

The Next Growth Curve: *Pivoting Infrastructure for City Development*



Development Bureau

The Government of the
Hong Kong Special Administrative Region
of the People's Republic of China



Foreword



Since the launch of Construction 2.0 in 2018, the Development Bureau of the Government of Hong Kong Special Administrative Region and local construction industry have continuously formulated strategic initiatives aiming at enhancing governance, capability, productivity, safety and sustainability of the project delivery industry.

One of the policy measures to support this ambition is the successful launch of the International Infrastructure and Projects Leaders Summit (IIPLS) from 14 – 16 November 2024, an international landmark summit for infrastructure sector.

IIPLS brought together over 500 esteemed infrastructure and major project leaders and visionary experts in infrastructure from over 20 economies around the globe, for exchanging insights and best practices in project delivery and governance, and equally important fostering collaborations and jointly formulating strategies and initiatives to enhance the performance of mega and complex infrastructure projects.

There were three plenary sessions in IIPLS, namely "The Next Growth Curve: Pivoting Infrastructure for City Development", "Powerful Partnerships: Collaboration for Project Success" and "Building Tomorrow: Embracing Innovation and Digitalisation".

This publication is part of a series of three publications aimed at reinforcing Hong Kong's position as an International Infrastructure Centre. While this publication focuses on the key theme of pivoting infrastructure for city development, the other two delve into powerful partnerships for project success and embracing innovation and digitalisation. Together, they provide a comprehensive overview of Hong Kong's strategic initiatives in infrastructure development.



Executive Summary

Infrastructure development has evolved into a new stage – from foundational facilities to becoming a dynamic engine driving cities' industry advancement and economic growth.

Over the years, Hong Kong has been orderly and strategically investing in infrastructure, with capital works expenditure averaging 3.4% of GDP. As the city embarks on a new era of development, with a strong focus on the Northern Metropolis and beyond, the government is building on this momentum to fully harness the potential of infrastructure as a catalyst for the city's substantial growth and transformational opportunities.

Despite ambitious aspirations for future city and infrastructure development, growth could be hindered by challenges in three major areas, based on our observation across the globe:

City

- Increasing need to strengthen connection between city development and industry activities
- Most cities have moved past the initial growth phase focusing on basic infrastructure, and are now exploring engines to drive the next wave of growth

Government

- Global economic uncertainty and rising interest rates are constraining government budgets for infrastructure investment
- Escalating infrastructure costs have exacerbated funding challenges

Capability

- Increasing appetite for innovative infrastructure solutions is demanding more diverse capabilities and talents (e.g., grey collar)

To overcome these complications and capitalize on growth opportunities, cities could act along 5 key directions:

- Industry-city integration - Craft a clear and differentiated proposition to integrate city development and industry core competence
- Strategic re-balancing by policymakers - Adopt proactive approach to develop capacity-building for enhancing city's strategic competencies
- Innovative infrastructure financing - Expand the leverage of a more diverse group of private investors via innovative procurement approaches
- High-productivity infrastructure - Embrace agile, fit-for-purpose, high-productivity infrastructure to uplift productivity while limiting cost
- Capability upskilling - Enhance skillsets and nurture "grey collar" talents with hybrid skillsets and technical savviness

Hong Kong has proved to successfully adopt these strategies in leveraging infrastructure for industry development and economic growth. Especially amidst global economic uncertainty, government's strategic infrastructure investment has served a counter-cyclical role, for laying the foundation for future long-term sustainable growth with significant GDP contribution. Given Hong Kong's strong credit rating (e.g., AA+ S&P rating) and vibrant private ecosystem, the city is well-positioned to drive effective financing and leverage private infrastructure investment, which amplifies the impact of public spending. This will not only solidify Hong Kong's role as a premier international infrastructure hub, but also set a benchmark for other cities to follow.

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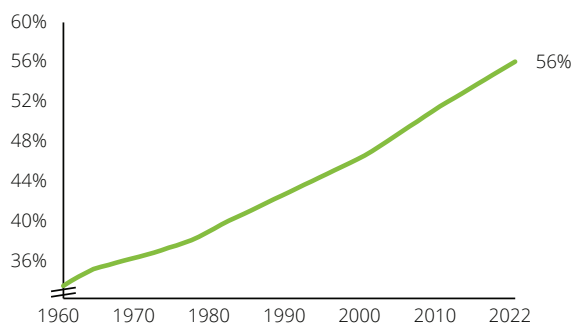
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Infrastructure to drive city development

Cities (mostly developed) will fuel the engine for next wave of global economic growth. Purpose-led infrastructure development will be crucial to debottleneck and drive city growth centered around industry transformation, ecosystem development etc. This will enable cities to become centers of innovation and collaboration - attracting global talents and solidifying their position as engines of global economic growth

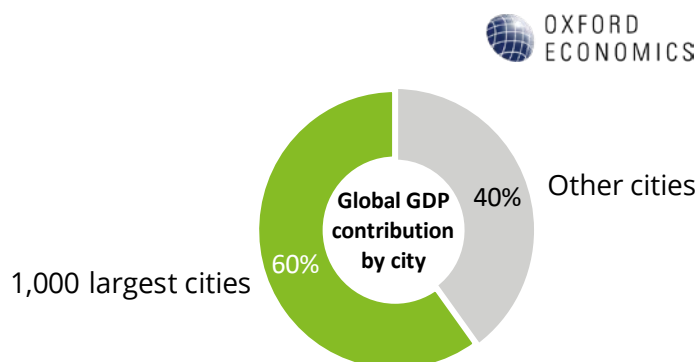
Global urbanisation has reached a historic high, with 56% of the world's population living in urban areas as of 2022 ...

