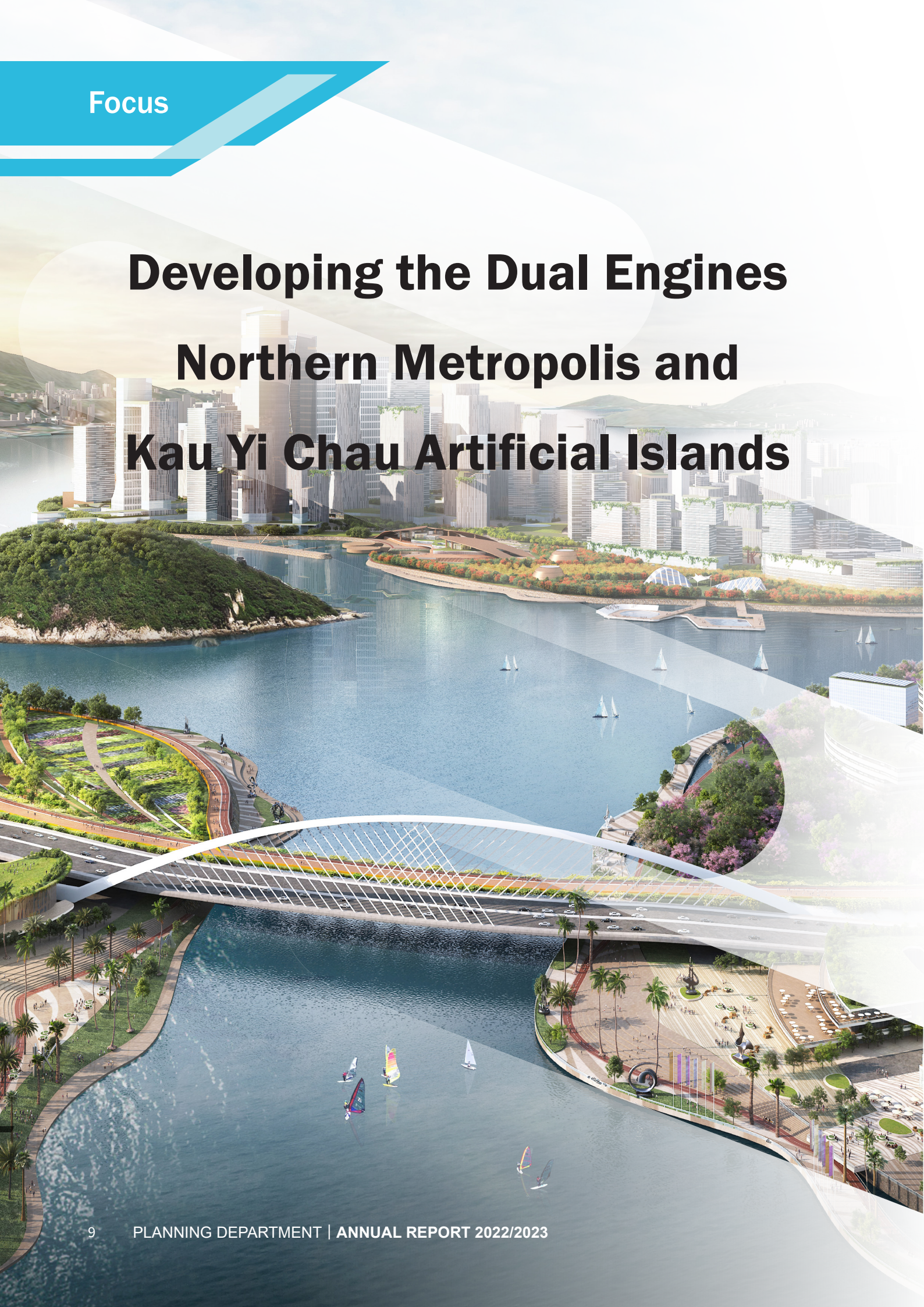
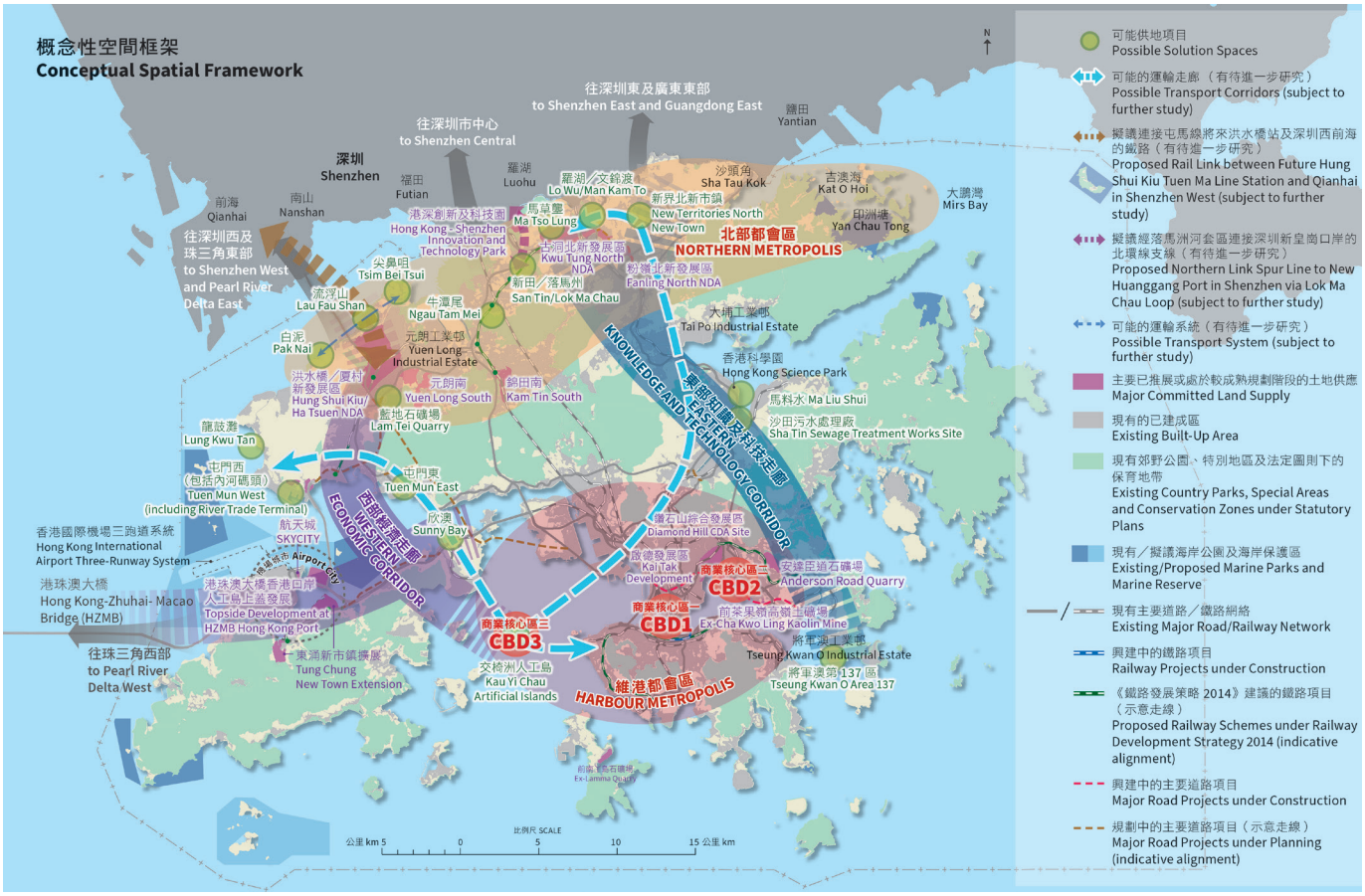
Developing the Dual Engines Northern Metropolis and Kau Yi Chau Artificial Islands



Background

According to the final recommendations of the "Hong Kong 2030+: Towards a Planning Vision and Strategy Transcending 2030" ("Hong Kong 2030+") promulgated in 2021, there would be a demand for about 5 800 to 6 200 hectares (ha) of land in Hong Kong by 2048. On the basis of a multi-pronged and capacity creating approach, the Conceptual Spatial Framework under the "Hong Kong 2030+" suggests that both the Northern Metropolis and Kau Yi Chau Artificial Islands (KYCAI) are two of the "possible solution spaces" to meet the medium to long term land requirements and to cater for sustainable development in Hong Kong.

The Chief Executive mentioned in the 2022 Policy Address the need to increase land reserve and regain control of land supply. The Northern Metropolis and the KYCAI are two major development projects that will expand the scope and capacity of Hong Kong's development, provide lands to meet the needs for housing, economic development and community facilities as well as to enhance Hong Kong's competitiveness. These two major development projects are expected to provide a total of about 4 000 ha of development land, of which 3 000 ha comes from the new development land of the Northern Metropolis, while the other 1 000 ha comes from the reclaimed land of Kau Yi Chau. Among which, about 1 400 ha of land of the Northern Metropolis and about 400 ha of land of the KYCAI have been included in the 10-year (2024-25 to 2033-34) supply forecast of developable land of 3 370 ha in the territory.



Conceptual Spatial Framework for "Hong Kong 2030+"

Policy Opportunities

National strategies including the 14th Five-Year Plan, the Guangdong-Hong Kong-Macao Greater Bay Area (GBA) development and the Belt and Road Initiative have injected continuous impetus to the growth of Hong Kong. The 14th Five-Year Plan has supported the development of the "eight centres" in Hong Kong, including international financial centre, international innovation and technology Centre, East-meets-West centre for international cultural exchange, international trade centre, international shipping centre, international aviation hub, centre for international legal and dispute resolution services in the Asia-Pacific Region as well as regional intellectual property trading centre. The GBA development clearly states the need to enhance the interconnectivity and integrated development among GBA cities and to develop a world-class city cluster. Meanwhile, the Belt and Road Initiative brings tremendous opportunities to our service industry, creating wider networks by fostering people-to-people bonds. Dovetailing with the above national strategies, the Northern Metropolis and the KYCAI will serve as dual engines driving Hong Kong's future development and high-quality collaborations with the GBA.

