



**2018**

**INFRASTRUCTURE FINANCE  
& CAPITAL MARKET  
DEVELOPMENT  
IN ASEAN**





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## EXECUTIVE SUMMARY

ONE OF INFRASTRUCTURE'S MOST  
DRAMATIC BENEFITS IS ON THE POOR,  
ALLOWING ACCESS TO BETTER HEALTH  
AND EDUCATIONAL SERVICES, IMPROVING  
LIVING CONDITIONS AND FOSTERING  
GREATER SOCIAL AND ECONOMIC  
MOBILITY

Meeting Asia's Infrastructure Needs, Asian  
Development Bank, 2017

connectivity both within countries and between the ASEAN Member States. It is a virtuous cycle however. The region needs more economic growth to allow for increased prosperity, alleviate poverty, and to find jobs for growing populations. More economic growth means increased need for infrastructure. And increased infrastructure means more economic growth. Infrastructure needs for the region will only continue to grow as ASEAN adds 60 million to its working population and 90 million people move into cities across ASEAN between 2015 to 2030<sup>2</sup>.

The need to develop infrastructure further and faster is demonstrated by the wide variations across the region in a world ranking on infrastructure (out of 144 countries): from Singapore (2nd), Malaysia (25th), to the Lao PDR (94th), Cambodia (107th), and Myanmar (137th)<sup>3</sup>. The ADB estimates ASEAN needs around USD3 trillion in infrastructure investment between 2016 and 2030<sup>4</sup>.

There is an infrastructure deficit across the region as things currently stand. As PwC noted in a recent report "the infrastructure deficit across ASEAN is very well-established fact - the ability of ASEAN countries to continue growing at their current rates will depend largely on how much infrastructure can be delivered in the coming years"<sup>5</sup>. Delivering that infrastructure depends on two things: having the capacity and know-how to physically build, deliver and operate that infrastructure in country (or to attract outside expertise to do so); and, financing. This paper concentrates on the latter element, though ASEAN will need to consider the former too.

IF MEASURES ARE NOT TAKEN TO  
INCREASE INFRASTRUCTURE SPENDING  
FURTHER, THE EXPECTED DEMAND FOR  
INFRASTRUCTURE WILL NOT BE MET, THE  
INFRASTRUCTURE GAP WILL REMAIN, AND  
ECONOMIC GROWTH WILL SLOW OR  
STAGNATE.

PwC, Understanding Infrastructure  
Opportunities in ASEAN, Infrastructure Series  
Report 1, 2017

It is also an established fact that current levels of infrastructure development across ASEAN, despite recent policy changes and announcements in places like Indonesia and the Philippines,

<sup>1</sup> See Table 1, p.26, Economic Outlook for Southeast Asia, China and India, OECD, 2016

<sup>2</sup> Southeast Asia at a Crossroads: Three paths to prosperity. P.79, McKinsey Global Institute, November 2014

<sup>3</sup> World Economic Forum (2014), The Global Competitiveness Report 2014-2015. Geneva: World Economic Forum.  
[http://www3.weforum.org/docs/WEF\\_GlobalCompetitivenessReport\\_2014-15.pdf](http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.pdf)

<sup>4</sup> ADB report, Meeting Asia's Infrastructure Needs, Feb 2017

<sup>5</sup> Understanding infrastructure opportunities in ASEAN: Infrastructure Series Report 1, PwC, 2017, p.18

are insufficient to meet the demand. Put simply, the governments of the region cannot afford, as things presently stand, to build everything they need to build. The Asia Development Bank estimates that even with public finance reforms, the public sector can provide only 50% of the required investment. Furthermore, current bank and capital market finance is also not sufficient to close the infrastructure gap; a \$3 trillion funding gap is equivalent to 90% of total bank assets and to 130% of the region's total stock market capitalisation. The solution is to 'crowd in' long term investors, such as insurance companies and pension funds, who have a key role to play in the financing of infrastructure projects. In this paper we have looked at some of the issues and given pointers to the policy makers and regulators across the region as to what needs to be done to free up more private funds for infrastructure and encourage more private investors.

Promoting a pipeline of "bankable" projects is key. And this means taking steps to allow for a deepening of capital markets; crowding in long term investors such as insurance companies and pension funds; finding ways to blend public and private funding of projects; and, accelerating projects which are commercially viable and so should be investible with private funding, leaving public resources to support projects which meet social rather than economic needs.

## TABLE OF RECOMMENDATIONS

Issue	Recommendation
<b>Enhance Private Sector involvement in infrastructure finance</b>	<ul style="list-style-type: none"> <li>➤ Introduce region-wide standardised reporting, documentation and benchmarking to help develop markets and make it quicker and easier for companies to assess projects and so facilitate private finance.</li> </ul>
	<ul style="list-style-type: none"> <li>➤ Give greater urgency to improve investment conditions and the offering of non-discriminatory regulatory regimes that encourage greater participation by insurers in long-term investments, especially those aimed at supporting infrastructure development.</li> </ul>
	<ul style="list-style-type: none"> <li>➤ Expand public-private sector blended finance initiatives. Create the right risk-return profile by encouraging other financial actors to pick up some of the risks typically associated with large scale infrastructure projects that the private sector finds difficult to take on its own.</li> </ul>
	<ul style="list-style-type: none"> <li>➤ Accelerate the implementation of clear and transparent PPP regimes across ASEAN, including open and transparent bidding processes.</li> </ul>
<b>Project Bankability</b>	<ul style="list-style-type: none"> <li>➤ Ensure there is a pipeline of bankable projects through both the development and operational phases of the lifecycle - this will have the greatest impact on both the provision of infrastructure and the development of capital markets to finance it.</li> </ul>
	<ul style="list-style-type: none"> <li>➤ Developing a pipeline of bankable projects will require standardisation of documentation (wherever possible in the local context), transparent regulations and dispute resolution procedures, and a role for MDBs to mitigate credit risk.</li> </ul>

## ASEAN'S INFRASTRUCTURE REQUIREMENTS & THE FUNDING GAP

ASEAN is growing and growing rapidly. Numerous studies have been done in recent years pointing to fast and significant economic development across the region. On average, GDP growth across ASEAN has been hovering around 5% for the past few years and is predicted to remain in a similar range for the next few years<sup>6</sup>. This growth has fuelled an increased demand for infrastructure right across the region, driven largely by the fact that most of the GDP growth in ASEAN is coming from increased levels of urbanisation and a growing middle class, coupled with the need and desire of the region to increase connectivity both within countries and between the ASEAN Member States.