World urbanisation rate
%, 1960 - 2022



... and growth is being driven by highly developed cities fueling the world's economic output and population ...

"In 2023, the **1,000 largest cities** in the world accounted for **60% of global GDP...**"



... along new themes - from industry to ESG and ecosystem development

Major growth themes to drive city re-positioning and re-development



Industry-oriented
development to drive
economic transformation



Flexible ecosystem to
drive vibrancy and talent
capturing



Strengthen connectivity
to leverage cities'
competitive advantage



ESG embedded into city
development to address
socio-environmental issues

Infrastructure growth drivers

Major infrastructure deployment hinges on new city development or urban redevelopment. Hong Kong is leveraging infrastructure to position Northern Metropolis as the next driver of growth, while other global cities are re-positioning their competitive advantage through infrastructure. Significant GDP contribution is also expected from infrastructure investment. For example, Hong Kong's capital works expenditure is on average around 3.4% of GDP, while total construction output is around 9% of GDP, based on 2023-24 figures

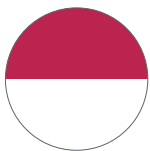
Key development highlights



The Northern Metropolis Development Strategy, announced in 2021, aims to establish a new metropolitan area in the northern New Territories, strategically positioned to establish high tech industries to drive economic growth, and to create 650k jobs high value-added jobs



New Industry Parks and CBDs (e.g., Punggol Digital District, Jurong East) focusing on establishing integrated ecosystems in the region – comprising innovative business, academia, test-bedding facilities, as well as high quality residential districts to retain talents



The New Capital City Nusantara project aims to drive development in the relatively underdeveloped Borneo island, diversifying its economy and to support Indonesia's GDP target of USD 180 billion and create 4 million jobs by 2045



City re-development projects to re-energize industrial zones into high value-added industries. e.g., Canary Wharf project, started in 1980s and continuing today, has transformed the former dock into the new CBD housing global corporations in finance and technology



Various urban renewal / city expansion projects focusing on livable cities and ESG certified infrastructures. E.g., Related Santa Clara to be developed with green building, smart city technologies and car-free spaces to enhance livability

Examples



San Tin Technopole



Punggol Digital District



New Capital City Nusantara



Canary Wharf



Related Santa Clara

Current challenges to growth

Despite ambitious aspirations for city development, a range of complications can hinder growth. These key issues range from city-industry disconnection to budget tightening, escalating construction costs etc. Addressing these complexities is essential to ensure successful and sustainable city development

1	Disconnection of city and industry activities	<ul style="list-style-type: none">• Misalignment of city and industry activities can create challenges to economic growth and sustainable city development• Infrastructure can bridge the gap to foster a more interconnected community with inbuilt synergies
2	Driving industry growth amid economic downturn	<ul style="list-style-type: none">• Economic downturn and competition from other countries / regions have prompted cities to promote new industries that will generate additional economic capacity and strengthen competitiveness• Infrastructure is a key enabler facilitating the growth of new and strategic industries
3	Budget tightening faced by governments	<ul style="list-style-type: none">• Economic uncertainties and a more challenging funding environment have constrained the budget available for governments to invest in infrastructure• Increasing cost of infrastructure has further exacerbated this funding gap
4	Rising construction and infrastructure costs	<ul style="list-style-type: none">• Construction and infrastructure costs have been rising faster than the general price levels of the overall economy• Improvements in construction productivity lag those in other sectors (e.g., manufacturing) due to its unique features (e.g., location-based, complicated value chain)
5	Increasingly diverse construction capabilities to be fulfilled	<ul style="list-style-type: none">• Increasing appetite for quality, innovative and sustainable infrastructure construction (e.g., green design, smart buildings and MiC)• Subsequently, construction capability requirements are increasingly diverse and need talent with matching skillsets

5 global trends in infrastructure development

To address prior challenges and fully harness growth opportunities, cities can focus on below 5 strategic directions. By focusing on these directions, cities can overcome existing challenges and position themselves as competitive global hubs, ensuring long-term prosperity and sustainability

1

Industry-city Integration

- Industry-city integration is hindered by homogenised sector focus; city planning lags industry development
- Developing a niche proposition with the right balance of city and industry activities is key to sustainable integration

2

Strategic re-balancing in the role of policymakers

- More proactive capacity-building for the strategic competence of a city
- Fewer constraints on development mode to leverage private consortiums throughout the development cycle

