated as a rebuild zone.

Finally, New Zealanders share a strong sense of guardianship (kaitiaki-tanga) for the country's environment. The Resource Management Act (RMA), passed in 1991, is a significant piece of legislation that promotes the sustainable management of natural and physical resources such as land, air and water, and so environmental concerns play an integral part in most deals.

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Auckland International Airport second runway

Jurisdiction:
New Zealand
Deal type:
Project development
Industry sectors:
Transport; Construction and materials
Firms:
Russell McVeagh
Party: Auckland International Airport (Project developer)

Overview:
- Auckland International Airport has begun a large terminal redevelopment that includes the construction of a second runway by 2025.
- The airport is presently seeking approvals required to provide for the second runway as it's expected that in the next 30 years, the number of passengers will triple to 40 million and the number of flights every year will nearly double to 260,000 in 2044.
- As the primary gateway to New Zealand, the Airport is a strategic regional and national asset that is fundamental to the economic prosperity of the region and country.

Auckland City Rail Link

Jurisdiction:
New Zealand
Deal type:
Project development
Industry sectors:
Transport
Firms:
Bell Gully
Party: Auckland Transport (Sponsor)
Simpson Grierson
Party: Auckland Transport (Sponsor)

Overview:
- The NZ$3.5 billion City Rail Link project (CRL) is the largest infrastructure project ever undertaken in New Zealand.
- It involves building two 3.5km rail tunnels and two underground railway stations for metro trains from the existing Britomart station up to Mt Eden station. New stations will be built on Albert St (Aotea) and Karangahape Rd.
- Practically, it will create a link to enable trains to travel through the Britomart central railway station to and from the existing line at Mt Eden, enabling significantly faster, more frequent and more reliable services across the entire passenger rail network.
- The project is expected to be completed by 2024, and will be a major factor in shaping the city's future, enabling the rail system to support economic and population growth, helping Auckland to become a globally competitive city.

Auckland Prison PPP

Jurisdiction:
New Zealand
Deal type:
Project development; PPP
Industry sectors:
Social infrastructure
Firms:
Anderson Lloyd
Party: Next Step Partners Consortium (Project developer)
Bell Gully
Party: Department of Corrections (Grantor)
Corrs Chambers Westgarth
Party: Fletcher construction (Project developer)
Minter Ellison Rudd Watts
Party: Westpac New Zealand (Project developer); Westpac Banking Corporation (Project developer)

Overview:
- The Auckland Prison PPP project is a redevelopment of the prison that is starting with the replacement of the 261 bed maximum security facilities, commonly known as Auckland East.
- The prison's four existing maximum security units were built in 1968 and have reached the end of their shelf life, so the Department of Corrections has partnered with Next Step Partners to deliver the new facility though a design, build, finance and maintain (DBFM) public private partnership (PPP).
- The Next Step Partners Consortium is comprised of Next Step Partners, Fletcher Construction, Cushman & Wakefield, Public Infrastructure Partnerships, Westpac New Zealand, and Macquarie Capital New Zealand.
- The new facilities will be connected to Units 1 - 5 (Auckland West), providing greater opportunities to streamline operations.
- Construction of the new facilities at Auckland Prison is expected to be completed by the end of 2017, with the new facilities fully operational by June 2018, when decommissioning of the existing Auckland East will commence.
- The total maximum prison number at Auckland Prison will remain at 681; and the project is the fifth PPP procured in New Zealand.

Auckland Unitary Plan

Jurisdiction:
New Zealand
Deal type:
Project development
Industry sectors:
Social infrastructure
Firms:
Simpson Grierson
Party: Auckland Council (Project developer)
Buddle Findlay
Party: Auckland Council (Project developer)
Brookfields
Party: Auckland Council (Project developer)

Overview:
- Auckland Council is developing a new Unitary Plan for the Auckland region.
- As Auckland is the largest city in New Zealand, specific legislation was passed to fast-track the standard planning process for Auckland.
- The planning document incorporates twelve plans from eight councils in the Auckland region prior to amalgamation in 2010, and is the largest and most complex planning document to ever be undertaken in New Zealand.
- The Unitary Plan will help ensure Auckland manages its significant resources to meet the economic and housing needs of a growing population, not only for Auckland but for New Zealand.
- When finalised, the Plan will be the first ever combined regional policy statement, regional plan and district plan for Auckland.
- Auckland council released the recommendations for the region's long-awaited new plan on July 27, 2016.

Central Plains irrigation

Jurisdiction:
New Zealand
Deal type:
Project development, Project finance
Industry sectors:
Social infrastructure; Natural resources
Firms:
MinterEllisonRuddWatts
Party: ANZ (Lender); Westpac (Lender)

Overview:
- The Central Plains irrigation project is a large-scale proposal for water diversion, damming, reticulation and irrigation for the Central Plains of Canterbury, New Zealand.
- The scheme originated as a feasibility study jointly initiated and funded by Christchurch City Council and Selwyn District Council.
- It is one of the few true private project financing transactions in New Zealand in recent years, with stage II of the project involving project financing for a 20,000ha expansion of the scheme.
- Stage II closed in December 2016 at NZ$219 million, while stage I completed in 2015 at NZ$180 million.

East West Connections

Jurisdiction:
New Zealand
Deal type:
Project development
Industry sectors:
Transport
Firms:
Buddle Findlay
Party: New Zealand Transport Authority (Project developer)

Overview:
- The East West connections project is a programme aimed at improving commuter travel, public transport, freight efficiency, and walking and cycling options in the area between Onehunga, East Tamaki, and Auckland Airport.
- Two priority projects are currently underway: new connections to State Highways 1 and 20 at Onehunga-Penrose, and bus, truck and bicycle transit lanes between Māngere, Ōtāhuhu and Sylvia Park.
- The indicative business case and public consultation for the priority projects was completed in July 2015.

Iron Sands

Jurisdiction:
New Zealand
Deal type:
Project development
Industry sectors:
Mining
Firms:
Bell Gully
Party: Trans-Tasman Resources (Project developer)
Russell McVeagh
Party: Origin Energy

Overview:
- Trans-Tasman Resources (TTR) has been trying to develop a billion-dollar Iron Sands dredging business within a few years off the west coast of the North Island.
- The project involves a 6,319 square km area off the West Coast of the North Island of New Zealand where iron sands will be dredged from the seabed, processed on floating platforms and shipped overseas, while the tailings will be returned to the seabed.
- An initial fast track production of 5 million metric tonnes annually (Mta) of titanomagnetite (TiFe) concentrate is proposed over approximately 18 months of mining, and TTR intends to be in full production in 2.5 to 4.5 years.
- The ultimate target is 50Mta of TiFe concentrate. The proposed volumes, and nature, of extraction are unprecedented in New Zealand.
- The proposed mining operation overlaps an existing petroleum mining licence and the Kupe Gas Field, which poses significant risks to existing operations of the Kupe Field, particularly increasing vessel collision risks with the Wellhead Platform.
- On February 16, 2017 TTR made a second attempt to obtain consents after a decision-making committee appointed by the EPA ruled in 2014 that the environmental impacts of the proposal were too difficult to gauge on the evidence available.

Kaiwera Downs 240MW wind farm

Jurisdiction:
New Zealand
Deal type:
Project development
Industry sectors:
Energy
Firms:
Anderson Lloyd
Party: TrustPower (Project developer)

Overview:
- The Kaiwera Downs Wind Farm is a proposed wind farm owned and operated by TrustPower to be located in the Southland region of New Zealand.
- It is expected to have a maximum capacity of 240MW and use up 83 turbines supplied by a Chinese turbine supplier.
- The proposed wind farm would be built in stages, with a projected total cost of NZ$440 million, and at full capacity could supply the equivalent of 113,000 homes.
- If this project is sanctioned, it will be the first major wind farm development to be sanctioned in New Zealand since the 2015 agreement between the New Zealand Aluminium Smelters and Meridian Energy, which has led to significant uncertainty in the New Zealand electricity market.

Petone - Grenada link road

Jurisdiction:
New Zealand
Deal type:
Project development
Industry sectors:
Transport
Firms:
Buddle Findlay
Party: New Zealand Transport Agency (Grantor)

Overview:
- Petone to Grenada link road is a project that aims to reduce congestion on the busiest part of the Wellington Northern Corridor between Grenada and Wellington and help optimise and realise the benefits of the other improvements being made to the Wellington State Highway network.
- The project is in the investigations phase and New Zealand Transport Agency (NZTA) has been continuing to refine its proposals for the new Petone to Grenada Link Road route and designs for the Petone and Tawa Interchanges.
- A new interchange at Petone, a key bottleneck, aims to make journeys faster along SH2 and the Esplanade, and generally it is expected that 550 jobs will be created as a result of increasing access to other job markets.

Pūhoi - Warkworth road PPP

Jurisdiction:
New Zealand
Deal type:
Project developmen;, PPP
Industry sectors:
Transport
Firms:
Bell Gully
Party: New Zealand Transport Agency (Grantor)
Anderson Lloyd
Party: Macquarie Capital (Sponsor); Northern Express Group (Sponsor); HRL Morrison & Co (Sponsor); Accident Compensation Corporation (Sponsor); Fletcher Building (Sponsor); AccionConcesiones (Sponsor)
Ashurst
Party: The Fletcher Building (Sponsor); Acciona Building Construction (Sponsor)
Chapman Tripp
Party: New Zealand Transport Agency (Grantor)
King & Wood Mallesons
Party: Macquarie Group Holdings New Zealand (Sponsor)

Overview:
- The Pūhoi to Warkworth road PPP project will extend the four-lane Northern Motorway (SH1) 18.5km from the Johnstone's Hill tunnels to just north of Warkworth.
- It is another project under New Zealand's roads of national significance (RoNS) programme using a PPP model and follows on from the Transmission Gully PPP project.
- It is the second PPP project for road infrastructure in New Zealand.
- The new RoNS is a key transport link connecting the north to the upper North Island freight triangle of Auckland, Waikato and Tauranga.

