



# Infrastructure: A Force for Good in Asia

## Infrastructure as a Force for Good

Infrastructure can be used to improve lives. Importantly, it is the basis for strong, sustainable, and inclusive economic growth. This includes:

- Schools to provide education;
- Transport infrastructure to enhance connectivity;
- Utilities for better sanitation; and
- Energy for essential services.

Infrastructure, when done right, can improve lives, change villages, provinces, cities, and countries. In this way, it affects healthcare and the quality of life, of peoples and nations. That is the broader function of infrastructure, and it is important to not lose sight of this, even as we focus on the legal aspects or the legal documentation.



## Growing Asian Demand for Infrastructure

The fast growing population in Asia, and the increasing density of urban populations, have made lack of infrastructure a pressing problem. By 2030, Asia is expected to have more than 50 percent of the world's population, with an estimated increase of 410 million people.<sup>1</sup> Within ASEAN, our urban population is expected to increase by another 90 million by 2030, as a result of the rapidly growing middle class.<sup>2</sup>

To support this rapid population growth, you need infrastructure. But infrastructure is finding it hard to get off the ground.



## Key Challenges

Countries have recognised this. For example, China has come up with the Belt and Road Initiative. It is a recognition of the pressing need for infrastructure in the region. More recently, the United States has passed the BUILD legislation, again to facilitate infrastructure.

What is it that is holding infrastructure projects back? The short answer is that many of them are not bankable. So there is a need for the project, everybody says it's a great thing, investors want to put money in, the project companies want the money. But when the investors and banks look at it, they ask: "What is the return? Are we going to get our money back? Is this going to be viable?" If it's not viable, the projects don't get off the ground.

### Structuring

What then is the key to making these projects viable? The key is structuring. Structuring takes various forms.

It can be financial. That is one of the most important aspects. But when I talk to the engineers, the engineers tell me things can't get off the ground unless it is technically viable and technically structured properly as well. So the two have to go in hand in hand; the engineering consultants need to speak with the financial consultants to make sure that the project is viable financially as well as from an engineering perspective.

Then there's the legal aspect which ties everything together. If the legal structuring is not done properly, then you don't have a proper allocation of the risks, which is also key to getting infrastructure off the ground.

<sup>1</sup> Source: Asia to Stay World's Fastest-Growing Region Through 2030, Anthony Fensom, Dec 2017.

<sup>2</sup> Source: Three Paths to Sustained Economic Growth in Southeast Asia, McKinsey Global Institute, Nov 2014.

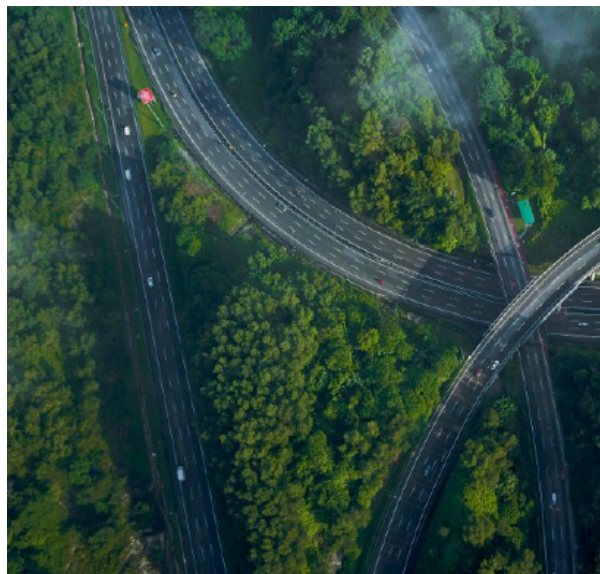
Stakeholders need assurance that their exposure is within their risk appetite and profile; financiers need some degree of certainty that they will either get back something or if they don't, that it is within their acceptable margin of loss.

This is where the lawyers and other consultants come in – to do that structuring which is key. AllB recognises this as well, for example, its Transport Strategy focuses on financing economically viable projects that contribute to promoting trade and economic growth.

### **Environmental Sustainability**

Another challenge for infrastructure today is the environmental aspect – making sure that projects are environmentally sustainable. All over the world, you see climate change. Things are happening, and you can't ignore climate change. If you are going to be building dams, townships etc, it has to be done in a way that is environmentally sustainable.

But how to do this? In the past, environmental concerns were not always built into infrastructure projects from inception. But it is hard to do it piecemeal after the project is up and running, and when you are trying to retro-fit everything. That is very expensive and difficult to do so.