Table 1: Real GDP Growth in ASEAN<sup>7</sup>

Country	2014	2015	2016	2016-2020 Average	2011-2013 Average
Brunei	-2.3	-1.4	0.5	1.8	0.9
Cambodia	7.0	7.0	7.1	7.3	7.3
Indonesia	5.0	4.7	5.2	5.5	6.2
Lao PDR	7.4	6.9	7.0	7.3	8.1
Malaysia	6.0	4.6	4.6	5.0	5.2
Myanmar	7.7	8.2	8.2	8.3	6.9
Philippines	6.1	5.9	6.0	5.7	5.9
Singapore	2.9	2.1	2.4	2.6	4.1
Thailand	0.9	2.7	3.1	3.6	3.2
Vietnam	6.0	6.4	5.9	6.0	5.6
ASEAN Average	4.6	4.6	4.9	5.2	5.4

According to the ASEAN Masterplan on Connectivity 2025 (MPAC2025) there are already more than 80 Million households in a “consuming class” in the region<sup>8</sup>. The McKinsey Global Institute have predicted that number to increase to more than 160 million households by 2030<sup>9</sup> - based on 4 persons per household that amounts to more than five times the population of the United Kingdom moving into a “consuming class”. Additionally, McKinsey’s have predicted that between 2013 and 2030 a further 90 million people (or to put it another way - three times the population of Malaysia) will move into urban areas in ASEAN<sup>10</sup>. An increase in the consuming class will mean more demand for disposable goods, transport, power, medical services, schooling, utilities, and tourism. An increase in urban populations will equally mean more demand for transport connections, power, schooling, hospitals, sewage systems and housing. All of this amounts to a significant demand for more infrastructure right across the region.

### WHAT IS ASEAN'S INFRASTRUCTURE NEED?

Between  
**US\$2.8 TRILLION AND US\$3.1 TRILLION**

from 2016 to 2030  
(baseline estimate & climate adjusted estimate respectively)

This translates to

**US\$184 BILLION PER ANNUM**

meaning a

**US\$92 BILLION FUNDING GAP PER ANNUM IN ASEAN**

*Source: Understanding infrastructure opportunities in ASEAN: Infrastructure Series Report 1, PwC, 2017 after ADB 2017 Report “Meeting Asia’s infrastructure needs”*

<sup>6</sup> See Table 1, p.26, Economic Outlook for Southeast Asia, China and India, OECD, 2016

<sup>7</sup> Replicated from Table 1, p.26, Economic Outlook for Southeast Asia, China and India, OECD, 2016

<sup>8</sup> See MPAC2025, Chapter 3, p. 29. Consuming Class is defined as a household with an annual income of more than US\$7,500 (in 2005 purchasing power parity terms).

<sup>9</sup> Southeast Asia at a Crossroads: Three paths to prosperity. P.79, McKinsey Global Institute, November 2014

<sup>10</sup> Ibid. p.74

Indeed, the ADB has estimated that the annual average infrastructure spending need in ASEAN is at least US\$184bn for the period 2016-2030<sup>11</sup> or 5% of GDP (see Table 2 below). To put this in context, current spending across the region (excluding Singapore, Brunei and Lao PDR) is merely US\$55 billion. Set against an estimate for required infrastructure spend going forward to 2030 for the same 7 ASEAN Member States (i.e. still excluding Singapore, Brunei and Lao PDR) of around US\$147 billion per year through to 2030, it would appear that there is a funding gap of at least US\$92 billion per year<sup>12</sup>.

**Table 2: Estimated Infrastructure Investment Needs in Southeast Asia 2016-2030<sup>13</sup> (2015 Prices)**

Projected Annual GDP Growth		5.10%
2030 UN Population Projection		723 million
2030 Projected GDP per capita (2015 US\$)		7,040
Baseline Estimates	Investment Needs	US\$2,759 billion
	Annual Average	US\$184 billion
	Investment Needs as % of GDP	5.00%
Climate Adjusted Estimates	Investment Needs	US\$3,147 billion
	Annual Average	US\$210 billion
	Investment Needs as % of GDP	5.70%

For Indonesia alone, the ADB has predicted that under its baseline scenario, the country will need to invest US\$70 billion in infrastructure annually between 2016 and 2030 (or 5.5% of its projected GDP)<sup>14</sup>. Indonesia's infrastructure investment levels in 2015 were put at only US\$23 billion, indicating a funding gap of US\$47 billion per year assuming that the 2015 levels are maintained<sup>15</sup>. The Widodo administration is attempting to address this problem by channelling an unprecedented funding into domestic infrastructure projects. The spending spree began with the addition of around US\$8.2 billion in the 2015 supplementary national budget specifically for infrastructure, or a 39% increase over the 2014 budget. This extra spending was funded largely by fuel subsidy savings made possible in part by the fall in oil prices at the time. This additional infrastructure spend is being dispersed across projects in oil and gas, power, water supply and waste treatment, roads, urban transport, rail, ports and airports<sup>16</sup>.

The underspending on infrastructure in Southeast Asia is further highlighted when the total infrastructure stock of the region is examined and pitted against a global benchmark. As can be seen on the graphic below (see Figure 1) several ASEAN countries have been under-investing in infrastructure with "average infrastructure stock among ASEAN economies (49% of GDP) falls short of the global benchmark by a large extent"<sup>17</sup>.

<sup>11</sup> Meeting Asia's Infrastructure Needs, ADB, 2017

<sup>12</sup> Understanding infrastructure opportunities in ASEAN: Infrastructure Series Report 1, PwC, 2017, after Meeting Asia's infrastructure Needs, ADB, 2017 - see p.50