- International Financial Centre
- International Innovation and Technology Centre
- East-meets-West Centre for International Cultural Exchange
- International Trade Centre
- International Shipping Centre
- International Aviation Hub
- Centre for International Legal and Dispute Resolution Services in the Asia-Pacific Region
- Regional Intellectual Property Trading Centre

Development Positioning of Hong Kong's "Eight Centres"

Development Advantages

Located at the northern part of Hong Kong, the Northern Metropolis is close to Shenzhen's metropolitan core and innovation and technology (I&T) base with the strongest development momentum, and it also enjoys the locational advantage of covering seven boundary control points. The Northern Metropolis covers an area of 30 000 ha in the northern part of Hong Kong, representing about one-third of the total area of the territory. It encompasses existing new towns (Yuen Long, Tin Shui Wai, Fanling/Sheung Shui) as well as a number of New Development Areas (NDAs) (Kwu Tung North, Fanling North, Hung Shui Kiu/Ha Tsuen, Yuen Long South) that have been undergoing various stages of planning and construction. We hope to leverage the strengths of the whole area and to utilise the land resources which are yet to be fully developed.

The KYCAI will be strategically located in the middle of the Hong Kong Island, Kowloon and Lantau Island, within the expanded Harbour Metropolis. It is only around 4 km from Hong Kong Island West and around 15 km from the Hong Kong International Airport and Hong Kong-Zhuhai-Macao Bridge Hong Kong Boundary Crossing. The KYCAI will provide 1 000 ha of land to develop a new central district. Together, the two projects in the northern and western parts of the territory will strengthen Hong Kong's unique advantage of enjoying strong support of the Motherland while being closely connected to the world, and will integrate better into our country's development.

Strategic Positioning

The Northern Metropolis and the KYCAI will be two key engines driving the future development of Hong Kong. These two projects will be implemented in tandem to expand the development capacity of Hong Kong and establish a new industry pattern for the city's development of "South-North dual engine (finance - I&T)".

The Northern Metropolis will be developed into a "new international I&T city", integrating quality life, industries as well as culture and leisure. Adopting an "industry-driven and infrastructure-led" approach as its key planning axle, the Northern Metropolis will integrate deeply with the planning of Shenzhen and other GBA cities, and forge a major hub for Hong Kong to integrate into the overall development of our country. The Northern Metropolis will promote better home-job balance and green living, and allow the integration of development with conservation.

The KYCAI will be developed into a new central district with a view to increasing public and private housing supply, while at the same time further enhancing Hong Kong's economic competitiveness through the development of a third Central Business District (CBD3). The proposed strategic transport infrastructure for supporting the artificial islands will significantly enhance the connection between the Harbour Metropolis and the Northern Metropolis, reinforce Lantau's edge as "Double Gateway" to the world and other GBA cities, and further refine Hong Kong's overall transportation network. Situated not far from the existing urban area, the KYCAI can offer decanting spaces to support the chain flows arising from the redevelopment of old urban districts of Hong Kong Island and Kowloon.

Hung Shui Kiu/Ha Tsuen NDA and Tin Shui Wai New Town

Three Complementary CBDs

Planning Principles and Objectives

The Northern Metropolis Action Agenda published in October 2023 sets out the following specific development goals:

- Providing land and housing
- Industry-driven planning and a better home-job balance
- Promoting integration of the GBA
- Infrastructure-led, railways as backbone
- Developing a "Northern Metropolis University Town"
- Ecological conservation, urban-rural integration
- Developing diversified arts, culture, sports and youth facilities
- Establishing presence of government deparments to drive development

The development of the KYCAI will be based on the following three major planning objectives:

Prosperous and diverse

To enhance Hong Kong's international competitiveness and regional significance, prepare for long-term diversified economic development.

Green and liveable

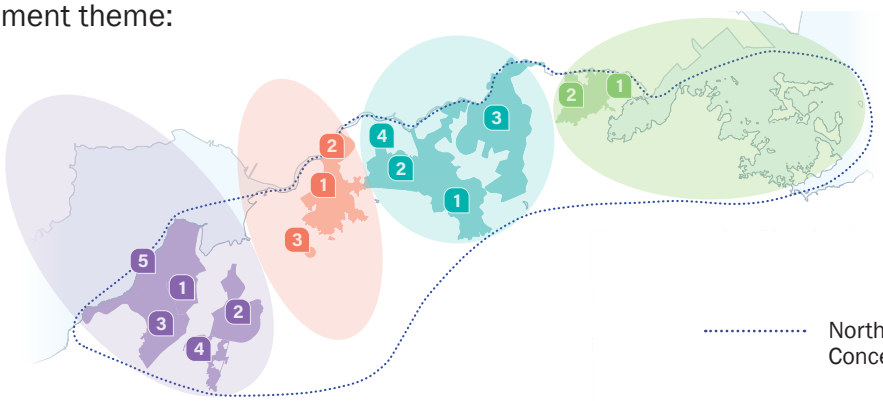
To create sustainable, accessible and people-oriented communities, adopt the planning concept of 15-minute neighbourhood and encourage residents to travel by healthy modes such as walking or cycling.

Forward-looking and innovative

To comprehensively implement a smart, green and resilient (SGR) city strategy, make the artificial islands an example of urban innovation embracing global and regional changes.

Planning Overview

The Northern Metropolis will be divided into four major zones, each with distinctive strategic positioning and development theme:



High-end Professional Services and Logistic Hub

Covering Hung Shui Kiu and the surrounding area, and connecting with the Qianhai Shenzhen-Hong Kong Modern Service Industry Co-operation Zone, the hub will provide financial and professional services, on top of capitalising on the locational advantages of the boundary control points (BCPs) for developing the modern logistics industry.

1. Tin Shui Wai
2. Yuen Long
3. Hung Shui Kiu/Ha Tsuen New Development Area
4. Yuen Long South New Development Area
5. Lau Fau Shan/Tsim Bei Tsui/Pak Nai

Innovation and Technology Zone

Covering San Tin Technopole including the Hong Kong-Shenzhen Innovation and Technology Park in the Loop, it will create synergy with the Shenzhen Innovation and Technology Zone and serve as a hub for innovation and technology development.

1. San Tin Technopole
2. Hong Kong-Shenzhen Innovation and Technology Park in the Loop
3. Ngau Tam Mei

Boundary Commerce and Industry Zone

Occupying the largest stretch of land, this zone enjoys the geographic advantages of the BCPs at Lo Wu, Man Kam To and Heung Yuen Wai. Apart from driving the development of industries such as advanced construction, green environment industries, health care, food technology and modern logistics, this zone will promote cross-boundary business services and entertainment spending, giving full play to its powerful function as a BCP commercial zone.

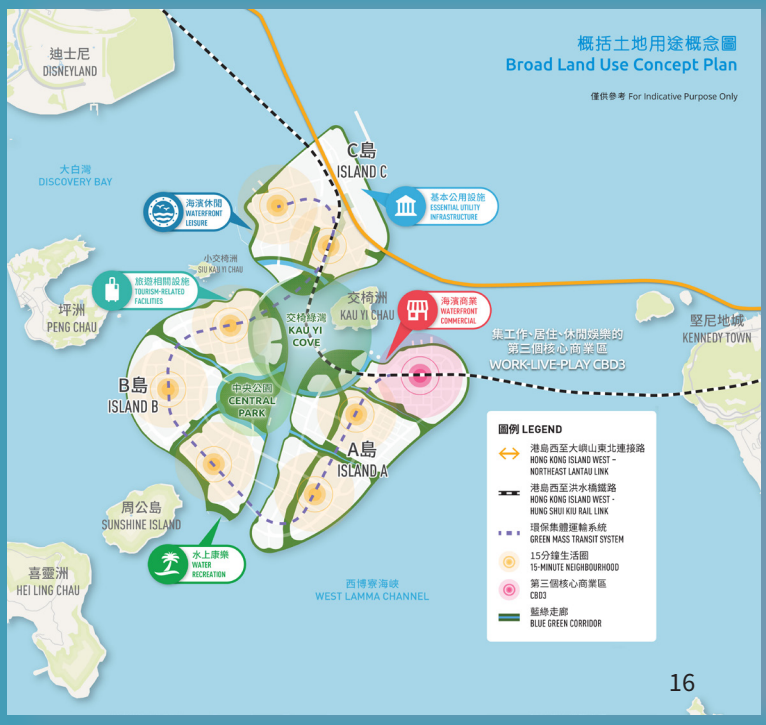
1. Fanling/Sheung Shui
2. Kwu Tung North/Fanling North New Development Area
3. New Territories North New Town and Lo Wu/Man Kam To
4. Ma Tso Lung

Blue and Green Recreation, Tourism and Conservation Circle

Comprising areas endowed with rich cultural heritage and natural resources, such as Robin's Nest, Sha Tau Kok and Yan Chau Tong, this circle will promote recreation and tourism development.

1. Sha Tau Kok
2. Robin's Nest

The KYCAI development will comprise the CBD3 of Hong Kong with an area of around 100 ha. It will enhance Hong Kong's position as an international financial centre to continue playing the role as an international trade centre and strengthen our edge in legal services. The CBD will provide about 4 million m² of commercial gross floor area. Innovative planning concepts will be adopted by using urban design and place-making approach will be adopted to create a quality "Work-Live-Play" environment for living and working. Besides, the planning concept of 15-minute neighbourhood will be adopted in the KYCAI to create sustainable, accessible, people-oriented and liveable communities.