So we need to learn from the past, and avoid the mistakes that have contributed to climate change today. Singapore supports a green approach. As a financial centre, one of the things that the Monetary Authority of Singapore (MAS) has been looking at is green financing e.g. green bonds for project finance to encourage environmental sustainability.

The World Wildlife Fund (WWF) has recently set up a chapter in Singapore to see how they can promote sustainable green financing. We are hoping that more and more people in the green space will come to Singapore and form a pool of expertise that people can draw on.

When I spoke to the project finance teams of the banks, one of the pieces of feedback they gave us was that there is good green eco-consultancy here, but more would be better.

So we are looking to see how we can attract more consultants who are well-versed in environmental standards and green issues and anchor them here, so that there is a larger pool of expertise to draw on.





## Singapore's Infrastructure Ecosystem

Like other things, infrastructure also has the potential to go wrong. Hence dispute resolution is important. Infrastructure projects have a long tail; they can take many years to conceive, prepare, and build. And infrastructure disputes are very expensive.

Singapore is an infrastructure hub for Asia and we are well positioned to partner infrastructure stakeholders like the Asia Infrastructure Investment Bank (AIIB) on this very important endeavour of getting infrastructure projects off the ground.



### Infrastructure Ecosystem

We have a good infrastructure ecosystem. We have strong governance and rule-of-law credentials, which were painstakingly built up over the years. This is inherent in our public institutions – our government agencies and judiciary, and is a key reason why many international companies choose to base their headquarters here.

Because of that, we are a legal hub. Maxwell Chambers was built to facilitate international arbitration, and it has seen rapid growth over the years. In addition, we set up the Singapore International Commercial Court (SICC), which addresses the litigation aspect, so clients have a choice – arbitration or litigation. We also set up the Singapore International Mediation Centre (SIMC), because if you can save time and money by amicable resolution, then that is a good way to go.

We have set it up such that these legal offerings operate together seamlessly. So you can start off with arbitration, then go to mediation. It is called the 'arb-med-arb' procedure. If that works and the matter is settled, you can take that back to the arbitration tribunal and have it recorded as an award, which means it is then enforceable under the New York Convention. That is one possibility. The other possibility is you start off with international litigation in the SICC, then you mediate, and if you get an agreement, again that can be registered and enforced as a judgment. If you can't settle, then you can go back to the arbitrator or to the court and 'slug it out', and get either the award or the judgment at the end of the day. This is a flexible integrated system to meet the different needs of disputants.

### Singapore Infrastructure Dispute-Management Protocol (SIDP)

We recently introduced the Singapore Infrastructure Dispute-Management Protocol (SIDP).<sup>3</sup> This was launched in October last year.

<sup>3</sup> Read more on the SIDP: [www.mlaw.gov.sg/content/dam/minlaw/corp/News/Press%20Release/SIDP/](http://www.mlaw.gov.sg/content/dam/minlaw/corp/News/Press%20Release/SIDP/)

When I first met with Gerard Sanders, General Counsel of the AIIB, I asked him: “What is AIIB interested in, in terms of infrastructure dispute resolution?” He said, “We need something quick, we need something fast, we need something customised, so that it doesn’t lead to very long, drawn-out litigation.”

So I discussed this with the Ministry of Law team and I said, “Look, this is what he is telling us: We have the traditional modes of dispute resolution, we’ve got arbitration, we’ve got litigation, but we need something else to shortcut these processes if need be.”

When we discussed it, we drew on the idea of the Disputes Boards. However, we decided that what was needed is a Disputes Boards plus plus plus model, to complement the existing dispute resolution processes. The essential thinking behind the SIDP is this: to have a panel of experts set up early, so that when a problem arises, parties can refer it to the panel at the early stages of the dispute.

Why is this important? It is important because as everyone who has done construction disputes knows, if you don’t crystallise the issues early, that is a problem because you could embark on your course of dispute resolution completely at odds and cross-purposes, and then you are halfway through this really long litigation or arbitration, and suddenly you realise that: “Oops, we’ve been talking about different things.” And then, you end up having to amend your pleadings, your points of defence, your points of claims, and it’s just hugely expensive. So right up front, we want to crystallise the issues.

The second thing we want to do upfront is see whether there is a way to resolve the issue without having to go for arbitration or litigation. Infrastructure disputes are usually a mixture of legal, factual and technical issues. It would be helpful to have neutral third parties with technical, financial and legal expertise looking at the disputed issues early. So the idea behind the SIDP is to have that panel of experts, ideally an engineer or someone with relevant technical background, a financial person, and possibly also a lawyer, injected in early. Then when the dispute arises, the project can be referred to this board. The board can suggest solutions.