3

Innovative approaches to infrastructure financing

- The infrastructure investment gap continues to widen as governments face growing funding challenges
- Private investors' appetite for infrastructure as an asset class has increased since COVID to diversify portfolio risk

4

Agile and high-productivity infrastructure development

- Rising construction costs have brought attention to innovative, more cost-efficient approaches
- Agile, fit-for-purpose, high-productivity infrastructure can limit cost and lift productivity

5

Capability upskilling for next generation infrastructure

- Skillsets need to be enhanced to address more diverse and sophisticated next generation infrastructure
- Increasing demand for “grey collar” talent with technical and managerial skills to enhance project execution and sustainability

1

Industry-city Integration

The “as is” situation

While integrating industries with urban development has become a common approach in modern city planning, various challenges can arise to hinder the realization of its full growth potential. As a matter of fact, misaligned priorities between city and industry activities will lead to inefficiencies and delay development progress

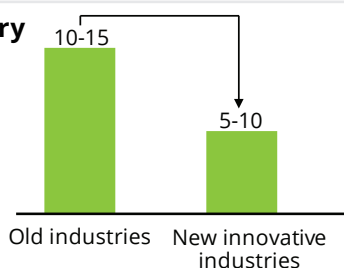
Challenges in industry-city planning and development

Homogenised sector focus

In recent decades, cities around the world have increasingly positioned themselves as hubs for innovation and technology. While this trend offers significant growth opportunities, it has also resulted in overlapping sectoral focus across cities, intensifying competition for top talent and investment. As multiple cities pursue the same high-growth sectors (e.g., biotechnology etc.), differentiation becomes more difficult. This convergence can contribute to stagnant development, as cities struggle to articulate unique value propositions. Moreover, it may result in duplicated efforts and inefficient resource allocation, ultimately diminishing the overall economic impact

Shorter industry development cycle

Avg. # of years of industry dev. cycle
(Old vs. New Industries)¹



With the growth of venture capital and start-up incubators, industry development cycles are shortening, with companies increasingly well-funded and supported

Long timeframe of city and infrastructure planning

Avg. # of years of city development



Due to its inherent complexity, city and infrastructure planning requires a long timeframe, which makes it exposed to uncertainties in industry development and demand trends

Note: (1) Examples of old industries includes automotive, industrials etc., which historically took a longer time to reach maturity, while new industries such as AI and Big Data, BioTech, FinTech etc. have coincided with strong venture capital funding and support which enable them to scale quicker than the older industries

1

Industry-city Integration

Keys to success

Crafting a unique value proposition and achieving a well-calibrated balance between industrial and urban development are essential for the successful integration of industries into city ecosystems. Strategic whitespace for later development is also necessary to accommodate unforeseen needs and foster long-term economic resilience

3 factors for industry-city integration

Niche and differentiated sector focus

**Silicon Valley, USA**

Home to major tech companies and a vibrant startup ecosystem, **Silicon Valley is renowned for its focus on software, hardware and biotechnology.**

**Shenzhen, China**

Shenzhen specializes in electronics manufacturing and innovation, particularly in drones and telecommunications.

Right balance of city and industrial development

**Berlin, Germany**

Berlin's creative industries are embedded in the city's culture, with art spaces, galleries and tech hubs located throughout urban neighborhoods.

**Boston, USA**

Boston has successfully transformed its old industrial districts into **developments with life science ecosystems integrated with vibrant residential areas.**

Strategic whitespace for later development

**Singapore**

Singapore's industrial development is by phases, including the establishment of industrial parks and clusters. **White spaces are allocated for future growth,** allowing for flexibility and adaptation to emerging industries.

**Melbourne, Australia**

Melbourne has developed its industrial and innovation sectors incrementally, with designated innovation districts that anticipate future needs. **Strategic planning has left space for new industries,** particularly in tech and creative sectors.

1

Industry-city Integration

Leading case study



The Northern Metropolis: Hong Kong's new economic engine seamlessly blends industry and city

Context of Northern Metropolis

- The project aims to transform around 30,000 ha. of northern Hong Kong into a comprehensive urban space, accommodating around 2.5 million people
- This initiative is designed to establish an Innovation and Technology (I&T) hub, creating around 650,000 jobs, including 150,000 in the I&T sector



Industry-city integration approach and impact

- The new development is to adopt an “Industry-city approach”, integrating industry planning and city planning to ensure both aspects will be mutually reinforcing to create sustainable development
- Each sub-development zone the in Northern Metropolis aims to nurture specific industries, which will be supported by industry and community infrastructures to support local business (e.g., labs, advanced manufacturing centres) and livable communities to attract talent to “live, work and play”



“ Industry-city integration is the mega trend, with potential to drive GDP and employment. The Northern Metropolis is an example, to transform the industry landscape and achieve further integration of city and industry ”

Patrick Tsang, CEO, Deloitte China

2

Strategic re-balancing in the role of policymakers

Capacity-building vs. supply & demand fulfillment

Strategic balancing between capacity-building and supply & demand fulfillment, with varied key priorities and economic return impact. Supply & demand fulfillment forms the backbone of a city addressing social and market needs, while capacity-building is intended to drive industry development and city growth. In the case of economic slowdown, government's continued investment has served a counter-cyclical role to drive strategic infrastructure investment (e.g., capacity-building) for the city's long term sustainable growth



