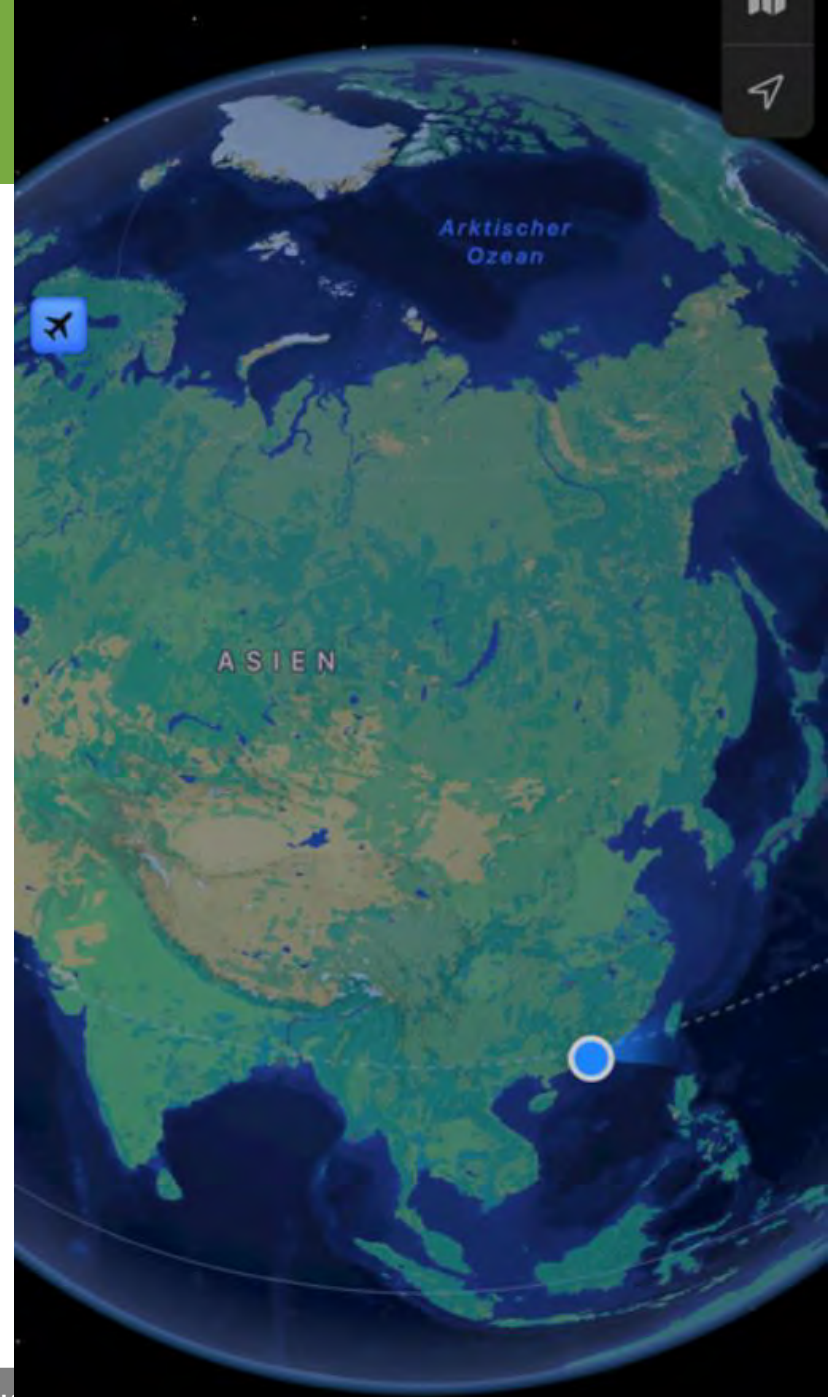


# Austrian Technology Days 2024

## CONSTRUCTION Chongqing, Foshan, Hong Kong

Dipl.Ing. Susanne Formanek  
(16.-22.03.2024)



Förderungen suchen.

- Thema -

- Zielgruppe -

- nationale Förderung
- internationale Förderung

Aktuelle Ausschreibungen

Förderungen und Services

## TECXPOR



Gezielte Unterstützung zur Verbesserung des Zugangs österreichischer FTI-Akteure und Unternehmen zu nationalen und internationalen Partnern

TECXPOR

Mit der Tecxport-Initiative unterstützen das Bundesministerium für Klimaschutz, Umwelt, Energie, Mobilität, Innovation und Technologie (BMK) und die FFG in Kooperation mit der AUSSENWIRTSCHAFT AUSTRIA den verbesserten Zugang österreichischer FTI-Akteure und Unternehmen zu nationalen und internationalen Partnern. Neu entwickelte innovative Technologien aus Österreich, u.a. zu den Förderschwerpunkten des BMK, werden durch gezielte Fördercalls, die mehrsprachige Präsentation österreichischer Technologieprofile, sowie im Rahmen der TECXPOR Austrian Technology Days unterstützt.

Die Initiative TECXPOR besteht aus vier einander ergänzenden Modulen, die österreichische FTI-Akteure und Unternehmen bei ihren Forschungs- und Entwicklungsaktivitäten und der weiteren internationalen Vernetzung im FTI-Bereich unterstützen.

1. Präsentation von Technologieprofilen „made in Austria“
2. **Austrian Technology Days** zur Präsentation von Technologien und Innovationen im Ausland
3. **Fördercall Tailored Innovation** – Maßgeschneiderte Innovationen für Länder außerhalb Europas
4. **Bilaterale Fördercalls** - Kooperative Forschungsprojekte mit ausländischen Partnern

Förderungen suchen.

- Thema -

- Zielgruppe -

- nationale Förderung
- internationale Förderung



Aktuelle Ausschreibungen

Förderungen und Services


# TECXPOR - 4. Call Bilateral Cooperation Austria - People's Republic of China (MOST)



Forschungsförderung im Themenfeld Energiewende

Ausschreibung offen von **18.10.2023 12:00**  bis **31.01.2024 12:00** 

Programmeigentümer/Geldgeber

 **Bundesministerium**  
Klimaschutz, Umwelt,  
Energie, Mobilität,  
Innovation und Technologie

# Vielen Dank für die gute Organisation!

- FFG
- BMK



**Susanne Formanek**  
**苏珊娜·福马内卡**

- WKO – ADVANTAGE Austria
- TECXPORT Partners in Austria
- Austria Embassy Beijing
- <https://www.ffg.at/europa/veranstaltungen/ATD-China-2024>

# Wer hat teilgenommen

- AIT Stefan Seer
- IBO/RENOWAVE/GRÜNSTATTTGRAU Susanne Formanek
- FULL COMFORT
- PARASTRUCT
- PLAN RADAR
- RUBNER HOLZBAU
- SHADOWMAP Technologies
- SYNTHETICS Dimensions
- Vienna Consulting Engineers
- SE-RAIL
- RIEGL (Scanner, Mapping)



**IBO**

Austrian Institute for Healthy  
and Ecological Building

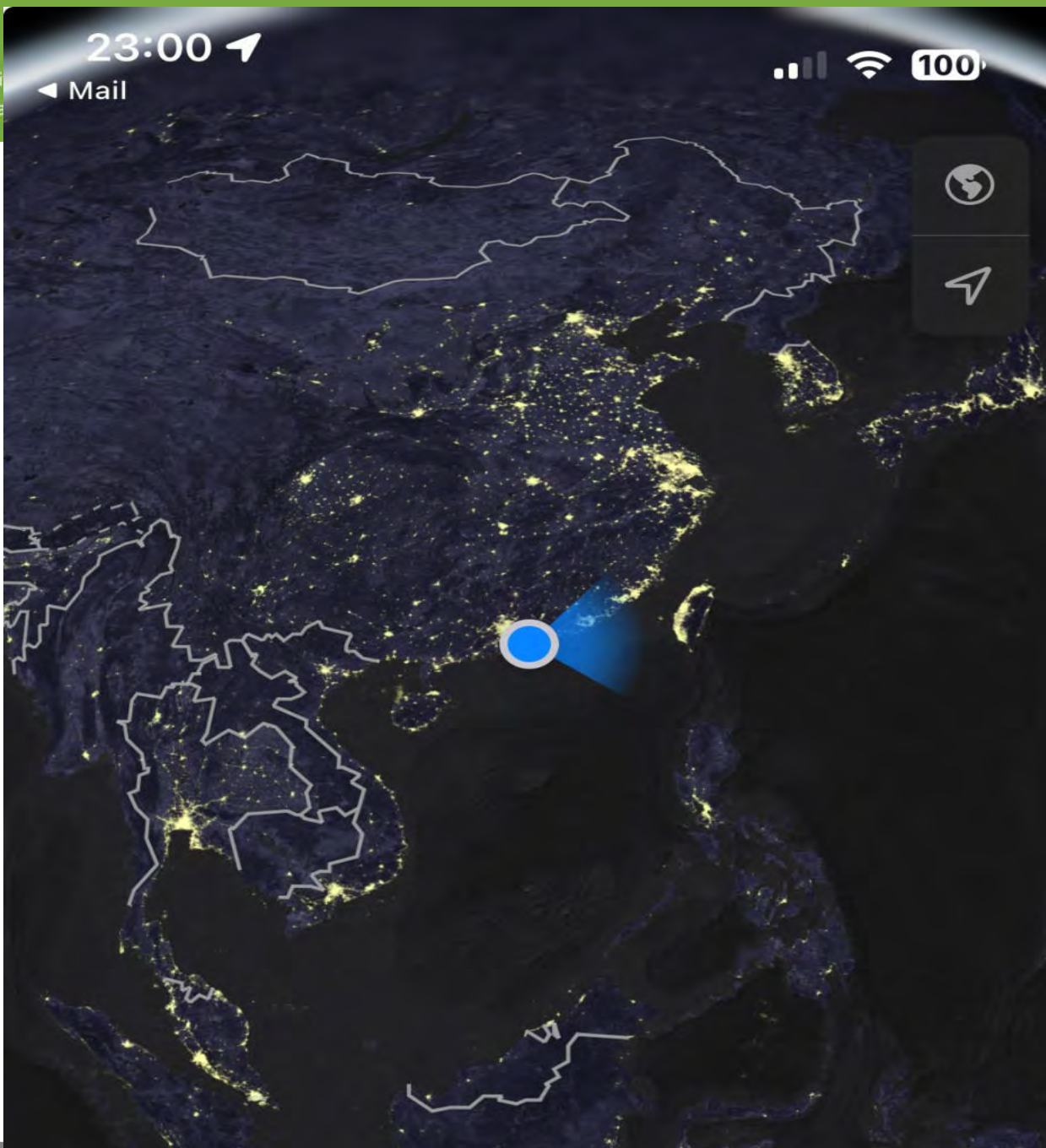


# **Austrian Technology Days 2024**

# **CONSTRUCTION**

## **Hong Kong**

Dipl.Ing. Susanne Formanek  
(21.-22.03.2024)





# HONG KONG

- eine Sonderverwaltungszone Chinas
- Bis 1997 war es eine britische Kolonie
- Halbinsel Kowloon, der Insel Hongkong und weiteren Inseln.
- Ein Sicherheitsgesetz hat die Befugnisse Pekings ausgeweitet und Pluralismus sowie Rechte eingeschränkt.
- Hongkong ist also etwa 3,7 Mal größer als Wien in Bevölkerungszahl - mit über 7 Millionen Einwohnern
- Die Fläche von Hongkong beträgt 1.104 Quadratkilometer. Wien hat 415 km<sup>2</sup>
- Wenig Landwirtschaft, Fischerei, Geflügel- und Schweinehaltung sowie Gemüseanbau





