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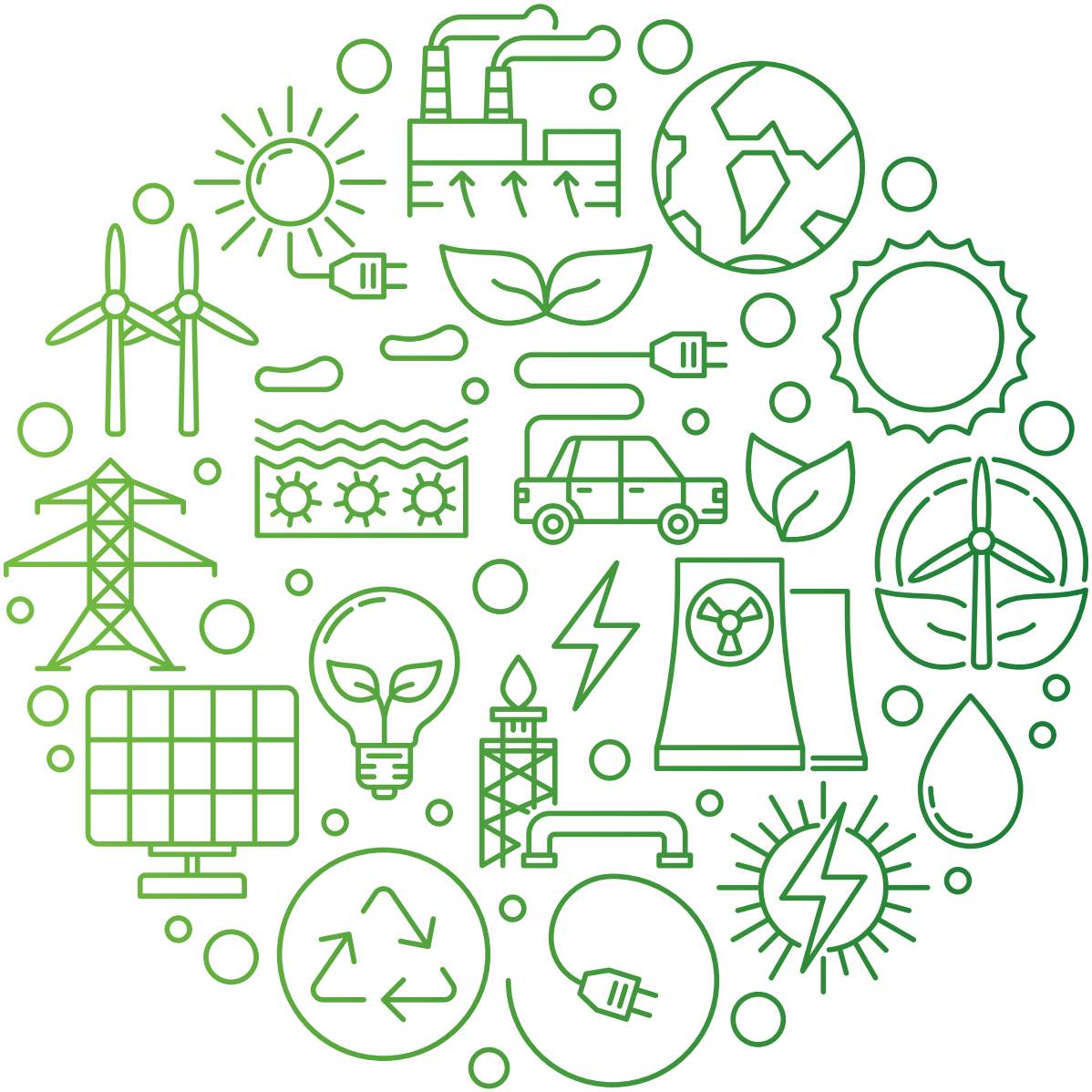


Infrastructure

Leading Southeast Asia's Economic Recovery

MAKING AN IMPACT THAT MATTERS since 1845

Executive summary

Infrastructure development to lead the economic recovery from COVID-19

The COVID-19 pandemic has necessitated the immediate and significant public health and economic policy responses centred on addressing the human impacts of the health crisis. Yet, measures aimed to slow the spread of the virus have led to unprecedented declines in economic activity.

According to the World Bank, the global recession caused by the pandemic is the deepest since World War II, and the Asian Development Bank is expecting economies across developing Asia to contract in 2020, for the first time in nearly 60 years.[1, 2]

Achieving high quality infrastructure development can positively impact economic output via higher construction activity and increased employment in the short-term. As such, some governments have already increased their infrastructure spending to stimulate their economies. Recently, the International Monetary Fund found that countries waste about one third of their infrastructure spending due to inefficiencies.[3] Governments need strong frameworks to plan, allocate, and implement quality public infrastructure. At the same time, the pandemic has revealed new vulnerabilities, highlighting that even countries with significant economic infrastructure were not sufficiently resilient to the ripple effects of such economic disruptions.

Against this background, we consider the role of developing high quality infrastructure in leading the recovery from COVID-19 in three phases:

1. **Respond: Minimise immediate disruptions from the impact of COVID-19 by filling urgent infrastructure gaps**
   We have seen the urgent responses many countries have implemented during the *Respond* phase. Governments have identified and sought to fill urgent infrastructure gaps in healthcare, telecommunications, and logistics. However, much more needs to be done in the region to address issues in accessing basic services, such as education, water and sanitation.

   The private sector also has a key role to play in addressing the significant crisis-induced disruption to the supply-side. Their value add would be to bring their innovation and ideas to infrastructure delivery and operations.