Major Planning Parameters

Northern Metropolis

The Northern Metropolis generally covers two district administration areas including Yuen Long District and North District, with a total land area of about 30 000 ha that currently accommodates a population of about 980 000 and provides about 400 000 residential units and around 134 000 jobs. The Northern Metropolis is the major source of land supply for Hong Kong in the future, providing some 3 000 more ha of new development land. It is also an arsenal of future housing supply for Hong Kong, providing over 500 000 new residential flats. Apart from addressing housing needs, the Northern Metropolis development can also meet public aspirations for larger living space. In addition, the new development land within the Northern Metropolis will create around 500 000 new job opportunities, thus helping to reduce cross-regional commuting and promote a better home-job balance. Upon completion, the entire Northern Metropolis is expected to accommodate a population of around 2.5 million, around one-third of Hong Kong's current population.

Population

2 500 000

Additional Residential Flats

500 000

(Adopt the 10%-20% home space enhancement recommended under Hong Kong 2030+)

Additional Employment Opportunities

500 000

Kau Yi Chau Artificial Islands

For the KYCAI, we preliminarily propose that the artificial islands of 1 000 ha will comprise three islands and provide a total of about 190 000 to 210 000 flats with the capacity of accommodating a population of 500 000 to 550 000 and providing 270 000 employment opportunities (including about 200 000 in CBD). The proposed maximum domestic plot ratios are 6.5 and 7.5 for living communities and CBD respectively, while the proposed maximum non-domestic plot ratio for the artificial island is 15.

Population

500 000 to 550 000

Residential Flats

190 000 to 210 000

(Adopt the 10%-20% home space enhancement recommended under 'Hong Kong 2030+')

Employment Opportunities

270 000

(including about 200 000 in CBD)

Ratios of land for open space and land for community facilities to population

No less than 3.5 m^2 per person

(Recommendation of 'Hong Kong 2030+')

Maximum Domestic Plot Ratio

Living Communities 6.5

CBD 7.5

Maximum Non-domestic Plot Ratio

15

Planning Concepts

I Increasing Quality Living Space for a Liveable Life

The new communities in the Northern Metropolis and the KYCAI will adopt the planning concept of 15-minute neighbourhood. With comprehensive pedestrian and cycling networks and facility layout, residents can travel by healthy modes such as walking and cycling within 15 minutes from their homes to different facilities, e.g. transport interchange hub, multi-functional community facility complex, school, clinic, etc., thereby reducing mechanised trips and encouraging the community to lead a low-carbon life.

15-minute Neighbourhood Concept Plan

Taking Kwu Tung NDA as an example, major venues for leisure activities and public service facilities within the area will be located within 500m from the future Kwu Tung railway station and the public transport interchange. Public transport and various supporting facilities will be accessible to most of the future residents, which will help minimise vehicular traffic and carbon emission. According to the preliminary proposal, the seven liveable living communities of KYCAI are planned with 15-minute neighbourhood concept. Each community will be around 80-100 ha, and they will be connected by a green mass transit system and separated by blue-green corridors with green waterfront promenade along the shorelines. As for the planning of each community, a green mass transit station is planned at the centre, with the public transport stations, daily shopping and dining facilities, basic community facilities, open spaces, etc. reasonably distributed within the community. At the same time, these places will be connected by comprehensive pedestrian and cycling track networks, allowing residents to travel by healthy modes such as walking or cycling within 15 minutes from their homes to different destinations to obtain various necessities. Furthermore, land will be reserved in the Northern Metropolis and the KYCAI for a diversified development of industries, with a view to increasing the local employment rate within the community.

Rendered Illustration of Living Communities on the KYCAI

Rendered Illustration of San Tin Technopole

We will also utilise blue-green assets to develop livable communities. For example, on the KYCAI, we will make efficient use of the over 20 km long coastline, as well as the water channels of about 200 m wide between the three islands. The coastline is designed to increase waterfront open space, promote water sports, and provide diversified activity venues. To provide living space of better quality, we propose increasing provision of land for both open space and Government, Institution and Community uses in the Northern Metropolis and on the KYCAI to a ratio of no less than 3.5 m^2 per person.

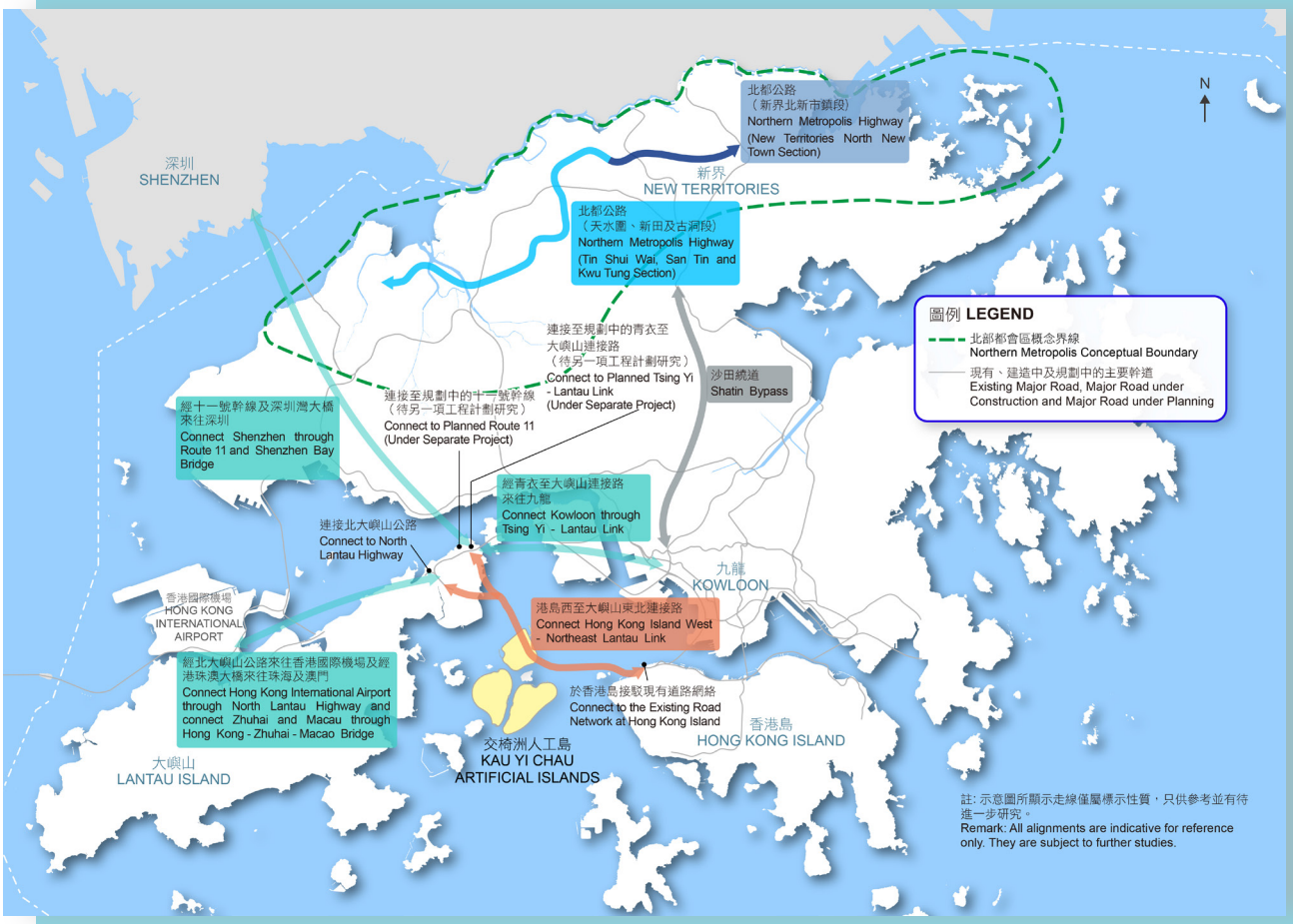
Rendered Illustration of Regional Park and Water Sports Facilities on the KYCAI

In respect of housing, we need to increase housing land supply in order to enhance living space and housing options as well as to provide decanting space to facilitate redevelopment for retrofitting the dense urban core. Meanwhile, land will be reserved for housing in the Northern Metropolis and the KYCAI based on the recommendation under the "Hong Kong 2030+" which assumes that the average flat size of public and private housing units to be increased by a range of 10% to 20%.

II Driving Cross-boundary Movement by Adopting Infrastructure-led and Capacity Creating Principles