<sup>13</sup> Meeting Asia's infrastructure Needs, ADB, 2017, p.xiv

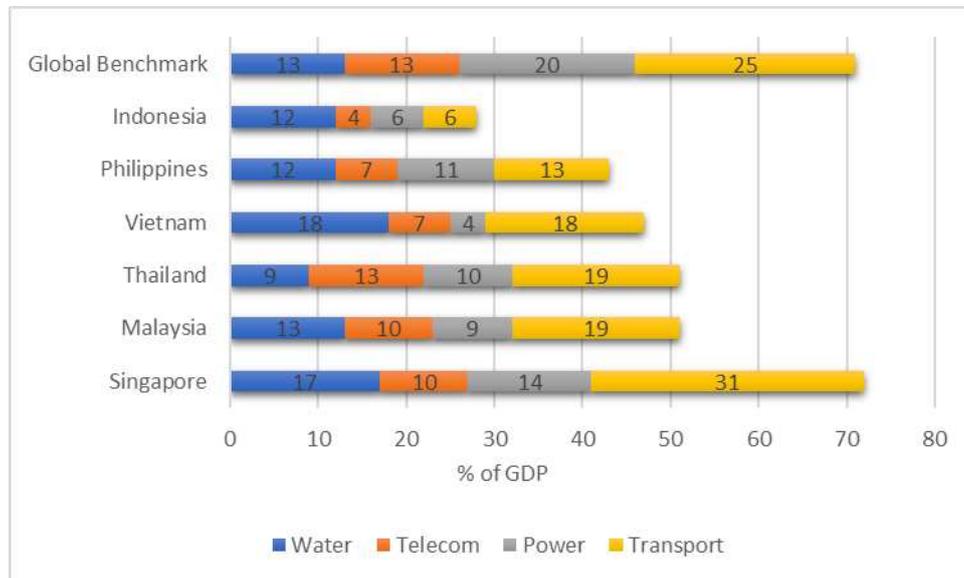
<sup>14</sup> Meeting Asia's infrastructure Needs, ADB, 2017, p.43 (all at 2015 Prices).

<sup>15</sup> Meeting Asia's infrastructure Needs, ADB, 2017, p.50

<sup>16</sup> <https://oxfordbusinessgroup.com/indonesia-2017/infrastructure>

<sup>17</sup> ASEAN Focus - The Virtuous Cycle Between Infrastructure & Economic Growth, UOB Global Economic & Markets Research, Quarterly Global Outlook 1Q2017

**Figure 1: Infrastructure Stock in Selected ASEAN Countries vs Global Benchmark<sup>18</sup>**



As UOB, a leading bank in ASEAN, has noted “Rising Asian affluence will be a net positive for consumption related sectors such as the transport, logistics, utilities, ICT, healthcare and education sectors”<sup>19</sup>. This will mean even further pressure to develop infrastructure faster, and even greater pressures on public finances. Finding ways to plug the funding gap is now critical to the region if the lack of provision of infrastructure is not to hinder further economic development.

<sup>18</sup> ASEAN Focus - The Virtuous Cycle Between Infrastructure & Economic Growth, UOB Global Economic & Markets Research, Quarterly Global Outlook 1Q2017 - Global benchmark is derived based on study of Canada, China, Germany, India, Italy, Poland, South Africa, Spain, UK and USA.

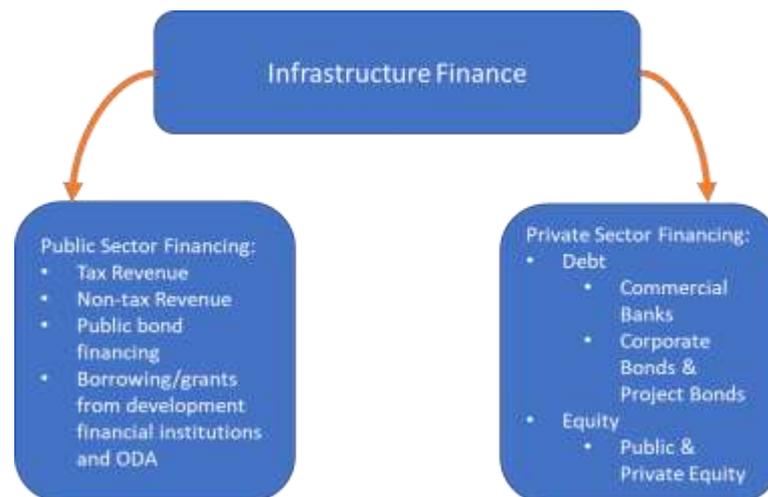
<sup>19</sup> ASEAN Focus - The Virtuous Cycle Between Infrastructure & Economic Growth, UOB Global Economic & Markets Research, Quarterly Global Outlook 1Q2017

## DEALING WITH THE INFRASTRUCTURE FINANCE GAP

It is a fact that most countries in the World, including in Southeast Asia, have insufficient public funds available to either meet the demand for new infrastructure, or indeed in some cases to meet the requirements for upgrading or maintaining existing infrastructure to meet increased needs driven by urbanisation and increased economic activity. The ADB noted, in fact, that “in many countries, power outages restrain economic growth and underdeveloped transportation networks restrict the flow of people, goods and services within cities and between urban and rural areas. City traffic congestion alone costs huge amounts of money in lost productivity and wasted fuel and adds to human stress”<sup>20</sup>. And yet, as demonstrated in the previous section, there is an absolute need for ASEAN to spend more on infrastructure than it is currently doing.

Sources of funds for infrastructure are either largely from the public purse or from private sector sources (see Figure 2 below). Pressure on public finances in the Southeast Asia are significant and infrastructure spending is competing against other very real public policy needs. As PwC noted in their 2017 report “emerging economies have even less available public budget to spend on infrastructure and must learn to prioritise effectively and clearly identify those that require government support, those that may attract ODA funding, and those that are sufficiently economically viable to attract private sector funding”<sup>21</sup>.

Figure 2: Key Sources of Infrastructure Finance<sup>22</sup>



### The Public Purse

It is clear that there is insufficient money in the various exchequers around Southeast Asia to adequately and sensibly fund the requirement for more infrastructure. But that does not mean that governments should automatically seek outside support, be that from multilateral development banks, overseas aid partners or the private sector. Policy makers need to examine how much they can afford to spend on developing their national infrastructure given other spending priorities. The ADB outlined a three-stage approach for governments to first follow<sup>23</sup>, namely:

- i. Examine to what degree they can increase government revenues via taxation and other revenue sources;
- ii. Examine existing spending to see where policy priorities can be re-orientated (i.e. switch government spending from one area to support increased infrastructure

<sup>20</sup> Meeting Asia’s Infrastructure Needs, ADB, 2017 -p.3

<sup>21</sup> Understanding infrastructure opportunities in ASEAN: Infrastructure Series Report 1, PwC, 2017, p.17

<sup>22</sup> After Meeting Asia’s Infrastructure Needs, ADG, 2017, p.55

<sup>23</sup> Meeting Asia’s Infrastructure Needs, ADB, 2017, p.55

investment, such as removing fuel subsidies - as Indonesia has done - or removing support for loss making SOEs)

- iii. Borrowing, so long as it does not unduly increase public debt to unsustainable levels.