**A:** Group photo taken at the Asia Infrastructure Investment Bank (AIIB) Legal Seminar 2019. From left to right: Peter Quayle, Chief Counsel of AIIB, Minister Indranee Rajah, Gerard Sanders, General Counsel of AIIB.

**B:** Minister Indranee delivering Opening Remarks at the AIIB Legal Seminar 2019.

**C:** Participants at the AIIB Legal Seminar 2019.

They can give non-binding suggestions or advice. Alternatively, parties can agree for them to give binding rulings. It is very flexible but the end goal is to eliminate smaller issues that can be settled early and upfront, and leave only those things that really need to be contested to go for arbitration or litigation. The SIDP is recommended for projects about S\$500million and above, because you obviously don't want to incur the costs of the exercise unless the relative return is worth it.

We hope that AIIB and the practitioners will consider adopting the SIDP when you have substantial projects. It does not preclude arbitration and litigation, but it inserts itself in the earlier stage with the view of making arbitration or litigation much more cost-effective if need be, or eliminating that need for it if an amicable resolution can be reached. Professionals can also be seconded to other players in the infrastructure space such as developers or multilateral development banks to work on projects and build up regional networks.

### Infrastructure Asia (IA)

We also set up Infrastructure Asia (IA), a Singapore Government agency which acts as a connecting platform.

When we looked at the issue of bankability and structuring, we asked ourselves: "What is missing in the region?" We have a lot of professional services here: legal services, financial services, consulting services, and engineering services. You have regional demand. You have the federal, regional and provincial governments who need infrastructure. So there is supply and there is demand. But projects are not getting off the ground. Why? Because the demand and the supply are not connecting. Many projects are not able to find the right people to help them with what they want to do.

It appeared to us that this was a space in which we could do something worthwhile, given our vibrant infrastructure ecosystem – to have a platform that can connect demand and supply. That includes connecting legal and professional services with the projects, governments and sponsors who need these services. So we set up IA. It is a one-stop platform that connects the region's infrastructure needs, with Singapore-based companies that have the relevant expertise and solutions.

IA recently inked a Memorandum of Understanding (MOU) with the World Bank. This is to help drive knowledge building and exchange in Asia. Many projects in the region can benefit from this in order to make themselves "shovel-ready". This would improve access to financing and capital.



Launch of Infrastructure Asia at the 8th Asia-Singapore Infrastructure Roundtable (ASIR). From left to right: Mr Png Cheong Boon, CEO of Enterprise Singapore, Mr Seth Tan, Executive Director of Infrastructure Asia, Minister Heng Swee Keat, Minister Indranee Rajah and Ms Jacqueline Loh, Deputy Managing Director of MAS.



IA reports to the Ministry of Trade and Industry (MTI) and the MAS. The reason for this dual reporting is because (a) financing drives projects, hence MAS needs to be in the picture; and (b) MTI oversees the arm that looks at internationalisation of services out of Singapore. So the thinking behind it is IA being able to connect Singapore-based services to the region.

## Singapore's Role in Enabling Infrastructure

Singapore can play a key role in enabling infrastructure and be a good partner to the AIIB.

