Powerful Partnerships: Collaboration for Project Success





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 collaboration 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 powerful partnerships for project success, the other two delve into pivoting infrastructure for city development and embracing innovation and digitalisation. Together, they provide a comprehensive overview of Hong Kong's strategic initiatives in infrastructure development.







Introduction

Hong Kong has a strong history of successful project delivery with a focus on infrastructure investment driving its economy. Government capital works accounted for around 3.4% of GDP, while construction output accounted for around 9% of GDP in 2023-24. Future major projects, like those in the Northern Metropolis, will be key for Hong Kong's development. However, addressing industry challenges, such as rising construction cost, will require collaboration between public and private sector partners for project success.

Ongoing Challenges in Major Projects Changing priorities Funding gap Insufficient talent Carbon neutrality Declining productivity Quality requirements Construction volume Rising costs



Objectives of this publication



To highlight the importance of collaborative partnerships

To set out Hong Kong's key initiatives for uplifting major project delivery through partnerships

To share insights on international best practices in partnering and collaboration

To recommend ways forward for cost effective delivery and long term value through successful public private partnerships

The way forward for powerful partnerships - three focus areas

It is crucial for public and private partners to confront industry challenges together and embrace innovation and opportunities to achieve cost-effective major project delivery and longer term value.



Strategic planning and procurement

- Foster strategic partnerships with diverse stakeholders locally and internationally
- Attract talents who excel in leadership, collaboration and integration in addition to technical expertise