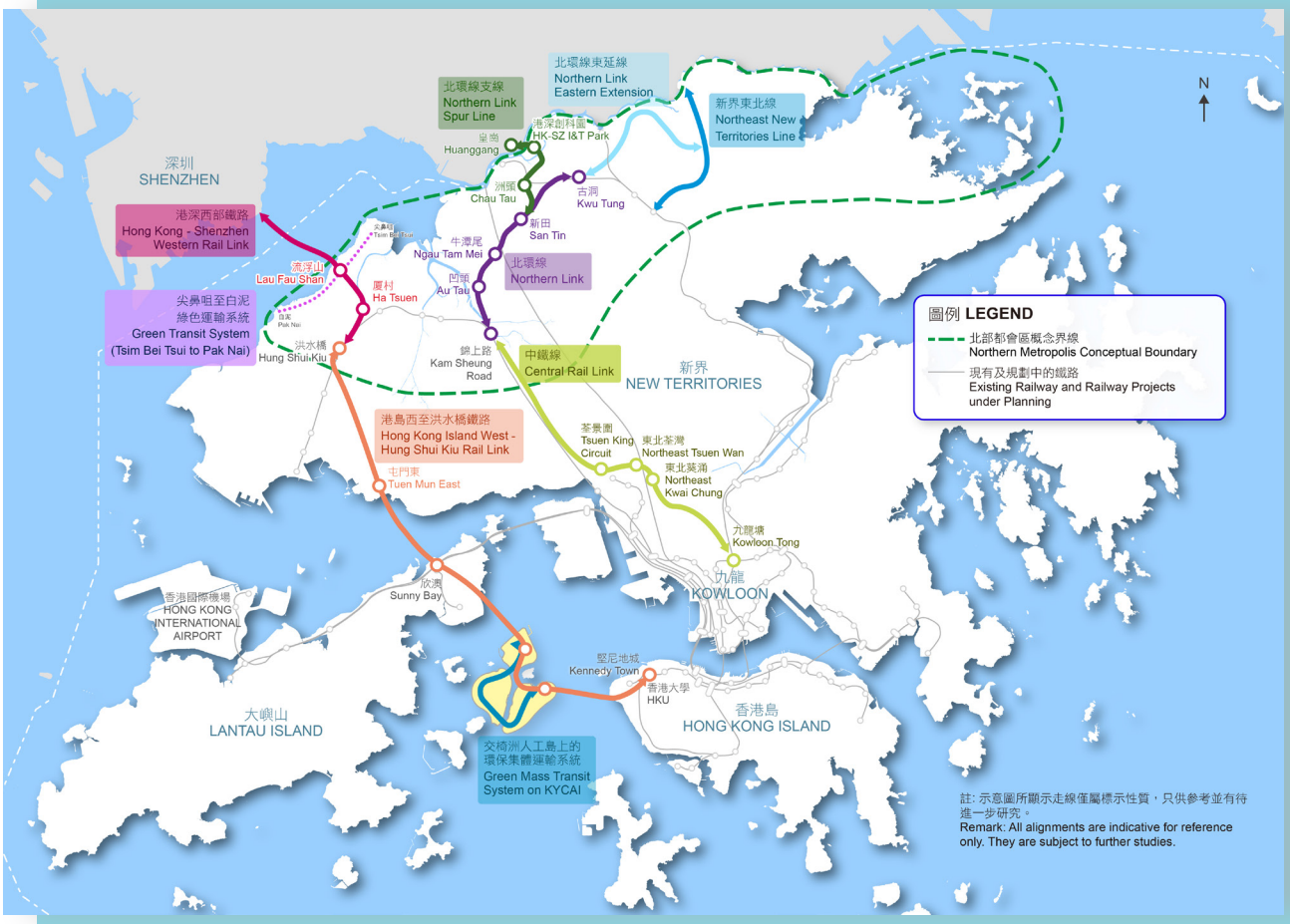
Transport connection is a prerequisite for social development. In planning the two projects, the principle of "infrastructure-led" has been adopted for the creation of a transportation network connecting the Northern Metropolis and Harbour Metropolis to drive land and economic developments by provision of transport infrastructure.

Two new cross-boundary railway lines are proposed in the Northern Metropolis to enhance the cross-boundary transport infrastructure between Hong Kong and Shenzhen. The railway-driven development aims to expand land resources for housing and economic developments. The railway projects include the Hong Kong-Shenzhen Western Railway linking up Hung Shui Kiu and Qianhai, the Northern Link Spur Line connecting the new Huanggang Port and the extension of the East Rail Line to Luohu, Shenzhen. Also, it is proposed to extend the Northern Link eastwards to Lo Wu/Man Kam To and various development nodes in New Territories North New Town to strengthen the internal connectivity within the Northern Metropolis. We also hope that the above transport infrastructure will further enhance the flow of people, goods, capital and information between Hong Kong and different cities in the Greater Bay Area, Asia and around the world. Moreover, upgrading the land transport capacity will facilitate the flow of people and goods across the border.

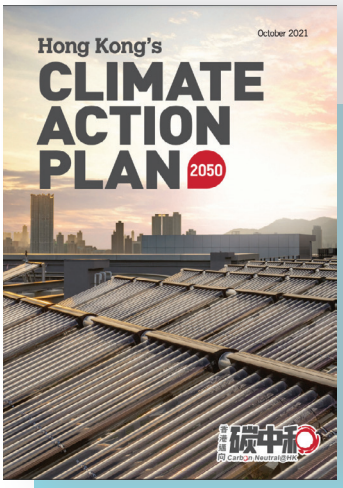


Major trunk roads projects recommended in relevant studies

The KYCAI provides a good opportunity for us to plan a network of strategic transport infrastructure (i.e. The Hong Kong Island West – Northeast Lantau Link and Hong Kong Island West – Hung Shui Kiu (HSK) Rail Link) with a view to developing key routes and opening up Hong Kong's strategic transportation network. The Hong Kong Island West – Northeast Lantau Link (HKIW– NEL Link), which is about 13 km long in total, will be the first major trunk road connecting Hong Kong Island and the Northwest New Territories without passing Kowloon. The southern section of the HKIW – NEL Link will be the fourth road harbour crossing connecting Kennedy Town on HKIW. As for the HKIW – HSK Rail Link, its total length is about 30 km long. We propose extending the railway northwards to Hung Shui Kiu for connection with the planned Hong Kong – Shenzhen Western Rail Link so as to strengthen the connections among the KYCAI, the Northern Metropolis and the Hong Kong-Shenzhen Western Rail Link, thus effectively enhancing the strategic position of the Northern Metropolis and the KYCAI. To cope with the planning needs and transport demand at the KYCAI, our preliminary proposal is to link up the three artificial islands by a green mass transit system with land reserved at suitable location(s) on the islands to facilitate passengers' interchange with the HKIW – HSK Rail Link.



Railway projects under planning



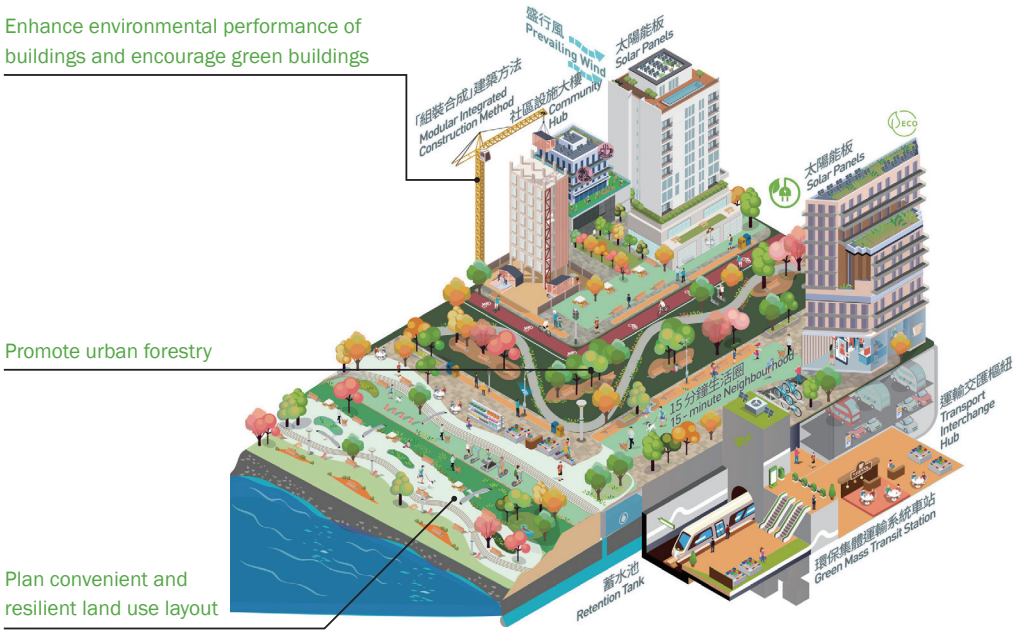
Hong Kong's Climate Action Plan 2050

III Moving Towards Carbon Neutrality by Fostering SGR Communities

The Northern Metropolis and the KYCAI are envisioned to be exemplars of urban innovations in realising the vision of becoming SGR cities in the 21st century and facilitating Hong Kong to achieve the carbon neutrality target by 2050. When implementing these two projects, we will adopt SGR city strategy to formulate measures in three aspects, including planning and urban design, infrastructure system and smart mobility, with a view to shaping the Northern Metropolis and the KYCAI into sustainable communities.

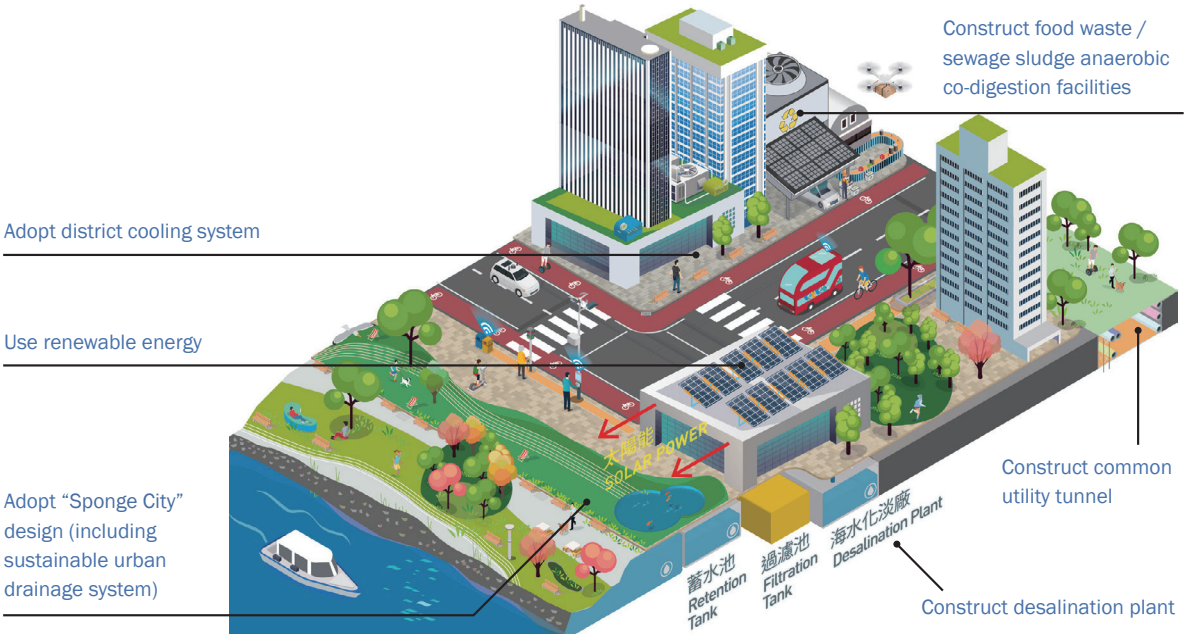
1. Sustainable Planning and Urban Design