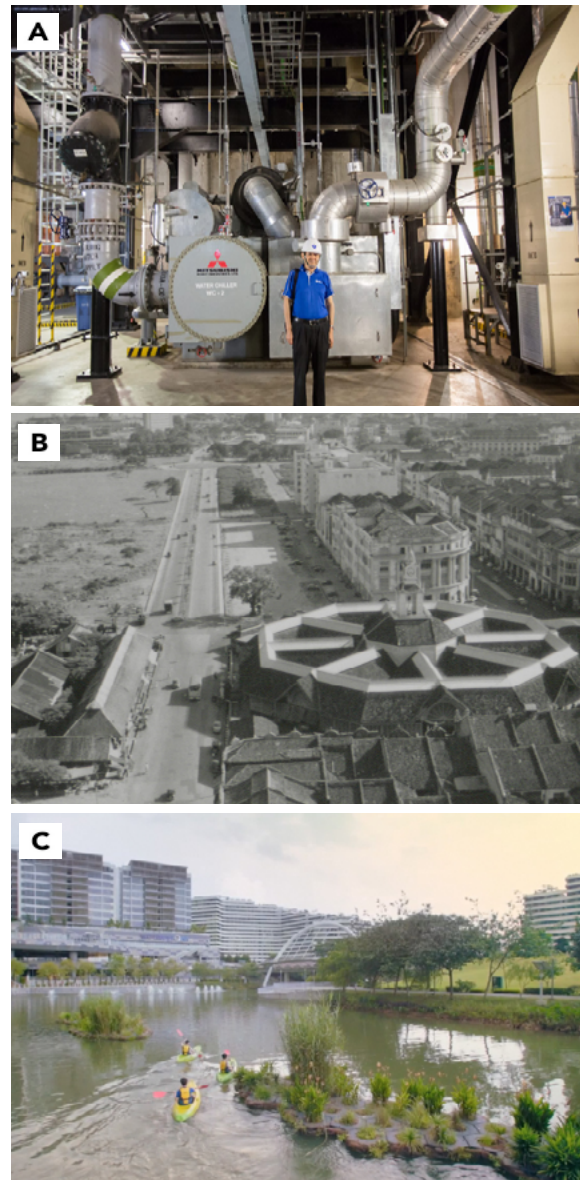
On the topic of green finance, the Singapore Marina Bay Financial Centre and the district cooling system is an example of what we have done in green infrastructure. Underneath the entire area is a cooling system that drives all the air flow and ventilation through that place. It is something which has come about from many years of urban planning. This is an example of environmental sustainability we can share with other countries. A lot of the expertise resides here in Singapore, and that is something that we would like to be able to do, partner with AIIB, partner with all of you, to bring this expertise to the region.

The Singapore story is also an infrastructure story. You've driven along Shenton Way many times but do you know that much of the section was just flat land in the 1970s? This was less than 50 years ago. Today, you see a lot of the tall buildings overlooking the bay. Our schools today also look very different, and this change is all within one generation.

This is what Singapore is like today (click [here](#) to play video). That's our story in the last 50 years. That's how infrastructure transformed Singapore. Every single building, every single project in the video has a story behind it. Let me touch very briefly on one of them – the Marina Barrage.

### Marina Barrage

Water as you know is essential to Singapore. When we first started off, water shortage was a major concern.



**A:** District Cooling System, Marina Bay Financial Centre  
Photo Credit: Urban Redevelopment Authority.

**B:** Singapore in the 1970s.  
Photo Credit: Derek Lehrle Collection, courtesy of National Archives of Singapore.

**C:** Video of Singapore today (click on image to play video).  
Video Credit: Urban Redevelopment Authority.

For the last 50 years, we have grappled with the question: “How do we make sure that we have enough water?” We had reservoirs but that wasn’t enough. In the early days, desalinisation was a very, very expensive option. It still is expensive, though it costs less today than it used to. Importantly, we now have NEWater.

The past 50 years were spent focusing on securing a sustainable water supply. When I grew up, at school and at home, you would have posters with the slogan “Every Drop Counts”. Singaporeans are taught that water is precious.

The Marina Barrage is the combination of several decades of forward planning. What that barrage does is this – it means that all the water that goes into our gutters, our pipes, runs into our drains, now no longer flows out into the sea. By blocking the mouth of the river, the barrage effectively turns the entire island into a reservoir. When it was first built, the water catchment would have been seawater. But over time, it is being pumped out. As rainwater falls into the catchment area, it will become completely fresh water. It will take some time for it to happen. The barrage has been up for a few years, so I’m sure that most of that has taken place already.

Water is a key component to Singapore’s existence. Ensuring supply has taken the form of infrastructure, but it is also backed up by legislation. For example, we do have legislation that prevents people from hoarding water or diverting water. You can see from this how law plays a part – in the legislation, in the structuring and in the entire ecosystem. In that, we are very much in alignment with AIIB’s green focus.

## Conclusion

Here in Singapore, we can have infrastructure and still have a lot of green space in which people can flourish and thrive. The best testimony for us is that the animals are coming back. These are our famous Singapore otters with the financial district in the background. They come out every day – they make the journey from Bishan/Ang Mo Kio down to the Marina Bay district, and in the evening they go back. We even have an Otter Watch group that follows them!



Photo Credit: Hilarion Goh.



Occasionally, the wild boars come out. We have built a special eco-bridge over the Bukit Timah Expressway, just so that the deer and the wild boar and all the other animals can cross over the expressway safely.

So, it is possible to build infrastructure to improve lives and yet have a green environment. Singapore is an example of this and we are happy to share our experience and work with infrastructure stakeholders like AIIB towards this end. ■■

