Newsletter No. 3 **9. 2024** 

PROJECT STRATEGY & GOVERNANCE OFFICE 項目策略及管控處

The construction industry - A new era with boundless opportunities

建造業 一 無盡機遇新時代



The Government has been investing in public works projects to enhance people's living environment and to sustain Hong Kong's long-term competitiveness. Meanwhile, we are facing the challenges of high construction cost and ageing construction workforce. Moreover, there have been rising aspirations from the general public for better performance of public works projects.

In June 2016, the Project Cost Management Office (PCMO) was established to implement cost management initiatives for the delivery of public works projects in a timely and cost-effective manner. In April 2019, PCMO was upgraded and renamed as the Project Strategy and Governance Office (PSGO) for implementing strategies and reinforcing capabilities in cost surveillance and project governance. PSGO adopts a holistic approach to strengthen cost management and improve the performance of public works projects through the following initiatives:

政府一直投資於工務工程項目,以改善市民的生活環境和維持本港 長遠的競爭力。與此同時,我們正面對建造成本相對高及勞動力高齡化 的挑戰。市民大眾對工務工程項目的表現亦抱有更高期望。

2016年6月,我們成立項目成本管理辦事處,推行成本管理措施, 使工務工程項目如期完成,又符合成本效益。到了2019年4月,我們 進一步把項目成本管理辦事處升格為項目策略及管控處(PSGO),推行 策略性措施,加強成本監察和項目管控的能力,並採取全面的方法, 從以下各方面提升成本管理和工務工程項目的表現:



Implement "Construction 2.0" with initiatives such as High Productivity Construction, digitalisation and applied R&D to uplift productivity

推行「建造業2.0」,包括推動高效 建築、數碼化及應用研發等措施 提升生產力



### Governance 加強項目管控

Strengthen cost management and control from project inception to completion

由項目立項至竣工各個階段加強成本監察和管控



Equip major project leaders and mid-tier managers with innovative mindsets and world-class leadership skills

培訓工程領導人員及中層主管, 培養創新思維及世界級領導技能



### Collaboration 強化夥伴協作

Enhance collaboration with local industry and international stakeholders 加強與本地業界及國際持份者合作



Established in 2019, PSGO now has around 20 multi-disciplinary professionals dedicated to formulating strategic initiatives to promote innovation, strengthening project governance and uplifting performance of public works.

In April this year, Joseph Lo assumed leadership as the Head of PSGO. Frankie Fung and SP Chow took up the posts of Principal Assistant Secretary (Project Capability and Strategy) and Chief Assistant Secretary (Works) of PSGO respectively.

With the shift in the macroeconomic environment in recent years, it has become ever-more important for the Government to take forward long term infrastructural development in an effective manner. One of the key tasks undertaken by PSGO this year is a comprehensive review and formulation of measures to control costs of public works in Hong Kong, with a view to contain the expenditure on infrastructure works at a sustainable level. Besides, this year we will implement a series of measures to strengthen the Modular Integrated Construction (MiC) supply chain and enhance collaboration with the Greater Bay Area (GBA), with a view to reducing labour demand and expediting housing supply of Hong Kong.

PSGO於2019年成立,團隊目前約有20名專業人員,參與制訂各策略措施以推動行業創新、加強工程管控及提升公共工程的表現。

今年4月,羅國權工程師正式就任項目策略及管控處處長,馮耀文工程師和周穗平工程師則分別任職首席助理秘書長(項目推展及策略)和總助理秘書長(工務)。

因應近年宏觀經濟環境的轉變,政府需要更有效地推動香港基建的長遠發展。PSGO 今年其中一個工作重點,是要全面檢討並制訂控制香港工務工程成本的措施,將基建工程開支維持在可持續發展水平。此外,我們今年將落實一系列加強「組裝合成」建築供應鏈的措施,促進與大灣區的協作,以減少人力需求及加快樓宇供應。





Construction Cost Ranking 建造成本排名

No. **9** (Global 環球) No. **1** (Asia 亞洲)



Building Works Tender Price Index (BWTPI) (Q1 2024)

建築工程投標價格指數(2024年第一季)

**1 3.1**% YoY按年



**Civil Engineering Works Tender Price Index** (CEWTPI) (Q1 2024)

土木工程投標價格指數(2024年第一季)

**↓ 4.5**% YoY 按年



**Highways Department Construction Cost Index** (May 2024)

路政署建造成本指數(2024年5月)

Labour Index 工資指數

Material Index 材料指數

**1** 4.9% YoY按年 ↓ 2.0% YoY按年



Approved capital works projects by Finance Committee of LegCo in 2024 (Up to August) 2024年立法會財委會通過基本工程項目(直至8月)