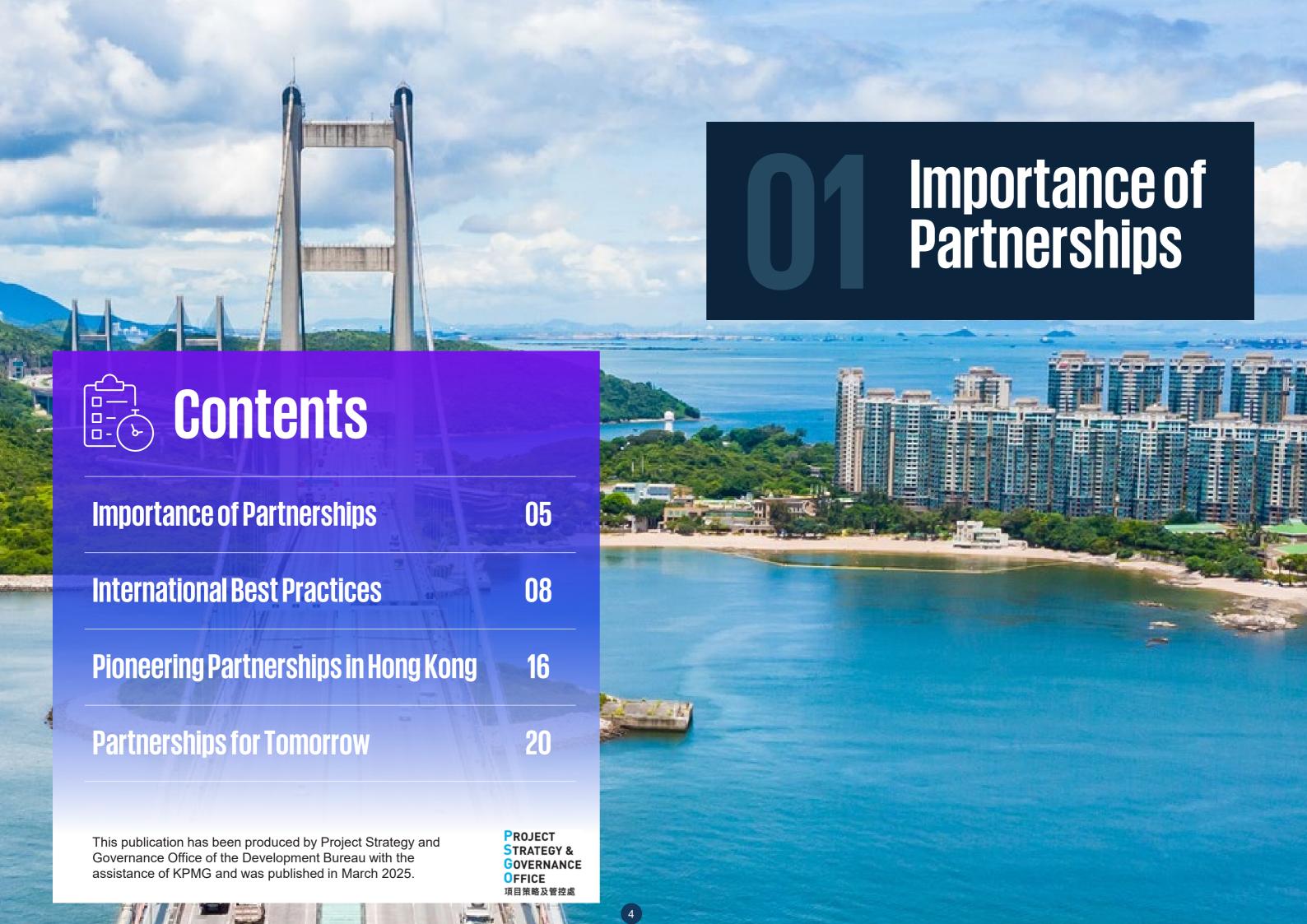
Enhanced project delivery approaches

- Integrated project **delivery** enabled by innovative technologies
- Agile project management creating swift and iterative responses to changes and challenges



Innovative project financing and funding

- **Explore** innovative mechanisms to reduce reliance on traditional funding sources
- Strengthen project business cases to align with long-term objectives including sustainability







Setting the scene



Benefits of collaboration

As major infrastructure projects **increase in complexity**, effective partnerships are crucial to **align stakeholders and achieve shared goals**.

Collaboration harnesses diverse strengths, leading to increased productivity, improved timeliness, and enhanced sustainability in project delivery.



Leveraging Global Expertise – integration of diverse skills and knowledge bases drives high-quality outcomes





Enhanced Innovation – different partners bring new perspectives, ideas, and technologies to solve problems creatively





Faster Delivery – partnerships accelerate project timelines through shared responsibilities and focused execution





Improved Access to Financing – strategic partnerships can enhance financial credibility





Local and Community Benefits – community needs and benefits are factored into project delivery



In recent years, there has been a growing emphasis on major project performance recognising the crucial role of partnerships and collaborative delivery in achieving success. The critical steps to forge successful partnerships are becoming increasingly well-defined.

Traditional top down hierarchical structures

Lack transparency

Misalignment of goals and objectives

Lack of capability to maintain and operate assets

Sustainability not a priority

Collaborative partnerships

Effective governance enabling open communications at all project levels

Mutually beneficial and well aligned goals for all stakeholders

Upskilling local capability through continuous investment

Increasing asset longevity by adopting sustainable designs and practices

Partnerships across the project delivery lifecycle Partnerships between multiple stakeholders play a crucial role in ensuring the success of major projects across the planning, preparation, procurement and implementation stages. Financial partners Project leader Planning Planning Contractors Digital solution providers End users Government

Key features of collaborative partnerships



N1

How to procure – Transparent and interactive stakeholder engagement drives informed decisions, prioritising long-term value creation over short-term cost.



02

How to collaborate – Success in a dynamic environment requires responsiveness, forward-thinking, and open communication built on mutual trust and benefits.



03

How to deliver – Agile and flexible, proactively addressing challenges together, and aligning project outcomes with broader social, environmental and economic objectives.



Powerful Partnerships: Collaborating for success

The IIPLS plenary session, "Powerful Partnerships: Collaboration for Project Success," highlighted Hong Kong and international examples of successful collaborations that delivered world class major infrastructure achievements.

To succeed given all the challenges...a collaborative spirit is necessary. Collaboration between the public and private sector and collaboration internationally. With collaboration and innovative ways of working together and a very proactive team-oriented mindset, so much can be achieved.