Capacity-building



Supply & demand fulfillment

Description	Proactive role from making policy to leading infrastructure development through regulations / policies to shape industry focus	Market-driven role of government promoting infrastructure development or meeting social needs
Key Priorities	Broader impact to overall economy and society (e.g., GDP, employment, economic diversity) for sustainable city development	Responsiveness and efficiency to address immediate market needs
Examples	<ul style="list-style-type: none"> • Industry parks • University town • Logistics hub 	<ul style="list-style-type: none"> • Roads and bridges • Parks and recreational facilities • Hospitals
	Attractive economic return capitalising on the city's core competencies with greater potential for impact	Average economic return with focus on addressing immediate market needs

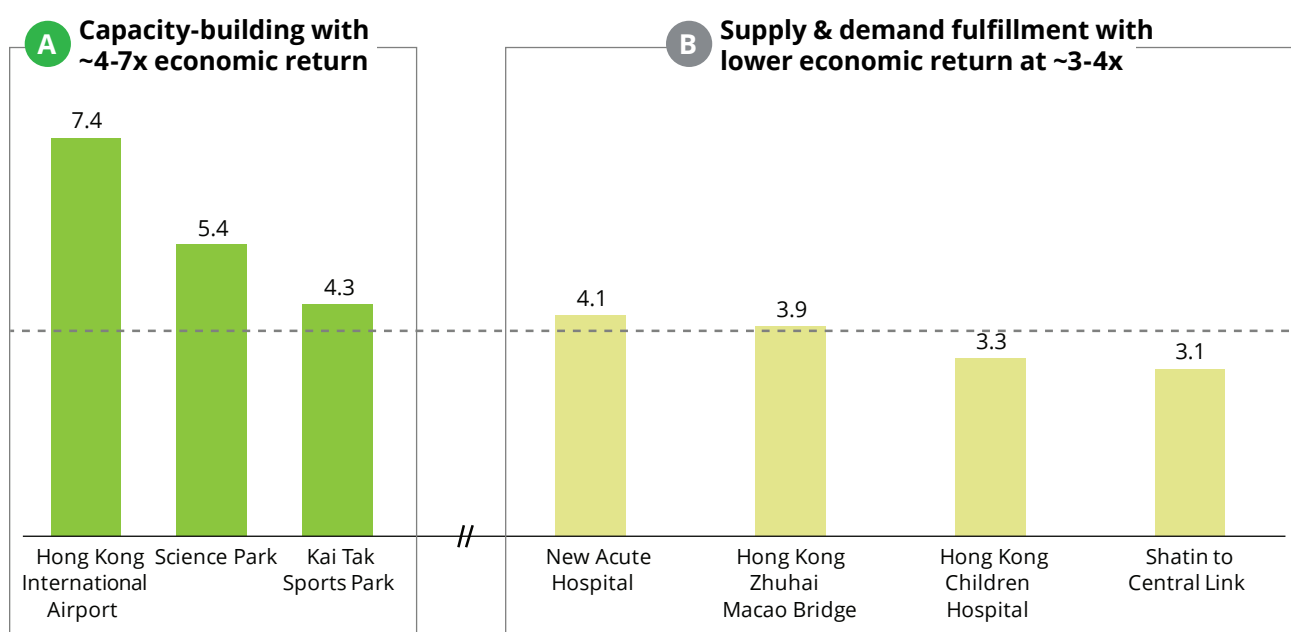
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Strategic re-balancing in the role of policymakers

Economic return of infrastructure in Hong Kong

Capacity-building tends to generate a more attractive economic return given its enablement of the city's industry development. Supply & demand fulfillment, even though with moderate return, is still indispensable as it supports the well-functioning of a city

30-year cumulative economic return by major project



Source: Economic return of infrastructure investment projects in Hong Kong by Heiwei Tang

Note: The economic return of Hong Kong International Airport (Phase 1) is estimated based on initial investment from 1991-1998 & Airport Authority's ongoing operational cost

A Capacity-building

Projects with strong **leverage of city core competence** to **enable industry development** tend to generate higher economic return

B Supply & demand

Infrastructure **meeting market** and **social needs** with average economic return. Nevertheless, it is indispensable as it forms the backbone of a well-functioning city to ensure social stability

City development requires a careful balance between capacity-building and supply & demand fulfillment. A well-balanced portfolio could ensure cities to grow sustainably and enhance the quality of life for their residents



Value is created during the design, construction and operation of infrastructure projects. What is less understood is the indirect value-add infrastructure can bring through industry cluster effects and intangible socioeconomic benefits

Professor Heiwei Tang, Director, Asia Global Institute

2

Strategic re-balancing in the role of policymakers

Leading case study



The Loop: Bridging capabilities of Hong Kong and Shenzhen to develop into a regional innovation ecosystem