Number/數目:33

:\$128.8B / 1,288億元 Value / 金額



Capital works contracts awarded in 2024 (Up to March) 2024年已批出基本工程合約(直至3月)

Number/數目:19

Value /金額 : \$19.1B / 191億元

### 2024内地与香港建筑论坛

MAINLAND AND HONG KONG CONSTRUCTION FORUM 2024

深化内地与香港建筑领域合作 高质量建设粤港澳大湾区 携手推进"一带一路"建设

2624年3月25-27日 中國了州

## Collaboration with Mainland and International Counterparts 與內地和海外協作

# 正式开幕 NOW OPEN

The Secretary for Development, Ms Bernadette Linn, led a Hong Kong delegation in March 2024 to attend Mainland and Hong Kong Construction Forum 2024 in Guangzhou. The forum attracted over 800 industry practitioners from Guangdong, Hong Kong and Macao. During the forum, the Permanent Secretary for Development (Works), Mr Ricky Lau, and the Deputy Director-General of the Department of Housing and Urban-Rural Development of Guangdong Province (DHURDGP), Mr Liu Genghui, signed the Letter of Intent on Strengthening Guangdong-Hong Kong Cooperation in Construction and Related Engineering Sectors on behalf of both sides. The Letter of Intent will deepen the co-operation in the construction and engineering sectors between Guangdong and Hong Kong on various fronts, including promoting synergistic development of the MiC industry in the GBA to build a Guangdong-Hong Kong industry chain.



發展局局長甯漢豪於2024年3月率領香港代表團在廣州出席「2024內地與香港建築論壇」。是次論壇吸引逾800名來自粵港澳地區的業內人士參與。期間,發展局常任秘書長(工務)劉俊傑與廣東省住建廳副廳長劉耿輝代表雙方簽署《加強粵港建築及相關工程領域合作意向書》。這份合作意向書從多方面深化粵港建築工程領域合作,包括促進大灣區「組裝合成」建築產業協同發展,構建粵港產業鏈。



PSGO received a delegation from the Mongolian Government in July 2024 consisting of representatives from the Ministry of Finance, Ministry of Foreign Affairs, Ministry of Justice and Internal Affairs and Ministry of Road and Transport, and shared the experience of Hong Kong in financing infrastructure projects including the public-private partnership model.

PSGO 於2024年7月接待了蒙古政府轄下包括財政部、外交部、司法 和內政部以及道路和交通部所組成的代表團,並分享了香港在基礎 建設項目融資方面(如公私合作模式)的經驗。



To raise the productivity of the construction industry, a cross-departmental steering committee under the Development Bureau (DEVB) will formulate various measures to enhance the application of MiC.

為提升建造業生產力,發展局轄下的跨部門督導委員會將制訂多項措施,加強「組裝合成 | 的應用。



Strengthen collaboration with the Guangdong Provincial Government to enhance the manufacturing, import/export facilitation and exportability of MiC modules, with a view to developing MiC as one of the industries in the GBA that enjoy clear advantages.

與廣東省政府加強合作,促進「組裝合成」組件 的生產、出入口便利和外銷能力,推動「組裝 合成」發展成為大灣區的優勢產業之一。



Examine the feasibility of investing in the MiC supply chain

研究投資「組裝合成」供應鏈的可能性。



Set up the **Building Testing and Research Institute\*** within this year to promote innovative application in the industry.

於今年內成立<mark>建築研發及測試中心\*</mark>,推動整個 行業加強創新應用。

\* Now named Building Technology Research Institute 現稱香港建築科技研究院

### Measures to enhance MiC supply chain

### 制訂措拖加強「組裝合成」建築供應鏈

In order to further promote the development of MiC, the DEVB established the cross-departmental Steering Committee on High Productivity Construction in 2023. During the Legislative Council Panel on Development in April this year, the Secretary of Development briefed members on the strategies and initiatives to promote the adoption of advanced construction technologies, including the announcement of various short-term and long-term measures to support and strengthen the supply chain of MiC modules:

為了進一步推動「組裝合成」建築法的發展,發展局於2023年成立跨部門高效建築督導委員會。今年4月,發展局局長向立法會發展事務委員會簡介政府推動建造業採用先進建築技術的策略及措施,當中包括公布一系列短期及長期措拖以支持及加強「組裝合成」建築供應鏈:



### Short-term Measures 短期措施



Promulgate periodically the annual overall demand

定期公布年度整體需求



Adopt direct procurement of modules

直接採購組件



Implement a Manufacturer Certification Scheme

實施製造商認證計劃



Promote wider adoption of MiC

推動更廣泛地採用「組裝合成」建築法



Foster collaboration with the Mainland 推動與內地合作



Facilitate crossboundary clearance of modules

組件通關安排



Further encourage technological innovation

鼓勵更多技術創新



Strengthen training 加強培訓

### Long-term Measures 長期措施



Assess the development of the ecosystem periodically 定期評估生態圈的發展



Examine the feasibility of investing in the supply chain 研究投資供應鏈



Establish a list of approved MiC suppliers for public works 建立認可公共工程「組裝合成」製造商名冊



Reserve land for the development of MiC industry

預留土地發展「組裝合成」產業



Updated DEVB Technical Circular (Works) No. 4/2024 Modular Integrated Construction 發展局更新工務技術通告 4/2024 「組裝合成」建築法