**IBO**

Austrian Institute for Healthy  
and Ecological Building











第十一届国际技术装备博览会

中国铁路工程集团有限公司

中国铁路工程集团有限公司











IBO

Austrian Institute for Healthy  
and Ecological Building

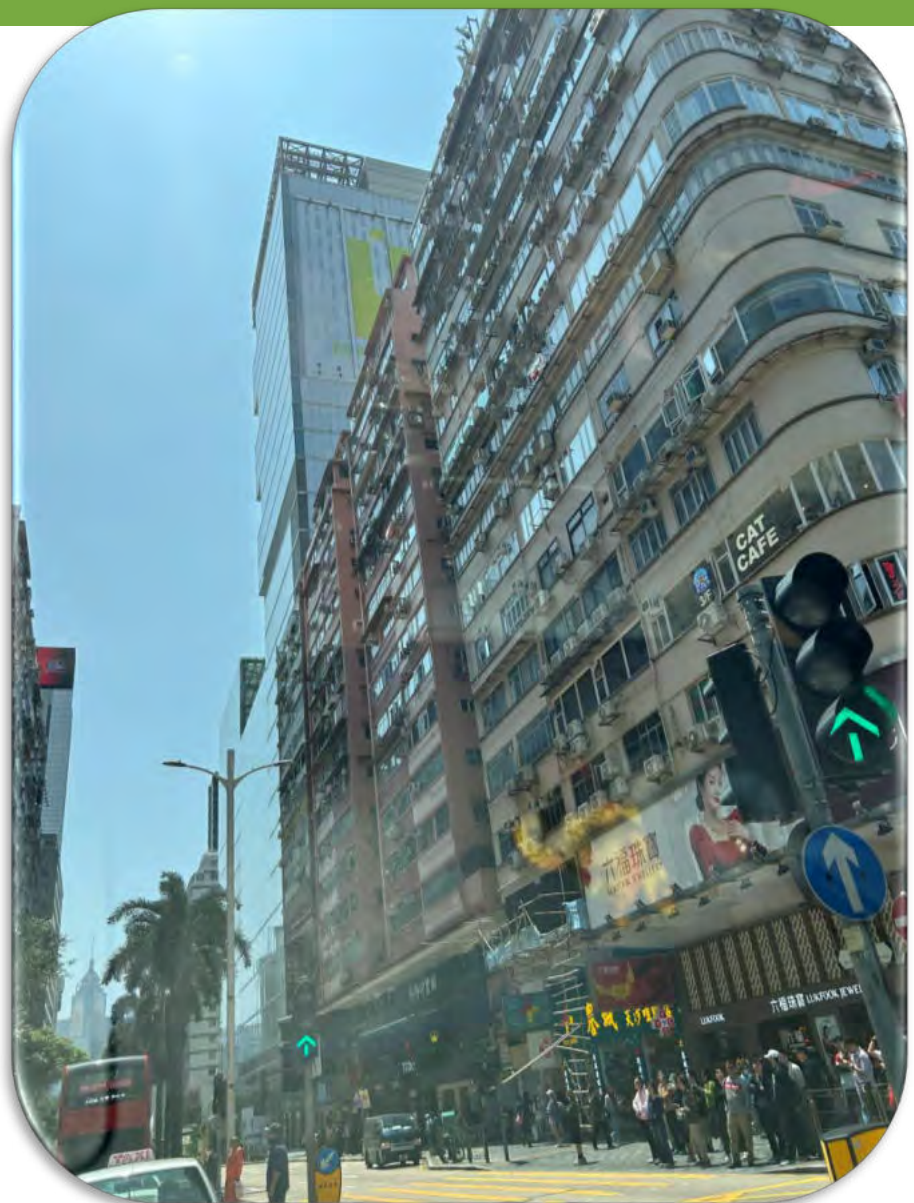






**IBO**

Austrian Institute for Healthy  
and Ecological Building







- Hurrikan sicher

# Innovation never stops!



FARM RESTAURANT



5041







**IBO**

Austrian Institute for Healthy  
and Ecological Building

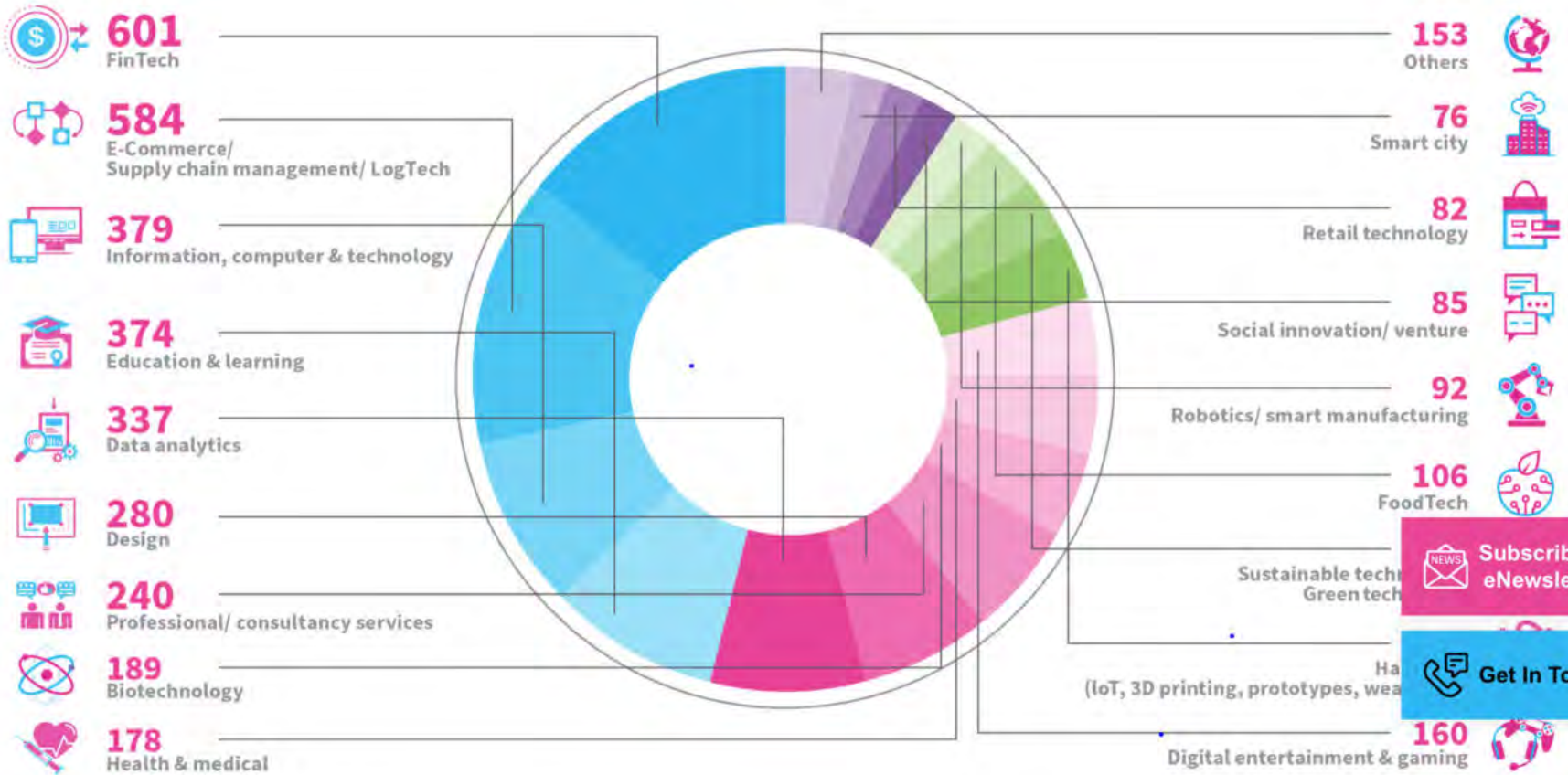












Subscribe to eNewsletter

Get In Touch



新蒲崗商貿區 San Po Kong Business Area











# Hong Kong GDP from Construction Sector

Year	HK\$ million				GDP at current prices (1)				Year-on-year % change			
					% contribution to GDP							
	2019	2020	2021	2022 f	2019	2020	2021	2022 f	2019	2020	2021	2022 f
Economic Activity				1,486	0.1	0.1	0.1	0.1	+16.7	+28.7	-18.1	-31.5
Agriculture, fishing, mining and quarrying	2,057	2,648	2,168	26,608	1.1	1.0	1.0	1.0	+6.5	-13.1	+2.5	+1.7
Manufacturing	29,366	25,525	26,175	32,910	1.2	1.4	1.3	1.2	-4.4	+3.6	+2.9	-9.5
Electricity, gas and water supply, and waste management	34,063	35,325	36,348	116,829	4.2	4.1	4.0	4.3	-5.0	-8.9	+4.8	+6.9
<b>Construction</b>	<b>114,499</b>	<b>104,262</b>	<b>109,254</b>	<b>2,557,582</b>	<b>93.4</b>	<b>93.4</b>	<b>93.7</b>	<b>93.5</b>	<b>+1.8</b>	<b>-6.6</b>	<b>+7.5</b>	<b>-0.6</b>
Services	2,560,716	2,392,895	2,571,900	494,675	19.5	18.4	19.4	18.1	-7.3	-11.6	+13.0	-7.1
Import/export, wholesale and retail trades	533,352	471,246	532,715	430,350	16.1	15.9	16.8	15.7	-5.3	-7.3	+13.3	-7.0
Import and export trade	440,363	408,372	462,630	64,325	3.4	2.5	2.6	2.4	-15.4	-32.4	+11.5	-8.2
Wholesale and retail trades	92,989	62,874	70,085	45,351	2.8	1.4	1.7	1.7	-17.1	-51.4	+22.9	-0.1
Accommodation and food services	75,918	36,934	45,394	204,348	5.5	4.5	7.3	7.5	-4.3	-24.8	+76.4	+1.7
Transportation, storage, postal and courier services	151,574	113,951	200,966	194,025	5.2	4.0	6.9	7.1	-4.6	-27.5	+82.9	+2.6
Transportation and storage	142,775	103,458	189,175	100,082	3.5	3.7	3.6	3.7	+4.5	-1.9	+6.1	+0.6
Postal and courier services	8,799	10,493	11,811	86,845	4.5	4.2	3.9	3.2	-2.3	-11.7	-1.9	-18.0
Information and communications	96,557	93,759	99,514	146,235	5.6	5.3	5.3	5.3	-0.9	-11.6	+5.9	+1.2
Financing and insurance	581,499	599,797	583,613	582,473	19.6	20.7	20.5	21.3	+7.6	-1.4	+6.1	+3.7
Real estate, professional and business services	276,497	244,337	250,306	284,135	11.3	11.8	10.8	10.4	+9.2	-1.8	-1.8	-4.6
Real estate	122,177	107,896	105,862	144,444	5.6	5.3	5.3	5.3	-0.9	-11.6	+5.9	+1.2
Professional and business services	154,320	136,440	144,444	233,080	10.1	9.5	9.1	8.5	-1.5	-11.6	+2.4	-6.9
Public administration, social and personal services	537,238	529,457	561,557	274,582	10.7	10.6	10.6	10.6	+0.1	-0.1	+0.1	+0.1
Ownership of premises	309,061	303,414	297,816	284,135	11.3	11.8	10.8	10.4	+9.2	-1.8	-1.8	-4.6
<b>Total</b>	<b>2,740,721</b>	<b>2,560,655</b>	<b>2,745,846</b>	<b>2,735,415</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>+1.5</b>	<b>-6.6</b>	<b>+7.2</b>	<b>-0.4</b>

Hong Kong GDP from Construction Sectors in 2022: **4.3%**



# Construction Worker Statistics

## Construction Worker Figure



## Worker Demand Shortage

	2023	2024	2025	2026	2027
Skilled/Semi-Skilled Workers	10,000 – 15,000	15,000 – 20,000	15,000 – 20,000	20,000 – 25,000	35,000 – 40,000
Technicians	2,500 – 3,000	4,000 – 4,500	4,000 – 4,500	5,000 – 5,500	5,500 – 6,000
Site Supervisory Personnel	1,000 – 1,500	1,500 – 2,000	1,500 – 2,000	1,500 – 2,000	2,000 – 2,500
Professionals	4,000 – 4,500	5,500 – 6,000	5,500 – 6,000	5,500 – 6,000	6,000 – 6,500

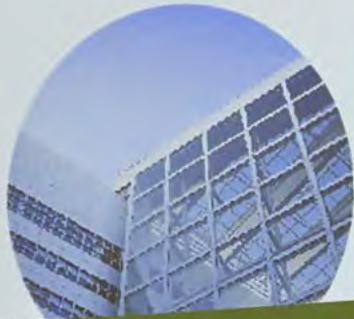
  

Stable trend, no shortage expected	Considerable shortage (16% to 25%)
Mild shortage (5% and less)	Serious shortage (25% and more)
Moderate shortage (6% to 15%)	





## Future Development Prospects and Cooperation Opportunities



### Contribution of Austrian Contech to the construction industry in Hong Kong

- Sustainable Building Practices
- Innovative Construction Materials
- Technological Integration
- Prefabrication and Modular Construction
- Construction Machinery
- Engineering Expertise



### Expansion and prospect of bilateral cooperation areas

- The Hong Kong construction industry and Austrian companies can cooperate more in smart buildings and green construction.
- Cooperation between the two sides can be further deepened, including technological innovation, personnel exchanges and market expansion.



# Construction Innovation and Technology Fund (CITF)

Introduce CIC's efforts in promoting innovation and sustainable construction in the industry

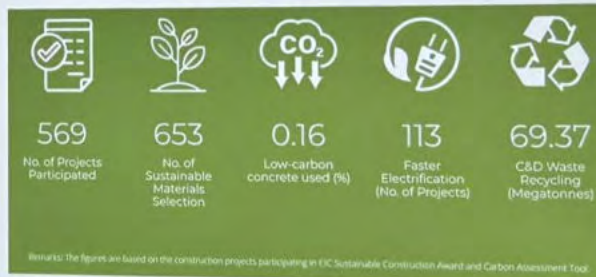
## 1. The Construction Innovation and Technology Fund (CITF)



## 2. The CIC Works on Sustainable Construction

### Our Works

- CIC Carbon Assessment Tool
- CIC Green Product Certification
- CIC Sustainable Construction Award
- CIC Sustainable Finance Certification Scheme
- CIC-Zero Carbon Park





## Business Opportunities for Austrian Companies





## Austrian Contech Benefit for Hong Kong Construction Industry



Sustainability  
Practices



Innovation in  
Materials



Efficiency via  
Technology



Adoption of  
Prefabrication



Quality  
Engineering







# 九龍灣行動區 KOWLOON BAY ACTION AREA



九龍灣行動區 Kowloon Bay Action Area

九龍灣行動區現時為不同政府設施所使用，包括警務處扣留區及驗車中心和運輸署驗車中心。相關設施會作重置，以理順土地用途及釋放發展潛力。

九龍灣行動區的定位為智慧綠色商業樞紐，以促進九龍東轉型為香港的另一核心商業區。九龍灣行動區擬議提供的48萬平方米的樓宇面積作混合用途發展，包括商業、文化創意用途、創科共享空間、公共交通設施和休憩用途等。位於行動區範圍內的兩幅土地已於2015年獲出作商業發展。行動區內亦擬設置綜合廢物處理設施，示範以環保方式處理商貿區內所產生的廢物的概念。

為提供優質城市設計及融合周邊城市環境，行動區內的發展將採取綠線式建築物高度輪廓，為提升步行性，九龍灣行動區亦會提供多層的行人網絡。

The Kowloon Bay Action Area (KBAA) is now accommodating various government facilities such as Hong Kong Police Force's vehicle detention and examination centre and Transport Department's vehicle examination centres. These facilities would be reconfigured so as to rationalize the land uses and release development potential.

KBAA is positioned as a smart and green commercial hub to facilitate the transformation of Kowloon East into Hong Kong's CBD2. KBAA would provide a total gross floor area of about 480,000 m<sup>2</sup> for mixed use development including commercial, cultural and creative use, IT co-working space, public transport facilities and open spaces, etc. Two parcels of land within KBAA were sold in 2015 for commercial developments. An integrated waste handling facility is also proposed within KBAA to demonstrate the concept of environmentally-friendly waste handling for the waste generated in the business area.

With a view to delivering quality urban design and integrating with the surrounding urban context, a stepped building height profile would be adopted for the developments within KBAA. To enhance walkability, KBAA will also provide a multi-level pedestrian network.