Ruataniwha dam and canal network

Jurisdiction:
New Zealand
Deal type:
Project development
Industry sectors:
Construction and materials; Social infrastructure
Firms:
Kensington Swan
Party: Obrascon Huarte Lain (Contractor)
Bell Gully
Party: Hawke's Bay Regional Investment Company (Project developer)

Overview:
- Ruataniwha is New Zealand's largest ever proposed water storage scheme involving a dam with a hydroelectric generator attached, and a primary distribution network that included a 16km canal and some high-capacity pipe.
- The design standard at 95% reliability amounts to 104 million cubic metres of water, and the scheme was a long-term sustainable water supply solution for Central Hawke's Bay and part of a wider programme to better manage water resources in the Tukituki Catchment.
- The dam's aim was to provide significant benefits to agricultural productivity in the area, but the project has been wound up due to action by Forest & Bird.

Schools III PPP

Jurisdiction:
New Zealand
Deal type:
Project development; Project finance
Industry sectors:
Social infrastructure
Firms:
Kensington Swan
Party: CPB Contractors (Joint venture partner); Southbase Contractors (Joint venture partner)
Bell Gully
Party: Ministry of Education (Grantor)

Overview:

- The Schools III PPP Project is a NZ$200 million project initiated by the Ministry of Education that will be the third schools PPP in New Zealand.
- The project involves the design, construction, financing and maintenance of a minimum of five schools around the country: Sylvester Primary (Hamilton), Flat Bush South East Primary (Auckland), Kumeu Primary (Auckland), Shirley Boys' High (Christchurch) and Avonside Girls' High (Christchurch).
- There is also the likelihood of other schools being added such as the Scott Point Primary (Auckland) and Marlborough Girls' & Boys' Colleges (Marlborough).
- The project follows the successful Hobsonville Schools PPP and the Schools II PPP project which reached financial close in 2015.

Tāmaki redevelopment

Jurisdiction:
New Zealand
Deal type:
Project development
Industry sectors:
Social infrastructure
Firms:
Simpson Grierson
Party: Tāmaki Redevelopment Company (Project company)
Kensington Swan
Party: Universal Homes (Project developer)

Overview:

- The Tāmaki Redevelopment Company (TRC) was established in 2012 and is jointly owned by the New Zealand Government and Auckland Council. It is responsible for the urban regeneration of Tāmaki, a large suburban area in east Auckland comprising more than 600 hectares and multiple suburbs.
- A consortium will be appointed to develop the land and build both private (mixed tenure) and social houses. Whilst the developer will sell off the private housing, the social housing will be transferred to a social arm of a consortium to be managed for a concession period of 25 years.
- The project includes social, economic, education and housing initiatives designed to make Tāmaki a thriving and prosperous community. It will be the biggest urban transformation in New Zealand and will be ongoing over the next 20 to 25 years.
- The project is in its first phase of development and the government has given the TRC a NZ$200 million loan facility to speed up new housing development in Auckland's eastern suburbs.
- One of the most important objectives is to increase the number of houses in Tāmaki by building new affordable, healthy and safe homes. The intention is to add up to 7500 homes in the area while developing quality neighbourhoods and street networks. Another objective is to revitalise town centres, improve walking and cycling connections and reconfigure some of the parks to create more useable open space for recreation.

Te Ahi Au Maui geothermal power plant

Jurisdiction:
New Zealand
Deal type:
Project development
Industry sectors:
Energy
Firms:
Buddle Findlay
Party: Ormat Systems (EPC Contractor)
Chapman Tripp
Party: Te Ahi O Maui Limited Partnership (Project developer)

Overview:

- The Te Ahi Au Maui geothermal power plant is a project that envisages the construction of a new geothermal power station, the first new plant to be contracted in New Zealand in recent years and the first for the sponsor, Eastland Energy.
- The Te Ahi O Maui geothermal project is a partnership between Eastland Generation and the Kawerau A8D Ahu Whenua Trust.
- Once operational, the power station will generate 25MW net of electricity to power 25,000 homes.
- The project is located 2.3km north-east of the Kawerau township, in the Whakatāne district, on land owned by the Kawerau A8D Ahu Whenua Trust.
- The project seeks to maintain the sustainability of the geothermal reservoir, with at least 70% of the extracted geothermal fluids being re-injected back into the reservoir.

Tihiroa 360MW gas power plant

Jurisdiction:
New Zealand
Deal type:
Project development
Industry sectors:
Energy; Oil and gas
Firms:
Bell Gully
Party: Nova Energy; Transpower

Overview:
- A 360MW gas power plant is planned for development at Tihiroa, near Otorohanga in the Waikato district.
- Nova Energy and Transpower New Zealand are seeking a designation for a transmission line which will connect the power plant to the national grid.
- The plant is intended to provide electricity to supplement intermittent generation from renewable sources and to support the national grid during periods of peak electricity demand.

Transmission Gully PPP

Jurisdiction:
New Zealand
Deal type:
Project development; PPP
Practice area:
Industry sectors:
Transport
Firms:
Bell Gully
Party: New Zealand Transport Agency (Grantor)
Simpson Grierson
Party: CPB Contractors (Joint venture partner); HEB Construction (Joint venture partner); VINCI Construction Terrassement (Joint venture partner)
Herbert Smith Freehills
Party: Wellington Gateway Partnership consortium (Sponsor)

Overview:
- The Transmission Gully PPP project involves constructing a 27km four-lane - two in each direction -motorway from MacKays to Linden, with interchanges at MacKays Crossing, SH58, eastern Porirua (James Cook), and at Kenepuru.
- The project is part of the Wellington Northern Corridor and is a vital cog in the region's transport system, and is designed to provide a critical and resilient lifeline to Wellington in the event of an earthquake or other major disruption.
- Transmission Gully is the first roading project in New Zealand procured through a Public Private Partnership (PPP) model, where the New Zealand Transport Agency (NZTA) has set performance targets for Wellington Gateway Partnership (WGP) on elements such as seismic resilience, incident response, and trip time reliability.
- The project is part of the roads of national significance (RoNS) programme that is key to the government's National Infrastructure Plan and financial close for the design, construction, and financing was obtained on 29 July 2014 with completion scheduled for April 30, 2020.

Waikeria Prison

Jurisdiction:
New Zealand
Deal type:
Project development; PPP
Industry sectors:
Social infrastructure
Firms:
Bell Gully
Party: Department of Corrections (Grantor)
Kensington Swan
Party: CPB Contractors (Bidder)

Overview:
- The New Zealand government is looking at a new PPP for a prison in the Waikato region.
- The Waikeria Prison Project will involve the design, build, financing and maintenance of the prison for a 25 year period, with 1,500-2,000 prisoner places.
- It is the Department of Corrections' third PPP project for the design, construction, finance and maintenance of a new prison, following the Auckland South Corrections Facility and the Auckland (Paremoremo) Prison.

New Zealand

Project finance transactions which reached financial close in 2016
(Data provided by IJ Global)

Name	Transaction type	Sector	Sub sector	Value
Tilt Renewables Wind Assets Refinancing	Refinancing	Financial close	Renewables	$584 million
Vector Gas Additional Facility	Additional Facility	Financial close	Oil & Gas	$153 million

Southeast Asia

Cambodia

Cambodia was among the least countries in the region in the past 12 months. The economy is growing but the country continues to lack the infrastructure required for the energy sector to match the pace of development. The Ministry of Industry Mines and Energy forecast the country's electricity consumption will grow annually at 9.4% until 2020. As a developing country, scaling up the availability of low price energy services is key in improving social equity and meeting Cambodia's development targets.

Indonesia

The outlook for Indonesia's infrastructure and power sector is generally positive, and the government's infrastructure budget 2017 sought to allocate Rp44.9 trillion to the Ministry of Transportation and Rp3.8 trillion to the Ministry of Energy and Mineral Resources, showing a 13% and 3% increase from the 2016 budget. These statistics show that infrastructure remains to be a top priority for the Jokowi administration.

In the energy sector, the country receives investor interest particularly from independent power producers (IPPs) in China, South Korea and Japan. Indonesia still depends heavily on oil to produce electricity and large scale coal-fired plant projects have been catching most of the media attention in recent years, including the 2x1050MW Jawa 7 coal-fired power plant in Banten, and the Central Java Power Plant that finally passed through its land acquisition stage and reached financial close in June 2016. Electricity demand will continue to increase, and according to Perusahaan Listrik Negara (PLN), the state-owned power producer and transmission system operator, electricity consumption is forecasted to reach more than 464TWh by 2025.

In the first 2016 revised budget, there was an increase of 9% in planned infrastructure spending from the 2015 budget. The government also raised planned infrastructure spending in the 2017 draft. The Jokowi administration will continue to invest in infrastructure projects over the period to 2019 but as the country's economy matures, it is believed that the expenditure in infrastructure will fall. Infrastructure projects addressed in the 2017 state budget cover the construction of 815 km of roads, 9,399 metres of bridges and 14 new airports.

As for the private sector, policy reforms and legislation have been put in place to encourage public-private partnerships (PPPs). For example, by expanding eligible sectors, limiting land acquisition procedure to 583 days and enabling revocation of land rights in the public interest. This last is particularly significant as projects, such as the Central Java Power Plant, were held up by long land acquisition disputes in the past. The Ministry of Finance (MoF) has formed a PPP unit to oversee projects. Most importantly, the Indonesian government = has emphasised projects that demonstrate strategic value to the country's economy.

There are challenges for developing projects in Indonesia. Currency risk is still a concern for foreign investors in Indonesia. The Bank of Indonesia introduced regulation forcing some projects, including ports and airports, to collect revenue in Rupiah. Procurement processes are also unclear and not transparent.

Laos

In Laos, infrastructure development for transportation connectivity, telecommunications, power, education and healthcare will be the focus of the ADB as it continues to assist Laos for the foreseeable future. 2017 By end of 2016, ADB's assistance to Laos reached $2.57 billion in loans, grants and technical assistance, of which $2.41 billion was for 93 loan projects and 52 grant projects.