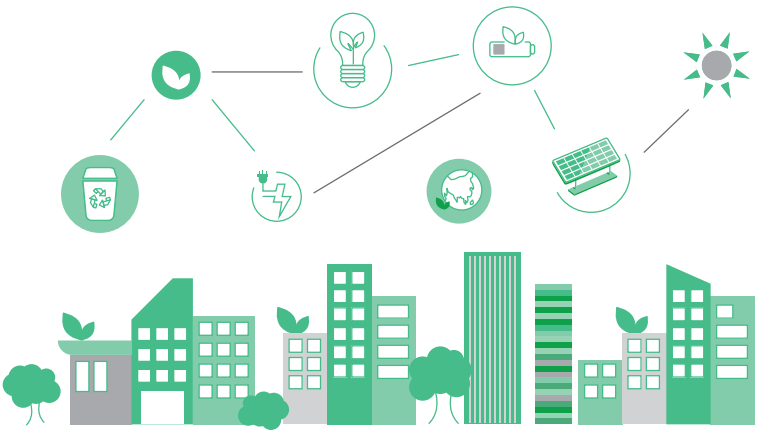
Firstly, regarding planning and urban design, the 15-minute neighbourhood concept will be adopted, along with other measures, which include building orientations according to prevailing wind directions, resilient coastal design strategy adapting to climate change, optimal use of underground space and "single site, multiple use" principle for enhancing development capacity and green buildings. Besides, we will adopt the Modular Integrated Construction method and opt for low-carbon building materials as far as possible to reduce carbon emissions during construction. At the same time, a urban forestry strategy will be devised to enhance biodiversity and carbon sequestration.



2. Integrated SGR Infrastructure System

With regard to infrastructure system, apart from district cooling system, we will also increase the proportion of greening/renewable energy usage as far as possible. In addition, we will incorporate the concept of "Sponge City"[1] and construct advanced food waste/sewage sludge anaerobic co-digestion facilities, common utility tunnels, reclaimed water treatment facilities, etc., in the Northern Metropolis and the KYCAI, so as to minimise the demand for resources. We will also reserve land for building waste recycling facilities and various facilities for supporting the development of a smart city.

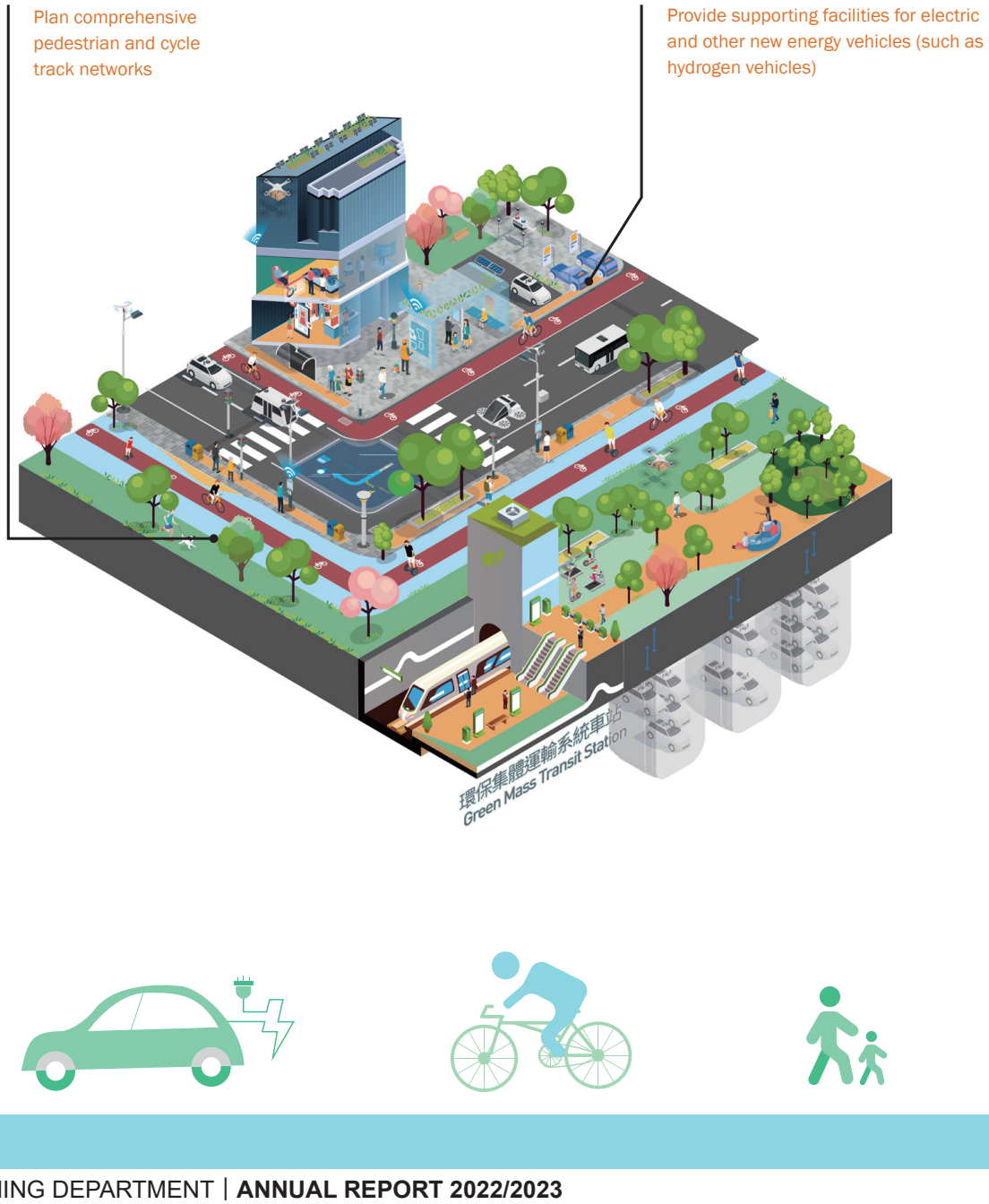




[1] "Sponge City" means that a city can function like a sponge that has great resilience. The stormwater could be absorbed, stored and cleaned during rainy days, and could be released and utilised as needed to enhance the ecological function and reduce flooding in the city.

3. Smart Green Mobility

We will implement smart green mobility initiatives in the Northern Metropolis and the KYCAI - using green transport with railway as the backbone, providing comprehensive pedestrian and cycle track networks, and designating car-free/car-moderated and pedestrian priority zones. It is anticipated that by allowing residents to travel more by healthy modes such as walking or cycling, the number of motorised trips could be reduced, hence encouraging a low-carbon lifestyle. Apart from that, we will establish green public transport nodes, charging facilities for electric vehicles, green fuel stations and supporting facilities for other new energy vehicles (e.g. hydrogen vehicles), etc. We will also reserve land to support different forms of green transport and related facilities.

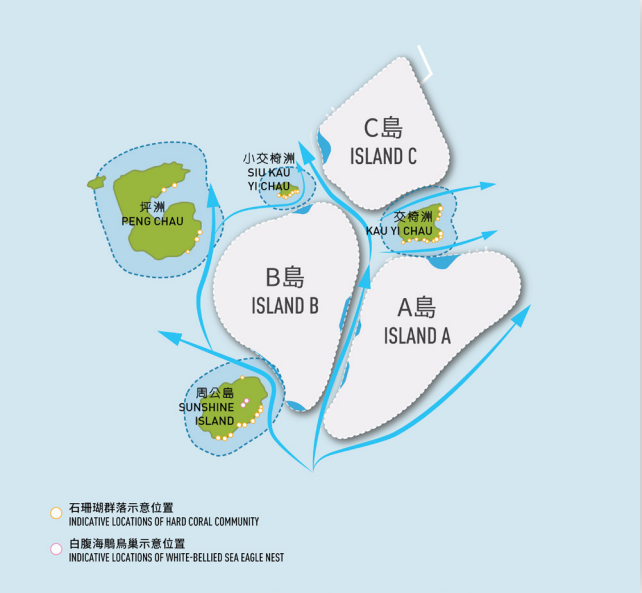


IV Ecological Conservation

Natural environment and biodiversity are crucial to our health and well-being. In addition to creating development capacity, we also need to increase environmental capacity in order to achieve the strategic planning direction of sustainable growth and "co-existence of development and conservation".

While creating development capacity for economic development in the Northern Metropolis, areas with high ecological significance will also be proactively restored and conserved. The Government is now conducting a feasibility on the establishment of a wetland conservation park system in the Northern Metropolis to enhance the environmental capacity there.

The "three-island" configuration of the KYCAI have taken into consideration the surrounding environment, keeping the artificial islands away from coral communities with ecological value along the coastlines of the surrounding islands. The design of the Y-shape channel between the islands can effectively cope with the impact of reclamation on water quality and ecology by maintaining sufficient water flow velocity in the waters nearby. Besides, a comprehensive blue-green network will be planned on the artificial islands. While a variety of recreational and sports opportunities will be provided for people living and working on the islands, a diverse range of flora and fauna habitats will also be created to enhance biodiversity. The network comprises the blue-green corridors, over 20 km of accessible waterfront promenades, eco-shorelines, and various open spaces. In addition, ecological enhancement measures are proposed within the Y-shape channel to further promote biodiversity, such as deploying artificial reefs at seabed and building eco-shoreline in the intertidal zone.



Key Considerations in the Design of Artificial Islands – Water flow, Water Quality and Ecology

Rendered Illustration of Water Channel between Artificial Islands

Rendered Illustration of Blue-green Corridor between Living Communities on the KYCAI

Rendered Illustration of San Tin Technopole

Way Forward

We will press ahead with the development of the Northern Metropolis. The respective planning and engineering studies for areas within the Northern Metropolis have been officially launched. Among which, the investigation study of San Tin Technopole and the planning and engineering study of New Territories North New Town and Man Kam To were commenced in October 2021, while the land use review for Lau Fau Shan, Tsim Bei Tsui and Pak Nai areas – Feasibility Study as well as the feasibility study for the development of the Ma Tso Lung area were commenced in the 3rd and 4th quarters of 2022 respectively. We are striving to make recommendations on land use and development schemes for all projects by 2024.