Context of the Loop

- The Loop encompasses 90 ha. of land, designated for the development of the Hong Kong-Shenzhen Innovation and Technology Park, aimed at fostering collaboration between Hong Kong and Shenzhen in innovation and technology sectors

Policies to support development

- Cross-boundary data and biosample policy to encourage companies to use Hong Kong as a base to develop products for Chinese Mainland
- The Loop will enhance Hong Kong's position as a regional innovation hub and strengthen its integration with the GBA's innovation and technology ecosystem



Biopolis: Fostering advancement of the biomedical industry to serve as a dynamic hub for life science R&D



Context of Biopolis

- In the 1990s, Singapore's economy focused on electronics manufacturing and needed diversification, and the government sought to build up its biomedical industry with a focus on high value-added manufacturing and leading R&D

Policies to support development

- Top scientist attraction initiatives to bring in top researchers that can in turn attract junior researchers and students to drive R&D
- Purpose-built biomedical campus (Biopolis) to support the formation of an innovation cluster



Governments are at their best when they set out a clear vision of the outcomes they want to see. For example, the Singapore government has launched a series of initiatives to support the development of the Biopolis campus to nurture a local high-value biomedicine sector.



Dr Janet Young, Director General & Secretary, Institution of Civil Engineers

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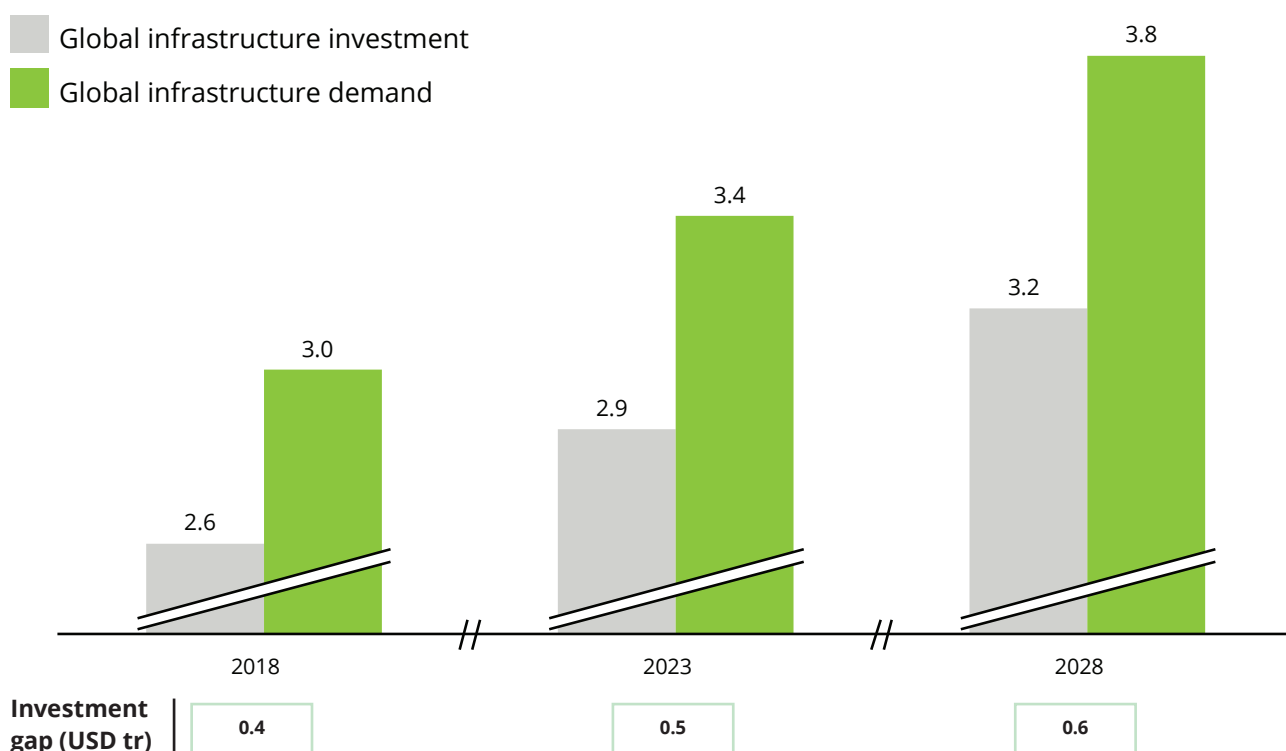
Innovative approaches in infrastructure funding

The "as is" situation

The gap in infrastructure investment has been steadily increasing as governments face escalating challenges in securing adequate funding due to global economic uncertainty and rising interest rate. This financial strain limits their ability to address infrastructure needs and delay projects

Infrastructure investment continues to fall short of demand by around 20% ...