現時環境 Existing Condition



擬議行人網絡 Proposed Pedestrian Network



擬議供使用地發展 Proposed Open Space Development



商業發展 Commercial Development



# 九龍灣商貿區 KOWLOON BAY BUSINESS AREA



九龍灣商貿區行人環境改善可行性研究於2016年8月完成。研究檢視了現時的行人環境及交通狀況，預測未來流量的增長，並提出一個整體的改善框架，包括建議短、中及長期的改善方案。該研究已制定全面行人網絡建議，以加強九龍灣商貿區及聯博發展區的連繫。



The feasibility study for pedestrian environment improvement in Kowloon Bay Business Area (KBBA) was completed in August 2016. The study reviewed the existing pedestrian environment and traffic conditions, forecasted the future increase in traffic volume, and proposed a comprehensive improvement framework that includes improvement proposals in the short, medium and long term. The study proposed a comprehensive pedestrian network to enhance the connectivity between KBBA and the Kai Tak Development Area.



我們正在與相關政府部門合作發展各項中長期方案的規劃及設計，包括在兩端九龍灣站附近提供三座行人天橋。

We are taking forward the planning and design of the medium and long-term schemes in collaboration with relevant government departments, which include the provision of three footbridges near MTR Kowloon Bay Station.

# 概念驗證測試

## PROOF OF CONCEPT TRIALS

我們的目標是通過概念驗證測試展示智慧城市發展的效益及探討擴大應用規模的可行性。

We aim to demonstrate the benefits of smart city development and explore the feasibility of scaling up for wider application through proof of concept (PoC) trials.

### 智慧人流管理系统

系統利用閉路電視攝影機、傳感器和影像分析技術自動檢測人群和車輛流量，並識別異常情況。提高2017年1月在九龍東馬拉松賽事中人群管理的效率。該系統亦成功於極短時間內在九龍東的一個繁忙路口重新設置，監察行人和交通流量。

### Smart Crowd Management System

The system utilizes CCTV cameras, sensors and video analytic techniques to automatically detect crowd and vehicle flows and identify abnormal conditions to improve the efficiency of crowd management in a marathon event in Kowloon East in January 2017. The system has also been successfully redeployed to monitor pedestrian and traffic flows at a busy junction in Kowloon East with minimal set-up time.

### 實時道路工程資訊

相關數據 OPEN DATA

此項測試利用活動裝置收集實時道路工程資訊，並把資訊發給公眾，讓他們更好地規劃行程。「我的九龍東」手機應用程式的多個功能顯示在行人路和車速每小時70公里以下的道路上進行的維修工程的資訊。

### Real-time Road Works Information

The trial makes use of mobile devices to collect real-time road works information. This information is then disseminated to the public such that they could better plan their journeys ahead. Information of active road works at footpath and roads with speed limit below 70 km/h are shown in various functions in "My Kowloon East" mobile app.

### 路旁上落貨區監察系統

相關數據 OPEN DATA

系統利用安裝在現有路燈上的閉路電視攝影機和影像分析技術，監察路旁上落貨區的運用和空曠情況。為鼓勵更有效地利用路旁空間，「我的九龍東」手機應用程式發給上落貨區的實時使用情況。測試地點包括荷里街和灣仔道部分路段。

### Kerbside Loading and Unloading Bay Monitoring System

By using the CCTV cameras installed on existing street lamp posts and video analytic techniques, the system monitors the usage and availability of kerbside loading and unloading bays. To encourage more efficient use of roadside spaces, real-time occupancy status at the loading and unloading bays is disseminated via "My Kowloon East" mobile app. Trial sites include sections of How Ming Street and Ho Bun Road.

### 違例泊車監察系統

相關數據 OPEN DATA

系統利用安裝在現有路燈上的閉路電視攝影機和影像分析技術，以協助辨識例泊車。政府的長遠目標是採用技術協助交通運作行為的執法，以對交通擠塞的情況。測試地點包括灣仔道、駱馬街和四馬路部分路段。

### Illegal Parking Monitoring System

The system uses CCTV cameras installed on existing street lamp posts and video analytic techniques to help detect illegal parking. The Government's long-term aim is to deploy technology to assist in the enforcement of traffic contraventions to alleviate traffic congestion. Trial sites include sections of Hong To Road, Teun Yip Street and Sze Mei Street.



# 智慧城市試點

## SMART CITY PILOT AREA

我們以九龍東為試點，探索智慧城市發展。

我們一直主動與不同的持份者交流，包括相關政策局/部門、資訊及通訊科技界、學術及研發機構、公用事業機構和公共交通營運商等，尋找協作機會，以九龍東為測試平台，共同推動並實施。經考慮公眾參與活動所收集到的意見，我們已為九龍東制定智慧城市發展的策略框架，以應對九龍東的挑戰。具體而言，重點策略範疇包括：

- (i) 提升流動及步行；
- (ii) 優化資源管理及改善環境；及
- (iii) 促進社會經濟活力。

We use Kowloon East as a pilot area for exploring smart city development.

We have been proactively engaging stakeholders including relevant government bureaux/departments, information and communications technology sector, academic and research institutions, public utility companies and public transport operators, etc. to seek collaboration opportunities to push ahead with this initiative using Kowloon East as a test bed. Taking account of the public views gathered during public engagement activities, we have formulated a framework strategy for developing Kowloon East into a smart city district to address the challenges of Kowloon East. Specifically, the strategic areas of focus include:

- (i) enhancing mobility and walkability;
- (ii) optimizing resources management and improving the environment; and
- (iii) promoting socio-economic vibrancy.



有關公開資料和創新資料一覽表 (data.gov.hk) 發給  
Related data released in data.gov.hk as open data.

# 啟德發展計劃 KAI TAK DEVELOPMENT

## 簡介 Introduction

啟德國際機場是昔日香港通往世界的門戶。經過廣泛的公眾參與後，啟德未來新市區的發展藍圖於2007年制定。「零填海」方案會保留機場跑道向海港伸展的布局，使跑道的成為該區獨有的歷史文化特色。

啟德發展計劃規模龐大、項目多元，總規劃面積超過三百二十公頃，在維多利亞港提供一幅最珍貴的填海土地。總計劃將綜合商業、住宅、康樂、旅遊及社區各項用途並為大約十三萬七千名居民提供優質生活環境，使九龍城、黃大仙和觀塘等鄰近地區再展活力姿采。

規劃的願景是發展啟德成為一個「集港畔富有特色、朝氣蓬勃、優美動人及與民共享的社區」。

### 規劃目標

- 成為香港的文化、綠色、體育和旅遊樞紐
- 建造一個可持續發展的綠化網絡
- 締造優質的生活環境

Kai Tak was once an international airport that served as Hong Kong's gateway to the world. Through an extensive public engagement process, the blueprint was set in 2007 for a new urban area in the future. The "zero reclamation plan" will preserve the distinctive runway projecting into the harbour as a heritage.

Kai Tak Development is a huge and highly complex development project spanning over 320 hectares with the largest available land fronting Victoria Harbour. It is planned for comprehensive commercial, residential, recreational, tourism and community uses and will provide quality living environment for around 137000 residents, as well as revitalize all of the surrounding districts such as Kowloon City, Wong Tai Sin and Kwun Tong.

The Planning Vision is "A Distinguished, Vibrant, Attractive and People-oriented Kai Tak by Victoria Harbour"

### The Planning Goals

- Heritage, green, sports and tourism hub of Hong Kong
- Green web for sustainable development
- Quality living environment



-rooted

# 規劃 PLANNING

早於機場搬遷前，啟德的重建規劃工作已經密鑼緊鼓——

- 1998年：完成可行性研究
- 2001年：修訂發展方案把原本為300公頃的填海範圍減少至133公頃，以回應公眾對填海的關注
- 2004 - 2006年：以「零填海」為起步點，展開「啟德規劃檢討」，進行三個階段廣泛公眾參與活動
- 2006年：《啟德分區計劃大綱草圖編號S/K22/1》於11月刊憲給公眾查閱。
- 2007年：獲得行政長官會同行政會議於11月核准有關草圖，圖則重新編號為S/K22/2
- 2011年：反映城市設計優化建議的《啟德分區計劃大綱草圖編號S/K22/3》於8月刊憲給公眾查閱。
- 2012年：行政長官會同行政會議於9月核准有關草圖，圖則重新編號為S/K22/4
- 2013年：行政長官的施政報告中宣佈檢討啟德發展區的規劃，以不影響規劃匯集和短期土地供應為原則，增加辦公室和房屋用地的供應。
- 2016年：完成檢視啟德發展區內進一步增加發展密度的可能性。
- 2017年：《啟德分區計劃大綱草圖編號S/K22/5》收納的修訂，主要涉及善用前北停機坪及跑道範圍的住宅/商業用地的發展潛力；改劃合適的用地作住宅、商業、政府、機構或社區及休憩用地用途；以及收納最新的發展建議。於2月刊憲給公眾查閱。
- 2018年：行政長官會同行政會議於5月核准有關草圖，圖則重新編號為S/K22/6。

Before the relocation of the airport, planning for the re-use of Kai Tak had already begun —

- 1998: Feasibility study completed
- 2001: Revised development scheme by reducing reclamation from 300 to 133 hectares in response to public's concerns over harbour reclamation
- 2004 - 2006: Kai Tak Planning Review with "zero reclamation" as the starting point to carry out 3 stages public engagement programme
- 2006: Draft Kai Tak Outline Zoning Plan (OZP) No. S/K22/1 was gazetted for public inspection in November
- 2007: The Chief Executive in Council approved the OZP amendments in November. The Plan was renumbered to S/K22/2.
- 2011: The Kai Tak No. S/K22/3 reflecting urban design enhancement was gazetted for public inspection in August 2011.
- 2012: The amended Kai Tak OZP was approved by the Chief Executive in Council in September. The Plan was renumbered to S/K22/4.
- 2013: The Chief Executive announced in the Policy Address to review the planning in Kai Tak development with the principle of not affecting the planning vision and short term land supply, to increase land supply for commercial and residential uses.
- 2016: Review on further increasing the development intensity in Kai Tak Development was completed.
- 2017: The draft Kai Tak OZP No. S/K22/5 incorporating amendments mainly involving optimization of the development potential of residential / commercial sites in former North Apron and Runway areas; rezoning of suitable sites for residential, commercial, Government, institution or community and open space uses, and incorporation of latest development proposals was gazetted for public inspection in February.
- 2018: The amended Kai Tak OZP was approved by the Chief Executive in Council in May. The Plan was renumbered to S/K22/6.



# 推展 IMPLEMENTATION

截至2018年第三季，推展啟德發展計劃中的主要項目進度如下：

## 已完成項目

- 啟德郵輪碼頭及在郵輪碼頭大樓頂部安裝新雷達
- 公共租住房屋(啟晴邨和德朗邨)
- 兩所小學
- 工業貿易大樓
- 啟德海濱花園(第1及2期)
- 跑馬地公園第1期
- 跑馬地公園碼頭
- 消防局暨救護站
- 香港兒童醫院
- 啟德明渠進口渠及觀塘避風塘改善工程(第1期)
- 啟德明渠改善工程
- 相關基礎建設

## 建造中

- 啟德發展區內的一段中九龍幹線
- 啟德發展區內的一段沙田至中環線鐵路
- 毗鄰啟晴邨一所中學
- 稅務大樓
- 東九龍總區總部及行動基地暨牛頭角分區警署
- 啟德大道公園
- 新急症醫院及海濱長廊
- 區域供冷系統第3期(組合乙及組合丙)
- 相關基礎建設

## 計劃中

- 6 號幹線(T2主幹路)
- 動物管理中心和動物福利綜合大樓
- 龍津石橋保育長廊
- 區域供冷系統第三期(餘下項目)
- 擴建海心公園
- 宋皇臺公園
- 跑馬地公園第2期
- 都會公園
- 啟德明渠進口渠及觀塘避風塘改善工程(第2期)
- 啟德車站廣場
- 飛行服務隊啟德分部
- 啟德體育園
- 香港兒童醫院前的海濱長廊
- 相關基礎建設

Up to the third quarter of 2018, the progress of the implementation of key projects at Kai Tak Development is as follows:

## Completed

- Kai Tak Cruise Terminal and radar on top of Cruise Terminal Building
- Public rental housing (Kai Ching Estate and Tak Long Estate)
- 2 primary schools
- Trade and Industry Tower
- Kwun Tong promenade (Stage 1 and 2)
- Runway park phase 1
- Runway park pier
- Kai Tak Fire Station cum Ambulance Depot
- Hong Kong Children's Hospital
- Phase 1 improvement works at Kai Tak Approach Channel and Kwun Tong Typhoon Shelter
- Reconstruction and upgrading of Kai Tak Nullah in KTD area
- Early phases of District Cooling System (DCS)
- Associated infrastructure works

## On-going

- Portion of Central Kowloon Route,
- Portion of the Shatin to Central Link,
- A secondary school next to Kai Ching Estate,
- Inland Revenue Tower,
- Kowloon East Regional Headquarters and Operational Base cum Ngau Tau Kok Divisional Police Station,
- Avenue Park,
- New Acute Hospital and adjacent Waterfront Promenade
- DCS phase III (Package B and C) and associated infrastructure works
- Associated infrastructure works

## Under planning

- Trunk Road T2 being a part of Route 6,
- Animal Management and Animal Welfare Building Complex,
- Lung Tsun Stone Bridge Preservation Corridor,
- DCS Phase III (remaining package),
- Hoi Sham Park Extension,
- Sung Wong Toi Park,
- Runway Park Phase II,
- Metro Park,
- Phase 2 improvement works at Kai Tak Approach Channel and Kwun Tong Typhoon Shelter,
- Station Square,
- Government Flying Services Kai Tak Division
- Kai Tak Sports Park, and
- Waterfront promenade fronting the Hong Kong Children's Hospital,
- Associated infrastructure works



# 環境友好連接系統

# ENVIRONMENTALLY FRIENDLY LINKAGE SYSTEM

辦事處下的啟德辦事處正繼續進行九龍東環保連接系統研究，包括釐定系統的覆蓋範圍、走線及車站位，相關的技術評估以確定其可行性。

The office under the Civil Engineering and Development Department continues with the Detailed Feasibility Study for Environmentally Friendly Linkage System (EFLS) for including the determination of its network coverage, station locations, etc., and carrying out the associated assessments to ascertain its feasibility.