Rendered Illustration of San Tin Technopole

The Study on the Artificial Islands in the Central Waters for the KYCAI is currently on-going and is expected to be completed by the end of 2024. The preliminary proposals on reclamation limits, land uses, transport infrastructure and financing options for the KYCAI were released in December 2022 for collection of public views, and the Environmental Impact Assessment (EIA) report on reclamation works will be submitted by the end of 2023 for commencing the EIA procedures. We target to commence reclamation works by the end of 2025, with the first batch of residential development completed for population intake in 2033.

Rendered Illustration of KYCAI

Reimagining Public Spaces in Hong Kong

Public Spaces

Public spaces encompass all indoor and outdoor spaces that are accessible and enjoyable by all, including parks, playgrounds, sitting-out areas, podiums and roof gardens. Open space is an essential component of a public space network in providing quality living environment for a city.

"Hong Kong 2030+: Towards a Planning Vision and Strategy Transcending 2030" ("Hong Kong 2030+") sets out the territorial spatial development strategy. One of the strategic objectives is to enhance the liveability of Hong Kong as a compact high-density city under which improvement in terms of quality and quantity of open space is proposed. With a view to meeting the public aspiration for more open space, "Hong Kong 2030+" had proposed increasing the open space provision standard to not less than 3.5 m^2 per person.

To achieve the above planning vision, the Department commissioned a consultancy study titled "Reimagining Public Spaces in Hong Kong – Feasibility Study" to review the key issues relating to the planning of open space in Hong Kong, including understanding the trends and public aspirations pertinent to the development of open space as well as reviewing the definition, classification, planning standards, calculation methodology, and design guidelines of open space, etc.

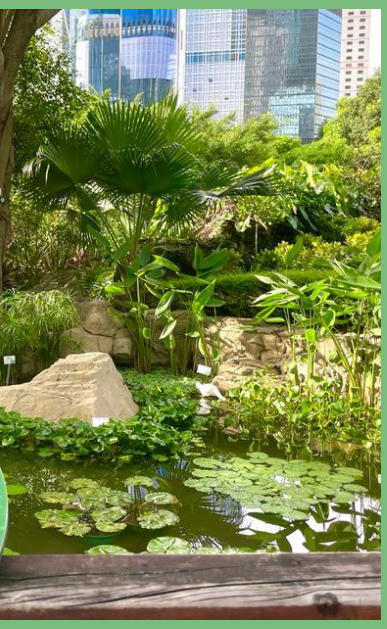






Public Aspirations on Open Spaces

Through conducting questionnaire surveys, stakeholders' interviews and field surveys, the Study Team found that the respondents were generally satisfied with the overall provision, design, quality and environment of the open space in Hong Kong. Apart from supporting and welcoming the provision of more open space for public enjoyment, the respondents also emphasised the quality of open space. They considered that smaller open spaces within walking distance from residences played a vital role in their daily life routine, while larger open spaces with higher scenic values and more greenery were the most popular. The respondents also pointed out that the quality of open space could be further enhanced with provision of more shades, trees and seatings. Some respondents were of the view that the current design and management of open space restricted how it could be used. They would like to see more flexibility in the design and use of the space, through which an inclusive environment adapting to the needs of different age groups and abilities would be built, thus creating a sense of belonging in the community.



Trends of Open Space Planning and Design

According to the literature review conducted by the Study Team and the discussions held with international experts, many international cities make good use of under-utilised or obsolete urban spaces to develop transient recreational areas and create new open spaces by transforming footpaths, road improvements and innovative ideas[2]. In addition, there is a tendency for the design of private development projects to integrate indoor and outdoor spaces in a bid to enrich user experience. Other development trends include putting focus on more flexible, innovative, adaptive and inclusive designs to promote usage by people of different ability and age; and encouraging public participation in the design and management of open space to enhance their sense of collective ownership and belonging. These design trends of open space demonstrate different means of delivery and operating mechanisms. Inter-departmental collaboration and partnership with the private sector could open up more new opportunities for the provision of quality open space.

[2] Retrofitting spaces actively by quick-wins such as Tactical Urbanism and Co-sharing of Time and Space.

Study Recommendations

Redefining Open Space

According to Chapter 4 of the prevailing Hong Kong Planning Standards and Guidelines (HKPSG), open space provides resting space and recreation facilities for the enjoyment of the general public.

With a view to more comprehensively reimagining the concept of open space and acknowledging the wider spectrum of the existing open space, it is proposed that the definition of open space should be reviewed to flexibly include the widely-used outdoor public open space which is not located within "Open Space" zone. The proposed definition of open space "generally refers to accessible outdoor spaces within existing/proposed built-up area with recreation and amenity value for users' enjoyment". Under the new definition, the meaning of open space will be broadened to include open-air open space in the facilities provided and managed by the Government, public institutions or private sector for enjoyment of the general public and intended users.

Conceptual Diagram of an Open Space Network

Standard of Provision

To implement the strategic direction of enhancing liveability of the city as advocated in "Hong Kong 2030+" and respond to the public aspirations, the Study proposed that the planning standard for provision of open space could be increased from the existing minimum of 20 ha per 100 000 persons (i.e. 2 m^2 per person) to no less than 35 ha per 100 000 persons (i.e. 3.5 m^2 per person).

Land ratio for open space

2 m^2 per person → **3.5 m^2 per person**

For existing built-up areas, although it might not be possible to provide more open space in a short period of time, it is expected that the situation would be improved gradually through comprehensive urban renewal projects or redevelopment projects of public/private sectors etc. The Study also proactively encouraged provision of ancillary open space within private developments.

Current examples include the public open space at a commercial project in Kowloon Bay (left) and the public open space at an integrated development project in Kwun Tong (right).

Locational Guidelines

Open space must be planned as a land use in its own right, and should not be the remainder when other land uses have been provided. The following locational guidelines are recommended for planning of public open space:

1 Accessibility

Local open space should preferably be located within 400m from its nearby residences or workplaces (equivalent to about 10-minute walking distance). District and regional open spaces should be easily accessed along street frontages, and preferably within 400m from public transport facilities (including railway stations and public transport interchanges).

2 Site Compatibility and Synergy

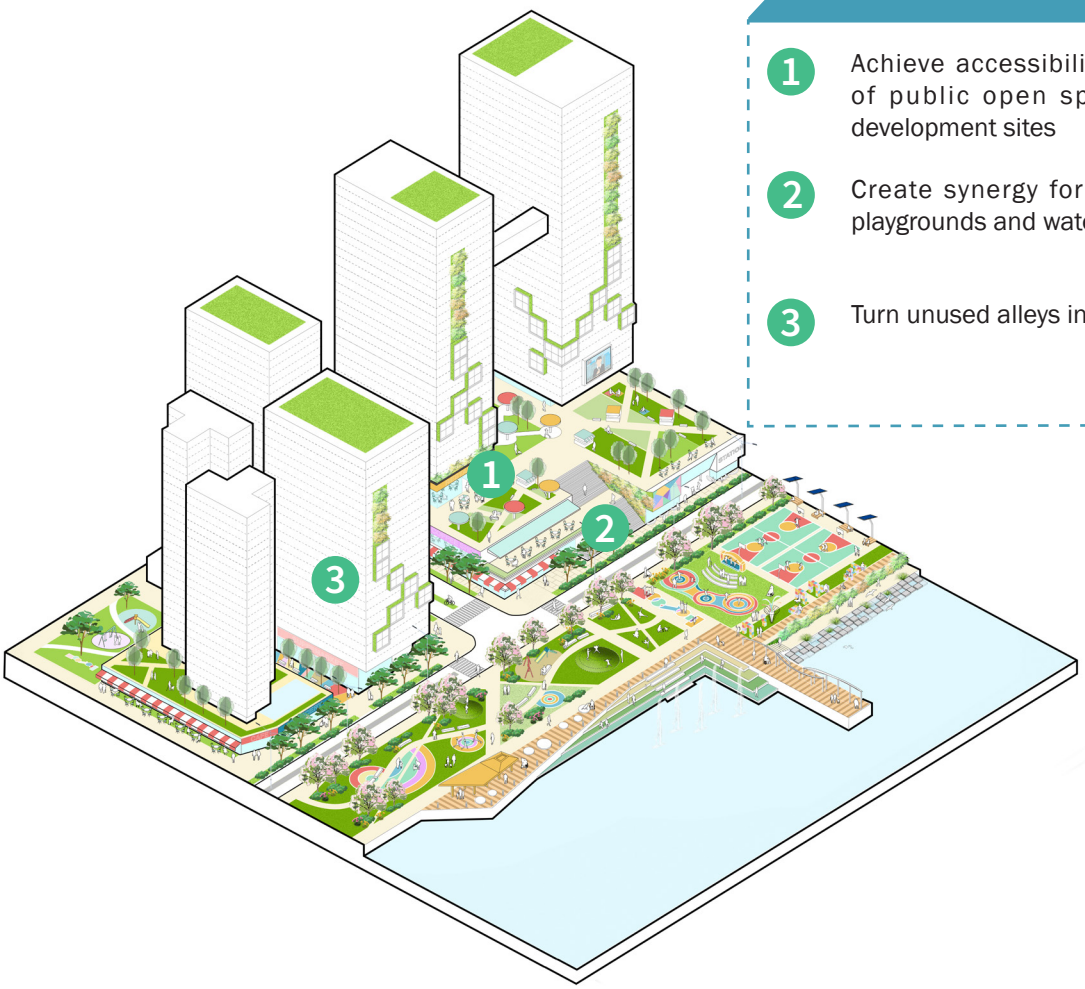
Open spaces must be compatible with adjoining land uses and their surrounding site context. For some open space which may attract a large patronage and facilities therein may create potential impacts on nearby residents, careful positioning/ design should be adopted for site selection to minimise the impacts on nearby residents.