1 https://blogs.worldbank.org/opendata/understanding-depth-2020-global-recession-5-charts
2 https://www.adb.org/news/developing-asias-economic-growth-contract-2020?utm_source=news&utm_medium=email&utm_campaign=alerts
3 https://blogs.imf.org/2020/09/03/how-strong-infrastructure-governance-can-end-waste-in-public-investment/

2. **Recover: Accelerate "shovel-ready" projects to drive higher economic activity**
   While there is a strong case for spending on infrastructure development to stimulate economic recovery, materialising it can be challenging due to lengthy lead times. Instead of large, new and eye-catching projects, the initial focus of expenditure should start with existing assets or those already in the pipeline. The immediate target should be areas that can be quickly deployed with minimal risk. Priority should also be given to maintenance and upgrades to existing infrastructure and asset recycling.

   However, the need for urgency should not override the need for due diligence. The message to governments is: "*plan a pipeline now so increased spending can flow when needed in the period ahead*".

3. **Thrive: Prepare economies for future shocks and position them for sustainability**
   As we take steps to stabilise and redesign our economies, we can also reduce the impact of future economic shocks by ensuring upcoming economic recovery initiatives embrace a sustainable and resilient future.

   While economic recovery will be at the forefront of public policy, governments need to weigh other priorities in the delivery of infrastructure. It is important that investments are guided by sound principles around project prioritisation, funding, market design and delivery. This means significant preparatory work needs to start now.

Sustainable financing for green and resilient infrastructure

With less fiscal space available due to necessary spending on the crisis response, it will be important to explore alternative sources of funding for future infrastructure projects. Sustainable financing as a source of funds for corporates and project owners of sustainable infrastructure has been gaining significant traction. As institutional investors place greater focus on the sustainability of their portfolios, regional sustainable infrastructure projects will be able to gain access to more funding options. Furthermore, the new theme of transition finance is expected to unlock a new pool of assets by supporting improvements to existing infrastructure assets, aiding the transition to a low carbon economy.

Given the human and social elements involved with disruptions such as the COVID-19 pandemic, investment in socially impactful infrastructure will be the right match for investors looking to allocate their capital to initiatives that generate broader benefits beyond just financial returns.

Collaboration between governments and the private sector

In Southeast Asia, it has become clearer that some sectors have been reprioritised for infrastructure development, such as renewable energy, logistics and transport, public health and info-communication technology.

Good structuring can enhance a project's investability. To attract more private sector investors, regional governments can sound out investors and work with consultants to develop tenders with a balanced risk allocation. Advice from strategic consultants, as well as experienced financial, technical and legal advisors, play an important role in making more projects bankable. As the private sector gains a better understanding of the types of resilient and sustainable infrastructure governments are looking for, they can adapt their solutions to ensure these are suitable, well-risk mitigated, and able to attract financing.

Through facilitation by government offices like Infrastructure Asia, governments and companies in the region can tap into an ecosystem of partners to adopt advice and solutions, as well as find collaborators to make their infrastructure projects more sustainable, investable and bankable.

Infrastructure development to lead the economic recovery from COVID-19

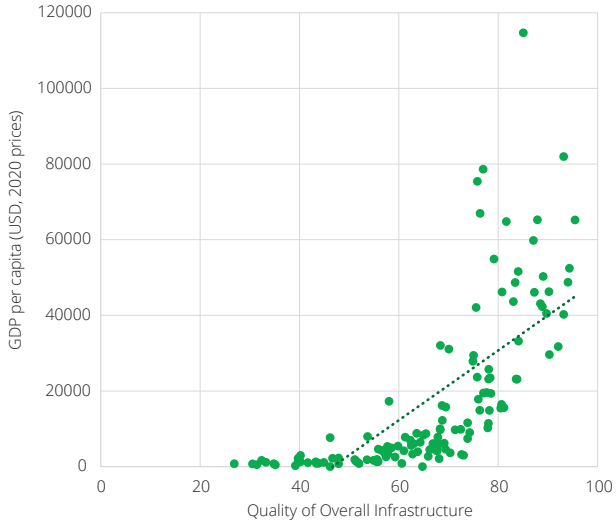
The COVID-19 pandemic has necessitated the immediate and significant public health and economic policy responses centred on addressing the human impacts of the health crisis. Economy-wide lockdown policies aimed at slowing the spread of the virus have led to unprecedented declines in economic activity, and governments have also been trying to mitigate the downsides as much as possible for businesses and households.

In several ways, the current recession we are facing is different. It was caused by an external shock – with devastating human consequences – rather than internal economic or financial imbalances. Its unprecedented nature means lessons from the past are not perfectly applicable to the present. However, the plan for a robust economic recovery and a more sustainable and resilient future must include investment in infrastructure. Of the options available to governments to stimulate their economies, spending on infrastructure will rank among the top, for two key reasons:

1. Infrastructure development has a strong multiplier effect in terms of boosting economic activity and creating jobs. This means that the final impact it has on economic output is greater than the initial injection of spending.
2. Infrastructure investment is crucial for creating a positive legacy of economic growth that is more resilient, sustainable, and productive.

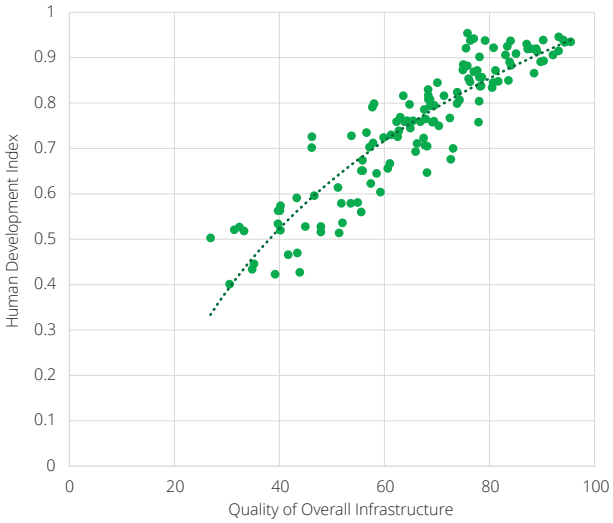
There is a strong positive correlation between GDP per capita and the quality of infrastructure in an economy (Chart 1) that supports this. At the same time, higher quality infrastructure coincides with improved health, education, and wealth outcomes (Chart 2).