The market in Laos used to see participation of niche developers, but now it is competitive to find good projects and investors are expanding existing projects rather than exploring greenfield opportunities.

Malaysia

Malaysia's eleventh five-year plan (11MP) for 2016-2020 anticipated real construction activity to grow by 8.4% in 2016, which is a large jump from approximate 5% the sector had historically been accustomed to. Under 11MP the country will spend over RM28 billion ($6.9 billion) on construction contracts over five years with a projected 10.3% annual expansion of the sector. There are four construction-related strategies detailed in the 11MP, namely: enhancing knowledge content, driving productivity, fostering sustainable practices in the construction value chain, and increasing internationalisation of the sector.

The country's 2016 budget allocated RM40 billion ($9.9 billion) for public transport infrastructure, primarily for expanding railways and bus transit systems. One of the country's largest infrastructure projects is the RM27 billion ($6.7 billion) Penang transport masterplan which involves building monorail and tram lines, two LRT lines and a rail line and a bus rapid transit system. Other ongoing rail projects include LRT3, which will cost approximately $2.5 billion and is estimated to run in 2020; and in southern Malaysia, the planned Johor Bahru-Singapore rapid transit system (RTS) is expected to be operational by 2018.

For the energy sector, the most high-profile project is the Pengerang Integrated Petroleum Complex (PIPC), which started in 2012. The PIPC is expected to add value to the downstream oil and gas segment, which should in turn benefit from lower oil prices. Under PIPC, the Refinery and Petrochemical integrated development project (RAPID) is by far the biggest that is underway in Malaysia.

Since a lot of Malaysian companies focus on the upstream market, the oil price crisis has had an impact on the sector and businesses are looking forward to more favourable conditions. At the same time there are also less projects taking final investment decisions in this lower oil price environment. On the other hand, there are more assets in the market for sale. For example, Shell is looking to sell its interest in Malaysian LNG projects, and Petronas is looking to sell one of its upstream assets in Malaysia. These types of acquisitions are more likely to happen now than last year as market conditions are more stable.

Foreign investors might be concerned by the latest scandal concerning 1 Malaysian Development Berhad (1MDB) where it is believed that more than $1 billion had entered Malaysian Prime Minister Najib Razak's personal bank accounts and much of it from 1MDB. As such, investors may choose to remain cautious when considering tapping into the Malaysian market.

Myanmar

Foreign investors have been increasingly interested in Myanmar. According to the Asian Development Bank (ADB), only 38.9% of Myanmar's road network is paved, which is an astonishing shortfall in one of the largest countries in Southeast Asia. The ADB estimates that Myanmar should budget between $10 billion and $15 billion per year on infrastructure and social spending through to 2030.

The national press in Myanmar reported that a new energy master plan is expected to be disclosed for the Yangon Region in the coming months. That region itself accounts for almost half of all electricity produced across the country.

There was also a new investment law that was enacted in October 2016 which aims to further open the country to foreign investment and to provide clarity and equal treatment of foreign and domestic investors. However, Myanmar's legal system lacks transparency, and the legislative and regulatory climate is at best uncertain, which continues to leave investors wary as they need to consult relevant government authorities routinely for clarity.

The Myanmar and Yangon authorities are interested in attracting foreign investment and technical know-how to the energy sector in order to resolve the shortfall of energy supply within the country, as well as to establish associated transmission lines and other relevant infrastructure.

Philippines

Ever since privatisation began in 2007, the Philippines has developed a strong history of private sector participation in the power sector. It is Asia's most well-developed and liberalised energy market, and the country has some very strong domestic independent power producers (IPPs), namely Ayala, Aboitiz, San Miguel, and Lopezes.

Although the Philippines is open for business, foreign banks are not as active as before because the local banking market is very liquid and has been developing an appetite for power projects. However, the single borrower limit has been an issue for the big Philippines IPP conglomerates.

The World Bank Group (WBG) partnership with the Philippines spans nearly 60 years. Up until March 2017, the bank's active portfolio in the Philippines consisted of 12 operations. The most recent project approved by the World Bank Board of Executive Directors is the Metro Manila Bus Rapid Transit Project, which is the first IBRD project under the new administration.

On the infrastructure side, there is still a deficit as the total expenditure on infrastructure in the past five years ranged between 2% and 2.5% of the country's gross domestic product, which was well below the 5% projection under the government's 2013-2016 development plan. Nevertheless, the Philippines enjoys an advantage for its well-developed legal system and the government's effort in providing transparency and legal certainty when compared to other Southeast Asian countries. Some ongoing high profile projects include the North-South Railway, the MRT-7 project, and the $2.28 billion regional airports project.

Singapore

Singapore has a favourable business framework, an advanced legal system, and very low political or commercial risks. In 2016, the country was ranked second, just after New Zealand in the World Bank's 'Ease of Doing Business' index. While there are projects happening, including the Jewel Changi Airport and plans to extend the nation's mass transit system, opportunities for investment are rather limited when compared to the nearby emerging markets in Asia. That is mainly due to the existing well-developed infrastructure in place.

Thailand

Infrastructure spending in Thailand is expected to reach $58.5 billion a year by 2025. The government announced in 2014 that it would pursue $75 billion in infrastructure projects over a period of eight years. The country is open to foreign investment and generally has a clear approvals procedure, while the regulatory systems are relatively transparent in comparison to other countries in Southeast Asia. Yet, corruption is common among civil servants and the country has endured political instability in recent years.

Vietnam

An increasing population, rapid urbanisation, and fast growing economic activities in the industrial and service sectors are putting pressure on energy supplies in Vietnam. The country has large reserves of primary energy resources including coal, oil, natural gas, and water for hydropower generation. Its national energy development strategy 2020, which was approved in 2007, has the following objectives: ensure national energy security; supply sufficiently high-quality energy for socioeconomic development; exploit and manage domestic primary energy resources efficiently; diversify energy investments and business models; establish and develop a competitive energy market to promote new and renewable energy sources; and develop energy resources effectively and sustainably with consideration for environmental protection. The Ministry of Industry and Trade (MOIT) is the country's energy sector institution.

The issuing of Vietnam's sovereign guarantees and undertakings (GGU) has been tightened from 1 March 2017. Decree No.04/2017/ND-CP (Decree 04) has now replaced Decree No.15/2011/ND-CP (Decree 15). The rationale of this new GGU regime is to control public debt. A possible result of this new development is that domestic investors in the energy and infrastructure sector may consider using more traditional public-private partnership (PPP) structures that have been overlooked in Viet-

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Sunseap Group 10MW photovoltaic power plant PPP

Jurisdiction:
Cambodia
Deal type:
Project development
Industry sectors:
Energy
Firms:
VDB Loi
Party: Asian Development Bank (Lender)
DFDL
Party: Sunseap Asset (Borrower)

Overview:
- Singapore solar company Sunseap Group has won a government tender to build the first industrial-scale solar farm in Cambodia that will be connected to the national grid.
- It will be built 10 km away from Bavet, a special economic zone of Cambodia in the Svay Rieng province.
- Sunseap has entered into a 20-year power purchase agreement with the state electricity regulator Electricite du Cambodge under a public-private partnership (PPP) arrangement.
- The solar farm is expected to commence operation by August 2017 and is expected to reduce Cambodia's greenhouse gas emissions by 5,500 tonnes of Co2 a year.

Bojonegara LNG receiving terminal

Jurisdiction:
Indonesia
Deal type:
Project development
Industry sectors:
Energy
Firms:
Linklaters
Party: Pertamina (Project developer); Kalla Group (Project developer)

Overview:
- Bojonegara LNG receiving terminal is a 4 million mt/year LNG receiving terminal being developed in Banjarnegara, Baten, by Kalla Group and Japanese investors.
- The terminal will have a capacity of 500 million standard cubic feet per day, equal to 4 million tons of LNG.
- Bumi Sarana Migas, Kalla Group's subsidiary, will be responsible for constructing the terminal.
- Funding for the project will come from shareholders and loans from Japanese government financial institutions and Japanese banks.

Central Java 2000MW coal power plant

Jurisdiction:
Indonesia
Deal type:
Project development
Industry sectors:
Energy
Firms:
Milbank Tweed Hadley & McCloy
Party: Japan Bank of International Corporation (Lender); Bank of Tokyo-Mitsubishi UFJ (Lender)
Shearman & Sterling
Party: Bhimasena Power Indonesia (Project developer)
Ali Budiardjo Nugroho Reksodiputro
Party: Japan Bank of International Corporation (Lender)
Mochtar Karuwin Komar
Party: Bhimasena Power Indonesia (Project developer)

Overview:
- A 2000MW plant in Central Java, this is Indonesia's first ultra-supercritical coal-fired power plant, one of the largest in Asia, and also one of the largest independent power producers (IPP) in Asia.
- Japan Bank of International Corporation (JBIC) alone contributed over $2 billion of the $3.4 billion loan, while the other lenders included the Bank of Tokyo-Mitsubishi UFJ, Mizuho Bank, Sumitomo Mitsubishi Banking Corporation, DBS Bank, Oversea-Chinese Banking Corporation, Sumitomo Mitsui Trust Bank, Mitsubishi UFJ Trust and Banking Corporation, Shinsei Bank, and Norinchukin Bank.
- Bhimasena Power Indonesia (BPI) is the builder and operator of the coal power project and the company is a joint venture established by Adaro Energy, Itochu and Electric Power Development (J-Power).

Cirebon 2 1000MW power plant

Jurisdiction:
Indonesia
Deal type:
Project development
Industry sectors:
Energy
Firms:
Makarim & Taira S
Party: Marubeni Corporation (Project company); Cirebon Energi Prasarana (Project company)

Overview:
- The Cirebon 2 power plant, also known as the Cirebon expansion project, will have a capacity of 1000MW and will deploy ultra-supercritical technology.
- The power plant will be located to the east of the current Cirebon 1 site, and has lenders such as the Japan Bank for International Cooperation and the Export–Import Bank of Korea.
- This project was guaranteed through a Business Viability Guarantee Letter from the Minister of Finance, and will account for 6% of the Indonesian Government's stated goal to generate 35,000MW of power generation by 2019.