The ADB has noted that in many countries in the region there is some scope for increasing government revenues through reforms of the tax system and more vigorous tax collection. The IMF and World Bank estimated that, for the Philippines, tax reform could increase government revenues by the equivalent of 2%-3% of GDP<sup>24</sup>. However, such reforms will not be sufficient to plug the finance gap for infrastructure on their own, especially as not all increased revenues from such reforms would be channelled directly to infrastructure development. Competing needs will always exist. There is, therefore a clear need to look to other sources for funds. PwC noted this, stating in their 2017 report: “Government funding will not be enough to meet the demand and to fill the gap. Therefore, significant private sector participation and financing is required to supplement it.”<sup>25</sup>

## Multilateral Development Banks and ODA funding

In recent years there have been a number of new developments in multilateral financing institutions which are targeting infrastructure development. They are no doubt a good alternative source of infrastructure funds. Indeed, “Multilateral Development Banks have financed an



ANOTHER KEY AND DEVELOPING SOURCE OF INVESTMENT FOR INDONESIA IS THROUGH CHINA’S BELT AND ROAD INITIATIVE (BRI).

ACCORDING TO HSBC, BRI-RELATED COMMITMENTS FOR ASEAN - SPECIFICALLY IN MALAYSIA, INDONESIA, AND THE PHILIPPINES - WILL TOTAL MORE THAN USD77 BILLION

<http://www.business.hsbc.com.sg/en-gb/sg/article/indonesia-and-singapore-leading-the-way-in-infrastructure-financing>

estimated 10% of infrastructure needs in developing Asia (excluding China and India)”<sup>26</sup>, and with institutions such as the Asia Infrastructure Investment Bank and the ASEAN Infrastructure Fund, as well longer established institutions such as the World Bank and the ADB, looking to investment more, the percentage of projects supported by them looks set to increase.

As an example, The ASEAN Infrastructure Fund (AIF), which was established specifically to help plug the region’s infrastructure gaps with Malaysia, Indonesia and the Asian Development Bank (ADB) as the major shareholders, has, as of June 2016, has processed seven projects in Indonesia, Vietnam, Myanmar and Laos with a combined amount of over US\$300 million on co-financing with ADB<sup>27</sup>.

However, funds from such institutions or from aid partners is not free money. The monies normally come in the form of loans - sometimes at discounted rates - which will eventually need to be repaid and which, in the meantime increase levels of public debt. Governments need to look at these debt levels, and the terms and conditions of the loans or grants, carefully to determine whether accepting such monies is truly in the long-term interest of the country.

MDB and ODA funding can play an important part in development of projects. However, as MDBs and ODAs compete to provide financing it is important that such money is focused on where there are gaps (i.e. private sector support is not feasible) and not focused on more feasible projects where use of MDBs or ODA funding would crowd out the private sector. At the same time, it will

<sup>24</sup> Meeting Asia’s Infrastructure Needs, ADB, 2017, p.56

<sup>25</sup> Understanding infrastructure opportunities in ASEAN: Infrastructure Series Report 1, PwC, 2017, p.17

<sup>26</sup> Meeting Asia’s Infrastructure Needs, ADB, 2017, p.xi

<sup>27</sup> ASEAN Focus - The Virtuous Cycle Between Infrastructure & Economic Growth, UOB Global Economic & Markets Research, Quarterly Global Outlook 1Q2017

also be important that such funds are applied to well considered infrastructure projects and that ODA money is not considered a ‘quick’ route to develop infrastructure without the need for best practice in project selection/design.

MDB and ODA funding can also usefully be focused on supporting the use of international best practice advisors for project design and feasibility stages - this would mean that lowest cost would not be the primary procurement methodology and that projects would have a better chance of being well designed. MDBs should also continue recent initiatives to increase the range of financial guarantees that can be used when considering projects and ensuring that these projects are flexible enough to address project specific risks.

The Belt and Road Initiative is one way to attract funding from a variety of public and private sources, and an increasingly important one in Asia as a whole. There are signs that BRI funding is adopting a commercial and sustainable approach, with the Java-7 power station project in Indonesia - which HSBC was a lead arranger of finance - being one such example. The project was awarded through a highly-competitive tender exercise and, once complete, will add significant low-cost power capacity to the Java and Bali regions<sup>28</sup>.

## Private Sector Funding

Many governments in Southeast Asia see the private sector playing a key role in financing further infrastructure development in the region. There is no doubt there is a significant interest from both financial institutions, such as banks and insurance companies, and infrastructure construction and operating companies, to be more involved in the region. The overwhelming need for further infrastructure means ASEAN represents a region of great opportunity in that respect. However, governments still need to ensure that the right conditions are in place to attract private sector support. The ADB has noted that the “...discussion on infrastructure finance highlights the huge increase required in private infrastructure financing and the critical public-sector role in helping make that happen”<sup>29</sup> and went on to highlight the fact that “with the private sector estimated to invest around US\$63 billion at present, expanding private finance by the required level is no doubt a major challenge”<sup>30</sup>. The lower than desired levels of private sector infrastructure investment is a result of many factors, such as policy decisions, lack of bankable projects, weak governance and a lack of transparency<sup>31</sup>.

There is no doubt that the private sector has considerable funds available that could be invested in infrastructure projects. It has been noted by McKinsey & Company that globally, banks and institutional investors hold approximately US\$120 trillion of assets under management<sup>32</sup>. Putting in place the conditions that would allow access to those funds is key.

Paiton Energy is a clear example of how debt capital markets have a potentially significant role to play in the funding of Indonesian infrastructure. In August 2017, the privately owned independent power producer - Indonesia’s second largest - launched a two-tranche USD2 billion project bond. The bonds comprised USD1.2 billion 13-year notes and USD800 million 20-year notes. The deal - which was arranged by HSBC - was the first in which a private company received an investment grade rating, was the first public project bond to be issued in Asia since 2000 and the long tenors appealed to investors looking for long-dated, high quality infrastructure assets. It showed that Asian investors are prepared to make significant investments in Indonesian infrastructure for the right deals. The fact that investors will buy long-dated amortising structures is also a significant step forward for the Asian capital market<sup>33</sup>.

<sup>28</sup> <http://www.business.hsbc.com.sg/en-gb/sg/article/indonesia-and-singapore-leading-the-way-in-infrastructure-financing>

<sup>29</sup> Meeting Asia’s Infrastructure Needs, ADB, 2017, p.85

<sup>30</sup> Meeting Asia’s Infrastructure Needs, ADB, 2017, p.85

<sup>31</sup> Understanding infrastructure opportunities in ASEAN: Infrastructure Series Report 1, PwC, 2017, p.18

<sup>32</sup> Bridging Global Infrastructure Gaps, McKinsey & Company, June 2016

<sup>33</sup> See: <http://www.business.hsbc.com.sg/en-gb/sg/article/indonesia-and-singapore-leading-the-way-in-infrastructure-financing>

Below we have looked further at some changes, to regulations, market structures, and policy approaches in a number of areas that could allow for funds to flow from the private sector for the financing of infrastructure in ASEAN.