Chart 1: Infrastructure quality and GDP



Notes: Infrastructure refers to both transport and utility infrastructure.
Sources: World Bank, World Economic Forum

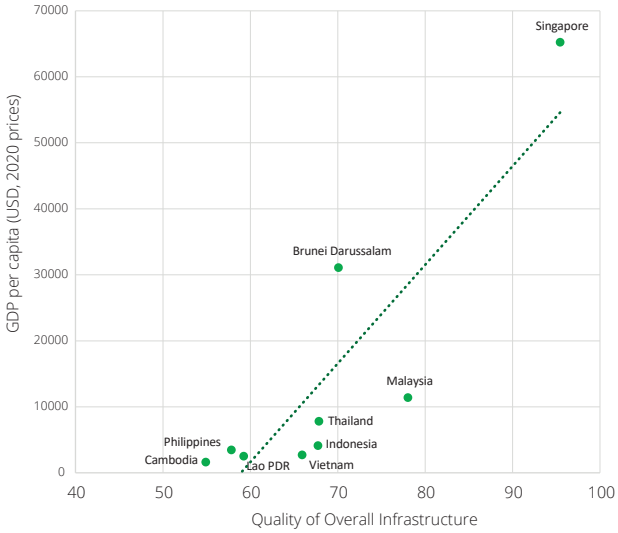
Chart 2: Infrastructure quality and human development



Notes: Human Development Index takes into account life expectancy at birth, expected years of schooling, mean years of schooling, gross national income per capita.
Sources: UNDP, World Economic Forum

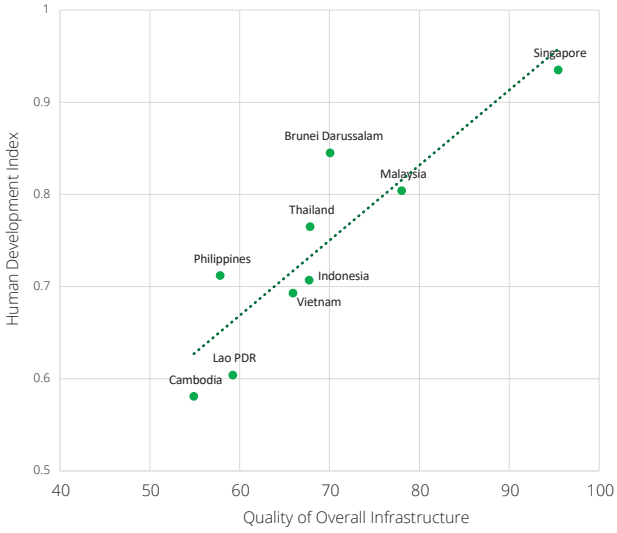
In Southeast Asia, the relationships between infrastructure quality and economic and development outcomes appear to be similarly strong (Charts 3 and 4).

Chart 3: Infrastructure quality and GDP in Southeast Asia



Notes: Infrastructure refers to both transport and utility infrastructure.
Myanmar's data on infrastructure quality is unavailable for 2019.
Sources: World Bank, World Economic Forum

Chart 4: Infrastructure quality and human development in Southeast Asia



Notes: Human Development Index takes into account life expectancy at birth, expected years of schooling, mean years of schooling, gross national income per capita.
Myanmar's data on infrastructure quality is unavailable for 2019.
Sources: UNDP, World Economic Forum

The role of infrastructure in enabling resilience has been particularly obvious during the current crisis. As difficult as the recent months have been on our economies and societies, it would have been much worse if we had not enjoyed access to efficient telecommunications networks and logistics infrastructure. COVID-19 has also uncovered other vulnerabilities. We have seen the shortcomings of healthcare systems around the world and areas where healthcare infrastructure and processes needed upgrading. In particular, it highlighted the lack of mechanisms to meet the surge in healthcare demand. Investing in logistics and supply infrastructure to improve existing intensive care in hospitals, as well as ensuring testing and essential equipment are available quickly, will be important aspects of preparation for future crises of similar nature.

We consider the role of infrastructure development in leading the recovery from COVID-19 in three phases:
1. **Respond:** Minimise immediate disruptions from the impact of COVID-19 by filling urgent infrastructure gaps
2. **Recover:** Accelerate "shovel-ready" projects to drive higher economic activity
3. **Thrive:** Prepare economies for future shocks and position them for sustainability

The *Respond* Phase: Fill urgent infrastructure gaps

We have seen the significant responses that many countries have implemented during the Respond phase. Governments have identified urgent infrastructure gaps in healthcare, telecommunications, and logistics, and sought to fill them. These are gaps which affect access to essential services. For example:

- Singapore repurposed the Changi Exhibition Centre and Singapore Expo into community healthcare facilities to treat patients with mild symptoms and lower risk factors.[4]
- The Malaysian government announced its RM260 billion People-Centric Economic Stimulus Package (PRIHATIN) in March, which included investments to improve telecommunications network coverage and capacity.[5] Among these initiatives was also funding to provide free internet access to lower income groups during the period of the Movement Control Order until June. In June, the Malaysian Government extended this plan to 31 December 2020 through its RM35 billion Short-Term Economic Recovery Plan (PENJANA).
- The Indonesian government announced improvements to its National Logistics Ecosystem (NLE).[6] The NLE is an integrated IT platform that facilitates collaboration of information systems between government and private organisations to improve the efficiency of export-import processes to enable movement of essential goods.