# 土地用途 LAND USE

啟德將成一個嶄新的都市區，主要發展包括商業／辦公室地帶、住宅區、多元化的政府、機構及社區設施、面向維港的啟德體育園、位於前跑道末端的郵輪碼頭暨旅遊中心，以及都會公園。

為配合九龍東商業區的轉型及市民對住屋供應的殷切需求，當局於2016年9月完成檢視發展區內進一步增加發展密度的可能性，確定區內整體的住宅和商業樓面面積供應量可分別增加至約二百九十萬平方米和二百三十萬平方米。有關的分區計劃大綱圖修訂於2017年4月完成為期兩個月的展示。行政長官會同行政會議於2018年5月15日核准大綱草圖。有關修訂《啟德分區計劃大綱圖編號S/K22/6》亦已於2018年5月25日刊憲。《啟德分區計劃大綱圖》規劃了商業／辦公室地帶(大約30.74公頃)以發展為本港的商業／金融中心，及區域性的商業／購物中心。用途可包括辦公室、商店、服務行業、娛樂場所、食肆和酒店。劃作此地帶的地點，往往是重要的就業中心。此外，有關分區計劃大綱圖亦規劃了大約46.48公頃的住宅用地作中高密度住宅發展，可提供約五萬個住宅單位。另外啟德還規劃了政府、機構或社區設施用地(大約37公頃)及休憩用地(大約98.18公頃)。

考慮到市民對公營屋宇的需要，行政長官在2018年6月29日宣佈將3幅位於啟德的私營屋用地改劃為發展公營房屋。啟德發展區住宅單位將由約49,900個單位增至約50,800個住宅單位(增加約900個住宅單位)，人口由約134,000增至約137,000。

Kai Tak will be a new urban node, supported by belt of commercial / office developments, clusters of residential neighbourhoods, a variety of government, institution or community facilities. Kai Tak Sports Park fronting the Victoria Harbour, a cruise terminal cum tourism node at the former runway and a Metro Park.

To facilitate the transformation of East Kowloon to a commercial hub and to meet the acute demand for housing, the feasibility study of further increasing the development intensity of Kai Tak Development was completed in September 2016, confirming the feasibility of increasing the gross floor area for domestic and non-domestic development to 2,900,000 m<sup>2</sup> and 2,300,000 m<sup>2</sup>. The related draft Kai Tak Outline Zoning Plan (OZP) was gazetted for public inspection for a period of 2 months till April 2017. The Chief Executive in Council approved the OZP amendment on 15 May 2018 and the approved OZP S/K22/6 was gazetted on 25 May 2018. The OZP has zoned commercial / office areas (about 30.74 hectares), which may include uses such as office, shop, services, place of entertainment, eating place and shopping centre. These areas are usually major employment nodes. Furthermore, the OZP has zoned about 46.48 hectares of residential site for medium to high density residential developments, which would provide about 50,000 flats. Also, there is land zoned as Government, Institution or Community areas (about 37 hectares) and Open Space (about 98.18 hectares). In considering the public demand for public housing, Chief Executive in Council on 29 June 2018 announced to change 3 pieces of land from private housing development to public housing. The housing supply for Kai Tak Development will increase from about 49,900 flats to about 50,800 flats (increase about 900 flats) with population increasing from about 134,000 to about 137,000.



啟德土地規劃  
Kai Tak Land Use Zoning

- 商業區  
Commercial
- 政府、機構或社區  
Government, Institution or Community
- 住宅區  
Residential
- 政府、機構或社區  
Government, Institution or Community
- 綠地  
Open Space
- 政府、機構或社區  
Government, Institution or Community
- 政府、機構或社區  
Government, Institution or Community
- 政府、機構或社區  
Government, Institution or Community



# 啟德行人連接通道 KAI TAK PEDESTRIAN LINKS

啟德發展計劃會活化毗鄰地區，設立總共26個新增和優化行人連接設施，使啟德與其腹地更緊密聯繫。

為了配合位於北港維坪內公共租住屋和工業貿易大樓，土木工程拓展署經已策劃及優化六個行人過路處，建造兩條全新的園藝美化高架行人道，建造一條全新的行人隧道及優化三種現有的行人隧道，使往來各區更方便，令環境更優美。土木工程拓展署正建造兩條行人隧道分別連接啟德和九龍城及啟德和彩虹，和一條園藝美化高架行人道連接啟德和將軍澳。

The Kai Tak Development will spearhead revitalisation of the surrounding neighbourhoods and communities. There will be a total of 26 new and enhanced pedestrian links to bring the Kai Tak and its hinterland closer together.

To serve the public rental housing and the Trade and Industry Tower, Civil Engineering and Development Department completed the construction and enhancement of six at-grade pedestrian crossings, construction of two new landscaped elevated walkways, and a new subway and enhancement of three existing subways, which improve pedestrian access and the walking experience among districts. Civil Engineering and Development Department is constructing two subways to connect between Kai Tak and Kowloon City, and between Kai Tak and Chui Hung respectively, as well as a landscaped elevated walkway to connect Kai Tak and San Po Kong.



啟德發展區內六個新落成及改善的行人過路處  
Enhancement and extension of the pedestrian highway across Prince Edward Road East connecting the Kai Tak and San Po Kong



兩條園藝美化高架行人道連接啟德和將軍澳  
Construction of elevated pedestrian walkway connecting the Kai Tak and San Po Kong



兩條全新行人隧道連接啟德和九龍城及啟德和彩虹  
Construction of the pedestrian subway and the Kai Tak and Chui Hung



沿啟德發展區內六個新落成及改善的行人過路處  
Enhancement and extension of the pedestrian highway across Prince Edward Road East connecting the Kai Tak and San Po Kong



兩條全新行人隧道連接啟德和九龍城及啟德和彩虹  
Construction of the pedestrian subway and the Kai Tak and Chui Hung



兩條全新行人隧道連接啟德和九龍城及啟德和彩虹  
Construction of the pedestrian subway and the Kai Tak and Chui Hung



兩條全新行人隧道連接啟德和九龍城及啟德和彩虹  
Construction of the pedestrian subway and the Kai Tak and Chui Hung



- 園藝美化高架行人道  
Proposed Landscaped Elevated Walkway
- 全新行人隧道  
Proposed New Pedestrian Subway
- 優化現有行人隧道  
Enhanced Existing Pedestrian Subway
- 園藝美化高架行人道  
Proposed Landscaped Elevated Walkway



兩條園藝美化高架行人道連接啟德和將軍澳  
Construction of elevated pedestrian walkway connecting the Kai Tak and San Po Kong



兩條全新行人隧道連接啟德和九龍城及啟德和彩虹  
Construction of the pedestrian subway and the Kai Tak and Chui Hung

# 概念總綱計劃5.0 CONCEPTUAL MASTER PLAN 5.0



九龍東「包括新填地發展區、維多利亞船塢發展區」發展工業基地及進入香港的大門，是「龍點九龍東」的發展軸帶之一。這地方轉型為以文化為重要元素的中心，正轉型為龍東第二個核心商業區 (CBQ2)。

我們在上述過程中不斷根據公眾意見及持續溝通概念總綱計劃，概念總綱計劃的更新包括：

- 增加綠化
- 增加核心商業區
- 發展創意
- 加強服務設施
- 加強文化傳承

The Conceptual Master Plan (CMP) is evolving as our work progresses, incorporating public views received from continuous public engagement activities. CMP 5.0 has five focuses:

- Green CBQ
- Smart City
- Sustainable Village
- The Spark at Creative

# 演變中的概念總綱計劃 EVOLVING CONCEPTUAL MASTER PLAN

## 概念總綱計劃 3.0 (2013年6月)

通過持續的公眾參與活動徵納民意，更新九龍東概念總綱計劃 3.0 概括出九龍東的最新發展，並設以下列新的建議：

- 高層綠地
- 創意文化藝術
- 綠色建築
- 工業文化傳承

## Conceptual Master Plan 3.0 (Jun 2013)

Conceptual Master Plan 3.0 provided an update on work progress and incorporated public views and opinions collected through continuous engagement activities. Opportunities were identified for:

- KaiTak Fantasy
- Creativity, arts and culture
- Green buildings
- Industrial culture and heritage



## 概念總綱計劃 2.0 (2012年6月)

概念總綱計劃 2.0 是根據 CBQ2 策略而制定，以回應納稅人的期望。我們希望：

- 概念九龍東與九龍東相連
- 增加地方行人的導線，增加對街道和配建城市步行
- 地方價值，促進健康的城市設計和創新建築，為公共空間增加活力，方便市民閱讀海港，將文化及藝術融入生活
- 完成九龍東轉化為另一個核心商業區，繼續為龍東工作以物，寫字樓，建築商的好地方

## Conceptual Master Plan 2.0 (Jun 2012)

Conceptual Master Plan 2.0 was formulated under the CBQ2 strategy. By taking public views and suggestions, the CMP was evolved with 10 new tasks. This was a plan for:

- Logistics within K1 and with its neighbouring areas
- Pedestrian-friendly environment, activating streets and urban spaces
- Place-making, promoting healthy urban design and innovative architecture, creating vibrant public space, bringing energy to the waterfront, adding arts and culture to city life
- Harnessing K1 to another CBQ or to place its work in its tradition, to work, to play, and to play



## 概念總綱計劃 1.0 (2011年10月)

在 2011 年 12 月的諮詢過程中，行政局成員曾向公眾諮詢，以加強對行政局「龍東九龍東」發展策略的認可。行政局成員曾向公眾諮詢，以加強對行政局「龍東九龍東」發展策略的認可。行政局成員曾向公眾諮詢，以加強對行政局「龍東九龍東」發展策略的認可。

## Conceptual Master Plan 1.0 (Oct 2011)

In Feb 2011-12 Public Advisory, the Chief Executive supported the adoption of a strategy to regenerate and revitalize Kowloon East. The Government will continue to support Hong Kong's economic and social development through the development of Kowloon East. The Government will continue to support Hong Kong's economic and social development through the development of Kowloon East.



# 新蒲崗商貿區 SAN PO KONG BUSINESS AREA



新蒲崗商貿區 San Po Kong Business Area

經動九龍東區將於2017年10月延伸至新蒲崗，尤其注重加強連繫、改善環境，以及增進活力和推動多元發展。

在加強連繫、行人暢通度及道路交通以配合新蒲崗商貿區轉型方面，我們於2018年2月展開新蒲崗商貿區行人環境及交通改善計劃可行性研究，為新蒲崗商貿區制訂全面計劃，包括行人環境及交通改善建議。我們將「易行力龐東」概念延伸至新蒲崗商貿區，以改善行人環境及與主要交通樞紐的連繫。在改善交通方面，我們建議修改一些行車線。這些改善方案將改善主要路口的交通狀況和舒緩區內交通擠塞。重要實施措施包括增建和擴建超時停車位，提升西英街和附近路口的交通容量，並提供一個地下公眾停車場。

在改善環境方面，我們已檢討位於西英街的擬議地區休憩用地及建議分期發展。

在增進活力和推動多元發展方面，我們正探討如何善用區內各種具潛力的用地，特別是現有政府用地及設施，以作重整。此外，新蒲崗商貿區正逐步引入智慧城市措施，如智能照明、智能路口、實時空置單位數據、違例泊車監測系統測試、「易行」及主題導覽和智慧泊車。



西英街的擬議地區休憩用地 Proposed District Open Space at Sai Mei Street

The Energizing Kowloon East initiative was extended to San Po Kong in October 2017, with particular emphasis on enhancing connectivity, improving the environment, and promoting vibrancy and diversified development.

On enhancing connectivity, walkability and road traffic to support the transformation of San Po Kong Business Area (SPKBA), we commissioned the SPKBA Pedestrian Environment and Traffic Improvement Feasibility Study in February 2018 to formulate a comprehensive plan including pedestrian environment and traffic improvement proposals in SPKBA. In particular, we are extending the concept of "Walkable Kowloon East" to SPKBA with a view to improving the pedestrian environment and connectivity to the major transport nodes. On improving traffic, we propose to re-configure some traffic lanes. Such improvements would improve the performance of major road junctions and alleviate traffic congestion in the area. Re-provisioning of the Kai Tak East Playground and Sports Centre will provide an opportunity to enhance traffic capacity at Sai Mei Street and the adjacent road junctions, and to provide an underground public vehicle park.

On improving the environment, we have reviewed and made proposals for phased development of the proposed district open space at Sai Mei Street.

On promoting vibrancy and diversified development, we are exploring the optimal use of various opportunity sites in the area, particularly the existing government sites and facilities, with a view to rationalizing them. In addition, smart city initiatives are being progressively introduced into SPKBA, such as smart lighting, intelligent monitoring system, "Easy Walking" and thematic tour and smart parking.



新蒲崗商貿區行人環境改善框架 San Po Kong Business Area Pedestrian Environment Improvement Framework



新蒲崗商貿區行人環境改善方案 San Po Kong Business Area Pedestrian Environment Improvement Scheme

# 觀塘行動區 KWUN TONG ACTION AREA



觀塘行動區 Kwun Tong Action Area



現時環境 Existing Condition

觀塘行動區建議作混合式發展，提供商業、政府／機構或社區、休憩用地及公共交通設施。現時的公共交通匯處、觀塘碼頭廣場暨購物公園、觀塘汽車運輸碼頭的危險品車輛等候處，以及食物環境衛生署基里里貨倉等設施會重新規劃，以理順土地用途和提升海濱環境。行動區可提供約8萬平方米商業樓面面積。行動區內的公眾休憩空間將連繫觀塘海濱花園，並延伸至未來的翠屏河及茶果嶺海濱。

為改善德業街／開源道路口的交通情況，建議將該處改為一個交通燈控制路口增加容量，基里里會改為雙層巴士，以及新增一條穿越行動區的行車路來分流現時的交通。

為促進觀塘風樓在非颱風日子能與水上康樂活動可共用水域，並應沿觀塘海濱花園的邊界由50米擴大至100米闊，停放更多空閒作水上康樂活動。在觀塘行動區及啟德啟德中船塢成後，區內將有更多與娛樂及旅遊相關用途，增添海濱的活力及吸引力。

Kwun Tong Action Area (KTAA) is proposed for mixed-use development to provide commercial, government/institution or community, open space and public transport facilities. Facilities such as the public transport interchange, Kwun Tong Ferry Pier Square cum Pet Garden, queuing area for dangerous goods vehicles of the Kwun Tong Vehicular Ferry Pier, and Food and Environmental Hygiene Department's Kai Yip Lane depot will be replanned with a view to rationalizing the land uses and enhancing the waterfront environment. KTAA can provide about 80,000 m<sup>2</sup> of commercial floor space. The public open space in KTAA will be connected to Kwun Tong Promenade and extended towards the future Tai Ping River and the Chi Kwo Ling Waterfront.