Cilacap refinery upgrade

Jurisdiction:
Indonesia
Deal type:
Project development
Industry sectors:
Energy; Oil & gas
Firms:
White & Case
Party: Saudi Aramco (Sponsor)

Overview:
- Saudi Aramco has signed an agreement with Pertamina (Persero), Indonesia's state-owned oil and gas company, to upgrade the Cilacap Refinery in Indonesia with a cost of $5 billion.
- The project is part of the Indonesian government and Pertamina's Refinery Development Master Plan.
- The Cilacap Refinery is located in central Java, and once the upgrade is complete, the refinery will have the capacity to process 400,000 barrels of crude oil per day.

Indonesia-Malaysia HVDC transmission Line

Jurisdiction:
Indonesia
Deal type:
Project development
Industry sectors:
Energy
Firms:
Hiswara Bunjamin & Tandjung
Party: Tenaga Nasional (Project developer)

Overview:
- The Indonesia-Malaysia High Voltage Direct Current (HVDC) Transmission Line is an initiative where Malaysia and Indonesia will share power through an interconnecting transmission line.
- The current power exchange between the two countries is merely 1MW, and this project will cover two transmission lines: South Sumatra to the Malaysian peninsula, and West Kalimantan to Sarawak.
- A subsea cable, with the capacity of 250kV HVDC will connect the Sumatra-Malaysia transmission line, which is expected to start operations in 2017.

Muara Laboh 2x110MW geothermal power plants

Jurisdiction:
Indonesia
Deal type:
Project development
Industry sectors:
Energy
Firms:
Latham & Watkins
Party: JBIC (Lender)
Hadiputranto Hadinoto & Partners
Party: Supreme Energy Muara Laboh (Project developer)
Milbank Tweed Hadley & McCloy
Party: JBIC (Lender)
Ali Budiardjo Nugroho Reksodiputro
Party: JBIC (Lender)
Baker McKenzie Wong & Leow
Party: Supreme Energy Muara Laboh (Project developer)

Overview:
- The Muara Laboh 2x110MW geothermal power plant project is the first internationally financed project to be developed under the new geothermal regulatory regime introduced by the government in 2003.
- A consortium of Supreme Energy, IPR-GdF Suez and Sumitomo Corporation was awarded the rights to develop the project in Muara Laboh, Solok Selatan Regency, West Sumatra, Indonesia.
- The project was the first to receive the Business Viability Guarantee from the Ministry of Finance (being a form of government support permitted under the second fast track programme regulatory framework).
- Construction of the geothermal plant began in late 2015 and electricity production is expected to commence by mid-2018.

Tanjung Priok port expansion

Jurisdiction:
Indonesia
Deal type:
Project development
Industry sectors:
Transport
Firms:
Herbert Smith Freehills
Party: Pelindo II (Sponsor); Mitsui & Co (Sponsor)
Hiswara Bunjamin & Tandjung
Party: Pelindo II (Sponsor); Mitsui & Co (Sponsor)

Overview:
- The $2.5 billion expansion of Tanjung Priok port will make it Indonesia's largest industrial port, and triple its annual capacity.
- The overall capacity of the completed port will be 19.5 million TEUs of containers per year.
- The project is divided into three phases.
- The port is anticipated to be fully operational in 2023, and the operators and sponsors are Pelindo II and Mitsui & Co.

Panca Amara utama ammonia plant

Jurisdiction:
Indonesia
Deal type:
Project development
Industry sectors:
Energy
Firms:
Mayer Brown
Party: International Finance Corporation (Lender)

Overview:
- The Panca Amara $830 million utama ammonia plant is a project to construct a greenfield ammonia plant in Sulawesi that will have a capacity of 700,000 metric tons of ammonia per annum or 2,000 MT per day.
- The plant is operated by Panca Amara Utama (PAU) and is one of the International Finance Corporation's (IFC) largest greenfield projects in the last decade.
- The project is funded through a $512 million debt package consisting of a $97 million IFC A loan and a $415 million IFC B loan funded by ANZ, HSBC, Korea Development Bank, OCBC, Standard Chartered Bank, SMBC and United Overseas Bank.
- The plant will be built on a 192-hectare site near a gas field jointly operated by Pertamina and energy company Medco Energy International, with commercial operation due in the last quarter of 2017.

Sarulla Operations 330MW geothermal power plant

Jurisdiction:
Indonesia

Deal type:
Project development, Project finance

Industry sectors:
Energy

Firms:
Milbank Tweed Hadley & McCloy
Party: Sarulla Operations (Project developer)

Overview:

- The Sarulla Operations 330MW geothermal plant is located in the Tapanuli Utara district, in North Sumatra province, Indonesia.
- It is the largest single-contract geothermal power project in Indonesia to date, and is owned and will be operated by Sarulla Operations, a consortium that includes Medco Energi Internation (27.5%), Ormat Techologies (12.75%), Itochu (25%) and Kyushu Electric (25%). The consortium has a joint operating contract with the concession holder Pertamina Geothermal Energy (PGE), whose parent company is Pertamina, a state-owned oil and gas company.
- The power plant will be constructed in three phases of 110MW each. Phase one started in 2014 and the other two phases are expected to be commissioned in 2017 and 2018.
- The project reached financial close in May 2014, and received a loan of $492 million from the Japan Bank for International Cooperation (JBIC) in March 2014. Other lenders including Asian Development Bank (ADB), Bank of Tokyo-Mitsubishi UFJ, ING Bank, Societe Generale, Sumitomo Mitsui Banking Corporation, Mizuho Bank and National Australia Bank.

Sidrap 75MW wind farm

Jurisdiction:
Indonesia

Deal type:
Project development

Industry sectors:
Energy

Firms:
Baker McKenzie Wong & Leow
Party: UPC Renewables (Project developer); AC Energy Holdings (Project developer)
Hadiputranto Hadinoto & Partners
Party: UPC Renewables (Project developer); AC Energy Holdings (Project developer)

Overview:

- The Sidrap 75MW wind farm Project is Indonesia's first wind project to reach financial close, and it is located in South Sulawesi.
- It is funded through equity financing from UPC and AC Energy, a subsidiary of Philippines conglomerate Ayala, as well as project financing from the Overseas Private Investment, the US government's development finance institution, and Bank Sumitomo Mitsui Indonesia, the Indonesian unit of Japan's Sumitomo Mitsui Banking.
- The project is part of the Indonesian government's 35,000MW programme to install said capacity of new electrical generation in Indonesia by 2019.

Sumsel-1 2x300MW coal power plant

Jurisdiction:
Indonesia

Deal type:
Project development

Industry sectors:
Energy

Firms:
Makarim & Taira S
Party: China Shenhua Energy (Sponsor)

Overview:

- Sumsel-1 power station, also known as South Sumatra 1, consists of 2x300MW super-critical coal-fired generators in South Sumatra Province, 100 km away from northwest Jakarta.
- The project was awarded to China Shenhua in January 2016 on a building-owning-operating (BOO) basis.
- The commercial operation date is expected to be in 2020.

Tangguh Train 3 LNG plant expansion

Jurisdiction:
Indonesia
Deal type:
Project development
Industry sectors:
Energy
Firms:
Linklaters
Party: BP (Sponsor)
Latham & Watkins
Party: Satuan Kerja Khusus Pelaksana Kegiatan Usaha Hulu Minyak dan Gas Bumi (Project developer)
Widyawan & Partners
Party: BP (Sponsor)

Overview:
- The Tangguh natural gas liquefaction facility (Tangguh) has been operating in West Papua, Indonesia's least developed region, since 2009. The two existing trains (Train 1 and 2) were financed by Asian Development Bank, JBIC and International Commercial Bank in 2007.
- Train 3 is now undergoing expansion and is expected to commence production in 2020, with 40% of the production being committed to PLN (the Indonesian national electric utility) under a long term sales and purchase agreement.
- The sponsors are led by BP. BP and its affiliates in Indonesia hold a 37.16% stake in the project, followed by MI (16.30%), CNOOC Muturi (13.90%), Nippon Oil Exploration (12.23%), KG Berau Petroleum and KG Wiriagar Petroleum (10.00%), Indonesia Natural Gas Resources Muturi (7.35%), and Talisman Wiriagar Overseas (3.06%).

Tanjung Jati B 5&6 2000MW power plant

Jurisdiction:
Indonesia
Deal type:
Project development
Industry sectors:
Energy
Firms:
Latham & Watkins
Party: Japan Bank for International Cooperation; Sumitomo Mitsui Banking Corporation; The Bank of Tokyo-Mitsubishi UFJ; Mizuho Bank; Sumitomo Mitsui Trust Bankl; Mitsubishi UFJ Trust and Banking Corporation; Oversea-Chinese Banking Corporation; Norinchukin Bank
Ali Budiardjo Nugroho Reksodiputro
Party: Japan Bank for International Cooperation; Sumitomo Mitsui Banking Corporation; The Bank of Tokyo-Mitsubishi UFJ; Mizuho Bank; Sumitomo Mitsui Trust Bank; Mitsubishi UFJ Trust and Banking Corporation; Oversea-Chinese Banking Corporation; Norinchukin Bank

Overview:
- The Tanjung Jati B 5&6 2000MW Power Project is an expansion project that concerns two 1000MW ultra super-critical power plants.
- Bhumi Jati Power is the project company that will operate and maintain the power plants and supply electricity over a period of 25 years, while Sumitomo Corporation, the Kansai Electric Power Company and United Tractors are the sponsors.
- The lender syndicate includes Japan Bank for International Cooperation, Sumitomo Mitsui Banking Corporation, The Bank of Tokyo-Mitsubishi UFJ, Mizuho Bank, Sumitomo Mitsui Trust Bank, Mitsubishi UFJ Trust and Banking Corporation, Oversea-Chinese Banking Corporation and the Norinchukin Bank.