Investment gap - Investment demand vs. investment
USD trillion, 2018-28



... due to governments' ongoing funding challenges around budget constraints, bureaucracy and the rising cost of infrastructure



Budget constraints

Governments in both developed and developing economies are faced with increasingly tight budgets after COVID



Regulatory and bureaucratic uncertainty

Complex regulations and lengthy approval processes can hamper allocation of public funds



Rising costs

Construction material and labour costs have risen, leading to more expensive development and maintenance

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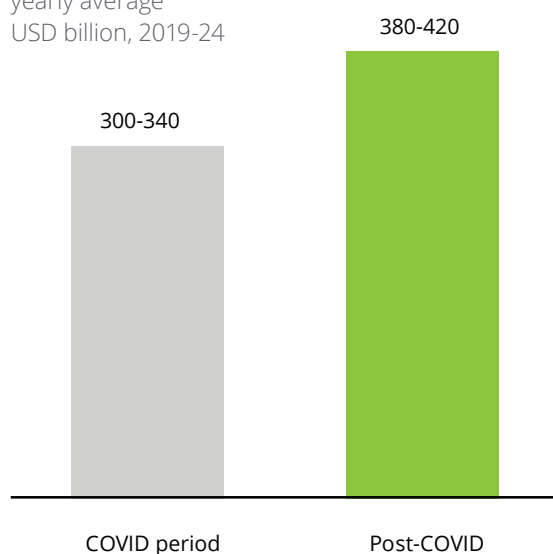
Innovative approaches in infrastructure funding

Proposed approach

Private sector interest has been steadily growing in the post-COVID era, driven by a heightened desire to diversify portfolio investment risks, while seeking for returns and opportunities for ecosystem growth. An effective role could be played by the government to leverage private investment, which hinges largely on the government's credit rating (e.g., Hong Kong's AA+ rating enhances private confidence and investment appetite)

Growing private involvement at around 7% CAGR from COVID-period to post-COVID

Global private investment in infrastructure projects, yearly average
USD billion, 2019-24



Note: (1) COVID period refers to 2019-2022, while post-COVID refers to 2023-2024

Source: Global Infrastructure Hub; Deloitte Analysis

... looking for return, diversification and ecosystem development

Types of investors	Rationale for infrastructure investment
Financial investor	<ul style="list-style-type: none"> Guaranteed return with limited risk Tolerance for short-term financial fluctuations
State owned enterprise (SOE)	<ul style="list-style-type: none"> Engage in long term, predictable profit-making projects Engage with policy and strategic priorities
Property / utilities developer	<ul style="list-style-type: none"> Generate positive operating cashflow
Industry player	<ul style="list-style-type: none"> Ecosystem and industry-oriented development Long term focus

Foreign currency sovereign ratings by S&P and Moody's

Selected economies	S&P rating	Moody's rating
Singapore	AAA	Aaa
Hong Kong	AA+	Aa3
United States	AA+	Aaa
United Kingdom	AA	Aa3
South Korea	AA	Aa2
Japan	A+	A1

- Hong Kong's healthy credit ratings implicate its financial stability and resilient economic framework
- Such strong creditworthiness enhances investor confidence and effectively drives private sector interest in investment (e.g., infrastructure projects)

3

Innovative approaches in infrastructure funding

Leading case study



Piloting “large scale land disposal”...



Context

- To ensure the financial sustainability of Northern Metropolis development, the HKSAR Government will pilot China’s “large scale land disposal” model to leverage private capital through PPP on infrastructure development

Key focus and impact

- This model leverages mainland experience to further privatise upfront infrastructure development to reduce the Government’s financial commitment
- The model increases development agility by segmenting land into smaller parcels, and enhances efficiency leveraging private expertise



“ Large scale land disposal means bringing private investors, industry and developers together to build cities, from utilities to fundamental and industry specific facilities ”

Patrick Tsang, CEO, Deloitte China



... using Chinese Mainland leading experience



Context

- China is a world leader in working with enterprises (mainly SOEs) to develop upfront infrastructure. This “large scale land disposal” model is a strategic tool to support rapid urbanisation, generate revenue, and promote industry development

Key focus and impact

- Primary (site formation and infrastructure) - secondary (building construction) - tertiary (operations and leasing management) cooperation - government cooperates with enterprise to develop cities from the infrastructure stage to construction and community development as a single entity
- Industry-oriented approach is used extensively to enhance the economic value of infrastructure



“ Developers are interested to be part of the driving force for these types of economic oriented mini-city development within the Northern Metropolis project ”