To improve the traffic condition at the Wai Yip Street / Hoi Yuen Road junction, it is proposed to change the roundabout into a signalized junction to increase junction capacity. Kai Yip Lane would be converted to two-way traffic together with the provision of an additional road through the KTAA to divert traffic from the roundabout.

To promote water body co-use between vessel and water recreational activities in Kwun Tong Typhoon Shelter during non-typhoon days, the promenade along Kwun Tong Promenade has been widened from 50 m to 100 m to release more space for water recreational activities. On completion of KTAA and Kai Tak Tourism Node, more entertainment and tourism-related uses would be provided to promote the vibrancy and attractiveness of the waterfront.



透視圖 Perspective



景觀設計總綱圖 Master Landscape Plan



水體共享建議 Water Body Co-use Proposal



# 觀塘商貿區 KWUN TONG BUSINESS AREA



我們於2017年12月完成一項顧問研究，制訂了短、中及長期方案，改善觀塘商貿區的行人環境及交通狀況。根據研究成果，我們確立了觀塘商貿區的整體行人及交通環境改善框架，包括六條主要南北走廊、四條主要東西走廊及後巷網絡。大部分快見成效和短期改善方案已經完成。同時，我們正在與相關政府部門合作推展各項中及長期方案的規劃及設計，包括一項改善港鐵牛頭角站附近行人暢通度的顧問研究，以在現有行人隧道提供無障礙設施，以及提供兩條新的行人隧道連接至海濱道公園。

A consultancy study to formulate short, medium and long-term proposals for improving the pedestrian environment and traffic conditions in the Kwun Tong Business Area (KTBA) was completed in December 2017. Based on the study findings, we have established the overall pedestrian and traffic environment improvement framework in KTBA, including six major north-south corridors, four major east-west corridors as well as the back alley network. Most of the quick wins and short-term improvement schemes have been completed. In tandem, we are taking forward the planning and design of various medium and long-term schemes in collaboration with relevant government departments, which include a consultancy study for improving walkability in the vicinity of the MTR Ngau Tau Kok Station with a view to providing barrier-free facilities at the existing subway, and two new subways connecting to Hoi Bun Road Park.



## 後巷計劃 BACK ALLEY PROJECT



善用合適後巷成為行人網絡之一，可舒緩附近行人路於繁忙時段的人流密度。我們選取了部分後巷，與有關部門、學術機構及非政府組織合作落實短期改善項目，吸引更多行人使用後巷。改善工程包括以標示及圖案翻新路面及加入公共藝術元素。11條後巷的改善工作已經完成。

By including suitable back alleys to form part of the pedestrian network, the pedestrian flow demand on adjacent footpaths during peak hours would be mitigated. We selected some back alleys for implementation as short-term improvement projects in collaboration with relevant departments, academic institutions and non-governmental organizations with the aim of enhancing the attractiveness of back alleys for pedestrian use. The improvement works include face-lifting pavement surface with signs and patterns, and introducing public art elements. Improvements to 11 back alleys have been completed.

# 十大主要任務 10 MAIN TASKS

- ### 環境友善系統 Environmentally Friendly Linkage System (EFLS)

進行詳細可行性研究及初步土地勘測工程以制訂環保友善系統的基本走向。  
Carry out detailed feasibility study and preliminary site investigation works to determine the way forward for the proposed EFLS.
- ### 九龍連接網 Connectivity in Kowloon Bay

建議以中至長期行人專道及橋樑改善計劃，以加強九龍海傍貿區內部及其與發展中的地區連接。  
Proposed short, medium and long-term improvements to the pedestrian and cycling route environment in Kowloon Bay Business Area for enhancing internal connectivity and connection with Kai Tak Development Area.
- ### 中環角連接網 Connectivity in Ngau Tau Kok

加強中環角海傍貿區至海濱道行人專道。  
Enhance pedestrian connection between Ngau Tau Kok MTR Station and the waterfront.
- ### 環境友善 Connectivity in Karan Tong

改善觀塘海傍貿區行人及單車專用道，並研究在該區興建行人專道。  
Improve the pedestrian and outdoor cycle path environment in Kwun Tong Business Area, and study the feasibility of EFLS and to study the feasibility of EFLS and to study the feasibility of EFLS and to study the feasibility of EFLS.
- ### 改善海傍街道設計 Overseeing Hoi Bun Road - Street Observation

透過步行觀察計劃，改善海傍街道的行人及單車專用道。  
Improve the pedestrian and outdoor cycle path environment in Hoi Bun Road Area and oversee the implementation of EFLS and to study the feasibility of EFLS and to study the feasibility of EFLS.
- ### 新工業文化公園 Kwun Tong Industrial Culture Park

將觀塘海傍貿區舊址發展為新工業文化公園。  
Transform Hoi Bun Street Playground into an Industrial Culture Park.
- ### 葵涌河 Tsui Ping River

透過環境、生態和園藝美化等改善計劃，將觀塘海傍貿區舊址發展為新工業文化公園。  
Develop environmental, ecological and landscaping proposals to transform King Yip Street into the Tsui Ping River.
- ### 九龍灣行動區 Kowloon Bay Action Area

釋放九龍灣行動區的潛力，發展為一個活力社區。  
Release the potential of Kowloon Bay Action Area and develop it into a vibrant neighbourhood.
- ### 觀塘行動區 Kwun Tong Action Area

充份利用「舊」計劃中，設計步行專用道，發展觀塘海傍貿區。  
Explore the potential of Kwun Tong Action Area for developing temporary links, and under the Kai Tak Family project.
- ### 濱水海濱 Waterfront

透過步行觀察計劃，改善海傍街道的行人及單車專用道。  
Improve the pedestrian and outdoor cycle path environment in Hoi Bun Road Area and oversee the implementation of EFLS and to study the feasibility of EFLS and to study the feasibility of EFLS.

UNIVERSITY  
DESIGN

# 綠色生活 GREEN LIVING

綠化率達 30% 的 100 公頃，綠化空間，提供別具特色的休憩地方，如靜養公園，同時在興建期間把鄰近地區綠化 11 公畝長的綠道，以改善內河行船景觀等。

重要的綠色標尺 -  
 區域供冷系統  
 • 每年可節省 6,500 萬度電，相當於每年減少 59,500 公噸二氧化碳排放量

環保運輸系統  
 • 單車徑

With 30% green space, Kai Tak will have signature open spaces like the Merry Park. A green network of landscaped corridors will link neighbouring districts to 11 km of waterfront. Working in Kai Tak will be convenient and pleasant.

Important green infrastructures -

District Cooling System  
 • Maximum annual saving in electricity consumption will be up to 60 million kilowatt hours, equivalent to a maximum reduction of 59,500 tonnes of carbon dioxide emissions per annum.

Environmentally Friendly Linkage System  
 • No roadside emission



新維多利亞港大橋及跑道公園第一期綠道  
Aerial view of Cruise Terminal Building and Runway Park stage 1



位於新維多利亞港大橋及跑道公園的郵輪碼頭公園  
The roof park of Cruise Terminal Building



跑道公園第一期  
Runway Park phase 1



新維多利亞港大橋二期  
Kai Tak Promenade Stage 2



新維多利亞港大橋二期  
The Kai Tak District Cooling System North Plant

# 優化城市設計 URBAN DESIGN ENHANCEMENT

新維多利亞港的城市設計指引和手冊 (UDGM) 制訂的目的是要確立一個最佳實踐手冊，包括包括下列例子的應用指引的例子，作為規管發展其他城市設計的決定因素。此外亦為專業人士、發展商和相關部門提供參考，從而訂出一個有遠景、高品質城市設計的行人區。

城市設計指引和手冊根據不同的土地用途分為六個部分：

- (一) 總綱性
- (二) 發展區以外的私人住宅用地
- (三) 私人非住宅用地
- (四) 政府、機構或社區
- (五) 跑道發展區
- (六) 海濱發展

城市設計指引和手冊建議了一系列非強制性的城市設計要求，並以例子表揚，為未來發展項目的城市設計提供最大的靈活性。



The purpose of the Urban Design Guidelines and Manual (UDGM) for Kai Tak Development is to establish a Best Practice Manual, with worked examples on the application of guidelines to form the basis of urban design parameters for control of development sites, and also provide reference for professionals, developers, and relevant authorities to achieve a coherent overall design with high quality urban design at pedestrian zone.

UDGM consists of six parts based on different land uses:

- (A) Grid Neighbourhood (GN)
- (B) Private Residential Sites other than GN
- (C) Private Non-residential Sites
- (D) Government/Institute and Community Sites
- (E) Runway Precinct
- (F) Promenade

UDGM proposed a series of non-mandatory urban design requirements with examples to maximize flexibility for the future urban design in development projects.

建議以階梯式高低度的設計，從而避免在初期興建高層。  
 A "Stepped Height" profile design with a high and low block design principle along the waterfront will help to avoid taller development within the Runway Precinct.



# 「易行」九龍東

## "WALKABLE" KOWLOON EAST

### 過去

九龍灣和觀塘傳統上是香港重要的工業基地。該區隨著時間推展而演化，九龍東正轉型為一個高吸引力的核心商業區，商業大廈、購物中心及酒店已陸續落戶該區。然而，道路設計是根據工業區的標準，行人路相對較窄，沿路亦設有上落貨區。在行人及交通流量不斷增加的情況下，這些設施已不能滿足社區需要及配合轉型。我們明白公眾殷切希望改善行人環境及交通情況，因此我們完成了兩個行人環境改善可行性研究。

### The past

Kowloon Bay and Kwun Tong were traditionally important industrial bases in Hong Kong. As the area evolves over time, Kowloon East is transforming into an attractive core business district (CBD) with commercial buildings, shopping malls and hotels gradually taking roots in the area. However, the road design was based on the standards for an industrial area where pedestrian pavements were relatively narrow with loading/unloading areas along the roads. Given that the pedestrian and traffic flows have been ever increasing, these facilities are no longer able to meet community needs and cater for the transformation. We understand the public have strong aspirations for improving the pedestrian environment and traffic conditions, so we have completed two pedestrian environment improvement studies.



### 「易行」九龍東

我們積極推廣「易行」九龍東的概念，建設一個暢達、安全及舒適的優質步行環境以鼓勵步行。我們在進行行人環境改善研究時，已實施了多項快見成效和短期改善方案。我們已制定全連行人網絡，涵蓋了地面行人連接、建築物背牆後綠、綠化行人通道、分隔行人設施（天橋、隧道和大廈內部通道）等，並會加強區內以安海連站和海濱的連接。

### "Walkable" Kowloon East

We actively promote the concept of "Walkable" Kowloon East and foster a connected, safe and comfortable walking environment of quality to encourage walking. While we were conducting the pedestrian environment improvement studies, we implemented quick wins and short term improvement measures in parallel. We have formulated comprehensive pedestrian networks that encompasses all-grade pedestrian links, building setbacks, landscaped walkways and grade-separated facilities (footbridges, setbacks, landscaped walkways and grade-separated facilities (footbridges, subways and walkways inside buildings), etc., putting particular focus on strengthening the connections between the areas, the MTR stations and the harbourfront.



# 易行及流動

## WALKABILITY & MOBILITY



政府正積極推展主要的運輸基建項目，包括六號幹線（包含將軍澳—藍田隧道、中九龍幹線和T2主幹線），以減輕九龍東主要道路的交通負荷和滿足交通需要。至於鐵路基礎，港鐵沙田至中環線會大為改善九龍東（特別是啟德發展區）的暢達度。

The Government is also proactively taking forward major transport infrastructure projects, including Route 6 (comprising Tsinghan Tunnel, Central Kowloon Route and Trunk Road T2) to alleviate the traffic loadings along major roads and to cater for the traffic needs in Kowloon East. On railway infrastructure, the MTR Sha Tin to Central Line will greatly enhance the accessibility of Kowloon East, particularly for the KTD area.





# 共融通道網絡 GREENWAY NETWORK

配合啟德發展，政府提出興建長約13公里的單車徑網絡，以方便市民往來啟德發展區內各休憩用地作消閒和娛樂之用。已完成的可行性研究建議在啟德發展區設立行人及單車共用的「共融通道」給公眾使用。

由於共用路面在香港是一個比較新的概念，因此可行性研究將繼續在觀塘海濱花園內進行一項試驗計劃。在共融通道試驗計劃下，觀塘海濱花園內的一公里長的現有行人路已改建為共融通道作實地試驗。為期約六個月實地試驗，主要目的是累積管理共融通道的經驗及進行推廣，以供啟德發展區全區推行共融通道時作為參考。

As part of the development of Kai Tak, the Government proposed building a cycle track network of about 13 km for the public to travel amongst the open spaces in the Kai Tak Development (KTD) for leisure and recreational purposes. The completed feasibility study has recommended that a shared-use pavement for cyclists and pedestrians, named "GreenWay", should be provided for public use in KTD.

Since the shared-use pavement is a relatively new concept in Hong Kong, the feasibility study proposed that a pilot project on the GreenWay be implemented at the Kwun Tong Promenade. The pilot project has included a field trial by converting an approximately 1 km existing footpath at the Kwun Tong Promenade into part of the GreenWay. A field trial conduct for about six months to gain experience in the management of the GreenWay and promote its development, so as to provide reference for the full implementation of the GreenWay network in the KTD.