There is more to be done in the region to address gaps in access to basic services such as education, water, and sanitation. For example, in Cambodia, lower income students staying in rural areas lack access to IT equipment as well as affordable and reliable internet service, and are subsequently struggling with e-learning. While the Cambodia Ministry of Education Youth and Sport has announced that Cambodian schools should open no later than November 2020, a safe reopening presents other challenges such as the lack of water and sanitation facilities in public schools located in rural areas.[7]

Across Southeast Asia, massive fiscal packages to support struggling businesses through tax incentives, grants, and debt restructuring, have been introduced to minimise the chances of coming out of the crisis with crippled economies. There are government wage subsidy schemes and initiatives to strengthen social safety nets, helping to cushion and mitigate the impacts of job loss. Central banks across the region have also adopted monetary easing aimed at injecting liquidity and providing stimulus to the real economy through the financial sector. These initiatives are meant to support waning global demand. However, the current crisis is also defined by a significant physical disruption to the supply-side. This means that strengthening physical infrastructure, such as improving the efficiency of transportation links, logistics nodes and supply chain networks should play a significant role. The private sector will have a key role in addressing the significant supply-side disruption by bringing to bear innovation in infrastructure delivery and operations.

4 https://www.straitstimes.com/singapore/coronavirus-community-care-facilities-for-patients-with-mild-symptoms-will-have-bed
5 https://www.mcmc.gov.my/en/media/press-releases/media-statement-the-people-centric-economic-stimul
6 https://www.bakermckenzie.com/en/insight/publications/2020/03/government-provides-nonfiscal-leniency
7 https://cambodianess.com/article/a-long-delay-in-reopening-schools-will-have-a-long-term-negative-impact-on-cambodia

The *Recover* Phase: Bring forward infrastructure spending to aid a robust recovery

Infrastructure investment offers a powerful tool for raising output via higher construction activity and increased employment in the short-term. It will be essential in securing a 'V-shaped' – rather than 'U-shaped' – recovery. Construction activity driven by infrastructure development has wide linkages with other sectors in an economy, from sourcing raw materials to demanding financing and using technology.

While there is a strong case for spending on infrastructure development to stimulate economies in recovery, materialising it can be challenging. One reason is the lengthy lead times of infrastructure projects.

Initially, short-term expansionary spending should be targeted at areas that can be quickly brought online with minimal risk. Priority should be given to spending on maintenance and upgrades to existing infrastructure, as well as accelerating pre-approved projects in the pipeline. For example:

- The Myanmar Ministry of Planning, Finance and Industry (MoPFI) signed an agreement with Infrastructure Asia (InfraAsia) to advance the implementation of infrastructure projects in the Myanmar Project Bank. The Myanmar Project Bank includes a publicly accessible interactive web-based database that contains a comprehensive list of prioritised investment initiatives. These have been pre-screened to ensure alignment with the Myanmar Sustainable Development Plan. InfraAsia and the MoPFI will jointly identify selected priority projects for potential private sector participation.
- A key focus of the Vietnam Government's recovery plan is to accelerate public investment, particularly in key transport projects.[8] The Vietnam National Assembly, on 19 June 2020, approved public investment into three sections of its North-South Expressway project, shifting the financing format away from public private partnerships (PPP).[9] This, in addition to the revamped PPP regime introduced into law on 18 June 2020, sends a signal of strong commitment to potential investors of the remaining five sections of the expressway project, which are still to be deployed under a PPP model.

Even with existing infrastructure and approved projects, careful planning is required if this spending is to be brought forward. The need for urgency should not override the need for due diligence. The message to governments is: "*plan a pipeline now, so that the increased spending can flow when needed in the period ahead*".

8 http://hanoitimes.vn/vietnams-north-south-expressway-project-gets-fresh-air-312122.html
9 https://vietnamtimes.org.vn/vietnam-parliament-approves-the-use-of-state-budget-for-north-south-expressway-sections-21569.html

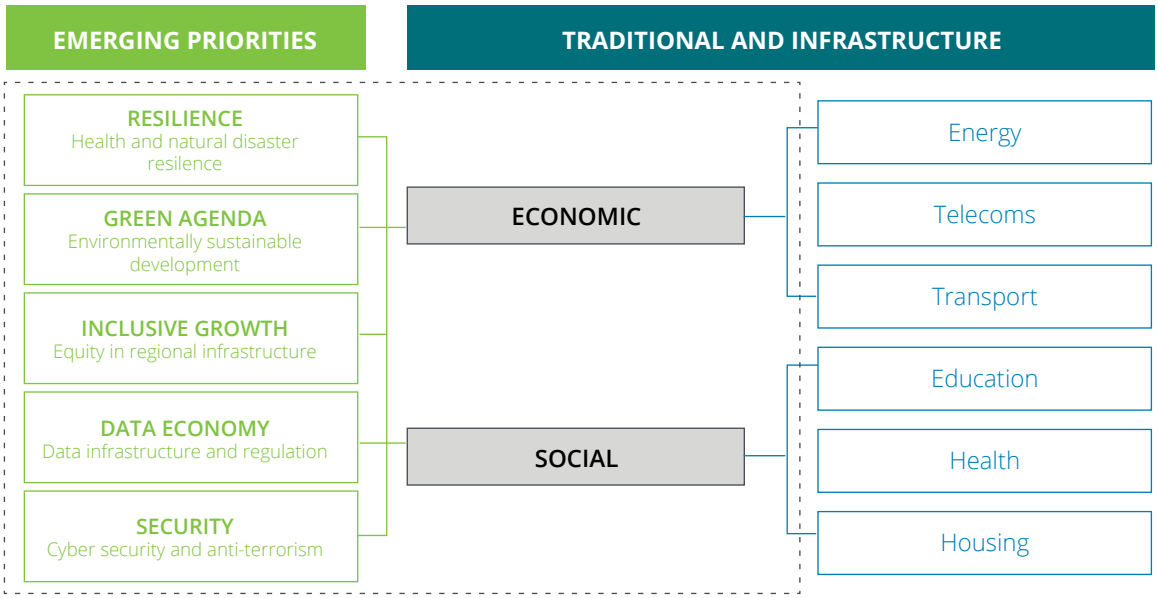
The *Thrive* Phase: Investing in infrastructure to create a resilient and sustainable future