### Capital Market Development

Deep, liquid and efficient capital markets promote non-bank sources of credit for infrastructure projects. Nine out of ten markets in ASEAN are either classified as an emerging or frontier market or not classified by MSCI due to stock market constraints. There are a number of obstacles that limit investors' confidence to invest in companies via capital markets: Shortage of information around company operations and corporate governance to investors and public; Lack of credit rating agency and of data on bonds, which reduces the ability of the companies to access funds from a wider group of investors who rely on credit ratings given by credit rating agencies in their investment decisions; and current regulations which restrict bond issuances. **Standardisation in terms of reporting, documentation and benchmarking will help to categorise projects and make rating easier. This in turn will help to develop the market for all types of investment, debt and equity, listed and unlisted. Greater urgency to improve investment conditions and the offering of non-discriminatory regulatory regimes that encourage greater participation by insurers in long-term investments are needed.**

It is our view that the ASEAN Markets would benefit from a greater standardisation in local currency credit pricing. The standards in Europe and the United States Markets are rising, and the gulf between these markets and the local currency ones is widening. For Euro or US Dollar markets the documentation platform is pretty standardised, but this is not the case for local currency bonds where often the decision to invest is based more on existing relationships. If the documentation standard were higher it would make the dynamic more sustainable. Standardisation of documentation would help the local currency market to improve and ease the steps for borrowers who wish to tap the offshore markets<sup>34</sup>.

The regulatory environment for different classes of institutional investors in different countries varies. For example, insurance companies in certain countries can only invest in OTC products, meaning that investing in a private loan style financing at the asset level is not allowed. Such blanket restrictions on Institutional investors being able to invest in the asset class should be removed/made consistent across the region, and permission to invest should be based on a company's resources and capabilities to manage risk.

Whilst it might be desirable in the long-term to develop local capital markets, it is a not viable solution in the short to medium term as every country with infrastructure needs will not be able to develop markets at the pace, depth and scale necessary to service their own financing requirements.



DEEPENING OF BOND MARKETS IS CRITICAL TO ATTRACT LONG-TERM INSTITUTIONAL INVESTORS... BOND FINANCING MUST ASSUME A GREATER ROLE TO COMPLEMENT BANKS. CREDIT ENHANCEMENT THROUGH BOND GUARANTEES CAN ALLOW LONG-TERM CONTRACTUAL INVESTORS LIKE PENSION AND INSURANCE FUNDS TO INVEST IN INFRASTRUCTURE BONDS

Meeting Asia's Infrastructure Needs, ADB, 2017, p.xvii-p.xviii

<sup>34</sup> See: "Mind the Gap", HSBC policy paper, October 2017

Thus, we propose creating **regional capital market hubs** that can build critical mass behind a new infrastructure asset class. Such hubs would act as a magnet for institutional investors, build liquidity and lead to better pricing. This is something that HSBC has also recommended<sup>35</sup>.

The MDBs have a leading role to play here too. As with individual infrastructure projects, they can help mitigate risk or enhance credit at the level of the pooled asset. This would provide assets with the “right” risk/return profile required by the broad public market. To provide momentum behind this approach, rating agencies should be involved to develop a unified approach to such warehoused products. And there is a key role for regulators to recognise such credit enhancement in the regulatory treatment for these vehicles, transforming them from an alternative asset to being a “true” fixed income asset class. This is necessary to meet the regulatory requirements and fiduciary duties faced by those controlling the funds we want to attract.

The MDBs can also provide solutions to handling local currency risk. This is a key issue for institutional investors whose funds are based in international currencies. Without appropriate inflation or FX hedging, market movements can significantly affect the bankability of any infrastructure project that relies on foreign financing. However, in many emerging and frontier markets, basic currency hedging or inflation hedging instruments are not available. Even where some form of derivatives market exists, there is often no meaningful liquidity, or the market may be too thin or short-dated, resulting in very large bid/offer spreads, making hedging uneconomical.

However, to off-set this, MDBs could be invited to develop and introduce risk mitigation and credit enhancement instruments at the level of warehoused infrastructure assets; and, convene regulatory authorities and credit rating agencies to discuss the appropriate recognition for such an asset class.

It should be noted that, in general, life insurance and pension companies do not face a local currency risk, as they typically have liabilities (their promises to their customers) in the local currency. Solvency regulations need to reflect this reality, and not have a ‘one-size fits all’ approach based on banking regulations.

#### Recommendations:

- Standardisation in terms of reporting, documentation and benchmarking will help to develop the market. Greater urgency to improve investment conditions and the offering of non-discriminatory regulatory regimes that encourage greater participation by insurers in long-term investments.
- Encouraging consistency in treatment of projects through international/local rating agencies.
- Creation of a regional capital market hub that can build critical mass behind a new infrastructure asset class. Such hubs would act as a magnet for institutional investors, build liquidity and lead to better pricing.
- Invite the MDBs to broaden their use of guarantees to cover, in whole or in part, losses derived from local currency and default risk; and, act as market makers in local currency instruments to permit the development of regional capital market hubs, able to support a market in local currency bonds.

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<sup>35</sup> See: “Mind the Gap”, HSBC policy paper, October 2017

### Long Term Investment Vehicles

We have highlighted the need to increase the role of insurance companies and pension funds in providing long-term investment, as public funding, bank finance and current capital market capacity cannot meet ASEAN’s infrastructure financing needs. In the insurance sector, a holistic approach to the asset class of infrastructure projects does not really exist. Varied regulatory treatment and the lack of a holistic approach have constrained the ability of insurance companies to make long-term investments in these projects. In Singapore, MAS is engaging insurers on their interest in an infrastructure asset class, and the specific types and characteristics of infrastructure financing appropriate for insurers, in order to formulate specific capital requirements for this asset class. In Europe, the Solvency II regime has been amended to include infrastructure criteria that will reduce capital charges or qualifying projects. **The EU-ABC seeks greater urgency to improve investment conditions and the offering of non-discriminatory regulatory regimes that encourage greater participation by insurers in long-term investments.** Current regulatory treatment of infrastructure investment is largely based on asset class, focusing on limitations/prohibitions on the instrument for investment instead of the overall risk profile of the underlying substance. Varied regulatory treatment has constrained the ability of insurance companies to make long-term investments. Table 3 below illustrates some examples for six members of ASEAN:

**Table 3: Regulatory Constraints on Long-Term Investment Vehicles in Selected ASEAN Countries**

	<i>Singapore</i>	<i>Indonesia</i>	<i>Malaysia</i>	<i>Vietnam</i>	<i>Thailand</i>	<i>Philippines</i>
<i>Private loans to infrastructure project</i>	Allowed	Allowed with limits	Allowed with limits	Not allowed	Not allowed	Allowed with limits
<i>Restrictions in foreign asset investments</i>	No specific restriction	No specific restriction	Detailed investment limits	Detailed investment limits	% limit of overall investments	Detailed investment limits
<i>Requirement to invest in only investment-grade bonds</i>	No	Yes	% limit of overall investments for non-investment grade bonds	No	Yes	No
<i>Ownership stake in a company</i>	Require regulatory approval for holding >10% stake in a company	Maximum 10% per issuer	Different limits for different counterparty types. Often limited to maximum 5% per issuer	No specific issuer limit	No specific issuer limit	Maximum 10% per issuer
<i>Specific restrictions in unlisted equity</i>	Follows listed equity limit	Maximum 10% of total investments	Maximum 5% per issuer	Follows listed equity limit	Maximum 5% of total investments	Require regulatory approval for investing in equities of other FIs
<i>Specific limits for subordinated debt</i>	No specific restriction	No specific restriction	No specific restriction	No specific restriction	Maximum 5% of total investments	No specific restriction

Currently capital charges focus on the instrument of investment, which can impose very high capital standards on long-term assets. This can be as high as 50% for unlisted equities and exceeding 20% for unrated bonds and loans, which makes investing in long-term assets costly for insurance companies. This is inappropriate as insurance companies, unlike banks, do not engage in maturity transformation - investing short-term deposits in longer term assets. Life insurance policies are typically long-term instruments, and so the companies tend to hold bonds to maturity to match their liabilities.

### Public and Multilateral Action to Expand Blended Finance

Meaningful public/private agreements share project risks and increase investors' confidence in the projects. Efforts such as the ADB's Credit Guarantee and Investment Facility (CGIF) and the IFC's Managed Co-Lending Portfolio Project (MCP) use capital contributed by the ASEAN+3 countries and multilateral organisations to insulate the risk of credit default for private institutional investors in projects that they may have otherwise deemed too risky. Product innovations, e.g. infrastructure debt takeout facility which provides a guaranteed takeout arrangement; guarantees for construction risks; government or agencies issuing guaranteed infrastructure bonds and allowing for pooling and securitisation of multiple projects etc. help "crowd in" private finance.

**The EU-ABC would like to see more of such initiatives to expand blended finance. As with multilateral bodies, national governments should also be encouraged to develop local capital markets facilities to do the same, e.g. the Indonesian government's support in terms of lending and guarantees via the Indonesia Infrastructure Fund (IIF) and the Indonesia Infrastructure Guarantee Fund (IIGF).**

Pension funds, asset managers, insurance companies and Sovereign Wealth Funds are seeking yield in new investment opportunities. But most are limited to opportunities of investment grade, as defined by credit rating agencies. This limits their ability to invest in infrastructure to the scale and speed required. Unless the risk return profile of the investment can be altered to crowd-in that finance, it will continue to sit on the side-lines.

Creating the right risk-return profile requires other financial actors to pick up some of the risks typically associated with large scale infrastructure projects that the private sector finds difficult to take on its own. These include:

### CASE STUDY: CGIF - A CASE OF PUBLIC, MULTILATERAL AND PRIVATE SECTOR COLLABORATION

Prudential was the lead investor for a deal in 2014 involving Masan Consumer Holdings. This is the first bond in Vietnam to be guaranteed by CGIF, a multilateral facility whose contributors were the ASEAN+3 countries, as well as the ADB. Prudential invested in over 30% of the bonds.

The deal uses the guarantee provided by CGIF, which covers 100% principal and coupon payments to provide a layer of loss protection for investors. The CGIF deal shows how private/public sector collaboration in the local currency bond markets provide confidence to investors and help companies raise long-term fixed rate funding in matching currencies. This access allows companies to make long-term investments when risks associated with refinancing as well as interest and foreign exchange rate volatility dissipate.

EU-ABC members look forward to seeing more of these instruments to support the development of bond markets in Vietnam.

- *Risks associated with the political and policy environment of the host country.* For example, risks around: political stability; dependability of the legal framework and policy settings; administrative capacity; and transparency of contractual processes. It also extends to judgments on the economic fundamentals of the country and the volatility of its currency.
- *Risks associated with a typical project in its design and construction phases.* Typical risks include Construction and Completion Risk which is carefully analysed by lenders, since any cost overrun or delay is highly detrimental to a project. This often depends on the credibility of the winning consortium for the project.

*Post-construction Payment Risk.* Will the promised returns materialise? The precise nature of the risk will depend on how the scheme has been operated, for example, through a PPP scheme where the fees remunerating the project will be paid by a public entity, or under a concession scheme where the remuneration comes from tariffs paid by the users.

## Recommendations

Ensuring these risks are picked up may require provision of guarantees or credit enhancement facilities. According to HSBC<sup>36</sup>, and others, the key question for policy makers is how to bring scale and a degree of simplification to what are often complex, and bespoke transactions. In our view this requires three things.

- First, create a toolbox of instruments tailored to meet common financing impediments found in project finance. This requires a systematic analysis to produce a taxonomy across: a) the different risks outlined above; b) the different sources of finance (pension, insurance, Sovereign Wealth Funds), and the risk/return characteristics required for them to invest; and c) the appropriate intervention in terms of risk mitigation or credit enhancement that can crowd-in that finance, without reducing returns to a level that fails to remunerate capital.
- Second, simplify access to risk mitigation instruments. These financial instruments should be standardised and “industrialised” to promote take up by project sponsors and financiers. We propose that a series of facilities be established at regional or global level. Such facilities might be run and part-funded by MDBs, as proposed by the World Economic Forum<sup>37</sup>. But funding could also come from philanthropic organisations and national development agencies.
- Third, construct the project pipeline to use these instruments. Institutions such as the Global Infrastructure Hub and the Global Infrastructure Facility, formed to establish best practice in project development, should help project designers use these instruments in combinations tailored to the risk profile of specific projects.

Public sector finance alone cannot be sufficient to finance infrastructure development. With the above successful examples as guide, multilateral bodies and governments need to create more capacity and facilities, specialist capabilities supported by clear rules for public/private collaboration, including common dispute resolution, to reward “crowding in” of private finance and promote the best use of resources.