Since the introduction of the MiC policy in the Chief Executive's 2017 Policy Address, the DEVB has driven the adoption of MiC through pilot applications in capital works projects. The DEVB Technical Circular (Works) No. 2/2020 was first promulgated in March 2020. The latest revision was issued this September to introduce new key initiatives to spearhead the wider adoption of MiC and advance the MiC technology in Hong Kong.

自2017年行政長官於施政報告推出「組裝合成」建築政策以來,發展局一直通過基本工程項目推動「組裝合成」建築法的應用。發展局於2020年3月首次頒布工務技術通告2/2020,並於今年9月完成修訂,其中多項新措施有助推動香港更廣泛地應用「組裝合成」建築法和提升相關技術水平。

Key updates in the latest technical circular include: 技術通告主要更新內容包括:



50% MiC adoption rate for listed building types 設立50%「組裝合成」建築法應用率目標



Adoption of MiC for lift shafts and lift machine rooms (MiC lifts) 於升降機井道及升降機房 應用「組裝合成」建築法



New building types to adopt MiC, e.g., data centres 在更多建築類型如數據中心應用「組裝合成」建築法



Enhanced milestone payment mechanism for MiC works 優化「組裝合成」項目分階段付款機制

### Applied R&D Initiative – Vibration Resistant Sprayed Concrete

### 應用研發項目 - 抗爆破震動噴射混凝土

To support the sustainable development of Hong Kong, the Drainage Services Department (DSD) is relocating the Sha Tin Sewage Treatment Works (STSTW) to rock caverns.

Both overseas and local experience reveals that sprayed concrete is a fast and efficient construction technique to facilitate tunnel/cavern excavations in variable geological conditions, but its application in Hong Kong over the years is mainly confined to temporary support. In this connection, the DSD and the Geotechnical Engineering Office (GEO) have been actively exploring the pilot adoption of Vibration Resistant Sprayed Concrete (VRSC), an advanced material capable of resisting vibration during blasting operation in the STSTW project. The performance of VRSC in the pilot adoption will be reviewed to facilitate its future adoption in general tunnel/cavern projects. The sprayed concrete lining formed by this material could be considered as part of the permanent support, hence bringing overall material and time-saving benefits to local tunnel/cavern projects.

為配合香港持續發展的需要,渠務署正著手把沙田污水處理廠遷往 岩洞。

從海外和本地經驗可見,噴射混凝土是一種快速且有效的施工技術,適合於多變的地質情況下進行隧道/岩洞挖掘,惟考慮到爆破時產生的震動可能對噴射混凝土造成結構損壞,此技術多年來在香港的應用主要侷限於臨時性支撐。為此,渠務署和土力工程處一直積極探討於沙田污水處理廠項目中率先試用「抗爆破震動噴射混凝土」,這種先進物料能夠抵抗於爆破操作時產生的震動。測試的成效將作檢討,以便推展「抗爆破震動噴射混凝土」在將來的隧道/岩洞工程中使用。由於這種物料建造的噴射混凝土襯砌可以用作永久支撐的一部分,故有助節省本地隧道/岩洞工程的整體施工用料和時間。



Cavern lining thickness 岩洞襯砌厚度



8.3kg/m<sup>3</sup>

Sprayed concrete mixing with advanced material – redispersible polymer powder (RPP) 噴射混凝土加入可再分散聚合物粉末





The iCWP is being implemented in phases for driving digitalisation in capital works. Since its initial launch in August 2022, the iCWP has been collecting and consolidating data from different digital systems for continuous monitoring and data analysis such that the delivery of capital works projects can be further enhanced.

We launched iCWP Phase 2 in December 2023 to consolidate data from over 100 nos. of Digital Works Supervision Systems (DWSS) of works contracts and various digital systems in the Government. To standardise the data communication process between iCWP and DWSS, the Data Standardisation Report for DWSS (version 1.1) was issued in June 2024, incorporating the updated key datasets required from the new modules to the iCWP.

We are now developing iCWP Phase 3 to connect more digital systems and to apply advanced technologies such as Artificial Intelligence (AI) for enhanced data analysis.