As we take steps to rebalance and redesign our economies, we can also reduce the level of future economic shocks by ensuring that our recovery embraces a low carbon future. Future prosperity is dependent on a green economy rather than outdated business models and infrastructure.

Private investors will play a key role. This is also an opportune time for governments to pave the way for targeted investments in clean energy, transport, and smart infrastructure to be at the heart of longer-term stimuli. Indonesia, one of the world's largest producer of coal, has plans to double the share of renewable sources in its national energy mix from around 12% to 23% by 2025[10]. New regulations were introduced by the Minister of Energy and Mineral Resources in late February 2020 to address procurement-related impediments to investment in renewable energy projects. However, further reforms should be made to existing pricing regulations, as the latter currently makes the generation of renewable energy uneconomic compared to fossil fuel-based energy sources[11]. The Indonesian parliament included a bill on "new and renewable energy" in its legislative priorities in February, which investors hope will address pricing concerns[12].

Long-term policies should be put in place to enable the move to a low-carbon economy. Governments will need to weigh priorities in the delivery of infrastructure. While resilience will be at the forefront of public policy at the moment, ensuring environmental sustainability remains a key objective, in addition to numerous other priorities that can be targeted in the longer term (Figure 1).

Figure 1: Traditional infrastructure and emerging priorities

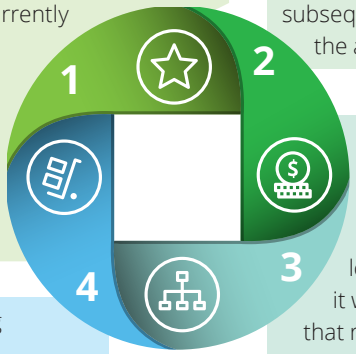


10 https://ieefa.org/indonesian-government-pushing-ahead-with-reforms-to-jump-start-renewable-energy-transition/
11 https://www.ashurst.com/en/news-and-insights/legal-updates/memr-regulation-4-2020---changes-to-the-tendering-regime-for-indonesian-renewables-ipps/
12 https://www.eco-business.com/news/new-renewables-bill-may-give-indonesia-chance-to-move-away-from-coal/

It becomes even more important that investments are guided by sound principles. This means significant preparatory work needs to occur now. Infrastructure investment is a long-term commitment and its benefits to societies are greatest when decisions regarding priorities are set, funding streams identified, property rights clarified, and regulatory regimes established. Coordinated efforts by government and the private sector is essential (see Four principles for long-term infrastructure investment), and private sector investors will need to ensure they are aligned with the shift in objectives.

Four principles for long-term infrastructure investment

Prioritisation: Appropriate approval and appraisal processes are already in place for many economies. These requirements should evolve with the times and per the programmes' agenda. For instance, regional and particularly rural equity in growth requires supplementary analysis to core impacts. In terms of the vital resilience agenda, economic analyses can outline and prioritise powerful negative externalities currently underlying the fragility of the healthcare sector. Improper prioritisation can detract from the core pursuit of a fast, inclusive recovery, leading to marginalisation of particular communities, intergenerational unemployment, income disparity, or other serious repercussions.



Funding: Infrastructure can benefit both users and non-users. For example, a new metro will benefit both users of the metro and, by reducing congestion on roads, road users. Accordingly, funding for the metro could come through both users (transport fares) and non-users (taxpayers through general revenue). Determining funding streams upfront as far as possible enables subsequent decisions on how to finance the project (whether the asset is publicly or privately owned).

Market design: The decision to have an asset in public ownership or private ownership subject to regulation will depend, among other things, on the nature of risks and externalities involved. For some assets such as local roads, public ownership will be the norm because it would become extremely difficult to design regulations that result in a private business owner having the incentives to deliver a socially optimal road network. On the other hand, for many assets, the private sector is better able to manage the risks involved and respond to changing demands or technology. Particularly where there is scope to drive efficiencies or realise the benefits of innovation, private ownership with suitable regulation is preferred. The challenge here will be to clarify such regulatory arrangements as far as possible at the outset.

Delivery: With property rights and funding streams thus determined, the (debt and/or equity) financing of the investment is relatively straightforward. To complement this, it is vital that procurement maximises competitive tension and provides long-term value for money for end infrastructure users.

Sustainable financing for green and resilient infrastructure

Increasing investors' appetites for responsible investment options increases financing sources

Sustainable financing as a source of funds for corporates and project owners of sustainable infrastructure has been gaining significant traction.