Umbulan water processing facility PPP

Jurisdiction:
Indonesia
Deal type:
Project development, PPP
Industry sectors:
Utilities
Firms:
Ginting & Reksodiputro
Party: Indonesia Infrastructure Guarantee Fund

Overview:
- Indonesia Infrastructure Guarantee Fund (IIGF) has signed an agreement with Meta Adhya Tirta and a recourse agreement with East Java Provincial Government to develop the Umbulan Water Processing Facility.
- The water processing facility has a capacity of 4,000 litre/second and is built under a public-private partnership (PPP) scheme between the parties.
- The project aims to increase the supply of clean water in the main regions of East Java, including Surabaya, Sidoarjo, Gresik, Pasuruan and Pasuruan city.
- The project is one of the Strategic Infrastructure Projects of the Indonesian government and aims to start operation in 2019.

Well Harvest Ketapang Smelter

Jurisdiction:
Indonesia
Deal type:
Project development
Industry sectors:
Mining
Firms:
Orrick Herrington & Sutcliffe
Party: China Hongqiao Group (Sponsor)

Overview:
- Well Harvest Winning Alumina Refinery – a joint venture between Indonesian conglomerate Harita Group and China's Hongqiao Group – started construction of its $1 billion smelter in Ketapang, West Kalimantan.
- The project will run through two phases, and on completion, there will also be six 80MW coal-fired power plants built.
- Harita sold a 60% stake in this project to China Hongqiao Group in 2014 while retaining the rest of the 25% share. Well Harvest received a $330 million loan in 2014 from a syndicate of banks led by DBS and OCBC.
- This is the first alumina smelter in Indonesia.

Kansai Xe Katam 61MW hydroelectric power plant

Jurisdiction:
Laos
Deal type:
Project development
Industry sectors:
Energy
Firms:
Allen & Overy – Stephen Jaggs
Party: Kansai Electric Power Company (Sponsor)

Overview:
- The Kansai Xe Katam project is a 61MW BOT greenfield hydropower project located Champasak.
- The commissioning year of the project is 2012, and Kansai Electric Power holds 55% ownership.

Nam Theun-1 600MW hydroelectric power plant

Jurisdiction:
Laos
Deal type:
Project development
Industry sectors:
Energy
Firms:
Allen & Overy
Party: Phonesack Group (Sponsor); Electricity Generating Public Company (Project developer)

Overview:
- Nam Theun-1 600MW hydropower palnt is a $750 million project being built downstream from the Nam Theun-2 and Theun-Hinboun dams.
- Electricity will be exported to the Electricity Generating Authority of Thailand (EGAT).
- This will be the first cross-border project where a non-governmental Laos company, Phonesack Group, is involved as a sponsor.

Xe Pian & Xe Namnoy 410MW hydropower plant

Jurisdiction:
Laos
Deal type:
Project development
Industry sectors:
Energy
Firms:
Allen & Overy
Party: SK Engineering and Construction (Sponsor); Korea Western Power (Sponsor); Ratchaburi Electricity Generating Holding Public Company (Sponsor); Lao Holding State Enterprise (Sponsors)
DFDL
Party: Krung Thai Bank (Lead arranger); Bank of Ayudhya (Lender); Export-Import Bank of Thailand (Lender); Thanachart Bank (Lender)

Overview:
- The Xe Pian & Xe Namnoy hydropower plant project is a joint venture between the government of Laos and a consortium of private sector sponsors, and it has been developed under the power development cooperation scheme between Laos, Thailand and the Republic of Korea.
- The plant is expected to have a nominal capacity of 410MW and an estimated annual energy generation of 1,860GWh.
- The project is located 500 km southeast of Vientiane.
- It is the first major investment by Korean sponsors in the Laos energy sector.
- Operation will start in 2019 with 90% of the plant's capacity to be sold to Egat, and the remaining to Electricité du Laos (EDL) under long-term power purchase agreements.

Baleh 1285MW hydroelectric power plant

Jurisdiction:
Malaysia
Deal type:
Project development
Industry sectors:
Oil & gas
Firms:
Hogan Lovells Lee & Lee
Party: Sarawak Energy (Sponsor)

Overview:
- The Baleh hydroelectric project involves the construction of a dam with a 1285MW hydroelectric plant and 73km road network from Nanga Mujung in Kapit to the project dam site Sungai Dapu.
- Malaysian developer Sarawak Energy received formal approval from the Sarawak state government in 2016, and the plant will be located on the Baleh River.
- The hydropower station will house five generator units, and the project will feed into the Sarawak Corridor of Renewable Energy (SCORE) agenda and consolidate Malaysia's potential as a renewable energy hub in Southeast Asia.

Kuala Lumpur-Singapore high-speed railway

Jurisdiction:
Malaysia
Deal type:
Project development
Industry sectors:
Transport
Firms:
Ashurst
Party: MyHSR Corporation (Project developer); Land Transport Authority (Project developer)

Overview:
- The Kuala Lumpur-Singapore High Speed Rail (HSR) project is being developed by the Malaysia and Singapore governments and will comprise eight stops in total: Singapore, Iskandar Puteri, Batu Pahat, Muar, Ayer Keroh, Seremban, Putrajaya and Kuala Lumpur.
- The project aims to enhance business connectivity and bring the people of both countries closer together, and once completed it will reduce travel time between Singapore and Kuala Lumpur from 4 hours to 90 minutes.
- Malaysia's MyHSR Corporation (MyHSR) and Singapore's Land Transport Authority (LTA) have awarded the Joint Development Partner (JDP) contract for project to a three-firm consortium made up of WSP Engineering Malaysia, Mott MacDonald Malaysia, and Ernst & Young Advisory Services.

LRT3 Bandar Utama-Klang railway

Jurisdiction:
Malaysia
Deal type:
Project development
Industry sectors:
Transport
Firms:
Christopher & Lee Ong
Party: Prasarana Malaysia (Project developer)

Overview:
- The LRT3 Bandar Utama-Klang railway is being developed under the Urban Rail Development Plan by Land Public Transport Commission (SPAD) and is a key part of the National Land Public Transport Master Plan.
- The route for LRT3 plans to link Bandar Utama to Klang, with 25 stations and an overall distance of 36 km.
- The LRT3 line is expected to serve two million people in the Klang Valley, transporting around 70,000 passengers daily with an end-to-end journey time of 51 minutes.
- Construction of the LRT3 began in 2016 and is expected to be completed by August 2020.

Pengerang 1220MW Cogeneration Plant

Jurisdiction:
Malaysia
Deal type:
Project development
Industry sectors:
Energy
Firms:
Christopher & Lee Ong
Party: Pengerang Power (Project developer)

Overview:
- The Pengerang Cogeneration Plant is being built by Pengerang Power (PPSB), a wholly-owned subsidiary of Petronas Power.
- Once completed, the plant will generate 1220MW tph of electricity and supply steam of up to 1,480 tonnes per hour.
- It will be one of the biggest power plants in the region, and will be built by a consortium comprising of Siemens, Siemens Malaysia and MMC Engineering.
- There will be four co-generation units, with the first unit expected to be commercially operational by mid-2017.

Pengerang deep water oil terminal

Jurisdiction:
Malaysia
Deal type:
Project development
Industry sectors:
Oil & gas
Firms:
Allen & Overy
Party: Vopak (Sponsor); Petronas (Sponsor); Dialog Group (Sponsor)

Overview:
- The Pengerang project is a $17 billion project that is one of the largest projects in the market, and part of this involves the construction of a deepwater oil terminal at the southern tip of Malaysia's Johor peninsula sitting atop 150 acres of reclaimed sea bed.
- Vopak, Dialog Group and the Malaysian government-owned oil and gas company, Petronas, are sponsoring the latest stage of the Pengerang project.
- Construction on the Pengerang project first commenced in 2011, and in 2014 the plan for a second terminal was announced.

Saudi Aramco $7 billion acquisition of stake in RAPID project

Jurisdiction:
Malaysia
Deal type:
Project development, Private acquisition
Industry sectors:
Oil & gas
Firms:
White & Case
Party: Saudi Arabian Oil Company (Acquirer, Project developer, Joint venture partner)
Shearman & Sterling
Party: Petroliam Nasional (Project developer)

Overview:
- Saudi Arabian Oil Company (Saudi Aramco) has signed a share purchase agreement with Petroliam Nasional (Petronas) where Saudi Aramco will acquire a 50% equity interest, which is valued at approximately $7 billion, in a joint venture with Petronas to develop the Refinery and Petrochemical Integrated Development (RAPID) project in the southern Malaysian state of Johor.
- The RAPID project comprises a refinery, cracker and integrated petrochemical complex.
- Morgan Stanley acted as financial adviser to Petronas.
- The refinery and petrochemical project will be the largest downstream petrochemical project in Asia following completion in 2019.

Sungai Buloh land development

Jurisdiction:
Malaysia
Deal type:
Project development
Industry sectors:
Real estate, Social infrastructure
Firms:
Shearn Delamore & Co
Party: Malaysian Resources Corporation

Overview:
- Sungai Buloh RM3.1 billion Land Development is a project involving seven separate development plots of eight office towers, one hotel block, one auditorium block and one facility block.
- The entire project will take approximately 12 years to complete, and will be developed by Malaysian Resources Corporation (MRCB) who were appointed by Kwasa Utama (KUSB), a company owned by the Employees Provident Fund (EPF).
- The management contract was signed in October 2015 and the supplemental agreement to the management contract was signed in December 2016.

Tun Razak Exchange property development

Jurisdiction:
Malaysia
Deal type:
Project development
Industry sectors:
Real estate, Social infrastructure
Firms:
Christopher & Lee Ong
Party: 1MDB (Project developer)
Rajah & Tann
Party: 1MDB (Project developer)

Overview:
- The Tun Razak Exchange (TRX) is a joint property complex comprising office towers for banking and finance, residences and retail spaces between 1Malaysia Development Berhad (1MDB), a government-owned entity, and the Abu Dhabi-based Mubadala Development.
- Developed on 34.4 hectares of land located in Kuala Lumpur, this will be Malaysia's first international financial district.
- The project is a component of the Economic Transformation Programme and was previously known as the Kuala Lumpur International Financial District (KLIFD).
- Developers will be getting 70% income tax reductions for five years, and companies moving into TRX may receive 100% tax exemptions for a full decade.