觀塘海濱花園共融通道試驗計劃  
GreenWay Pilot Project in Kwun Tong Promenade



擬議的共融通道網絡  
The Proposed GreenWay Network



# 啟德海濱 KAI TAK WATERFRONT

《啟德分區計劃大綱圖》已規劃了總長度約11公里的貫通海濱長廊。海濱長廊將由土瓜灣經啟德和觀塘伸延至茶果洲。日後會成為啟德發展計劃中，佔地約100公頃的休憩用地的一部分。

「啟德海濱花園第一期及第二期」，已分別於2010年1月及2015年5月落成及開放給市民享用。位於觀塘末端的啟德跑馬地公園第一期亦於2014年6月開放給市民使用。

至於已規劃的海濱長廊項目，香港兒童醫院前的海濱長廊項目將於2018年第四季展開，並預料於2020年第三季完成。另外，毗連D3路（都會公園段）的海濱長廊亦計劃在2019年展開，並預料於2023年完成。位於兩跑馬地海濱長廊，將會由相連的私人發展項目發展向一併發展，發展後將開放給市民享用。

當啟德明渠進口道和截機避風橋的水質進一步改善後，我們更可研究在該處水體進行水上活動，其可行性需視乎未來的公眾諮詢。

According to the Kai Tak Outline Zoning Plan, a total length of about 11 kilometres of promenade stretching from To Kwa Wan via Kai Tak and Kwun Tong to Cha Kwo Ling is planned. It will form part of the nearly 100 hectares of open space of the Kai Tak Development.

Kwun Tong Waterfront Promenade Stage 1 and 2 were open in January 2010 and May 2015 respectively. The Runway Park located at the tip of former runway was open for public enjoyment in June 2014.

Regarding the planned promenade projects, the waterfront promenade in front of the Hong Kong Children's Hospital will commence in the 4th quarter of 2018 and planned to be completed in the 3rd quarter of 2020. Also, the promenade adjacent to Hong Kong Children's Hospital (D3 Metro Park Station) will commence in 2019 for completion in 2023. The promenade along the former Runway will be developed by private developer(s) of the adjoining developments and will be open for public enjoyment after completion.

Once the water quality of the Kai Tak Approach Channel and Kwun Tong Typhoon Shelter is further improved, we can review the usage of the waterbody for water sports. The feasibility will be subject to future public consultations.



觀塘海濱長廊  
Kwun Tong Promenade

觀塘海濱長廊  
Kwun Tong Promenade

11公里長的貫通海濱長廊  
11 km across promenade

# 啟德明渠 KAI TAK RIVER

啟德明渠「啟德明渠」，總長約2.4公里，由舊大仙洞崗村起，沿彩虹道經東頭邨和新頭角，最終匯入啟德發展區內的啟德明渠進口道。啟德明渠初建於1920年代，以配合當時啟德港在老區的需求。此後，隨著周邊地區發展，明渠屢經多次改造，見證了香港經濟高速增長的年代，同時亦因工業污水非法排放、污水渠超駁至雨水渠和其他原因，受到嚴重污染。

為改善啟德明渠水質，環境保護署與同業協會自80年代中着力堵截非法污水排放，糾正錯誤接駁和實施「社區滯留處理熱污水輸送計劃」等多項措施，經兩個部門共同努力，明渠水質於2005年已大有改善，而公眾亦開始把明渠改稱「啟德河」。

為配合啟德發展計劃，政府於2011年展開啟德河改善工程。渠務署負責進行舊大仙洞內一段長約1.1公里啟德河的渠建及改善工程，並於彩虹道地底加建箱形暗渠。土木工程拓展署則負責進行啟德區內長約1.3公里下游段的渠建及改善工程。主要包括建造一條由開放式河道和多管箱形暗渠組成的排水道，以及興建兩個密封式淤泥清理站，旨在提升排洪能力之餘，也釋放河岸兩旁空間，日後將其發展為河畔公園，為公眾提供更多綠化休憩空間。由土木工程拓展署建造的下游段工程已於2018年4月大致完成。

Kai Tak River, originally called Kai Tak Nullah, is 2.4km in length. It runs from Po Kong Village Road in Wong Tai Sin through Chei Hung Road to Tung Tau Estate and San Po Kong, and finally discharges into Kai Tak Approach Channel in the Kai Tak Development area. Kai Tak Nullah was first built in the 1920s to meet the needs of the nearby areas. The nullah had been repeatedly re-routed. As a witness to Hong Kong's rapid economic growth over the years, the nullah became seriously polluted due to illegal sewage discharge from factories, the misconnection of sewers to stormwater drains, and other reasons.

To improve the water quality of Kai Tak Nullah, the Environmental Protection Department and the Drainage Services Department (DSD) have implemented a range of measures since the mid-1980s, including the rectification of illegal sewage discharge and misconnected pipe works and implementation of the Tolo Harbour quality has significantly improved since 2005 and the public have since then called the nullah "Kai Tak River".

To dovetail with the developments at Kai Tak, the Government has launched improvement works in relation to Kai Tak River since 2011. The DSD was responsible for the reconstruction and improvement works for a section of Kai Tak River measuring about 1.1 km in length located in Wong Tai Sin District, downstream section within the KTD, the Civil Engineering and Development Department was in charge of the reconstruction and upgrading works. The project mainly includes the construction of a drainage channel consisting of an open river channel and multi-cell box culverts as well as two enclosed desludging compounds, riverbank for future development of a riverside park with more landscaped leisure area for the community. The downstream section constructed by Civil Engineering and Development Department was substantially completed in April 2018.



舊大仙洞內一段長約1.1公里啟德河的渠建及改善工程  
Reconstruction and improvement works for a section of Kai Tak River measuring about 1.1 km in length located in Wong Tai Sin District



啟德區內長約1.3公里下游段的渠建及改善工程  
Reconstruction and upgrading works for the 1.3 km downstream section within the KTD



二號淤泥清理站  
Desludging Compound no. 2



啟德河位置圖  
Location Map for Kai Tak River

# 啟德體育園 KAI TAK SPORTS PARK

啟德體育園將提供國際級設施，推動體育全面發展，吸引更多國際級體育項目及賽事來港。主場館可提供50,000個座位，並設有開合式天幕，將成為維港的新焦點；公眾運動場和多功能室內體育館分別設有約5,000個和最多10,000個座位；園區亦會提供廣闊休憩用地、公園設施和零售及餐飲店舖，以迎合市民大眾、業餘運動愛好者及專業運動員的多元化需要。

The Kai Tak Sports Park will provide facilities of international standard for the promotion of holistic sports development, and for attracting more international sports events and competitions to Hong Kong. The Main Stadium with a retractable roof and 50,000 seats will become a new focal point on the waterfront. A Public Sports Ground with around 5,000 seats, a multi-purpose Indoor Sports Centre with up to 10,000 seats as well as large open space, park features, retail and dining outlets will also be provided to meet the diversified needs of the general public, amateur and professional athletes.



資料來源：啟德體育園項目網站  
Source: Kai Tak Sports Park Project website



啟德體育園構想圖  
Artist's impression of Kai Tak Sports Park

# 啟德大道公園和啟德車站廣場 AVENUE PARK AND STATION SQUARE

啟德大道公園及啟德車站廣場位於前啟德機場北面舊機坪，面積分別約3.2公頃及12公頃。

啟德大道公園被住宅及商業發展區圍繞，包括總人口約有31400人的啟晴邨(5200個單位)和德朗邨(8200個單位)。因應附近地區人口增長帶來的需求，公園旨在提供有綠化環境的休憩及康樂設施供市民享用。公園會設有主題林蔭大道、園景花園，富有特色的廣場及康樂設施，例如健身區、兒童遊樂場及籃球場。

車站廣場位於啟德城的心臟位置，為附近的居民和上班的市民提供寬敞並設有不同康樂設施的優質休憩用地。有關設施包括為不同年齡組別及騎單車技術水平人士而設的3個單車場地，1條連接啟德單車徑網絡的單車徑，以及九龍首個公眾草地滾球。

Avenue Park and Station Square are located at the former north apron of Kai Tak airport, with areas of about 3.2 hectares and 12 hectares respectively.

Avenue Park is surrounded by residential and commercial developments, including the Kai Ching Estate(5200 flats) and Tak Long Estate (8200 flats) with a total population of about 31400. To meet the needs of the increasing population in the vicinity, Avenue Park will provide leisure and recreation facilities with a soft landscaping environment for public enjoyment. The Park provides thematic tree avenue, landscaped gardens, featured plaza and leisure facilities such as fitness area, children's play area and a basketball court.

Locating at the heart of Kai Tak City Centre, Station Square will provide spacious and quality open space with a mixture leisure and recreational facilities for the nearby residents and working population. These facilities include three cycling grounds catering for different age groups and skill levels, a cycle track connected to Kai Tak cycle track network and the first public bowling greens in Kowloon region.



啟德大道公園構想圖  
Artist's impression of Avenue Park at Kai Tak



啟德車站廣場構想圖  
Artist's impression of Station Square at Kai Tak (Under Construction)

# 活化啟德水道 REVITALISING KAI TAK'S WATERWAY

為貫徹啟德發展計劃的綠化理念，締造充滿生氣而優美的綠色水邊景致，我們採取以下措施，活化啟德水道——

- 堵截污水，杜絕污染源頭。堵截污水已於2009年展開。
- 應用生物除污法緩減硫化氫所產生的臭味。除污工程已於2014年完成。啟德水道的空氣質素及水質在以上措施實行後得到明顯改善，我們正研究進行載流泵水計劃，以進一步改善啟德明渠進口處的水質，以達到適合用作水上活動的相關水質要求。

To complement the open spaces and green character of the Kai Tak Development, we propose the following for the revitalising of Kai Tak's waterways —

- Flow interception to stop pollution sources. The works commenced in 2009.
- In-situ bio-remediation at Kai Tak Approach Channel to suppress the generation of odorous hydrogen sulphide. The works was completed in 2014. The air and water quality of Kai Tak's waterway has obvious improvements with implementations of the above mitigation measures. We are studying implement interception and pumping scheme in order to further improve the water quality at Kai Tak Approach Channel, which an aim of meet the water quality standards for water sports activities.



Open

# 啟德區域供冷系統 KAI TAK DISTRICT COOLING SYSTEM

2008-09年施政報告中宣布，香港政府計劃在啟德發展區設立區域供冷系統以推動節能的能源及增加能源效益。

區域供冷系統是一個大規模的中央供冷系統，它將中央供冷站生產的冷凍水通過地下水管輸送到各用戶樓宇的空調系統。

## 社會貢獻

- 每年可節省8,500萬度電，相當於每年減少59,500公噸二氧化碳的排放。

## 用戶效益

- 減少前期在樓宇安裝製冷機組的投資
- 用戶無需自行安裝製冷機組及相關的電氣設備，減少對建築外觀的影響，讓大廈設計更靈活
- 用戶無需再在樓宇中安裝散熱設備及製冷機組，避免震動的困擾
- 區域供冷系統與獨立製冷系統相比，更能切合空氣調節冷量變化的需求

As Announced in 2008-09 Policy Address, the Government plans to implement a District Cooling System at the Kai Tak Development to promote energy efficiency and conservation.

The District Cooling System is a large scale centralized air-conditioning system which produces chilled water at its central chiller plants and distributes the chilled water to user buildings through an underground network of water pipes.

## Benefits to the Society

- Maximum annual saving in electricity consumption will be up to 85 million kilowatt-hours, equivalent to a maximum reduction of 59,500 tonnes carbon dioxide emissions per annum

## User Benefits

- Reduction in upfront capital costs for installing chiller plants for buildings
- User buildings do not need to install their own chillers and the associated electrical equipment, thus allowing more flexible building designs
- Noise and vibration arising from the operation of heat rejection equipment and chillers of air-conditioning plants in buildings can be reduced as this equipment is not necessary for buildings subscribing to District Cooling System
- District Cooling System is more adaptable to the varying demands for air-conditioning than an individual air-conditioning system



啟德區域供冷系統北廠全景  
Kai Tak District Cooling System North Plant overview



啟德區域供冷系統北廠內設有互動展示及增加能源效益的教育館和展示區  
Gallery and display area to promote energy efficiency and conservation at Kai Tak District Cooling System North Plant building



啟德區域供冷系統北廠  
Kai Tak District Cooling System North Plant

# 政府飛行服務隊啟德分部 GOVERNMENT FLYING SERVICE KAI TAK DIVISION

因應東涌新市鎮擴展發展項目將會用現時政府飛行服務隊（飛行服務隊）直升機在不利天氣情況下執行緊急召喚的主要航線。當有需要為飛行服務隊在香港國際機場的總部以外另設分部，以維持他們提供全天候緊急服務的效能和效率。經過選址及技術可行性評估後，有關分部將會設立在前啟德跑道末端。



擬建政府飛行服務隊啟德分部的建築效果圖(正面圖)  
Architectural rendering of proposed Government Flying Service Kai Tak Division (Front view)

啟德分部佔地的7,400平方米，包括一個直升機坪、一個可容納兩架直升機的直升機庫、一幢辦公大樓，以及相關的基建及支援設施等。此外，亦會將化直升機庫及辦公大樓的屋頂，提供綠色空間，亦能提高隔熱效能。

Since the developments under Tung Chung New Town Extension project would hamper the primary helicopter flight route used by helicopters of the Government Flying Service (GFS) in response to emergency call-outs under unfavourable weather conditions, we need to establish an operational base for GFS outside its Headquarters at the Hong Kong International Airport in order to maintain the effectiveness and efficiency of GFS's emergency services under all-weather conditions. Following site search and technical feasibility assessments, we decided to establish the operational base for GFS (Kai Tak Division (KTD)) will be established at the top of the Ex-Kai Tak former Runway (EKTR).



擬建政府飛行服務隊啟德分部的建築效果圖(從高空俯瞰)  
Architectural rendering of proposed Government Flying Service Kai Tak Division (Aerial view)

The KTD covers an area of about 7,400 square metres, including an apron for helicopters, a hangar to accommodate two helicopters, an office building, associated infrastructure and supporting facilities etc. In addition, it will provide green roofs at the hangar and the office building for providing green spaces and enhancing the effectiveness of heat insulation.



擬建政府飛行服務隊啟德分部的位  
Location of proposed Government Flying Service Kai Tak Division

# 香港兒童醫院 HONG KONG CHILDREN'S HOSPITAL

香港兒童醫院作為第三層專科轉介中心，集中處理嚴重、複雜、不常見，及需要跨專科治理的兒科病症，為全香港初生至18歲有相關臨床需要的病童提供診斷、治療及復康服務，同時匯聚專家及先進醫療儀器，推動兒科及遺傳疾病的研究，加強醫護人員培訓，提升本港整體兒科醫療水平。

香港兒童醫院亦透過各項以兒童為本及家庭友善的設施及服務，建構非院舍環境，改善醫療體驗。

The Hong Kong Children's Hospital is a tertiary referral centre for complex, serious and uncommon paediatric cases requiring multidisciplinary management, providing diagnosis, treatment and rehabilitation services for patients in need from birth to 18 years of age territory wide. It also pools together advanced equipment and expertise to promote research and training regarding paediatric and genetic diseases, so as to enhance the overall standard of paediatric service in Hong Kong.