Investments based on environmental, social, and governance (ESG) criteria have been growing since before the COVID-19 pandemic. The global market for sustainable investment more than doubled between 2012 and 2018, growing from USD13.6 trillion to USD30.7 trillion worth of managed assets.[13] In 2019, a record high of nearly USD255 billion in green bonds and loans were issued worldwide – an increase of nearly 50% on 2018.[14]

BlackRock research suggests a majority of ESG-tilted investment portfolios have outperformed non-sustainable counterparts during this year's COVID-fuelled downturn. BlackRock themselves have committed to making sustainability a key priority in their investment strategy, and to stop investing in companies presenting a high risk to sustainability, such as the coal industry.[16]

As institutional investors place a greater focus on the sustainability of their portfolios, sustainable infrastructure projects in the region will enjoy access to more funding options. At the same time, financiers and banks are also reviewing their approach to financing.

As sustainability becomes increasingly mainstream, corporations and projects should be prepared for the opportunities it creates. ING Bank's Mr Hoogerwerf noted that banks look for two main attributes when reviewing corporates or projects looking to access sustainable financing: 1) Sound ESG management, and 2) Robust ESG disclosures.

13 http://www.gsi-alliance.org/trends-report-2018/
14 https://www.climatebonds.net/2020/01/record-2019-gb-issuance-255bn-eu-largest-market-us-china-france-lead-top-20-national
15 https://www.hedgeweek.com/2020/05/19/285741/new-blackrock-research-points-esg-resilience-during-coronavirus-downturn
16 https://www.blackrock.com/corporate/investor-relations/larry-fink-ceo-letter

"We have a loan book of about €600 billion across many sectors, which we have begun steering towards meeting the Paris Agreement's two-degree goal using our Terra approach."

Mr Martijn Hoogerwerf, Director of Sustainable Finance, ING Bank Asia Pacific

"It is important to understand the reasons for corporates or projects to look at sustainable financing, as different products help organisations achieve different aims."

Ms Yulanda Chung, Head of Sustainability, Institutional Banking Group, DBS

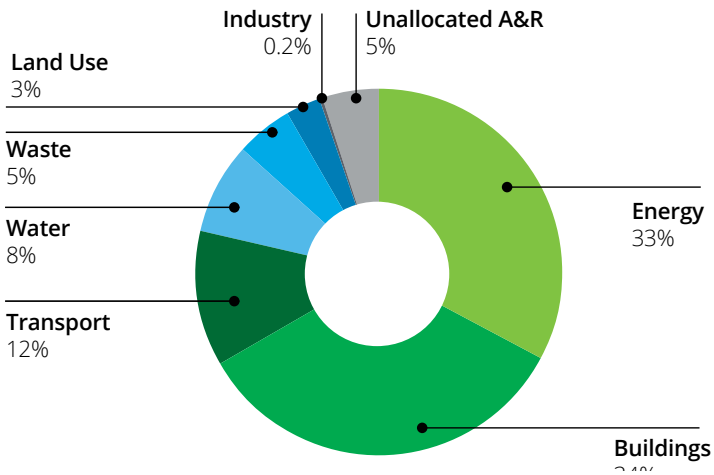
Using sustainable financing for infrastructure projects

DBS's Ms Yulanda Chung further elaborates that there is a range of sustainable finance products. For example, sustainability-linked loans peg lowered interest rates to the project's or company's ability to meet sustainability targets such as emission reductions. Meanwhile, green loans have a direct impact on showing the resolve of the organisation in committing capital towards a sustainability agenda. In some cases, the use of the loan is project-specific, while in others, such as sustainability-linked loans, it can also be used as working capital or short-term loans to achieve the aims of the organisation. One of the recent green loans provided by DBS is for Sembcorp's floating solar project in Singapore.

Other than green loans and sustainability-linked loans, green bonds are also a useful form of debt instrument to raise financing for infrastructure projects. DBS and ING were joint global co-ordinators in the inaugural USD Green Bond issued by Vena Energy, an independent power producer focused on renewable energy. The USD325 million bond was the first corporate USD Green Bond issuance from a Singapore-headquartered company. The Green Bond proceeds will be used to refinance the development, construction, and operation of Eligible Green Projects, in accordance with Vena Energy's Green Financing Framework.[17]

Sustainable financing has begun to cover a wider range of sectors and industries as banks and corporates become more familiar with the principles and guidelines of sustainable financing. In 2019, over 65% of ASEAN's green bonds' proceeds targeted low carbon buildings and energy (Chart 5).[18]

Chart 5. Allocation of green bonds and loan proceeds in ASEAN, 2019



Source: Climate Bonds Initiative

"Beyond green buildings, renewable energy and climate change will be dominant themes in sustainable financing going forward."

Mr Mike Ng, Head of Structured Finance and Sustainable Finance, OCBC

OCBC's Mr Mike Ng, Head of Structured Finance and Sustainable Finance, shared that "beyond green buildings, renewable energy and climate change will be dominant themes in sustainable financing going forward." He further emphasised the importance of sustainability to the bank, as assets that are not sustainable today (for example, coal), face the risk of getting stranded in the next decade.

After surpassing its initial SGD10 billion target for sustainable finance two years ahead of schedule, OCBC has set a new sustainable finance target of SGD25 billion by 2025. To achieve this, OCBC has been actively pursuing industry and geographical diversification as its two main strategies. It ventured into transportation with an AUD25 million green loan to ComfortDelGro Corporation for the financing of 50 hybrid buses in Australia, and also emerging countries like Myanmar with green loans worth USD44 million for Shwe Taung Group, which will be used to finance an integrated retail and commercial development in downtown Yangon. This was the first green loan for Myanmar.