Ir Eric Ma, President, HKIE

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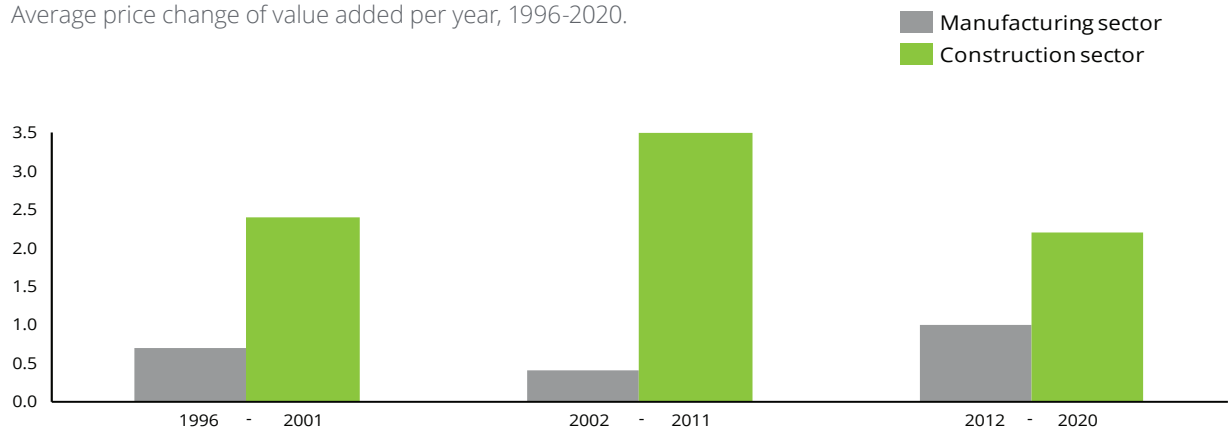
Agile and high-productivity infrastructure development

The "as is" situation and proposed approach

Construction cost for infrastructure has been on an upward spiral over the past 20 years; to manage this challenge, cities are increasingly adopting agile, fit-for-purpose and intelligence-based infrastructure solutions, leveraging technologies like MiC and automation to optimize costs and improve efficiency

Construction cost has been becoming more expensive over the past 20 years ...

Average price change of value added per year, 1996-2020.



Notes: (1) Data based on EU countries (2) Data measured in gross value added per hour worked, represents major economies including OECD countries and China

Source: OECD; Deloitte Analysis

... hence, governments are leveraging agile, fit-for purpose and intelligence-based infrastructure to control cost and uplift productivity

High productivity construction


Modular Integrated Construction (MiC)

- Pre-fabrication and installation of all building components inside modules in a factory to be installed onsite


Multi-trade Integrated mechanical, electrical and plumbing (MiMEP)

- Better construction efficiency, quality, sustainability and project outcomes

Digitalisation and automation


Digitalisation of Work Flow

- Use of digital tools to support collaboration. E.g, Digital Works Supervision System (DWSS)


Smart Site Safety

- Use of sensors and computer vision to enhance site safety


Site Automation

- Robotic systems automate specific tasks

4

Agile and high-productivity infrastructure development

Leading case study



Global leading hub for Modular Integrated Construction and setting international best practices



Description

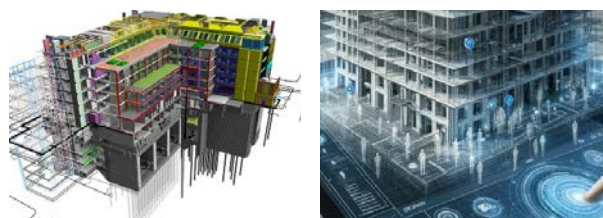
- Modular Integrated Construction (MiC) is an innovative building method that involves the factory-based production of pre-finished modules, which are then transported to the construction site for quick assembly
- Hong Kong is world leading in MiC adoption, with 100+ MiC projects across public and private construction

Key focus and impact

- Increased productivity - up to 50% time saving and 400% uplift in on-site production
- Enhanced site safety and minimised waste and pollution at construction site
- Helps tackle issues such as labour shortages, high costs, and low productivity in the construction sector



Rapid advancement in construction digitalisation to leverage technologies for efficiency uplift



Description

- Construction digitalisation improves planning, delivering and operating buildings by automating workflow and enhancing collaboration
- Chinese Mainland is recognized as a major leader in construction digitization, driven by substantial government support

Key focus and impact

- Better decision-making: allows stakeholders to simulate various design scenarios and assess their impacts before construction begins
- Improved efficiency and cost savings: early clash detection and project visualization reduces the likelihood of errors and rework



“Infrastructure development needs to be faster and more agile to capture the next waves of growth. For example, MiC adoption is particularly advanced in Hong Kong, while in the Chinese mainland, construction firms are using more robotics, which makes construction more precise and more efficient. ”

Ir Eric Ma, President, The Hong Kong Institution of Engineers (HKIE)

5

Capability upskilling for next generation infrastructure

The "as is" situation and proposed approach

The skillsets of the construction workforce must be enhanced to meet the evolving demands of the industry. Additionally, leveraging grey collar talents will be essential in addressing the increasingly complex infrastructure needs of the future

More diverse and sophisticated skillsets required of workforce for future construction ...