- Mr. Andrew Weir, FCA, MBE, BBS, JP

Former Global Head of Asset Management and Real Estate, KPMG

The plenary session of the IIPLS featured distinguished industry leaders:

- Mr. Andrew Weir, Former Global Head of Asset Management and Real Estate, KPMG
- · Mr. John Batten, Global Cities Director, Arcadis
- Mr. Jerome Frost OBE, Global Chair, Arup
- Mr. Paul Shepherd-Smith, Global Capability Director, Engineering and Design, AtkinsRéalis
- Mr. Davendra Dabasia, CEO Consult, Mace

Three focus areas were identified as key factors in creating powerful partnerships:



Strategic planning and procurement



Project delivery approaches



Project financing and funding

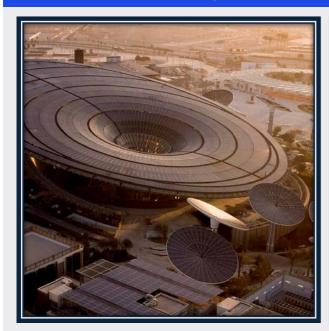




Strategic planning and procurement (1/2)

A key challenge in collaborating for success in today's major projects is aligning vision, goals, and outcomes among diverse partners.

Case Studies from the Plenary Session



Redefining boundaries in the Middle East: Expo 2020 Dubai – United Arab Emirates

- Mace, Jacobs, and the Client partnered to deliver infrastructure for the largest global event in the Middle East.
- The partnership managed 40 individual projects, 300 contracts, and the development of the masterplan, infrastructure, public realm spaces and the site's legacy transition.
- The team achieved a sustainability milestone with 105 buildings achieving Leadership in Energy and Environmental Design ("LEED") Gold Certification and 7 buildings achieving LEED Platinum Certification.



Without aligned outcomes, and the organisations working hand in hand to get to a simple goal, then the partnership, as well as the supply chain, will struggle to succeed.

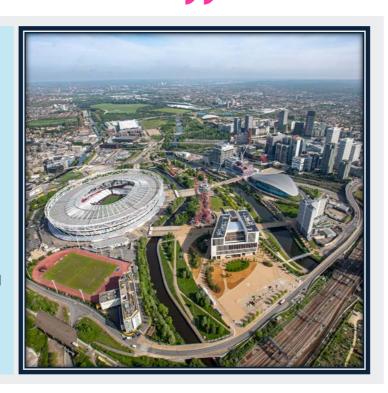






Creating a lasting impact: London 2012 Olympics and Paralympics **Programme – United Kingdom**

- · Delivered five permanent venues worth GBP 1.6 billion of construction.
- The project had to balance sustainability, design, safety and training targets while creating a lasting community impact.
- The adoption of a delivery partner model, in collaboration with the Olympic Delivery Authority, facilitated the successful completion of the project, totaling over GBP 5 billion in procurement and achieving cost savings exceeding GBP 1 billion.



Strategic planning and procurement (2/2)

The strategic planning and procurement of major projects must go beyond mere construction, and aim for sustainability, innovation, operational excellence, financial and socio-economic outcomes. Investing time in securing the right partnerships from the outset is critical to navigate the complexities and challenges of major projects collaboratively over the long term.

Key factors in strategic planning and procurement

Recommendations to enhance strategic planning and procurement in major project delivery include:



Aim to increase certainty in order to reduce risk. Key areas for certainty include political and policy support, team and partner involvement, project outcomes, and crucially, stakeholder consent.



Adopt a lifecycle approach to major projects. Early planning for operations, maintenance, and end-of-life considerations delivers more effective, durable, well-maintained and sustainable infrastructure.



Recognise that systems, not projects, deliver outcomes. Systems thinking enables major project leaders to break down complexities and make better decisions about interconnected interfaces.



Embed partnership into the contracting environment and incentivisation **structure.** Contracts should consistently reflect a shared purpose.



Nurture integrated teams and a common mindset. Partnerships seamlessly integrate capabilities and talents through well-defined roles, aligned outcomes and a shared purpose.



Project delivery approaches (1/2)



World-class project delivery requires effective management of complex data environments, integrated systems, and expanded supply chains to enhance transparency and drive productivity.

