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Infrastructure holds the key to sustainable prosperity

You don't need to be particularly optimistic to see a very bright future for Asia. It's there in the everyday bustle and buzz of activity across the great cities. It's there in the drive of young people to embrace education and hard work. It's there in peoples' appetite to build a healthier, wealthier future for their families. And it's there in the vast network of cities, roads, railways and airports springing up across the region.

Demographics and growth statistics capture a small flavour of this remarkable success story. Organisations such as the World Bank forecast gross domestic product (GDP) growth in excess of 6 per cent for the next few years, even as the heavyweights in the dataset, such as China, decelerate and rebalance. This rate of economic growth is forecast to be matched by fixed investment in Asia, running at around 5.7 per cent in 2018 and 2019. And even if the current global political uncertainty does lead to a slight slowdown in some areas, there seems to be little doubt that we will still see a surge of investment over the next decade as infrastructure races to keep pace with the ambitions of the region.

As Asia claims its economic place in the world, this expansion will require new and expanded cities, transport and utilities to serve the region's burgeoning homes, offices, factories, hotels, schools, universities and hospitals.

All this infrastructure will be critical to supporting growth at the tremendous pace envisaged and it will be measured in multiples of trillions of dollars over the coming decade—some US\$10 trillion or more per decade, depending on which estimate you prefer for emerging Asia.

However, this is more than just a growth story. It is a story about the fundamental choices we face as a shared global society.

We have to ensure that this new infrastructure is future-proofed. We have to build our new world to far higher standards than today's to ensure that it is not only efficient and delivers value for money, but also so that we have a chance of meeting the COP 21 (Paris Climate Conference) commitment to restrict global temperature rises to 2°C.

If Asia—and the world—simply builds to existing standards, then climate change risks will become 'locked in' and we will repeat the past mistakes of congestion, pollution and a whole host of other external costs, which will be paid for in health risks, lost potential and climate refugees.

Equally, we have to build the 'right' infrastructure. That means infrastructure that not only works in the sense of being lower carbon, but also works just as well for the economy as it does for people.

In plain language, we need to avoid the white elephants and vanity projects that serve the needs of vested interests rather than the community. For example, we need to build airports that are scaled to the appropriate size, but have a phased plan for expansion when the time is right; and we need to create road and rail links that form part of an integrated inter-regional network, rather than reflecting short-term local political priorities. Additionally, it is important to ensure that urban expansion is matched by coherent plans for the hard and soft infrastructure required to avoid the rise of informal settlements and new slums.

In short, we must develop a truly strategic approach that ensures that infrastructure investment across borders and regions serves a socially useful purpose.

This is why it is so important that everyone involved is fully focused on building the most efficient, sustainable and resilient future possible for Asia and for the world.

If we can work together to get this right, then Asia can forge a new infrastructure that will not only withstand the test of time, but also help to address one of the biggest tests of our time—meeting our shared global commitment to limit the impact of climate change.

Mapping the challenge

Even the most optimistic reading of Asia's future suggests that there are some real challenges ahead in terms of tackling infrastructure expansion

of this scale and complexity.

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The good news is that some of the key players are getting to grips with the big issues and working towards shaping a market that will deliver projects that are investable,

deliverable, sustainable, and backed by the governance, transparency and legal standards required to ‘crowd in’ private investment.

For example, the World Bank has done a good job of mobilising support around carbon pricing initiatives. Organisations such as the Asian Development Bank (ADB) and the Asian Infrastructure Investment Bank are promoting resilience across the region. The European Union recently introduced a beneficial risk weighting for infrastructure assets to make it easier for insurance firms to invest and will now look at extending this to green infrastructure. And groups such as HSBC are promoting disclosure rules on environmental risk statements, highlighting exposure to high carbon markets, supply chains and regional climate regulations in a bid to incentivise a shift towards greener investment strategies.

These are just a few of the positive steps being taken, but we need far more of this type of thinking if we are to build towards the idea of infrastructure as an asset class in its own right—and, in particular, a shift that really incentivises green and resilient infrastructure.

If we succeed, we will go a long way towards raising infrastructure standards and improving the allure of Asian assets, closing Asia’s massive infrastructure funding gap in the process.

Capital works

The fact is that there is a great deal of funding available for the right

projects. Sovereign wealth funds, insurers and pension funds are all extremely keen to invest in infrastructure assets that match the long-term liabilities they carry. Once the asset is operational, there is a ready market of global investors, especially for green infrastructure.

The challenge lies in translating that funding availability into project financing. To achieve this, we need to focus far more on promoting common standards, strong governance and international guidelines that will transform bespoke projects into investable project pipelines.

Among other things, this could mean:

- improving the ability of investors to define and rate infrastructure asset classes to allow easier comparison between assets to support structured fundraising;
- promoting standardisation of guidelines along the lines of the Green Bond Principles developed by the International Capital Market Association;
- encouraging governments, multinational banks, non-governmental organisations and private investors to collaborate on developing project pipelines in sectors such as transport, energy, water or digital connectivity;
- introducing public-private partnership legislation that sets the framework for transparent and fair tender processes;
- creating catalyst funds or mechanisms to earmark ‘funds within funds’ for high risk—but relatively low cost—independent feasibility studies that will provide a credible baseline for feasibility studies and business case analyses;
- training governments and local developers to help make them even smarter clients when it comes to procuring major schemes;
- incentivising research and development investment for infrastructure and clean technology; or
- developing guidelines to ensure that projects are assessed on lifecycle value, societal impact and resilience rather than just the false economy of lowest capital cost.

This is far from being an exhaustive list and there are many good ideas out there. What is clear, however, is that everyone concerned about the future of Asia’s infrastructure should be working together to ensure that we build a truly sustainable and efficient infrastructure asset class

that serves the long-term interests of all the people of Asia.

Bold ambition

If we get it right, Asia can set an example for the world. However, if we get it wrong then the sheer pace and scale of infrastructure growth in Asia means that our mistakes will be embedded in our environment for decades to come.

That legacy will be witnessed in choking, congested cities that future generations will have to pay even more for to build afresh.

It is critical that we all work together to get this right, especially as the latest ADB report suggests that Asia will need US\$1.7 trillion per year in infrastructure investment once climate change mitigation and adaptation costs are incorporated.

This represents both a massive challenge and a great opportunity to make a real impact. So, this is the time for everyone to get involved and take coordinated action to ensure that Asia gets the investment it needs for a more resilient future.



Gregory Hodkinson is the Chairman of Arup Group. He joined Arup Group in 1972. He led the firm's expansion in the USA from 1988 as a founding Principal of the New York office. He became Chairman of the Americas Region in 2004 and in 2011 moved to Milan to lead the firm's European business. He has been the Chairman of Arup Group since 2014. In addition, he is a member of the International Advisory Board of BritishAmerican Business, the Advisory Board of the China–Britain Business Council, and the Infrastructure & Urban Development Industries Governors Steering Committee. He is also Chairman of the Future of Urban Development & Services Steering Committee at the World Economic Forum. Arup Group is a Corporate Member of Asia House.