New construction method	Skills for new construction methods (e.g., MiC, MiMEP etc.)
Digital construction	Ability to use digital tools (e.g., BIM, CDE) to enhance construction process
Automation	Capacity to leverage automation tools (e.g., robotics) on construction site
ESG	Improve ESG in construction and operation (e.g., smart building, green design) for future-ready and sustainable infrastructure

... with need to nurture and leverage grey collar talent

Profile of grey collar workforce	
	Hybrid skillset of both technical and managerial capabilities
	Technologically savvy , and adept in innovative construction technologies
	Future-oriented: Know-how of eco-friendly and sustainable practices
<i>Offering a blend of technical and managerial skills to enhance project execution and sustainability</i>	



“

Aspects shaping the next generation infrastructure are items such as ESG, digital technology, diversity and results of innovations, etc. These are the reasons why some economies and companies are standing out and are more future ready than others. ”

Paul Hu, Executive Director Greater China, IMD

5

Capability upskilling for next generation infrastructure

Leading case study



Fostering close collaboration among academic institutions, research institutes and government departments across GBA to drive construction innovation



Building Technology Research Institute
香港建築科技研究院



Context

- The Development Bureau has been promoting construction innovation in Hong Kong, establishing the Building Technology Research Institute (BTRI) in 2024 to focus on facilitating HK-GBA integration to shape the region as a leading construction technology hub

Key focus and impact

- Devise standards, conduct testing and provide accreditation to allow Chinese technologies to be used in Hong Kong and overseas
- Work with research groups and industry stakeholders to commercialise high-impact technologies
- Enable piloting and promote adoption of Chinese leading technologies tailored to needs and context of Hong Kong



Advancing skills of local construction workforce by offering modular certificates and specialized diplomas



Building and Construction Authority



Context

- One of the key initiatives of Singapore's Building and Construction Authority (BCA) is driving the establishment of Integrated Construction and Prefabrication Hubs (ICHPs), which enable local production of prefabricated components to promote the use of prefabs in local construction

Key focus and impact

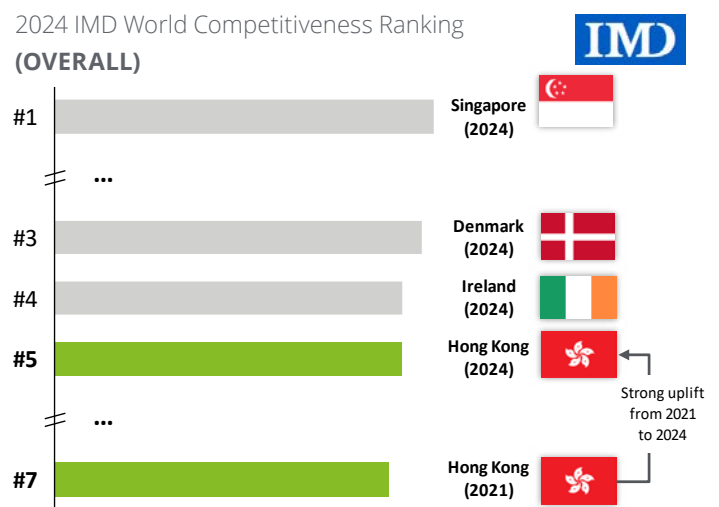
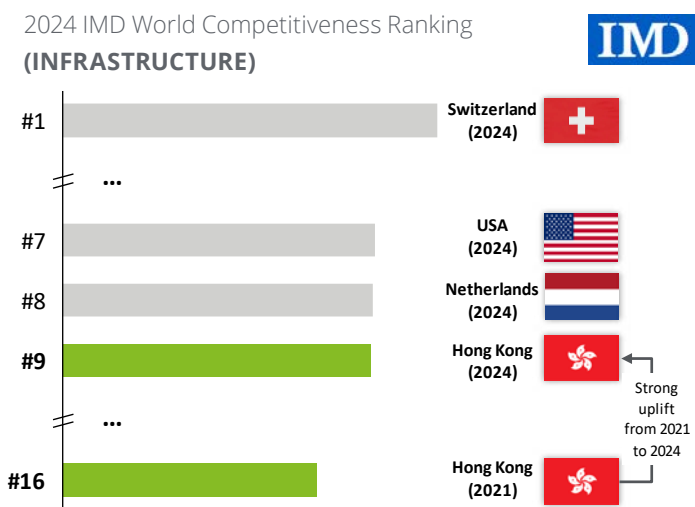
- Offer modular certificates and specialized diplomas to equip professionals with the expertise required
- Increase supply chain resiliency with local production to avoid construction delays
- Create a robust ecosystem that supports faster project completion, cost savings and greater adaptability to unforeseen challenges

Final notes

There is a growing convergence between infrastructure development and city competitiveness, as well-planned infrastructure plays a critical role in enhancing a city's industry development, economic performance and livability. Strategic infrastructure will drive a city's ability to compete globally while fostering long-term growth, sustainability and resilience

Strong improvement of infrastructure competitiveness in Hong Kong observed from 2021 to 2024 ...

... which is in parallel contributing to an uplift in overall city competitiveness



“ In our latest World Competitiveness Ranking, Hong Kong is extremely competitive at #5 out of 67 economies, enabled by its competitive infrastructure improvement ranked at #9. If we look beyond hardware, what makes the difference is talent. To be a future ready economy, we need future ready talent that embraces innovation and capability growth, and are trained to stretch their bandwidth through ambidextrous leadership. ”

Paul Hu, Executive Director Greater China, IMD



Hong Kong is exceptionally well-positioned to become a premier infrastructure hub, with its unique blend of financial expertise, innovative spirit and strategic location. And with its commitment to sustainable development, innovative financing solutions and collaboration between the public and private sectors, this city can be a model for others to follow.