<sup>36</sup> See: “Mind the Gap”, HSBC policy paper, October 2017

<sup>37</sup> WEF report on “Risk Mitigation Instruments: Infrastructure Gap Assessment” (July 2016) concluded that a significant scale-up in the use of risks mitigation tools would require, the establishment of a global or regional risk mitigation facility with or without direct participation of the MDBs, offering a standardised set of products. Such a facility would have the potential to strengthen local capital markets if applied to local currency bond financing.

## Public-Private Partnerships

Public-Private Partnerships (PPPs) undoubtedly have a significant role to play in helping ASEAN finance more infrastructure development. All 10 of the ASEAN Member States have been, or are intending to, developing frameworks to allow for more PPP projects. Indeed, ASEAN has developed a framework for PPP projects<sup>38</sup> which provides some general guidance to ensure successful project structures for PPP projects. Some countries in the region, notably the Philippines, have established PPP offices and a growing tradition of PPP infrastructure projects - Indeed, in a survey done by the Economist Intelligence Unit only the Philippines in the region was identified as having a “developed” PPP regime, with others only ranked as “emerging”<sup>39</sup>.

PPPs can play a pivotal role in financing infrastructure projects, especially when compared to traditional capital investments from the government. This is because in PPP projects financial and operational risks can be more effectively allocated to the private sector, who tend to be able to manage such risks more efficiently. Furthermore, PPPs also allow governments to tap on the innovative ability and managerial talent in the private sector as well as free up public resources, in turn allowing them to invest available resources in other infrastructure projects or other areas of society and economy<sup>40</sup>.

PPP projects can though be complex and difficult to structure and procure as potential investors and operators will require certain assurances and guarantees over areas such as public policy, changes to rules and regulations, contract length, usage rates and charging levels etc. to be sure of the viability of the project. Governments, therefore, will need to consider carefully whether the provision of such assurances and guarantees is in their long-term interest, especially if they are seen a precedent setting for other projects. However, PPPs should represent a “win-win” scenario for all stakeholders involved - the government, the private sector funders and operators, and the general public. To achieve this a general principle for arriving at the best available structure is to apportion the risks to the stakeholders best able to handle them. In order to do so, the nature of inherit project risks in the first place must be identified<sup>41</sup>. Table 4 below sets out some the key risk factors that need to be borne in mind when developing PPP projects.

The ADB has stated that “Developing a robust pipeline of bankable projects requires a regulatory and institutional framework that (i) specifies the types of procurement contract; (ii) ensures project identification and structuring appropriate for the specified procurement; (iii) includes a dispute resolution mechanism; (iv) contains streamlined processes for environmental and other regulatory permits for construction and operation; (v) defines costs and service levels; (vi) has defined bid parameters (for example, minimum viability gap requirements provided by the government); and, (vii) has an independent tariff setting authority”<sup>42</sup>. To achieve this, it is important that countries in the region enact clear PPP laws, and ensure clear and transparent bidding and contracting models, preferably with independent oversight offices in place.

To be bankable, i.e. financeable for the private sector, PPPs “need to be structured within a regulatory and institutional environment conducive to private investment and better project preparation capabilities”<sup>43</sup>. Only through this approach can a robust pipeline of bankable projects really be developed.

AN ENABLING ENVIRONMENT THAT  
DELIVERS WELL-PREPARED, VIABLE  
PROPOSALS FOR PRIVATE  
INVESTMENT IS CRITICAL FOR PPPs

Meeting Asia’s Infrastructure Needs, ADB,  
2017, p.xvii

<sup>38</sup> See: [http://www.asean.org/storage/images/pdf/2014\\_upload/Attachment-ASEAN%20%20PPP%20Principles.pdf](http://www.asean.org/storage/images/pdf/2014_upload/Attachment-ASEAN%20%20PPP%20Principles.pdf)

<sup>39</sup> Economist Intelligence Unit (2015), Evaluating the Environment for Public Private Partnerships in Asia Pacific - The 2014 Infrascope. London: Economist Intelligence Unit. Indonesia, Thailand and Vietnam were classified as emerging.

<sup>40</sup> Understanding infrastructure opportunities in ASEAN: Infrastructure Series Report 1, PwC, 2017, p.32

<sup>41</sup> [http://www.eria.org/PPP\\_in\\_General\\_ERIASummary\\_2015.pdf](http://www.eria.org/PPP_in_General_ERIASummary_2015.pdf)

<sup>42</sup> Meeting Asia’s Infrastructure Needs, ADB, 2017, p.66

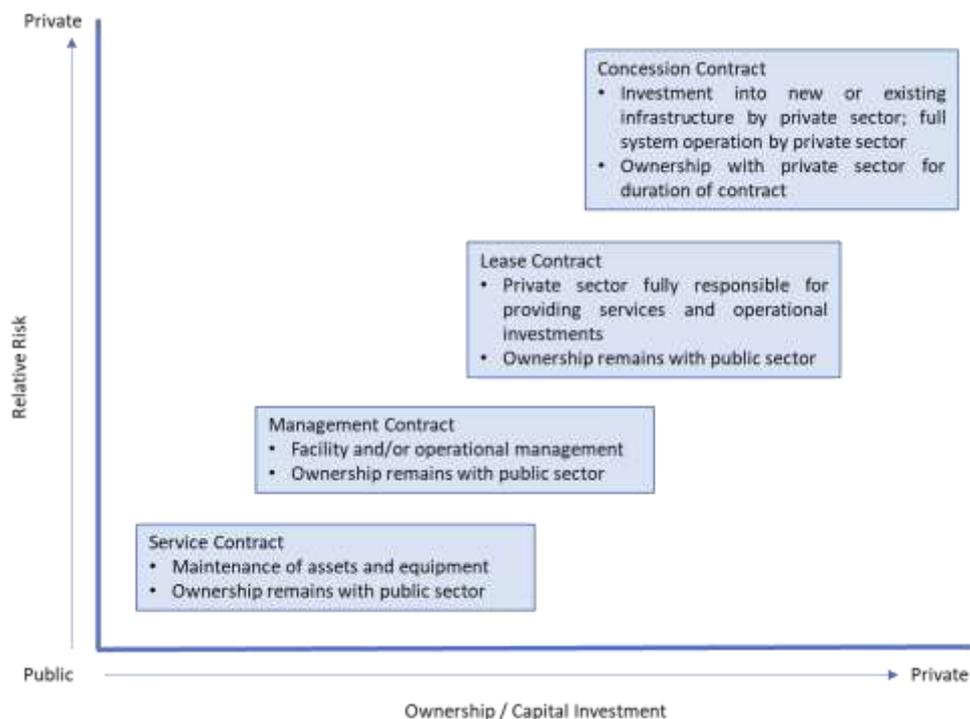
<sup>43</sup> Meeting Asia’s Infrastructure Needs, ADB, 2017, p.xvii