我們正分階段發展綜合基本工程平台 (iCWP) 以推動基本工程項目數碼 化。iCWP 自2022年8月首次推出以來,收集和整合了來自不同數碼系統 的數據,並透過持續的性能監控和數據分析,令基本工程項目能更有效 地推展。

去年12月,我們完成了iCWP第二階段的開發,整合了超過100多個數碼工程監督系統(DWSS)和政府內部的數碼系統的數據。為了標準化iCWP和DWSS之間的資料傳送流程,DWSS數據標準化報告(版本1.1)於2024年6月正式發布,制定了iCWP新功能中所需的各關鍵數據集。

我們目前正在進行iCWP第三階段的開發,以連接更多數碼系統,並準備應用人工智能(AI)等先進技術來增強數據分析能力。

### Building Technology Research Institute

香港建築科技研究院

Established in August this year, the Building Technology Research Institute (BTRi) is a limited company wholly owned by the Financial Secretary Incorporated of the Government. The Institute will conduct applied R&D activities for innovative construction materials, construction methods and technologies, as well as devise standards, conduct testing and provide accreditation to spearhead innovation in the construction industry, attract R&D talent to Hong Kong and uplift the construction profession.

Through collaboration with authorities in the GBA, the BTRi will foster interconnectivity and the integrated development of the GBA, and help build the brand of "GBA Standards" by developing standards for different domains of construction, such as materials, design and construction methods, with a view to developing the GBA into one of the regions with the most advanced construction technologies in the country and transforming the construction industry into a new quality productive force.

The DEVB has injected a funding of \$10 million for the initial operation of the BTRi. Thereafter, the BTRi will collaborate with academic institutions, research institutes, government departments, private organisations and more to carry out various projects and research, and adopt a self-financed operation strategy through its business receipts.

香港建築科技研究院(建科院)於今年8月正式成立,是特區政府財政司司長法團全資擁有的有限公司,將為創新的建築物料、建造方法和技術等進行研發、制訂標準、提供測試及發出認證,帶領建造業界創新,吸引研發人才在港發展,提升建造專業。

建科院會透過與大灣區政府單位之間的協作,促進互聯互通和融合發展,為工程不同領域,如物料、設計和施工方法等制訂標準,打造「灣區標準」品牌,將大灣區發展成為全國其中一個在建築科技方面最先進的地區,把建造業打造成為新質生產力。

發展局注資一千萬元作為建科院的初期資金。日後,建科院會與學術機構、研究院、政府部門、私人機構等合作進行各種項目及研究,並透過業務收益達至自負盈虧的營運模式。



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

### Three focus areas of BTRi 建科院三大專業領域



Applied R&D 應用科技研發



Accreditation, Certification and Testing

認可、認證和測試



Standards Advancement 標準優化



### Major Projects Leadership Programme (MPLP) 主要項目領導計劃

The convocation ceremony of Cohort 5 & 6 of MPLP was completed in July 2024. There are a total of 39 graduates, who are major project leaders from the Government, public organisations, major engineering consultants and contractors. The 12-month programme includes international classes at Oxford and local classes, personal coaching, professional assessment, as well as exchange visits to the GBA.

第5及6期主要項目領導學員於今年7月舉行結業禮。今期計劃共有39名來自政府、公營機構、國際工程顧問和承建商的主要項目領導人員參與,參與了為期12個月的課程,當中包括在牛津進行的國際課程和香港的本地課程、個人指導、專業評估,以及大灣區的考察交流活動。

### International Infrastructure and Projects Leaders Summit (IIPLS) 國際基建項目領導峰會

Hong Kong will host the inaugural summit this November to bring together esteemed infrastructure and major projects leaders as well as visionary experts in infrastructure from around the world to exchange insights and best practices in project delivery and governance, jointly formulate strategies to enhance the performance of our mega infrastructure developments and major projects, and promote Hong Kong's role as a leading "International Infrastructure Centre".

香港將於今年11月舉辦首次「國際基建項目領導峰會」,與海內外的基建及主要項目領導人員及專家分享項目推展及管控的經驗,共謀策略以提升本地大型基建和主要項目的表現,並強化香港作為「國際基建中心」的角色。



### Project Delivery Capability Programme (PDCP) 項目推展能力計劃

The Convocation Ceremony cum Welcome Session of PDCP was conducted in March 2024. This is the third year of the programme and this year there will be around 100 senior professionals from major public sector organisations, engineering consultants and contractors participating in the programme. The 12-month programme will include five-day structural training, a series of topical seminars, workshops and visits.

「項目推展能力計劃」畢業暨歡迎典禮2024於今年3月舉行。今年是第三年舉辦此計劃,本年度將有約100名來自主要公營機構、國際工程顧問和承建商的高級專業人員參與。12個月的課程包含5天的結構性訓練課程,以及一系列專題研討會、工作坊和參觀交流活動。

PROJECT STRATEGY & GOVERNANCE OFFICE 項目策略及管控處

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