Dawei special economic zone

Jurisdiction:
Myanmar

Deal type:
Project development

Industry sectors:
Social infrastructure

Firms:
Baker & McKenzie
Party: Italian-Thai Development Company

Overview:
- The Dawei special economic zone project consists of a 27 square km industrial estate, a 138 km highway connecting to the border of Thailand, power plants, a port, an LNG terminal to receive LNG, a water reservoir, workforce residences, and telecommunications infrastructure.
- The project is developed by a consortium of Thai and international developers and is located in the Dawei Special Economic Zone (DSEZ), Myanmar.
- The consortium of private developers includes Italian-Thai Development (ITD), Rojana Industrial Park and LNG Plus International.

Minbu 220MW solar power plant

Jurisdiction:
Myanmar

Deal type:
Project development

Industry sectors:
Energy

Firms:
Chandler MHM
Party: Krung Thai Bank (Lender); EXIM Bank (Lender)
Weerawong Chinnavat & Partners
Party: Green Earth Power (Project Developer)

Overview:
- Green Earth Power (GEP) has signed a memorandum of agreement with the Myanmar Ministry of Electric Power (MOEP) to develop a 220MW solar power plant in Minbu, the Magway region of Myanmar.
- With a total investment of $350 million, the solar plant is being built on a single 344-hectare site 200 km west of Nay Pyi Taw.
- The solar power plant will be connected to the new 230kv transmission line that is being constructed by the MOEP, which will be the off-taker under a 30-year power purchase agreement.

Hanthawaddy Airport

Jurisdiction:
Myanmar

Deal type:
Project development

Industry sectors:
Social infrastructure

Firms:
DFDL
Party: Asian Development Bank (Lender)

Overview:
- The new Hanthawaddy airport will be located on 9,600 acres about 48 miles outside the commercial centre and former capital of Yangon. It will increase capacity from 2.7 million passengers per year to 3.5 million by 2015 and 6 million by 2019.
- Japan's JGC Corporation, Singapore's Changi Airport International and Yongnam Holdings are part of HIA (Myanmar) are developing the Airport.

Myingyan 225MW gas power plant

Jurisdiction:
Myanmar
Deal type:
Project development
Industry sectors:
Energy
Firms:
Allen & Overy
Party: IFC (Financial adviser)
DFDL Myanmar
Party: IFC (Financial adviser)
Mayer Brown JSM
Party: Asian Development Bank (Lender)
Duane Morris & Selvam
Party: Sembcorp Industries (Sponsor)

Overview:
- Myanmar's Ministry of Electric Power (MOEP) has selected a private sector independent power producer (IPP) to develop a natural gas power plant on a build operate and transfer (BOT) basis in Myingyan Township, approximately 500 km north of Yangon and 90 km west of Mandalay.
- The IFC provided financial advisory support to this project. Sembcorp and MMID Utilities will own 80% and 20% stake in the plant respectively.
- The plant is a 225MW combined cycle gas turbine (CCGT) power plant.
- The project received approval on December 8 2015.
- The project is the first competitive tender for a gas-fired independent power producer project in Myanmar.

Thaketa 485MW gas power plant

Jurisdiction:
Myanmar
Deal type:
Project development
Industry sectors:
Energy
Firms:
VDB Loi
Party: Union Resources and Engineering Company (Sponsor); Department of Electric Power Management of Myanmar (Sponsor)

Overview:
- The Thaketa 485MW combined cycle gas turbine (CCGT) project is the largest gas-fired power plant concession in Myanmar..
- It is the fifth privately run power plant in Yangon.
- The construction period for the 106MW plant is the first phase of the 485MW CCGT project, and it is set for two years with power production due to start in March 2018.

Jewel Changi Airport

Jurisdiction:
Singapore
Deal type:
Project development
Industry sectors:
Transport, Aviation
Firms:
Allen & Gledhill
Party: Jewel Changi Airport Trustee (Trustee)
WongPartnership
Party: Changi Airport Group (Project developer)

Overview:
- Jewel Changi Airport, which is scheduled to open in early 2019, is a mixed-use airport terminal complex and an extension of the Singapore Changi Airport featuring leisure attractions, retail offerings, hotel and airport operations.
- The ground work will be completed by the end of 2018. Once completed, the airport will have a capacity of 85 million passengers a year. The Jewel Changi Airport is positioned in front of Terminal 1, and it will be a public space.
- While the project itself is public, the details of the joint venture and financing are confidential. The lenders include a Singaporean bank, a Chinese bank, as well as Japanese banks.

Marina East desalination plant PPP

Jurisdiction:
Singapore
Deal type:
Project development, PPP
Industry sectors:
Utilities
Firms:
Ashurst
Party: IDE Technologies (Bidder), MCC Land (Bidder)

Overview:
- The Marina East desalination plant is the Singapore government's fourth desalination plant and is the first to offer dual mode design allowing it to treat both reservoir and sea water.
- The project attracted 16 bids from seven local and international bidders. National water agency PUB awarded the project to Keppel Infrastructure to design, build, own and operate the plant for a 25-year concession period.
- The plant is expected to be producing treated water by 2020 and will add 30 million gallons of water per day to the nation's water supply.
- PUB anticipates expanding its desalination and water capacities to meet up to 85% of the nation's water needs by 2060.

Toll City logistics hub

Jurisdiction:
Singapore
Deal type:
Project development
Industry sectors:
Logistics
Firms:
WongPartnership
Party: Toll Logistics (Project developer)

Overview:
- Toll Group, a subsidiary of Japanese conglomerate Japan Post Holdings and a leading provider of transport and logistics in Asia-Pacific, is investing S$228 million in a 100,000 square metre Toll City high-tech logistics hub in Singapore.
- The completion of Toll City is expected in mid-2017, and the project will also coincide with and be connected to the planned 2020 completion of the Tuas Port which will consolidate all of Singapore's container operations in one terminal and handle up to 65 million TEUs annually when fully operational.
- Plans for the new project have been developed in collaboration with the Workforce Development Agency (WDA) to meet the demands of Singapore's 'Smart Nation' vision.

TuasOne waste-to-energy PPP

Jurisdiction:
Singapore
Deal type:
Project development, PPP
Industry sectors:
Energy
Firms:
Allen & Gledhill
Party: DBS Bank (Lender); Malayan Banking (Lender); Mizuho Bank (Lender); The Bank of Tokyo-Mitsubishi UFJ (Lender)
WongPartnership
Party: Mitsubishi Heavy Industries (Sponsor); Hyflux (Sponsor)

Overview:
- TuasOne is a S$750 million waste-to-energy public-private partnership (PPP) between Hyflux, Mitsubishi Heavy Industries and the National Environment Agency of Singapore (NEA).
- The project also comes with a contracted waste processing capacity of 2,300 tpd of waste that is expected to reduce the volume of solid waste by at least 90%.
- The Ministry of Environment and Water Resources and the NEA own and operate the Tua incineration plant and Tua South incineration plant which has reached the end of its useful lifespan, hence this new waste-to-energy plant will be important in meeting future waste needs.
- This plant will also be Singapore's largest and most energy efficient plant that can produce 2,880MWh of electricity daily from incinerating waste.

Bangkok Red Line

Jurisdiction:
Thailand
Deal type:
Project development
Industry sectors:
Transport
Firms:
Allen & Overy
Party: Sumitomo Corporation (Sponsor)

Overview:

- The Bangkok Red Line Project is a 41 km metre-gauge train system that is part of Bangkok's 'mass rapid transit masterplan' which aims to develop an urban rail network to serve Greater Bangkok.
- The line will encompass two elevated lines to the north of the Thai capital, and is expected to be completed by 2020.
- This Red Line is an addition to the existing three operating rail lines: the Green Line, the Blue Line and the Airport Rail Link. The Red Line was proposed by the State Railway of Thailand and received approval in 2007, while the first construction phase started in 2013.
- Mitsubishi Heavy Industries, Hitachi, and Sumitomo Corporation were awarded a contract by the State Railway of Thailand to design and build the electric and mechanical systems for the Red Line project.

Fuel Pipeline Transportation pipeline

Jurisdiction:
Thailand
Deal type:
Project development
Industry sectors:
Energy
Oil & gas
Firms:
Chandler MHM
Party: Bangkok Bank (Lender)

Overview:

- Fuel Pipeline Transportation has obtained financing from Bangkok Bank to construct a major fuel pipeline in Thailand that starts from Ayudhaya Province in central Thailand to the country's northern provinces and for fuel tank farms in areas along the pipeline.
- The project is a part of Asean's fuel security enhancement initiative according to energy minister Anantaporn Kanjanarat.
- The deal is significant considering the broad area in Thailand affected by the pipeline, and the resulting potential for land rights issues and environmental challenges.

Haiphong Expressway

Jurisdiction:
Vietnam
Deal type:
Project development
Industry sectors:
Transport
Firms:
Baker & McKenzie
Party: IL&FS Transportation Networks (Investor); Strategic Alliance Holdings (Investor); Tung Shing Group (Investor)

Overview:

- The Haiphong Expressway is a major freight corridor for Vietnam and is the first expressway in northern Vietnam.
- The road will run from Ha Noi through Hung Yen and Hai Duong, which are two major provinces in northern Vietnam, and ends at Dinh Vu port in Hai Phong, the biggest sea port in Vietnam.
- The first section of this project started operation in May 2015, and another section was opened in September 2015.
- Ha Noi, Hai Phong and Quang Ninh together form a strong economic triangle of the country and the new industrial zones along this region have been the driving force for this project's development.
- An investor group consisting of India-owned IL&FS Transportation Networks, Philippines' Strategic Alliance Holdings and Hong Kong's Tung Shing Group has acquired a stake in the project.