The hospital has adopted a children-centred and family-friendly design to create a home-like environment for a better patient experience.



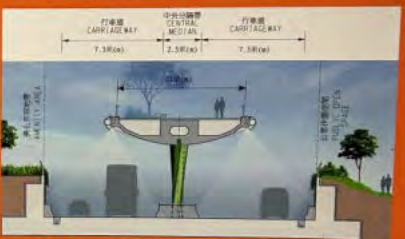


# D3路(都會公園段) ROAD D3 (METRO PARK SECTION)

土木工程拓展署轄下的啟德辦事處將會建造一段長約1,130米的雙程雙車道D3路(都會公園段)，以連接在前北停機坪的D2路和前跑道的D3A路。這將會提供一條直接的道路連貫並加強連繫前北停機坪和前跑道地區。此道路建築項目也包括D3路(都會公園段)上建造一個園景平台及毗鄰的海濱長廊，提供大約3.9公頃的休憩用地。



D3路(都會公園段)毗鄰的公眾休憩用地(構想圖)  
Public Open Space adjacent to Road D3 (Metro Park Section)



高架園景平台(構想圖)  
Elevated Landscaped Deck (Artist Impression)



D3路(都會公園段)的位置圖  
Location Plan for Road D3 (Metro Park Section)

The Kai Tak Office under the Civil Engineering and Development Department will construct a section of dual two-lane Road D3 (Metro Park Section) of about 1,130 metres long connecting Road D2 at the former North Apron and Road D3A at the former Runway. It will provide a direct access and improve connectivity between the former North Apron and former Runway. The road project will also include the construction of landscaped deck above Road D3 (Metro Park Section) and the adjacent promenade providing a total of about 3.9 hectares of public open space.

# 啟德道路網絡 KAI TAK ROAD NETWORK

啟德道路網絡主要提供道路連接啟德發展區內及毗鄰的地區。除現有的機場隧道、龍翔道和觀塘繞道外，計劃興建的6號幹線，包括中九龍幹線、T2主幹路(位於啟德發展區內)，和將軍澳—藍田隧道，將為九龍東西區之間提供一條快速的連接通道。



新幹道 Kai San Road  
承啟道 Shing Kai Road

啟德發展區會並設有四條地區幹路和道路連接點以連接鄰近地區：令道路網絡四通八達。四條地區幹路中，協調道和世運道(D1路)，和承啟道(D2路)已完成，加強了啟德發展區對土瓜灣、九龍灣及新蒲崗的連繫。而另外兩條地區幹路承豐道(D3路)，啟德橋、祥雲街和承昌道(D4路)正在延長和擴闊中。



望光道 Wang Kwong Road  
祥雲街 Cheung Yip Street

The road network in Kai Tak Development provides key connections within the development and to its neighbouring districts. Apart from the existing Airport Tunnel, Lung Cheung Road and Kwun Tong Bypass, the planned Route 6, including Central Kowloon Route, Trunk Road T2 (within Kai Tak Development) and Tseung Kwan O-Lam Tin Tunnel provides a convenient route linking up West Kowloon with East Kowloon.

The Kai Tak Development will have a well-developed transport network with four district distributors and road connections connecting the nearby suburbs. Out of these four district distributors, Concorde Road and Olympic Avenue (Road D1), and Shing Kai Road (Road D2) are completed, strengthening the connection of Kai Tak Development with To Kwa Wan, Kowloon Bay and San Po Kwoong. The other two district distributors, namely Shing Fung Road (Road D3), Kai Tak Bridge, Cheung Yip Street and Shing Cheong Road (Road D4), are under extension and widening.

望光道 / 安順道轉入啟東道  
Wang Kwong Road / Wong Chu Road into Eastern Road  
啟祥道轉入啟成街  
Kai Cheung Road into Kai Shing Street



# 駿業街遊樂場改建為INPARK TSUN YIP STREET PLAYGROUND CONVERTED INTO INPARK

隨著數碼商貿區轉型，駿業街遊樂場進行了改善工程，配合社區需要。駿業街遊樂場已重新命名為INPark，通過公園的設施表達工業文化元素。第一期改善工程於2014年9月完成，將部分駿業街遊樂場由一個封閉的休憩空間轉為一個綠化露天展覽園地，展示如何把工業文化元素與城市設計結合以改善公共空間，容納以「創造精神」為題的展品，並於邊一小片公共空間展現具創意的改裝再用和設計。

第二期改善工程將駿業街遊樂場餘下部分改建為以工業文化為主題的公園，提供中央草坪及景觀設施、休憩區和供表演及展覽的多用途場地等設施。「駿業街遊樂場公共藝術計劃」下的七組以工業文化為主題的藝術作品已裝置，突顯和讚揚昔日的嚴謹工業文化。

With the transformation of the Kwun Tong Business Area, improvements have been made to Tsun Yip Street Playground (TYSP) to cater for the community needs. TYSP has been renamed as "INPark" (Industrial Park) which conveys industrial culture elements through the park facilities.

The Phase 1 improvement works were completed in September 2014. It has transformed part of TYSP from an enclosed sitting-out area into an open-air gallery surrounded by greenery. It showcases how industrial culture elements can be integrated into urban design to improve public space. It accommodates the "The Spirit of Creation" exhibits and also demonstrates the creativity of adaptive reuse and design in a small public space.

The Phase 2 improvement works covering the remaining part of TYSP has converted it into a park with an industrial culture theme, providing a central lawn with landscape amenities, sitting-out areas, a stage and a multi-purpose area for performance and exhibition, etc. Seven sets of public artworks under the "Public Art Scheme of Tsun Yip Street Playground" are installed to feature and pay tribute to the industrial culture of Kwun Tong.



## 臨華街遊樂場改善工程 IMPROVEMENT WORKS TO LAM WAH STREET PLAYGROUND

九龍東的臨華街遊樂場亦將進行改善工程，以「印刷業」為設計主題，展示九龍東的工業文化。場內將添與主題有關的裝置，並與建築和綠化空間結合，締造一個別具特色的公共空間。

Improvements will also be made to the Lam Wah Street Playground in Kowloon East. The design theme is "printing industry" to showcase the industrial culture of Kowloon East. Elements related to the theme will integrate with the architecture and green space to create a unique public space.



# 概念驗證測試 PROOF OF CONCEPT TRIALS



### 能源效率數據系統

系統利用智慧感應器實時收集住戶層面個別電器的用電量數據，幫助眼睛和思維的參與住戶培養更好的用電習慣，提高家居節能意識和推廣低碳生活。參與住戶可透過專用手機應用程式查詢即時用電量。手機應用程式亦會因應住戶的用電情況發出個人化的省電貼士。

### Energy Efficiency Data System

The system uses smart sensors to collect real-time electricity consumption at household and electrical appliance levels for assisting the participating households from Kai Ching Estate and Tak Long Estate in cultivating better electricity consumption habits, raise awareness in energy conservation at home and encourage low-carbon living. Participating households can view their real-time energy consumption via a dedicated mobile app. The mobile app also provides personalized energy saving tips to the households based on their energy usage.



### 智慧回收箱系統

系統利用傳感器偵測廢物分類回收箱的滿載程度，有助完善收集安排及減少行車時間。我們採擷了一條現有回收可再循環物料的路線，為當中33組回收箱裝上傳感器。

### Smart Recycling Bin System

The system uses sensors for detecting the fill level of recycling bins with a view to optimizing the collection arrangement and minimizing trip generation. We have selected an existing recyclables collection route in which 33 sets of recyclables collection bins have been installed with sensors.



### 按個人特性及喜好提供的行人導向

「我的九龍東」手機應用程式提供行人導向和個人化導遊功能。行人導向能按用戶需要和喜好建議步行路線，如有步行人路徑和避障導遊。個人化導遊是利用人工智能分析，推薦特色景點導遊路線。手機應用程式亦以廣播實境及虛擬實境科技介紹九龍東特色景點。

### Persona and Preference-based Way-finding for Pedestrians

Pedestrian way-finding and personalized tour functions are available at "My Kowloon East" mobile app. The pedestrian way-finding function recommends walking routes according to personal needs and preferences, e.g. sheltered paths and barrier-free path. The personalized tour function uses artificial intelligence to recommend a touring route of points of interest. The app also uses augmented reality and virtual reality to introduce points of interest in Kowloon East.



### 多功能路燈

這項測試包括七支多功能路燈，每支路燈安裝了多種物聯網裝置，以及具備不同的數據傳送技術。利用安裝在路燈上的各種物聯網傳感器，收集器可以實時收集城市數據，如天氣、空氣質量、人流和車流統計等。收集到的數據透過「我的九龍東」手機應用程式展示，並顯示在多功能路燈上的資訊顯示屏。

### Multi-purpose Lamp Post

This trial includes 7 multi-purpose lamp posts. Each lamp post accommodates a range of Internet of Things (IoT) devices and is equipped with various data transmission technologies. By making use of various IoT sensors installed on the lamp posts, the system enables real-time collection of city data such as weather, air quality, people and vehicle flow, etc. The real-time collected data are disseminated to the public via MYKE mobile app and the information dashboard at the multi-purpose lamp posts.

有關公開資料亦於資料一級匯 (data.gov.hk) 發佈  
Related data are released in data.gov.hk open data



# 起動綠色海濱道計劃 ENERGIZING HOI BUN ROAD - GREEN OPERATION



海濱道過往只是一條毗鄰公共屋邨範圍的道路，經發展商對外公佈，現在已轉變成一個讓公眾和遊客享受綠化和親水空間的休閒廊。

Hoi Bun Road used to be an ordinary road abutting on a public housing area directing the Kwun Tong waterfront. It has turned into a charming green-blue gem and leisure hotspot for both locals and visitors.

透過持續的公眾參與、城市策劃和設計，發展商改善公共環境，包括美化公共設施和提供更多綠化空間，使海濱道逐步嶄新面貌。

Through iterative public engagement processes, dedicated planning and urban design efforts, a new face of Hoi Bun Road is in the making. We have gradually implemented public realm enhancement works such as designing public facilities and providing more green spaces.



## 「創意文化藝術 | 天橋底123號場」 Creativity, Arts and Culture | under Kwun Tong Bypass - FF0123

「新橋天橋底計劃」是「起動綠色海濱道計劃」不可或缺的一部分。我們希望創造一個新空間，推動發展商將空置的屋宇轉化為創新的商業和公共空間。該項目一方面帶來更多元化的商業發展模式，另一方面亦為市民提供一個新的、具吸引力的公共空間，以加強與鄰近的商業發展聯繫。

The "Up the Bypass Operation" forms an integral part of "Energizing Hoi Bun Road". We have intended to use restructuring "unused vacant spaces" from the old Kwun Tong Bypass into creative arts and cultural spaces for innovative public engagement. The Operation has added vibrancy to the existing urban landscape. It also brings a new, interesting concept to life on the newly redeveloped waterfront as the busy commercial hub at K1, K2 and K3, creating a better and vibrant waterfront atmosphere.



# 翠屏河及花園 TSUI PING RIVER AND GARDEN

我們和各部门通力合作，以跨界别手法活化親水高質素的康樂近海濱一帶。我們計劃利用環境、生態和園境美化改善工程，將一段約一公里的商業街明顯活化為一條綠化和具活力的翠屏河。這工程將改善環境，加強聯繫和美化公共範圍，優化九龍東的轉型。

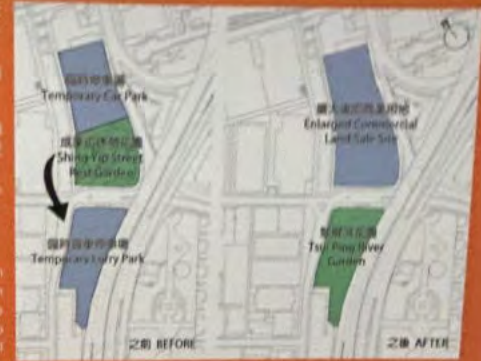
我們建議在河畔建造行人通道，以及提供連接兩邊河岸的行人通道和園景平台，加強河道與周邊（包括翠屏河花園）的聯繫，使翠屏河成為綠化河道走廊，連繫轄區內多個休憩及康樂設施。我們採用與周邊休憩設施一體化的設計意念，創造以河道為中心的公共休憩空間，例如於跨河行人通道上設置座位及觀景平台。

咸業街休憩花園已重置為翠屏河花園，與未來的翠屏河結合。

With concerted effort of different departments, we have embarked on a multi-disciplinary approach to revitalize the eastern edge of the Kwun Tong Business Area up to the harbourfront. We plan to revitalize about one-kilometre long of the existing King Yip Street nullah into a green and vibrant Tsui Ping River with environmental, ecological and landscaping upgrading. The project will improve the environment, enhance connectivity and the public realm, acting as a catalyst for the transformation of Kowloon East.

We propose to construct riverside pedestrian walkways and cross-river walkways and landscaped decks spanning across the river to enhance connectivity between the river and the surrounding areas (including Tsui Ping River Garden). Tsui Ping River will become a green river corridor, connecting various leisure and recreational facilities in Kwun Tong. We adopt a design concept that integrates with adjacent leisure facilities, to create public leisure spaces centred on cross-river walkways.

King Yip Street Rest Garden is repositioned as Tsui Ping River Garden to integrate with the future Tsui Ping River.