17 https://www.venaenergy.com/wp/wp-content/uploads/2020/02/Vena-Energy-Green-Financing-Framework.pdf
18 https://www.climatebonds.net/system/tdf/reports/cbi_asean_sotm_2019_final.pdf?file=1&type=node&id=47010&force=0

"Transition finance is expected to unlock a new pool of assets and funding, and enable us to transition to a more sustainable economy. With the growth of infrastructure in Southeast Asia, it may not be feasible to expect countries to only construct green infrastructure; hence it will be similarly important to support improvements to existing infrastructure assets that aid the transition to a low carbon economy, in alignment with the Paris Climate Agreement."

Mr Martijn Hoogerwerf, Director of Sustainable Finance at ING Bank Asia Pacific

Transitioning to a low-carbon economy

An important new theme has started to materialize in the past two years around transition financing. While many Sustainable Finance products have been directed to green projects and assets, fewer funds have been directed towards companies that are looking to transition their carbon-intensive business models to lower carbon intensity. Aware of this gap, standard setting bodies have established the EU Taxonomy for sustainable activities and the International Capital Markets Association have set up a climate transition working group. Investors and financiers are also developing views on this topic, with AXA publishing its Transition Bond Guidelines in November 2019[19]. In June 2020, DBS launched the world's first sustainable and transition finance framework and taxonomy to help clients advance on sustainability agenda.[20]

An example of transition finance in action is the EUR500 million Transition Bond issued in June by Italian gas network operator, Snam. The proceeds of this bond would be used to finance initiatives to reduce carbon emissions, potentially including the adoption technologies that enable the transport of hydrogen blended with natural gas in Snam's current transmission network infrastructure.

In Singapore, Keppel Infrastructure Trust and Keppel Energy obtained a SGD700 million sustainability-linked loan from DBS and OCBC. This was one of the largest sustainability-linked loans issued locally, and the first such loan in Singapore's energy sector. The loan is linked to carbon emission targets for the gas-fired co-generation plant, Keppel Merlimau Cogen Plant. If pre-set targets to reduce the plant's carbon emissions intensity are met, the interest rate on the loan will subsequently be reduced on a tiered basis.[21]

19 https://www.axa-im.com.sg/content/-/asset_publisher/FehknnI2EsIG/content/financing-brown-to-green-guidelines-for-transition-bonds/26520

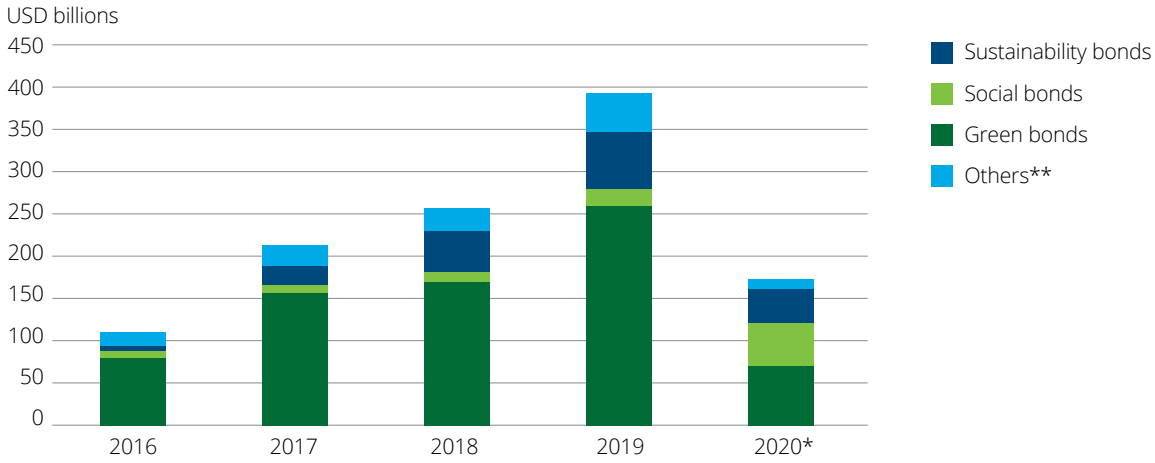
20 https://www.dbs.com/newsroom/DBS_launches_worlds_first_sustainable_and_transition_finance_framework_and_taxonomy_to_help_clients_advance_on_sustainability_agenda

21 https://www.businesstimes.com.sg/companies-markets/kit-keppel-energy-bag-s700m-sustainability-linked-loan-from-dbs-ocbc

Social bonds as part of the response mechanism for covid recovery

Green bonds have dominated the share of sustainable debt instruments on issue. While record levels of green bonds were issued in 2019, only USD20 billion in social bonds were issued in the same period.[22] Conversely, while the impact of COVID-19 has reduced bond issuance in the first half of 2020, social bond issuance experienced a fivefold increase – with USD33 billion of issuances at the end of April 2020, compared with USD6.2 billion in the same period in 2019 (Chart 6).[23] Examples of social bonds issued included a USD1 billion social bond issued by the International Finance Corporation in March 2020, and USD4.3 billion of pandemic bonds issued by the Indonesian government.

Chart 6. Annual issuance in sustainable debt by instrument type



Note: Data apply to green, social, and sustainability bonds issued under the ICMA's Green Bond Principles, Social Bond Principles and Sustainability Bond Guidelines.

* Year to date through 15 June 2020.
** Others include sustainability-linked loans, green loans, and other excluded financing.

Sources: Climate Bonds Initiative, Standard & Poor's

While the recent surge may have been hastened by COVID-19, with the bonds largely being used to help fund the response to the pandemic (for example, vaccines, manufacturing of health and safety equipment, and unemployment benefits), the appeal of social bonds as a source of funding for socially impactful infrastructure such as waste water treatment and affordable housing may endure into the future.