Case Studies from the Plenary Session

Integrated Project Management Office ("PMO") to enable successful world-class innovation and technology district development: Tencent Internet + Future Technology City – Shenzhen, Chinese Mainland



- Tencent and Arcadis partnered to form an Integrated PMO, ensuring the successful delivery of Tencent Internet+ Future Technology City in Shenzhen Bay.
- Innovation and Technology District Development in Greater Bay Area has a total construction floor area measuring three million m² of sustainable urban infrastructure.
- The integrated PMO approach and the digital PMIS enable smarter management of the complex design and construction supply chain, encompassing both global and local markets.

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An integrated PMO approach together with a digital Program Management Information System ("PMIS") enables smarter management of the complex design and construction supply chain, delivering better project outcomes.



Global Cities Director, Arcadis



Wider supply chain ecosystem for best value: National Highways, Lower Thames Crossing – United Kingdom

- The Lower Thames Crossing is a complex, multi-asset horizontal infrastructure programme with a GBP 9 billion budget and a 15-year timeline.
- Arcadis was appointed as the multidisciplinary and data-enabled Programme Delivery Partner ("PDP").
- This PDP approach, using extensive cost benchmarks and intelligence, optimises and validates whole-life costs, reducing inflation exposure by around 50% in the main works contract.



> Project delivery approaches (2/2)



The construction industry's adoption of data and AI for major projects faces challenges like supply chain integration, data standardisation, fostering innovation, and addressing regulatory, privacy, and security concerns. Effective data utilisation is key to driving innovation and addressing these complexities. Strong partnerships are essential to leverage technology's full potential and navigate these obstacles.

Key factors in enhancing project delivery

Recommendations to enhance major project delivery approaches include



Make upfront strategic investments. Early data utilisation is vital for informed decision-making throughout project lifecycles.



Employ a systems perspective to use technology intelligently. Identifying the value of AI and other digital tools for optimising project delivery efficiency and outcomes, including integration strategies.



Establish a single source of truth. A common data environment streamlines communication, builds trust and supports collaborative decision-making.



Focus on data transparency. Clear and accessible information fosters open communication and coordinated efforts among partners.



Activate supply chain management with incentives, standardisation, prefabrication, and modularity. Optimising resource use and processes across the project lifecycle is essential to reduce costs.



Project funding and financing (1/2)



Cost pressures are driving both public and private sectors to explore alternative funding and financing approaches to optimise value for money.

Case Study from the Plenary Session



Increasingly we are having to turn to very different sources of funding, we can no longer rely on 100% public funding, and the importance in emphasis on private sector collaboration, private sector investment has risen to the top of the agenda.



- Mr. Jerome Frost OBE

Global Chair, ARUP

Strong financial partnerships are the key to the success of massive scale infrastructure programmes. Financial partners expect delivery partners to enhance certainty and realise financial objectives and other project benefits.



Mr. John Batten

Global Cities Director, Arcadis

Collaborative Delivery Partnership: Gateway Hudson River Tunnel **Project – United States of America**

- · One of the largest infrastructure projects in the US today, tagged at USD 16 billion and expected to span over a decade.
- Collaborative funding partnerships are across two cities, two states and the Department of Transportation.
- · The project utilises a delivery partner model, with Arcadis partnering with Mace and Parsons to form a collaborative Delivery Partner. This partnership aims to fully realise the project's potential in conjunction with the client, financial partners, and stakeholders.



Project funding and financing (2/2)



With growing global construction volumes, attracting private capital, leveraging innovative financing, and adopting collaborative contracting with proper risk allocation is crucial.

Fostering long-term partnerships between public and private sectors is essential for cost-efficient and timely project delivery, ensuring certainty in the consenting process, and laying the foundation for successful infrastructure implementation and long-term investments.

Key factors in project funding and financing

Recommendations to attract private capital and explore alternative financing methods include:



Blended finance strategies. Combining public, private, philanthropic, and development finance funds mitigates risks and encourages investment in large infrastructure ventures.



Capitalise on government incentives and subsidies. Attracting investment and reducing the cost of capital enhances project financial viability and appeal to a wider investor base.