3 Optimisation of Unused Public Space

Beautification and facelifting of unused public space as designated open space should be promoted as far as possible.

Examples:

1. Achieve accessibility through provision of public open space within private development sites
2. Create synergy for sports venues with playgrounds and waterfront promenades
3. Turn unused alleys into open space



Design Guidelines

Furthermore, the Study has recommended six major design guidelines to create high-quality public space for people to walk, stay and enjoy:

Place-making and Functions

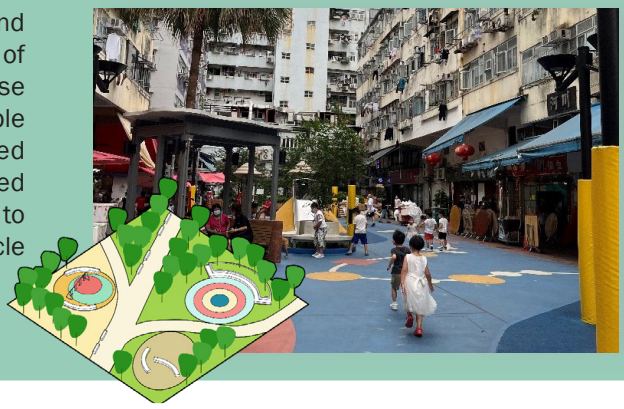
Open space should consider site context, local identities, as well as users and usage pattern, and seek opportunities to augment overall place-making impact with holistic consideration of the uses and design of its adjoining spaces to promote synergy and vibrancy. Its design should flexibly provide active and passive functions within an open space and encourage vibrancy at the area fronting the main street with visual connections to pedestrians at street level. Areas for public recreation or social activities could also be created as open spaces on a temporary or time-sharing basis.

Pocket open space at Queen's Road East, Wan Chai

Play, Flexible and Active Design

Open space design should cater for more flexible and adaptive uses to create more possibilities. A range of dynamic play options with provision of multi-purpose and spontaneous play space for shared use by people of different ages and abilities should be considered in the design. Active design should also be adopted to encourage physical activities, which is conducive to promoting health and well-being (e.g. provision of cycle path, stairs and ramps, where appropriate).

Yi Pei Square Playground, Tsuen Wan



All-inclusive and Inter-generational Design

The needs and activities for people of different ages, ethnic groups and abilities should be considered in designing the space and types of facilities within an open space to foster a sense of community. Co-sharing of open space among different users should be encouraged where appropriate.

Tuen Mun Park

Safety and Comfort

Adequate lighting, clear demarcation and barrier-free access routes, universal design, and adequate protective devices should be provided to enhance safety. Adequate shading, greening and water features, seating, and suitable choice of colours, materials and design of facilities should also be provided to enhance comfort.

Lam Fook Street Sitting-out Area, Kowloon Bay

Accessibility and Permeability

The open space should promote seamless connection with the adjoining footpaths/destinations. Fence-free design for open space and promenade should be considered as far as practicable to promote visual permeability from outside. These could enhance accessibility, walkability, interactions and vibrancy. Besides, physical permeability within the site can be achieved through proper design of a walking route which is connected, safe, enjoyable and legible. Sense of openness can also promote air and natural light penetration.

Hong Kong Velodrome Park, Tseung Kwan O

Greening, Smart, Biophilic and Resilient Design

Sufficient greening, in particular tree planting and activity lawns, should be provided. To embrace sustainability and adapt to climate change, it is encouraged to deploy smart, biophilic and resilient initiatives in the design process, such as recreational ground for flood relief, as well as provision of retention ponds and rain gardens.

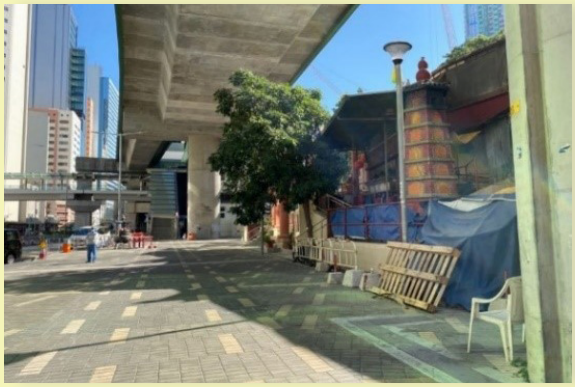
Kai Tak River with Drainage Capacity

Pilot Cases

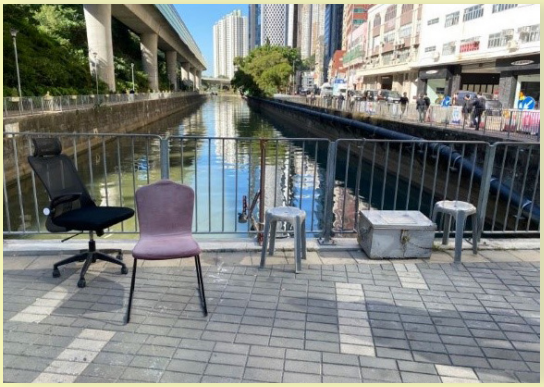
The Study has identified a few potential public spaces and proposed conceptual designs to illustrate the application of the design guidelines.

1 Public Space in Wong Chuk Hang

Wong Chuk Hang has been transformed into a business area with large-scale residential developments to be completed. Taking into account the demand for open spaces of the additional residential and employment population and the advantages from the revitalisation of Staunton Creek Nullah, the Study has identified the public space adjoining Tai Wong Ye Temple near MTR Wong Chuk Hang Station with potential for beautification.



The pilot scheme area is adjacent to the Tai Wong Ye Temple with natural shading provided by a viaduct.



Spontaneous placement of chairs by the locals to be public seating.

To showcase the design principles such as place making, flexible design, comfort, accessibility and permeability, biophilia and resilience, the Study Team proposed conceptual designs such as installing featured railing, providing flexible “street furniture” and offering more seats for visitors. The design concepts of the Study Team have been gradually realised through the close collaboration with the Invigorating Island South Office of the Development Bureau and other works departments.

The design theme of a Chinese dragon for viaduct column is in line with the ambience of the Tai Wong Ye Temple.

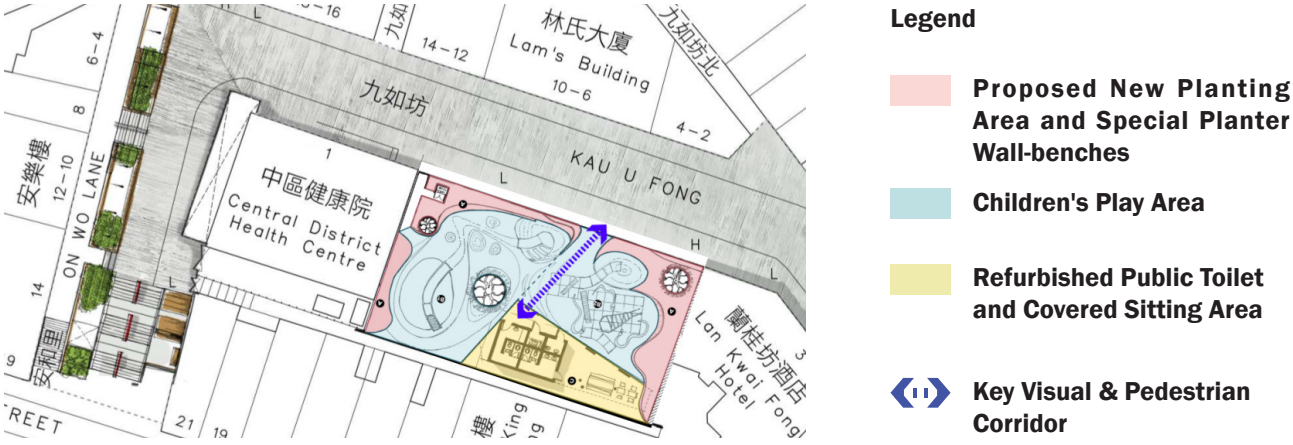
Benches are provided for visitors to rest near the water body to be revitalised.

II Kau U Fong Children's Playground

The Kau U Fong Children's Playground and the open space in Kau U Fong and On Wo Lane, together with nearby major activity nodes such as the PMQ, Graham Market, the public space at Grand Millennium Plaza and Pak Tsz Lane Park etc., form a crucial open space network in Central and Sheung Wan. Echoing the strong "Old Meets New" ambience, the revamped children's playground is proposed to become a vibrant "Urban Playroom". Key design principles are to incorporate elements of place-making responsive to local context, adopt all-inclusive and inter-generation design, and employ adaptive design for flexible and safe uses to address the recommendations of the Study.

The design objective of the playground is to create a pleasant and appealing open space where local residents and other pedestrians could play, rest, gather, and stay. The Study Team has strategically made use of zoning, colours and materials to enhance attraction while also taking user's safety into account. The fencing in the playground and a majority of the street interface are proposed to be replaced by planters of varying heights, together with a diverse palette of shrub plantings, in order to enhance visual quality and permeability, and to create a green backdrop for seating along the playground and the southern footpath of Kau U Fong.

Architectural Services Department will adopt this conceptual design in the detailed design stage as appropriate.



Conceptual Design Plan of Kau U Fong/On Wo Lane and Kau U Fong Children's Playground Pilot Cases

Existing Condition of Kau U Fong Children's Playground

Illustrative Reference for the Initial Design of the Children's Play Area

III Kau U Fong/On Wo Lane

Another pilot case covers Kau U Fong and the staircase connecting On Wo Lane and Gough Street.