MW Hai Duong 2x600 coal power plants

Jurisdiction:
Vietnam
Deal type:
Project development
Industry sectors:
Energy
Firms:
Watson Farley & Williams
Party: JAKS Pacific Power (Sponsor)

Overview:
- The MW Hai Duong is a 25-year BOT project to construct two 600MW coal power plants, sponsored by Malaysian company Jaks Resources.
- Jaks Resources entered into an agreement with China Power Engineering Consulting Group in July 2015 to jointly develop the plant via a 50/50 joint venture.
- The project is expected to be commissioned in 2020, and construction started on 27 March 2016.
- This is the first project financing to close under Decree No. 51/2015/ND-CP.

Nam Dinh 1 1200MW thermal power plant BOT

Jurisdiction:
Vietnam
Deal type:
Project development
Industry sectors:
Energy
Firms:
Shearman & Sterling
Party: Taekwang Power Holdings (Sponsor); ACWA Power (Sponsor)
Watson Farley & Williams in association with LVN & Associates
Party: Taekwang Power Holdings (Sponsor); ACWA Power (Sponsor)

Overview:
- Nam Dinh 1 is a $2.5 billion 1,200MW coal-fired thermal power plant project being developed by a consortium including ACWA Power, the largest private sector water and power company in Saudi Arabia, and Taekwang Power Holdings of Korea.
- Nam Dinh 1 is an independent BOT power project and part of the 2,400MW Nam Dinh thermal power plant complex in Nam Dinh.
- The construction of the plant is scheduled to be completed in late 2016 while the remainder of the complex is expected to become commercially operational in 2021.

Nghi Son 1 600MW coal power plant

Jurisdiction:
Vietnam
Deal type:
Project development
Industry sectors:
Energy
Firms:
Lexcomm
Party: Vietnam Electricity (Sponsor)

Overview:
- Nghi Son 1 is a major 600MW BOT thermal power project in Vietnam that is one of two plants of the Nghi Son complex under a long term power development plan for 2006-2015, established by the Vietnamese Government.
- This project is one of the most important projects in meeting increasing power demands in Vietnam, where significant economic growth is being achieved.
- The construction contract for Nghi Son 1 was awarded to Japan's Marubeni Corporation.

Thai Binh 1 600MW coal power plant

Jurisdiction:
Vietnam
Deal type:
Project development
Industry sectors:
Energy
Firms:
Lexcomm
Party: Vietnam Electricity (Sponsor)

Overview:
- Thai Binh 1 is a 600MW coal-fired power plant being built by Vietnam Electricity (EVN) and Japan's Marubeni Corporation.
- The first unit is scheduled to become operational in November 2017, with the second unit expected to become operational in May 2018.
- EVN applied for approval to build transmission lines for the plant in July 2015.

Vinh Tan 1 1200MW thermal power plant

Jurisdiction:
Vietnam
Deal type:
Project development
Industry sectors:
Energy
Firms:
Clifford Chance
Party: China Southern Power Grid (Sponsor); China Power International Development (Sponsor); Vinacomin Power Holding (Sponsor)
VILAF
Party: China Southern Power Grid (Sponsor); China Power International Development (Sponsor); Vinacomin Power Holding (Sponsor)

Overview:
- Vinh Tan 1 is a 1,200MW thermal power plant being built by Chinese energy firms China Southern Power Grid, China Power International Development and Vinacomin Power.
- Its first generator is expected to start commercial operation in December 2018, whereas the second generator will be operational in June 2019.
- This is China's largest investment in Vietnam: China Southern Power Grid and China Power International Development hold 55% and 45% respectively and Vinacomin owns the remaining 5% of the project.
- It is one of three thermal power plants to be built in the central province of Binh Thuan – the others being Vinh Tan 2 (1,200MW) and Vinh Tan 3 (2,000MW).

South East Asia

Project finance transactions which reached financial close in 2016

(Data provided by IJ Global)

Name	Country	Sector	Sub sector	Transaction type	Value
Central Java Coal-Fired Power Plant (2000MW) PPP	Indonesia	Primary Financing	Power	Coal-fired	$4.3 billion
Hasang Hydroelectric Power Plant (39MW) PPP	Indonesia	Primary Financing	Power	Hydro	$210 million
Java-7 Coal-Fired Power Plant (2000MW) IPP	Indonesia	Primary Financing	Power	Coal-fired	$1.8 billion
KNSS Steel Plant	Indonesia	Primary Financing	Mining	Manufacturing	$220 million
Panca Amara Utama Ammonia Plant	Indonesia	Primary Financing	Oil & Gas	Petrochemical	$830 million
Sidrap Wind Farm (75MW)	Indonesia	Primary Financing	Renewables	Onshore Wind	$150 million
Tangguh LNG Expansion	Indonesia	Primary Financing	Oil & Gas	LNG	$3.74 billion
Tujuh Bukit Gold Mine	Indonesia	Primary Financing	Mining	Base Metals; Precious Metals	$160 million
Phu Bia Mining Refinancing 2016	Laos	Refinancing	Mining	Precious Metals	$90 million
Pertama Ferroalloys Processing Plant	Malaysia	Primary Financing	Mining	Manufacturing	$447 million
Ooredoo Myanmar 3G Network Financing	Myanmar	Additional Facility	Telecoms	Mobile	$300 million
Clark PV Solar Plant (22MW) Refinancing	Philippines	Refinancing	Renewables	Photovoltaic Solar	$45 million
GNPower Dinginin Coal-Fired Power Plant (668MW)	Philippines	Primary Financing	Power	Coal-fired	$1.1 billion
Kauswagan Coal-Fired Power Plant (550MW) Expansion	Philippines	Primary Financing	Power	Coal-fired	$1.04 billion
Light Rail Transit 1 (LRT) Extension PPP	Philippines	Primary Financing	Transport	Heavy Rail	$707 million
Negros Occidental Biomass Power Plants (70MW)	Philippines	Primary Financing	Renewables	Biomass	$161 million
Pagbilao LNG Hub Terminal Additional Facility	Philippines	Additional Facility	Oil & Gas	LNG	$32 million
Tiwi-MakBan Geothermal Complex Refinancing 2016	Philippines	Refinancing	Renewables	Geothermal	$262 million
BW LPG Gas Carrier	Singapore	Primary Financing	Oil & Gas	LNG	$221 million
TuasOne Waste-to-Energy Plant (120MW) PPP	Singapore	Primary Financing	Renewables	Waste-to-Energy	$594 million
NPS Solar PV Plant (18MW)	Thailand	Primary Financing	Renewables	Photovoltaic Solar	$34 million
Ratchaburi Combined Cycle Plant (250MW)	Thailand	Primary Financing	Power	Co Generation	$235 million
Sarahnlom Wind Farm (67.5MW)	Thailand	Primary Financing	Renewables	Onshore Wind	$165 million
Hoi Xuan Hydro Power Plant (102MW)	Vietnam	Primary Financing	Power	Hydro	$200 million

South Korea

For a country that possesses almost no natural resources but has an insatiable appetite for energy, the slump in commodity prices was expected to be a boon. However, this was not the case as Korea's economy was hit by cheap oil – and China's slowdown – as the country is a critical part of the global supply chain. The country is habitually engaged in balancing its need for energy security with environmental concerns, and most of its electricity comes from conventional thermal and nuclear power. It's no surprise then that despite the global climate deal in Paris, South Korea is still pressing ahead with plans to open many new coal-fired and other thermal power plants. Projects in development include the Goseong Hai 2080MW thermal power plant project, and the Chuncheon combined heat and power plant project.

South Korea is also a major energy importer that buys almost all of its oil, and is the second-largest importer of liquefied natural gas (LNG) in the world. More recently, Korean oil companies are working on diversifying their sources of oil to the US and Russia as it traditionally imports 80% of its oil from the Middle East. Furthermore, South Korea's purchases of Iranian crude oil doubled in the first quarter of 2017 when compared to the previous year, and Iran is now the second biggest oil exporter to the country.

It seems that South Korea may have to remain reliant on seeking fossil fuels internationally. It did have plans for the continued expansion of nuclear power and set a target of generation to 60% by 2035. However, the plan was reduced due to several scandals related to the falsification of safety documentation; and more recently the impeachment of President Park Geun-hye has led new presidential candidates to promise a cut back in coal and nuclear power generation in addressing public concerns over pollution and safety.

The country had signed a $3.5 billion agreement to develop an oil field in Iraq in order to gain a foothold in a country with the world's third-largest crude oil reserves, and this has been supplemented by social capital as South Korean law firms have been busy acting on the largest new city construction ever won by a Korean company overseas. Hanwha Engineering & Construction Corporation is undertaking the development of the $8 billion Iraq Bismayah New City development project, which includes 100,000 residential units, water and sewage facilities, roads and other infrastructure.

Korea's infrastructure is at an advanced level when compared to other emerging industrial economies and it has developed strong experience in implementing PPP (public-private partnership) projects. So there is a trend for outbound work in hard infrastructure as the country exports its expertise, and this includes toll roads, bridges, ports and railways. Closer to home – in fact 65km south west of Seoul – a new high-tech smart city, Songdo, is being built from scratch on 600 hectares of reclaimed land along Incheon's waterfront. With many of the country's largest independent law firms involved, this $40 billion project is the largest private real estate development in the country's history and has been hailed as the city of the future, where cutting-edge infrastructure will be part of everyday life.

DEAL DATA

The deals that matter. The lawyers that led them.

Below is a selection of energy and infrastructure deals taken from IFLR1000 Deal Data.

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Chuncheon combined heat and power plant

Jurisdiction:
South Korea

Deal type:
Financing; Project development

Industry sectors:
Energy

Firms:
Kim & Chang
Party: Chuncheon Energy (Borrower)
Lee & Ko
Party: Kookmin Bank, Industrial Bank of Korea, Samsung Life insurance (Lenders)

Overview:

- Chuncheon combined heat and power plant is a project currently under construction at the East Chuncheon industrial complex in Gangwon-do.
- The 470MW + 120Gcal/h capacity project will begin commercial operation in May with completion in July 2017.
- Chuncheon Energy, the project owner, is an IPP jointly established by Korea East-West Power, POSCO Engineering & Construction, and Hanjin Heavy Industries & Construction.
- Kookmin Bank, Industrial Bank of Korea and Samsung Life Insurance acted as co-arrangers in connection with arranging a debt facility for W513 billion ($454 million) for the project.