**Table 4: Risk Allocation Factors & Bankability for PPP Projects<sup>44</sup>**

Risk Type	Key Points
Construction and Completion Risk	Cost of Construction; Delay; Performance (i.e. infrastructure performs as expected)
Operating Risks	Operating costs (fixed or variable); Performance of operator; Revenue risks (fixed or variable)
Demand Risk	Certainty of revenue stream and/or patronage
Force Majeure and Change in Law	Certainty is needed to ensure that loans/grants are still repayable even in a force majeure situation or in the event a government changes the law
Political/Regulatory Risk & Expropriation/Nationalisation Risk	Change of government policy; inclusion of compensation measures
Environmental Risk	Environmental and social requirements of lenders and governments
Social Risk	Potential for social unrest/protests resulting from development
Currency Exchange Risk	Divergence between currency of revenue and currency of debt
Interest Rate Risk	Fixed or variable rates (or a combination thereof)

As to whether PPP is the right approach for a government, and the degree of private sector involvement within a project, much depends on the allocation of risks. Figure 3 below graphically explains the possible degree of private sector involvement depending on the type of PPP, and therefore the level of risk being taken on.

**Figure 3: Allocation of Risks by PPP Type<sup>45</sup>**



<sup>44</sup> From <http://ppp.worldbank.org/public-private-partnerships/financing/risk-allocation-mitigation>

<sup>45</sup> Meeting Asia’s Infrastructure Needs, ADB, 2017

Currently, the pipeline of approved investment-ready projects is in short supply to bridge the infrastructure gap. **Projects can be prioritised, with the projects that can be designed to be investible with only private funding accelerated.** The OECD and the World Economic Forum had jointly established a Sustainable Development Investment Partnership (SDIP), doing just that to review governments' lists of priority infrastructure projects.

ASEAN has conducted a review of various projects that were originally listed in the Masterplan on ASEAN Connectivity 2010 or in Member States' own infrastructure lists connected to ASEAN connectivity. That review was undertaken by ASEAN with assistance from the World Bank and Australian Aid<sup>46</sup>. An initial review of projects produced a list of 40 projects that might be "bankable". However, a second stage review reduced the list to only 8 projects that were seen as being deliverable and which met the needs of ASEAN Connectivity. In many respects, this demonstrates the difficulty of ensuring the bankability of projects. For the record the 8 projects are:

1. Kanchanaburi - Phu Nam Ron Motorway
2. Manado-Bitung Toll Road
3. Central Luzon Link Expressway
4. NLEX East Expressway
5. Trans-Sumatra Toll Road: Kayu Agung - Betung
6. Bien Hoa - Vung Tau Expressway
7. Bitung Port
8. Makassar port
9. Laos Road No. 3: ASEAN Highway No. 3 (Boten-Nateuy-Houayxay)
10. Development of port facilities along the Mekong, Basac, Tonlesap rivers

## Overall Recommendations to Enhance Private Sector Involvement in Infrastructure

In order to boost the level of involvement of the private sector in the financing of infrastructure in ASEAN, the EU-ABC recommends:

- Enhance Private Sector involvement in infrastructure:
  - Introduce region-wide standardised reporting, documentation and benchmarking to help develop markets and make it quicker and easier for companies to assess projects and so facilitate private finance.
  - Give greater urgency to improve investment conditions and the offering of non-discriminatory regulatory regimes that encourage greater participation by insurers in long-term investments, especially those aimed at supporting infrastructure development.
  - Expand public-private sector blended finance initiatives. Create the right risk-return profile by encouraging other financial actors to pick up some of the risks typically associated with large scale infrastructure projects that the private sector finds difficult to take on its own.
  - Accelerate the implementation of clear and transparent PPP regimes across ASEAN, including open and transparent bidding processes.
- Ensure there is a pipeline of bankable projects through both the development and operational phases of the lifecycle - this will have the greatest impact on both the provision of infrastructure and the development of capital markets to finance it.
- Developing a pipeline of bankable projects will require standardisation of documentation (wherever possible in the local context), transparent regulations and dispute resolution procedures, and a role for MDBs to mitigate credit risk.

<sup>46</sup> See <http://asean.org/storage/2016/09/Project-Briefs-for-Selected-PPP-Projects.pdf> for the full report.

## ABOUT THE EU-ASEAN BUSINESS COUNCIL

The EU-ASEAN Business Council (EU-ABC) is the primary voice for European business within the ASEAN region.

It is recognised by both the European Commission and the ASEAN Secretariat. Independent of both bodies, the Council has been established to help promote the interests of European businesses operating within ASEAN and to advocate for changes in policies and regulations which would help promote trade and investment between Europe and the ASEAN region. As such, the Council works on a sectorial and cross-industry basis to help improve the investment and trading conditions for European businesses in the ASEAN region through influencing policy and decision makers throughout the region and in the EU, as well as acting as a platform for the exchange of information and ideas amongst its members and regional players within the ASEAN region.

The EU-ABC conducts its activities through a series of advocacy groups focused on particular industry sectors and cross-industry issues. These groups, usually chaired by a multi-national corporation, draw on the views of the entire membership of the EU-ABC as well as the relevant committees from our European Chamber of Commerce membership, allowing the EU-ABC to reflect the views and concerns of European business in general. Groups cover, amongst other areas, Insurance, Automotive, IPR & Illicit Trade, Customs & Trade Facilitation, Healthcare and FMCG.

### Executive Board

The EU-ABC is overseen by an elected Executive Board consisting of corporate leaders representing a range of important industry sectors and representatives of the European Chambers of Commerce in South East Asia. The Executive Board is led by its Chairman Mr Donald Kanak.

### Membership

The EU-ABC’s membership consists of large European Multi-National Corporations and the nine European Chambers of Commerce from around South East Asia. As such, the EU-ABC represents a diverse range of European industries cutting across almost every commercial sphere from car manufacturing through to financial services and including Fast Moving Consumer Goods and high-end electronics and communications. Our members all have a vested interest in enhancing trade, commerce and investment between Europe and ASEAN.



To find out more about the benefits of Membership and how to join the EU-ASEAN Business Council please either visit [www.eu-asean.eu](http://www.eu-asean.eu) or write to [info@eu-asean.eu](mailto:info@eu-asean.eu).

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