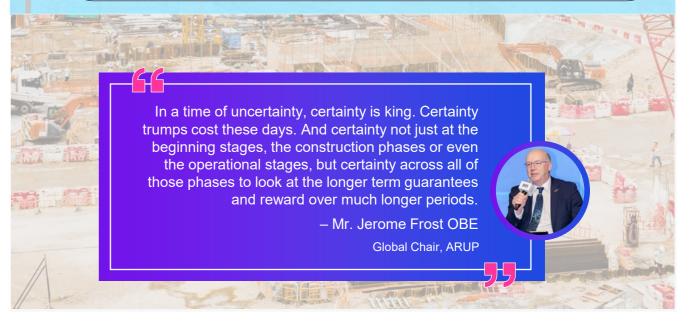
Green, social and sustainable financing for a lasting impact. Tapping into the growing market and attracting investors or institutions with aligned visions for delivering environmental and social outcomes.



Optimise long-term financial sustainability. A robust business case demonstrating cost savings and value generation over time increases investor confidence and attracts those seeking sustained returns.



Flexible financing frameworks. Project financing models should be flexible to accommodate economic shifts and diverse investor preferences.







Pioneering Partnerships in Hong Kong



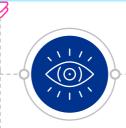
Hong Kong has all the ingredients to be an International Infrastructure Centre, just as much as its International Financial Centre. It has the human capital, it has the finance, world leading investment, world leading projects and it really is a truly remarkable story.



Former Global Head of Asset Management and Real Estate, KPMG



Hong Kong is committed to uplifting major project delivery through pioneering partnerships enabled by:



Vision and Commitment – a clear vision for the future and commitment to excellence in infrastructure development



Prowess in Delivering Complex Projects –

Hong Kong has a proven track record of successful major projects, showcasing its mature delivery approaches and structured project governance



Unique Competitive Advantages – an exemplary jurisdiction for world-class delivery, combining infrastructure and financing expertise



Broadened Market Reach – benefits from the "One Country, Two Systems" framework and strategic initiatives such as the Belt and Road and the Greater Bay Area



Hub for Knowledge Exchange – the "East-Meets-West" platform leverages local and international capabilities and capacities, drawing on collective industry experiences

Hong Kong's initiatives in fostering pioneering partnerships (1/2)



Hong Kong is investing in fostering a partnership ecosystem for major project delivery, aiming to enhance strategic planning and procurement, adopt new approaches to project delivery and attract innovative funding and financing to ensure the long term sustainability of infrastructure.

Strategic planning and procurement



Capability Uplift and International Collaboration



Leadership and Capability

- Since 2019, the Centre of Excellence ("CoE") has provided senior government officials and project leaders with high-level development programs to enhance project delivery capability and performance.
- Established in 2017, the Institution of Public Private Partnerships ("IPPP") promotes the PPP project delivery model for the Belt and Road Initiative, aiming to enhance project efficiency and sustainability.

Adoption of PPP in Major Infrastructure Projects

Public-Private Partnerships ("PPP")

- · PPP has been widely adopted in major Hong Kong projects, with the PPP structure evolving based on market conditions, risk appetite, government preferences and cost efficiency considerations.
- Kai Tak Sports Park ("KTSP") is a successful largescale PPP project in Hong Kong, notable for its unprecedented scale, urban redevelopment role, and unique partnership and financing structure.



Procuring for Value



Innovative Procurement

- The Development Bureau of the Government of the Hong Kong Special Administrative Region ("DEVB") promotes innovative procurement and contract forms, such as framework procurement, direct procurement, and New Engineering Contract ("NEC"), to enhance project efficiency and cost management.
- These innovative approaches foster long-term supplier relationships and increase transparency with partners, as demonstrated by the use of Innovative Design Packages ("IDP").

Northern Metropolis Development Strategy

Pilot schemes of large-scale land disposal

- The Northern Metropolis ("NM") adopts an "industrydriven and infrastructure-led" approach to forge a new engine for Hong Kong's future growth.
- Three pilot areas for large-scale land disposal in NM aim to encourage innovative market suggestions and leverage private developer expertise to enhance NM's long-term sustainability. The Government plans to commence tendering for these areas from 2025 to 2026.