Daewoo Pocheon LNG power plant

Jurisdiction:
South Korea

Deal type:
Project finance; Project development

Industry sectors:
Energy; Oil and gas

Firms:
Kim & Chang
Party: Korea Development Bank (Lenders)
Lee & Ko
Party: Daewoo Energy (Borrower, Sponsor)

Overview:

- Daewoo Pocheon LNG power plant is a 947MW capacity project being constructed in Pocheon, an inland city in the Gyeonggi province of South Korea.
- It is Daewoo Engineering & Construction's first civil power plant project where the sponsor has implemented the project not merely for the construction work but also as one of the investors.
- Daewoo Energy is the project owner and the borrower that has obtained the power business license, ITB and documents for turbines and BOP, project documents, and financing.
- Daewoo Energy has successfully funded W779 billion ($690 million) on a non-recourse basis from a group of lenders including the Korea Development Bank as agent to the loan facilities.
- The power plant is expected to start generating power by mid-2017.

Goseong Hai 2080MW thermal power plant

Jurisdiction:
South Korea

Deal type:
Project finance; Project development

Industry sectors:
Energy

Firms:
Kim & Chang
Party: Goseong Green Power (Project developer, Borrower)
Lee & Ko
Party: Kookmin Bank, Shinhan Bank (Lenders, Co-arrangers)

Overview:
- Goseong Hai 2080MW thermal power plant is coal-fired power station in South Gyeongsang Province, South Korea.
- The power station would consist of two 1040MW units, and construction started in 2016 with completion expected in April 2021.
- Goseong Green Power was established by Korea South-East Power, SK E&C, SK Gas, and an investment fund managed by KDB Infra Asset Management.
- The plant will be Korea's biggest private coal-fired power plant that will constitute 2% of the total power generation capacity in Korea.
- This project is the biggest independent power plant (IPP) project in Korea with an investment cost of W5 trillion ($4.4 billion).
- To finance the power plant construction, Goseong Green Power procured a syndicate loan of W4.3 trillion ($3.8 billion), which is the biggest project financing deal in Korea, from 20 lenders with KB Kookmin Bank and Shinhan Bank as joint lead arrangers.

Jangmoon 1820MW gas power plant

Jurisdiction:
South Korea

Deal type:
Project development; Project finance

Industry sectors:
Energy; Oil and gas

Firms:
Bae Kim & Lee
Party: The Korea Development Bank (Lenders)
Lee & Ko
Party: SK E&S (Sponsors)

Overview:
- SK E&S are sponsoring the construction of an 1820MW LNG combined cycle power plant in Jangmoon area, Paju-city, South Korea.
- The produced electricity will then be sold in the Korean wholesale electricity market through the Korea Power Exchange.
- The W700 billion ($570 million) project financing is structured as senior and subordinated loans, the latter of which is convertible into equity in certain circumstances.

Kunsan 200MW biomass power plant

Jurisdiction:
South Korea

Deal type:
Project development; Project financing

Industry sectors:
Energy

Firms:
Lee & Ko
Party: Hana Financial Investment (Arranger)

Overview:
- Kunsan biomass energy general facility project is a 200MW (100MW × 2) project in development.
- It represents the single largest biomass project in Korea last year.
- The transaction has a unique structure that involves an equity bridge financing, investments from various project funds with differing requirements and needs, and a financing package involving shareholder support from the shareholders of the borrower.
- The total financing amount was approximately W498 billion.

Po-Sung Biomass Development Project

Jurisdiction:
South Korea
Deal type:
Project development
Industry sectors:
Energy
Firms:
Lee & Ko
Party: Daelim Energy (Project developer); Po Sung Green Power (Project developer)

Overview:
- The Po-Sung biomass development relates to biomass renewable power energy generation though utilisation of wood pellet and wood chips.
- The project required the acquisition of the business license, securing the lease for the site property through negotiation with Kyung-gi province, attracting foreign investment and raising capital, execution of the EPC contract and fund raising for the project.
- The main source of revenue for the project is derived from sale of electricity produced from electric generating facilities trading on KPX and secondarily from sales of Renewable Energy Certificate (REC) to the Renewable Portfolio Standard (RPS) obligor.
- The project also obtained investment from foreign investors in order to obtain a rent reduction from Kyung-gi province.
- This project is one of the largest biomass projects underway in Korea.

Pyoung Taek LNG power plant

Jurisdiction:
South Korea
Deal type:
Project development
Industry sectors:
Energy; Oil and gas
Firms:
Shin & Kim
Party: GS Energy (Sponsor); Korea Western Power (Sponsor)
Kim & Chang
Party: Kookmin Bank (Lender)

Overview:
- The project involves the construction and operation of an LNG combined cycle power plant in Pyoung Taek, Korea.
- The sponsors for the project are GS Energy and KOWEPO.
- Kookmin Bank is the financial advisor and the lead arranger for the project finance and will arrange the formation of a private fund for equity investment and sub-debt investment.
- The size of the power plant is 950MW with a project value of $1 billion, and its commercial operation is expected to begin in November 2019.

Songdo International City

Jurisdiction:
South Korea
Deal type:
Real estate project
Industry sectors:
Real estate; Social infrastructure
Firms:
Bae Kim & Lee
Party: New Songdo International City Development (Project company)

Overview:
- Songdo International Business District is a new smart city or 'ubiquitous city' built from scratch on 600 hectares of reclaimed land along Incheon's waterfront, 65km southwest of Seoul in South Korea.
- In 2003, the Korean government instituted three free economic zones for the development of the Economic Centre of North East Asia, and Songdo has been active throughout, including the more recent construction of Incheon Bridge that connects Songdo and Yeongjongdo where Incheon International Airport is located.
- The project includes $3 billion structured project financing, a partnership agreement with MSREF for the whole project and various partnership agreements for individual projects with private investors, including Cisco, Taubman, Jack Nicklaus, and governmental authorities.
- The city has also established educational institutions such as Chadwick International; Yonsei University Global Campus; State University of New York, Korea; and Incheon Global Campus.
- The project is in its third stage of development which is expected to be completed by 2022.

Seoul–Munsan Highway

Jurisdiction:
South Korea
Deal type:
Project finance; Project development
Industry sectors:
Transport
Firms:
Kim & Chang
Party: Kyobo Life Insurance (Arranger); Hanwha Life Insurance (Arranger)

Overview:
- The Seoul Munsan Highway is a 35.6km segment of the 83km Suwon–Munsan Expressway under construction that connects Hwaseong to Suwon, Gwangmyeong, Goyang, and Paju.
- Seoul Munsan Highway, the project operator, executed a W795 billion ($699 million) project finance contract with financial institutions arranged by the financial arranger institutions, Kyobo Life Insurance and Hanwha Life Insurance.
- The contract was executed on 26 February 2016 to finance the private investment business of the highway from Seoul to Munsan under the Public-Private Partnerships in Infrastructure Act.

Ulleung Island

Jurisdiction:
South Korea
Deal type:
Project development
Practice area:
Project development
Industry sectors:
Energy
Firms:
Lee & Ko
Party: LG CNS; KEPCO; Gyeong Sangbukdo Province; Shinhan Financial Group

Overview:
- The project involves the establishment of an independent energy island in Ulleung Island to replace the entire power of Ulleung Island with renewable energy sources such as solar, wind, geothermal and fuel cells.
- The Korean government and other project participants may make plans to expand energy independent island developments into other islands in South Korea.
- LG CNS is actively participating in the project as the highest standards of ESS (Energy Storage System) and EMS (Energy Management System) are required.
- In the present project the PPA contract between KEPCO and the project special purpose company will govern instead and allow for power purchase independent of KPX.
- It will be the first energy independent island project in Korea, and may have significant economic impact in Korea's advancement of implementing a comprehensive system for renewable energy.

Ulsan oil terminal

Jurisdiction:
South Korea
Deal type:
Project development
Industry sectors:
Oil and gas
Firms:
Shin & Kim
Party: Korea Oil Terminal (Project company)

Overview:
- The Ulsan $800 million oil terminal project is a plan to develop a large scale commercial oil terminal in Korea to make Ulsan port a competitive world class oil hub.
- The project involves the construction of an oil terminal in the capacity of 9 million barrels in Ulsan north port, with a total capacity that may be expanded up to 18.5 million barrels by the year 2020.
- Korean Oil Terminal is a joint venture company comprised by the Korea National Oil Company (KNOC), Vopak and S-oil, the Korean subsidiary of Saudi Arabia's Aramco.
- The construction companies include Daewoo E&C and SK E&C.

Youngnam gas-fired combined cycle power plant

Jurisdiction:
South Korea
Deal type:
Financing; Project development
Industry sectors:
Energy
Firms:
Bae Kim & Lee
Party: Korea Southern Power (Sponsor); Shinhan Bank (Lender); Shinhan Investment (Lender); Shinhan BNP Paribas ITMC (Lender)

Overview:
- Youngnam gas-fired combined cycle power plant is a project to build a 476.1MW LNG combined cycle power plant on a site owned by Korean Southern Power (KOSPO).
- It aims to sell its produced electricity in the Korean wholesale electricity market through the Korea Power Exchange.
- The project financing is structured as senior and subordinated loans, and some lenders also participated in the project by way of equity investment.
- The project did not rely on the credit enhancement mechanism provided by sponsors, and it did not have EPC or O&M contractors; which meant that the financial investors and lenders were vulnerable to such risks.

South Korea

Project finance transactions which reached financial close in 2016
(Data provided by IJ Global)

Name	Transaction type	Sector	Sub sector	Value
ICIL Maritime Leasing LNG Vessels	Primary Financing	Oil & Gas	LNG	$315 million
Posueng Biomass Power Plant (43.2MW)	Primary Financing	Renewables	Biomass	$200 million