22 https://www.spglobal.com/ratings/en/research/articles/200622-a-pandemic-driven-surge-in-social-bond-issuance-shows-the-sustainable-debt-market-is-evolving-11539807
23 https://cib.bnpparibas.com/sustain/capital-markets-and-covid-19-have-social-bonds-come-of-age-_a-3-3503.html

Collaboration between governments and the private sector

Through Infrastructure Asia's interactions with the regional governments, it is clear that some sectors have been reprioritised for infrastructure development, including renewable energy, logistics and transport, public health, and info-communication technology.

Renewable energy

During this period, renewable energy projects such as solar utility plants can be deployed quickly to spur economic activity. This is due to the many success cases in the region and both developers' and investors' familiarity with such project structures.

In April 2020, Myanmar's Ministry of Planning, Finance and Industry (MoPFI) issued a COVID-19 Economic Relief Plan (CERP) to mitigate the economic impact from COVID-19. Implementing the CERP is expected to cost around USD2-3 billion.[24] Expediting quality renewable energy projects and strategic infrastructure projects are key areas in the plan to promote investment into Myanmar.[25] In June 2020, the Malaysian government launched a 1GW tender for solar projects under the fourth round of its Large Scale Solar (LSS) procurement programme. This is Malaysia's largest tender and has been linked to the broader COVID-19 recovery efforts, expecting to unlock USD927 million in investment and create 12,000 new jobs.[26] This shows the countries' direction and resolve in prioritising green and sustainable infrastructure.

To attract more private sector investors to this sector, regional governments could sound out investors and work together with consultants to develop a tender with a more effectively balanced risk allocation, thus achieving a more efficient tariff structure.

Rooftop solar has also been gaining increasing attention and awareness in the region, with energy-hungry countries like Vietnam and Indonesia implementing regulations and guidelines to manage and encourage the development of rooftop solar to supplement their power generation. Access to financing is key to the scalability of rooftop solar projects – and this is where innovative financing structures could be beneficial.

24 https://www.irrawaddy.com/specials/myanmar-covid-19/myanmar-receive-2b-covid-19-relief-intl-development-organizations.html
25 https://eurocham-myanmar.org/uploads/7a892-cerp---final-report-(1)5713756333092471786.pdf
26 https://www.pv-tech.org/news/malaysia-eyes-pandemic-recovery-with-1gw-new-solar-tender

For this "First-in-Southeast Asia" limited-recourse green loan for a rooftop solar projects, ING worked with its client to perform due diligence to structure the deal. Since the first of such loans extended to Sunseap, which covered projects in Singapore, ING has provided structured financings to other roof-top solar companies, like Cleantech Solar, covering the Southeast Asia region.

Waste and water management

The pandemic has demonstrated the importance of infrastructure to improve public health such as sanitation, and adequate access to clean water and waste disposal services. At the same time, waste management is becoming increasingly important to countries in the region. As landfills start to fill, cities realise they require more sustainable processes to treat their municipal waste.

Anaergia is a global technology leader in recovering value from waste for the municipal, industrial, and agriculture sectors with Asian HQ in Singapore. Anaergia specializes in a unique approach of Mechanical Biological Treatment (MBT) of waste. Its proprietary solution for extracting organics from municipal waste maximises renewable energy and reduces the overall cost of waste management. This is an alternative and complementary technology to the commonly-used incineration technology for municipal waste. MBT is particularly suitable for the ASEAN region as the waste here has higher organic content and moisture level. It also has a low calorific value that helps to generate biogas, which can be converted to renewable energy or Biomethane (BioCNG), as well as refuse-derived fuel (RDF) that can go to a cement kiln or be incinerated.

Similar to waste management, water supply and wastewater treatment projects in the region face the challenge of commercial viability. To date, most of the water projects in the region tend to be government-financed.

"Rooftop solar projects tend to be individually small-scale and therefore uneconomical to finance separately and are generally funded on a guaranteed basis. However, ING has created an innovative structure to finance this portfolio of rooftop solar projects on a limited-recourse basis and in a single loan facility".

Mr Arunabh Prasad, Vice President, Energy Asia Pacific, ING Bank Asia Pacific

"Municipal solid waste management, which is a critical part of social infrastructure, offers a unique opportunity for environmental protection of cities. At the same time, it can be source for base load renewable energy and resource recovery. The key to selecting the appropriate process or technology for managing waste is understanding the composition of the municipal waste generated in each city, possible revenue streams that can be generated, economic viability on life cycle basis, and the regulatory or policy framework."

Mr Kunal Shah, Managing Director and Regional Business Development Head, Anaergia

"Technology could play a role in equalising the way water is treated and supplied. This increases the financial and commercial viability of water projects. One idea is to leverage technology by decentralising the wastewater treatment or water supply plants to build a series of small plants, rather than one large plant, in an efficient and well-planned manner."

Mr Victor Sim, Head of Resiliency (Sustainability and Resiliency Office), Surbana Jurong

Surbana Jurong's Mr Victor Sim shared that he was drawing from the lessons learned during their participation in the on-site and portable wastewater treatment containerised system for the converted Community Isolation Facility used to house recovering COVID-19 patients in Singapore. These solutions may be useful for water infrastructure in rural areas of Myanmar and Cambodia.

Governments and private sector working together for more bankable projects

A project's investability can be enhanced by good structuring. Advice from strategic consultants, as well as experienced financial, technical, and legal advisors play an important role in making more projects bankable. As the private sector gains a better understanding of the types of resilient and sustainable infrastructure governments are looking for, they can better adapt their solutions to ensure they are appropriate, risk mitigated, and able to attract financing.

Through facilitation by government offices like Infrastructure Asia, governments and companies in the region can tap into an ecosystem of partners to adopt advice and solutions, as well as find collaborators to make their infrastructure projects more sustainable, investable, and bankable.

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