Hong Kong's initiatives in fostering pioneering partnerships (2/2)

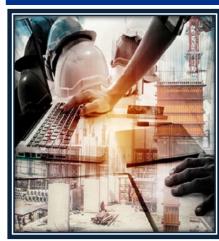


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Project delivery approaches



Technology-Enabled Delivery



Innovative and high productivity construction

- DEVB and the industry have embraced innovative design practices in construction, including Building Information Modelling ("BIM"), Modular Integrated Construction ("MiC"), and the implementation of the integrated Capital Works Platform ("iCWP").
- Driven by MiC demand, the Chinese Mainland supply chain, particularly in the Greater Bay Area ("GBA"), is expanding rapidly, with increasing partnerships between HK and Chinese Mainland. A key example is the MiC Manufacturer Certification Scheme, which collaborates with Mainland production bases.



Delivery Partner Model

Enhanced Collaboration and Increased Efficiency

- · Overseas precedents demonstrate that the delivery partner model, with its specialised expertise, streamlined processes, cost optimisation, early risk mitigation, and enhanced collaboration, consistently delivers more efficient and higher-quality major projects.
- · The NM development of Kwu Tung North/Fanling North and San Tin Technopole will pilot the delivery partner model.



Project funding and financing



Alternative Financing Approaches



Sustainability at the fore of Infrastructure financing

- Since 2019, Hong Kong Mortgage Corporation ("HKMC") has launched its Infrastructure Financing and Securitisation business to develop the local debt capital market and position Hong Kong as an infrastructure financing hub.
- The newly formed Committee on the Financing of Major Development Projects and Office for the Financing of Major Development Projects aim to explore diverse investment options and ensure fiscal sustainability.
- In the 2024-25 Budget, the HKSAR Government plans to issue HKD 95-135 billion in bonds annually over the next five years to support NM development and other major infrastructure projects.





Partnerships for Tomorrow: Paradigm shift towards collaborative major project and programme delivery



This is an opportune moment to embrace partnerships and collaborative efforts across all project phases. As the industry addresses global delivery challenges, effective leadership and strategic vision are crucial for leveraging international knowledge exchange to benefit Hong Kong.

Collaborating for success, both locally and globally, requires harnessing collective wisdom, aligning strategic vision and objectives, and leveraging local and international capabilities to deliver financial, social, economic and environmental outcomes.



Effective project leadership is realised when key stakeholders — sponsors, funders, consultants, contractors, and operators — come together, with each party contributing to the collective direction essential for success.



CEO Consult, Mace





Legacy for me is about global businesses establishing a lasting impact, ensuring that local communities and employment get the benefits of infrastructure for decades to come.

- Mr. Davendra Dabasia

CEO Consult, Mace







This is not just about building traditional civil engineering skills. It is about strategically exploring adjacent sectors, collaborating with diverse industries, and deriving insights from previously overlooked disciplines. That is exciting.

-- Mr. Paul Shepherd-Smith,

Global Capability Director, Engineering and Design, AtkinsRéalis





Hong Kong as an International Infrastructure Centre



Promoting collaborative procurement and contracting practices strengthens partnerships among stakeholders, reinforcing Hong Kong's role as a conduit for knowledge, expertise, and best practices, supporting its vision of developing world-class smart and sustainable urban landscapes.



Hong Kong has long been recognised for its infrastructure prowess. Not only do we deliver infrastructure projects with quality, we have also earned a global reputation for running and managing them. As an international financial centre, Hong Kong can help match quality projects with funding, supporting regional and global infrastructure development.



- Mr. Paul Chan Mo-po, GBM, GBS, MH, JP

Financial Secretary,

The Government of the Hong Kong Special Administrative Region





Under the unique advantages of "one country, two systems", Hong Kong would continue to capitalise on the privilege of enjoying strong support of the motherland and being closely connected to the world, and consolidate its position as an international infrastructure centre. uniting the world's best talent, knowledge and investment to address upcoming challenges and promote quality infrastructure development.



- Ms. Bernadette Linn Hon-ho, JP

Secretary for Development,

The Government of the Hong Kong Special Administrative Region





The Government is taking forward the Northern Metropolis, the Kau Yi Chau Artificial Islands project as well as a number of major transport infrastructure projects. The Government is committed to being an "enabler" fostering innovation and industrialisation to drive industry enhancement.



- Mr. Ricky Lau Chun-kit, JP

Permanent Secretary for Development (Works), The Government of the Hong Kong Special Administrative Region