# 智慧綠色核心商業區

## A SMART AND GREEN CBD



為把九龍東發展為一個智慧綠色的核心商業區，推動九龍東商業區積極地對社區內興建綠色建築，政府的綠色建築策略對商業區發展起著至關重要的作用。我們於2013年推出把九龍東劃出發展綠色的內閣內務局，要求發展商為每項建築的綠化比率及環境友好程度評的(暫定)或更高等級。在2016年，我們更進一步將其他具體要求納入九龍東的發展條款，包括提供智能水錶和電動汽車充電設施，並要求特約車位車位設施。我們亦建議政府建築採用低碳及環保建築。

To build Kowloon East into a smart and green CBD, the Energizing Kowloon East Office actively promotes the construction of green buildings in the district. Besides the Government's commitment in form of gross floor area concessions for green building designs, we proposed introducing provisions in the leases for new land sale sites in Kowloon East in 2013 stipulating requirements for a higher greening ratio and attaining BEAM Plus (Provisional) Gold rating accreditation or above. In 2016, we further introduced other specific requirements into the lease conditions in Kowloon East, including the provision of smart water meters, electric vehicle charging facilities, and sharing of real-time parking vacancy information. We also advocate the adoption of low-carbon and green materials in government buildings.



"Easy Parking" Scheme 「易泊車」計劃

# 綠色建築地圖 GREEN MAP



自九龍東發展區自成立以來，已全面檢視九龍東內本應其用的政府用地的用途及其發展潛力，以支持香港長遠經濟發展。九龍東有潛力再提供約440萬平方米的商業/寫字樓樓面面積。- 發展區提供約180萬平方米。- 數幢及九龍東商業區提供約260萬平方米。加上現有約260萬平方米。九龍東有潛力提供約700萬平方米的商業/寫字樓樓面面積。

為了貫徹政府發展計劃實行的可持續發展理念，我們建議將九龍東發展為一個綠色社區，包括低碳建築。我們致力推動政府建築工程項目採用低碳綠色設計。私人商業發展項目方面，我們在土地契約內加入適當的條款，包括要求發展商提供指定綠化標準評核，及提供更高的綠化比率。

為推動低碳建築，我們自2013年6月設立綠色建築地圖，標示九龍東區內的綠色建築及綠色建築，為公眾提供多元化的環保資訊。

Since the establishment of EKEO, we have comprehensively reviewed the land uses and development potential of underutilized government sites in Kowloon East (KE) to support the long term economic development in Hong Kong. KE has the potential to provide additional commercial/office green floor area of about 4.4 million m<sup>2</sup>.

- About 1.8 million m<sup>2</sup> from Kai Tak Development  
- About 2.6 million m<sup>2</sup> from Kowloon Tong and Kowloon Bay Business Area  
With an existing stock of over 2.6 million m<sup>2</sup>, KE has the potential to supply a total of over 7 million m<sup>2</sup> of commercial/office space.

In line with the sustainable development theme adopted in Kai Tak Development, we advocate developing KE into a green community incorporating low carbon building design. We are taking the lead to promote low carbon and green design in government projects. On private commercial developments, we stipulate requirements for attaining specific BEAM Plus rating and higher greening ratio in lease conditions.

To promote low carbon buildings, we have developed a Green Map since June 2013, highlighting Green Buildings and Green Check Points in KE to provide diversified environmentally friendly information to the public.

- |  |   |
|--|---|
| <p><b>大廈名稱</b></p> <ol style="list-style-type: none"> <li>1. 華康中心</li> <li>2. 華康中心</li> <li>3. 華康中心</li> <li>4. 華康中心</li> <li>5. 華康中心</li> <li>6. 華康中心</li> <li>7. 華康中心</li> <li>8. 華康中心</li> <li>9. 華康中心</li> <li>10. 華康中心</li> <li>11. 華康中心</li> <li>12. 華康中心</li> <li>13. 華康中心</li> <li>14. 華康中心</li> <li>15. 華康中心</li> <li>16. 華康中心</li> <li>17. 華康中心</li> <li>18. 華康中心</li> <li>19. 華康中心</li> <li>20. 華康中心</li> <li>21. 華康中心</li> <li>22. 華康中心</li> <li>23. 華康中心</li> <li>24. 華康中心</li> <li>25. 華康中心</li> <li>26. 華康中心</li> <li>27. 華康中心</li> <li>28. 華康中心</li> <li>29. 華康中心</li> <li>30. 華康中心</li> <li>31. 華康中心</li> <li>32. 華康中心</li> <li>33. 華康中心</li> <li>34. 華康中心</li> <li>35. 華康中心</li> <li>36. 華康中心</li> <li>37. 華康中心</li> <li>38. 華康中心</li> <li>39. 華康中心</li> <li>40. 華康中心</li> <li>41. 華康中心</li> <li>42. 華康中心</li> <li>43. 華康中心</li> <li>44. 華康中心</li> </ol> | <p><b>建築商名稱</b></p> <ol style="list-style-type: none"> <li>1. 華康中心</li> <li>2. 華康中心</li> <li>3. 華康中心</li> <li>4. 華康中心</li> <li>5. 華康中心</li> <li>6. 華康中心</li> <li>7. 華康中心</li> <li>8. 華康中心</li> <li>9. 華康中心</li> <li>10. 華康中心</li> <li>11. 華康中心</li> <li>12. 華康中心</li> <li>13. 華康中心</li> <li>14. 華康中心</li> <li>15. 華康中心</li> <li>16. 華康中心</li> <li>17. 華康中心</li> <li>18. 華康中心</li> <li>19. 華康中心</li> <li>20. 華康中心</li> <li>21. 華康中心</li> <li>22. 華康中心</li> <li>23. 華康中心</li> <li>24. 華康中心</li> <li>25. 華康中心</li> <li>26. 華康中心</li> <li>27. 華康中心</li> <li>28. 華康中心</li> <li>29. 華康中心</li> <li>30. 華康中心</li> <li>31. 華康中心</li> <li>32. 華康中心</li> <li>33. 華康中心</li> <li>34. 華康中心</li> <li>35. 華康中心</li> <li>36. 華康中心</li> <li>37. 華康中心</li> <li>38. 華康中心</li> <li>39. 華康中心</li> <li>40. 華康中心</li> <li>41. 華康中心</li> <li>42. 華康中心</li> <li>43. 華康中心</li> <li>44. 華康中心</li> </ol> |
|--|---|















# Eindrücke Bilder



- Systeme einfach gehalten



- Fassadenbegrünung Bewässerung






友邦保險

LIPPO LIPPO



# Kooperationsfelder

- Smart Building - Sensoren
- Robotics – am Bau!
- Verdichten- Simulationen
- Klimawandelanpassungsmaßnahmen -> Stabilität bei Unwetter
- Veranstaltung Austausch mit Hong Kong/Jennifer – Firmen
- Qualitätssicherungsmaßnahmen aus Österreich



**baubook eco2soft**  
ökobilanz für gebäude

Alle Gebäude | Übersicht | Ergebnisse

Druckansicht | Excel-Export: Tabelle / CSV

← zurück

Darstellung:  Bauteil-Bemerkung

Sortierung: BG aufsteigend

Zusatz-Sortierung: Bezeichnung aufsteigend


alle Ökokennz.  Standard

---

**Gebäude "HT\_EFH-1\_Pellets": Ergebnisse der Gebäudeberechnung**


**Nutzungsdauern:**  
Ökokennzahlen / OI3: ganzzahlige Austauschzyklen im Betrachtungszeitraum lt. Norm EN 15804, Nutzungsdauerkatalog 2012, **Betrachtungszeitraum** 100: Jahre

Art: Neubau  
Katalog der Ökokennzahlen: IBO-Richtwerte 2017  
BGF: 158 m<sup>2</sup>  
BZF (OI3): 158 m<sup>2</sup>  
l<sub>c</sub>: 2 m



**Opake und transparente Bauteile**

ΔOI3	PENRT	PENRE	PENRM	GWP100 S	GWP100 P	GWP100 C	AP	EP	PERT	PERE	PERM	POCP	ODP
	MJ	MJ	MJ	kg CO <sub>2</sub> equ.	kg CO <sub>2</sub> equ.	kg CO <sub>2</sub> equ.	kg SO <sub>2</sub> equ.	kg PO <sub>4</sub> <sup>3-</sup>	MJ	MJ	MJ	kg C <sub>2</sub> H <sub>4</sub>	kg CFC-11
BGF	pro m <sup>2</sup> BGF												
<b>Menge Bauteil</b>	<b>0,00</b>	<b>0,00</b>	<b>0,00</b>	<b>0,00</b>	<b>0,00</b>	<b>0,00</b>	<b>0,00</b>	<b>0,00</b>	<b>0,00</b>	<b>0,00</b>	<b>0,00</b>	<b>0,00</b>	<b>0,00</b>
<b>Summe</b>													



**Haustechnik**

ΔOI3	PENRT	PENRE	PENRM	GWP100 S	GWP100 P	GWP100 C	AP	EP	PERT	PERE	PERM	POCP	ODP	
	MJ	MJ	MJ	kg CO <sub>2</sub> equ.	kg CO <sub>2</sub> equ.	kg CO <sub>2</sub> equ.	kg SO <sub>2</sub> equ.	kg PO <sub>4</sub> <sup>3-</sup>	MJ	MJ	MJ	kg C <sub>2</sub> H <sub>4</sub>	kg CFC-11	
BGF	pro m <sup>2</sup> BGF													
<b>Menge Bauteil</b>														
1,00 Stk. Einzelraumlüfter fehlt	0	0	0	0,0	0,0	0,000	0,000	0,000	0,0	0,0	0,00	0,0000	0,00·10 <sup>-6</sup>	
1,00 Stk. Elektrotechnik	48	505	293	212	18,5	18,4	-0,059	0,210	0,238	15,1	15,1	0,00	0,0138	0,35·10 <sup>-6</sup>
1,00 Stk. Fußbodenheizung unvollständig	1	13	9	4	0,7	0,7	0,001	0,003	0,001	1,4	1,4	0,00	0,0002	0,04·10 <sup>-6</sup>
1,00 Stk. ...														



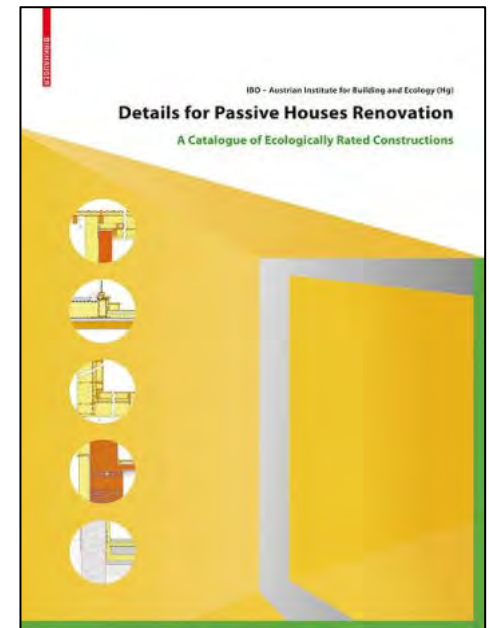
## IBO Passivhaus Catalogue: Details for Passiv Houses

→ Collection of building elements  
→ in passive house standard level  
with technical descriptions of:

- physical parameters
- ecological life cycle analysis
- suitability
- construction process
- maintenance
- structural discussion



for new buildings







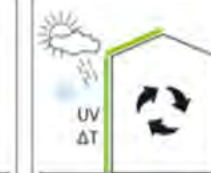


for refurbishments



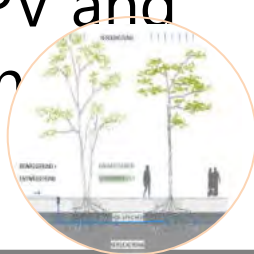
## BUILDING GREENING WHY?

© Pfoser

NEED	°C Temperature	☀️ Light	🌀 Ventilation	⚡ Energy Production	💧 Water	♻️ Material, LCA	
METHOD	 Adiabatic cooling	 Insulation, buffer	 External sunshading	 Preconditioning Natural/controlled ventilation	 Environmental energy	 Greywater use/filtering	 UV ΔT Co <sub>2</sub> balance
Benefits of Nature Based Solutions	<ul style="list-style-type: none"> <li>+ less overheating of surfaces through shading/evapo-transpiration</li> <li>+ reduction heat loss</li> <li>+reduction windspeed</li> <li>+less humidity</li> </ul>	<ul style="list-style-type: none"> <li>+ anti glare</li> <li>+green technical shading</li> <li>+translucent by plant species</li> </ul>	<ul style="list-style-type: none"> <li>+ air purification</li> <li>+air humidity</li> <li>+air cooling summer</li> <li>+air buffer winter</li> </ul>	<ul style="list-style-type: none"> <li>+increased production rates</li> <li>+supporting passive and active energy production</li> </ul>	<ul style="list-style-type: none"> <li>+water savings</li> <li>+water cooling</li> <li>+pollutants filter</li> <li>+aesthetic value</li> </ul>	<ul style="list-style-type: none"> <li>+CO<sub>2</sub> storage</li> <li>+O<sub>2</sub> production</li> <li>+less energy need</li> <li>+material protection</li> <li>+extended LC</li> </ul>	
<b>SAVINGS GAINS</b>	Reduction of cooling costs	Reduction of heat transfer	Reduction of primary energy substitution of technical systems	Support/substitution of technical airconditioning	Increased productivity PV, cooling energy savings, Biomass production	Savings depend on systematic approach	Substitution of roofing/facade materials, lifespan extension

## „R&R Post City Linz - a biodiverse, energy-flexible urban quarter“ Green.Diversity.Linz

- Sponge City elements
- Animal aided design©
- and biodiversity in urban areas,
- animal-friendly construction
- Sustainable rainwater management
- Combination/interaction of PV and greenin



Copyright: project POST CITY LINZ, AEE INTEC

## **International annual congresses since 2001: “BauZ! Vienna Congress on Sustainable Building “**

- Approximately 300 participants
- Collaboration with international delegations
- Partnership with Green Building Council Canada
- Congress schedule includes: lectures, workshops, an excursion, an evening reception and a „come together“ session

**➔ Save the date: BauZ 2024 on 15<sup>th</sup> - 16<sup>th</sup> April!**  
**<https://www.bauz.at>**



**Vielen Dank für die Einladung!**

## Contact:

DI Susanne Formanek

IBO - Austrian Institute of Building and Ecology

Alserbachstraße 5/8

A-1090 Vienna

mail to: [vorname.nachname@ibo.at](mailto:vorname.nachname@ibo.at)

[www.ibo.at](http://www.ibo.at)

 **RENOWAVE.AT**



IBO is a member of

**a  
cr** **austrian  
cooperative  
research**