The vision of the pilot case is to create an area for social interaction along the staircase and the shopfronts abutting On Wo Lane. Featured railings that are specially designed with wider handles and "lean friendly" profile are proposed to be installed along the staircase for resting and gathering. Timber decks can be installed along On Wo Lane for placing pot plants to increase overall greening. Newly added timber seating decks and louvre screens can be expanded along the edge of On Wo Lane to create better pedestrian environment on both sides of the lane and provide new social gathering points. The existing lamp posts and railings at the footpath are proposed to be replaced by ones with a retro design, and the bollards at the bottom of the staircase are also proposed to be removed to enhance the recreation and gathering space.

The pilot case will be implemented with the assistance of the Home Affairs Department and other works departments.

Photo (1)

Photo (2)

The proposed design was formulated upon the site visits and collaboration with relevant Government departments.

Photo (1) and Photo (2): Existing Condition and Conceptual Design of On Wo Lane Pilot Scheme

Way Forward

The Study is closely related to the visions of the “Hong Kong 2030+”. The recommendations put forward in the Study will provide a basis for future revision of the Open Space section in Chapter 4 of the HKPSG. We anticipate the findings of the Study would provide guidance to relevant government departments and the private sector and facilitate their continued collaboration to create a more liveable environment for Hong Kong.


stop

Envisioning Beyond Legacy Exhibition at the City Gallery

Background

To celebrate the 25th anniversary of the return of Hong Kong's sovereignty to China, the Development Bureau and the Department jointly held a special exhibition, themed "Envisioning Beyond Legacy", at the City Gallery. The exhibition opened in early July 2022 and lasted for around six months. It was a review of Hong Kong's achievements in town planning and infrastructure developments in the past 25 years, whilst envisioning the future development and promoting the vision for Hong Kong to become a liveable, competitive and sustainable Asia's World City.

繼往創未來 ENVISIONING BEYOND LEGACY

A top view of the outdoor exhibition showing a figure of "25", which denotes the 25th anniversary of the establishment of the Hong Kong Special Administrative Region.

City Gallery and "Envisioning Beyond Legacy" exhibition banner

The exhibition aimed to strengthen public understanding of Hong Kong's town planning and infrastructure developments, and spark public thinking and exchanges on our future developments. The event also served as a conduit for showcasing Hong Kong's unique advantages of having the strong support of the Motherland while engaging with the world. Not only did the exhibition tell the good stories of Hong Kong from the planning and infrastructure development perspectives, it also brought out a message that upon the foundation of our past achievements, that with confidence and aspiration, as well as our unrelenting efforts in town planning and infrastructure development, Hong Kong could look forward to a bright and beautiful future.

Review and Outlook

The "Review and Outlook" zone on the ground floor of the gallery featured a 2-minute short video simulating a time tunnel which would show to visitors a kaleidoscope of major events in Hong Kong since 1997 to date. The 270-degree video show with original thematic music created an atmosphere which turned memories into a forward momentum envisioning that with confidence and capitalising on the advantages of Hong Kong and the opportunities for integrating into the overall development of the country, Hong Kong could turn a new chapter of vision and hope.

Review and Outlook zone

The Application of Planning Principles and Innovative Ideas

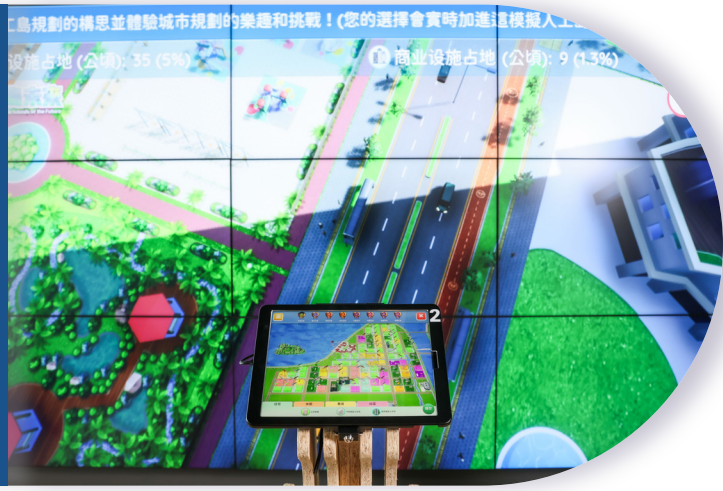
The exhibition was designed to give visitors an interactive, immersive and educational experience through a variety of innovative, high-tech and user-friendly exhibits. In the "Building a New Era for Hong Kong" zone in the multi-purpose hall on the 3rd floor, the exhibits presented to visitors the three development directions of Hong Kong for meeting our present and future social, environmental and economic needs and aspirations. These three directions were enhancing liveability, strengthening economic competitiveness for embracing economic opportunities and challenges, and creating capacity for sustainable growth. The exhibits also introduced the conceptual spatial framework of the Two Metropolises of Hong Kong which put forward the development of the Northern Metropolis as a metropolitan area ideal for living, working and travelling with innovation and technology industries as its economic engine, and the development of the third Central Business District in the Harbour Metropolis.

Immersive and interactive experience through Hong Kong's first-ever large-scale L-shaped interactive LED device

Through exhibits imbued with a variety of interactive features, the planning concepts and development proposals mentioned above became more easily comprehensible. Among these exhibits, the most spectacular one was Hong Kong's first-ever large-scale L-shaped interactive digital map. Standing on the map, visitors could have an immersive experience of exploring Hong Kong's future transport network and the geographical locations of the "Development Highlights". When visitors stepped on the trigger point of a "Development Highlight" on the LED interactive map on the floor, the relevant introduction video would be displayed on the LED wall.

An exhibit equipped with motion tracking sensors. When visitors stepped on the trigger point of a "Development Highlight" on the LED interactive map on the floor, the relevant presentation video would be displayed on the LED wall.

The planning principles of the Kau Yi Chau Artificial Islands proposal, such as the 15-minute neighbourhood and eco-shoreline, were presented to visitors together with an interactive town planning game which facilitates an understanding of the layout planning of the artificial islands and the considerations involved. The game also worked as an effective platform for collecting public opinions on the land uses of the future artificial islands in a smart and interactive manner.



"Building the Islands of the Future", an interactive town planning game

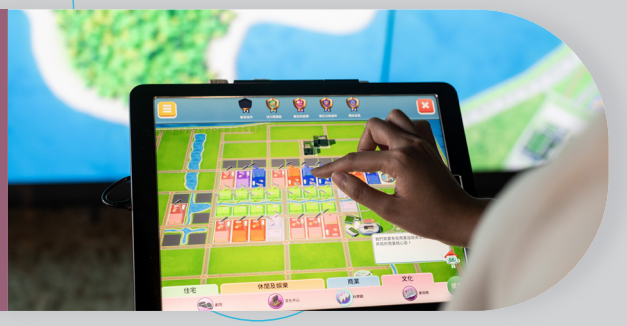
A Collective Effort

The exhibition had counted on the participation of more than 20 government bureaux/ departments and organisations, and their contribution of information on various projects, which added to the diversity and comprehensiveness of the exhibition.

The LED interactive map also made use of orthophotos from the Lands Department and information on existing and future transport networks provided by relevant departments. Visitors standing on the platform could have a complete overview of such images and information.

The interactive screens centering on the theme of "Three Development Directions" showcased 40-plus projects covering people's livelihood, transport and infrastructure. It facilitated public recognition of the efforts made by governemtn bureaux/ departments and organisations.

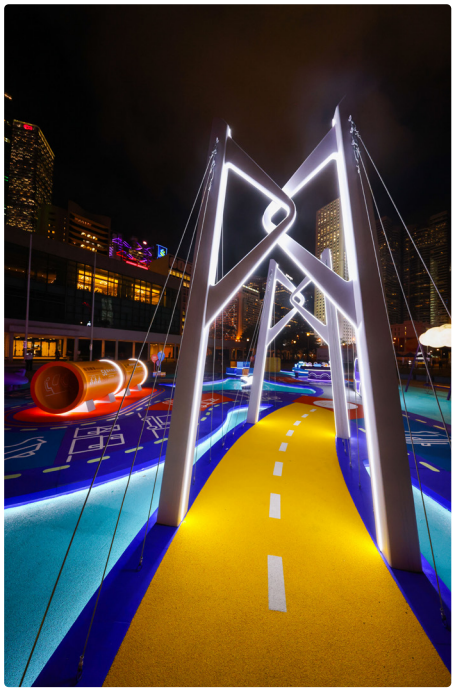
The "Building the Islands of the Future" was an interactive town planning game jointly developed with the Civil Engineering and Development Department. It gave visitors an understanding of the layout planning of the Kau Yi Chau Artificial Islands and the considerations involved.



Outdoor Exhibition

Besides the indoor exhibition zones, we also set up in the Edinburgh Place adjacent to the City Gallery an outdoor exhibition zone called "Gateway to Future". Adopting the curation concept of positioning Hong Kong as a "gateway", this zone took the form of an enormous chessboard with giant props and augmented reality games that presented fun facts about sea, land and air infrastructures. The zone attracted a large number of visitors who would learn about Hong Kong's achievements in the developments of transport infrastructure as well as the advantages of Hong Kong's high connectivity with the Greater Bay Area and the world.

"Gateway to Future" outdoor exhibition zone



Giant Props and Installations

Augmented reality games

Public Engagement for All

We embraced proactively the principle of inclusiveness in the exhibition for facilitating participation of physically-challenged visitors. Having taken the initiative to consult stakeholders before designing the special devices for our exhibits, we put in place tactile icons and texts in braille for the visually impaired, as well as barrier-free facilities for wheelchair users.

We welcomed individual visitors and also endeavoured to enhance public engagement through various channels, such as organising guided tours for District Councillors, professional organisations, schools etc., and a wide array of activities and workshops for members of the public.

Tactile icons and texts in braille as well as voice guidance designed for the visually impaired; and stair climber facilities installed for wheelchair users.

Guided Tours

District Councils

Community Organisations

Professional/ Official Organisations

Activities and Workshops

Harbourfront Sketching Workshops

Light Painting Workshops

Heritage and Culture Walking Tour @ Central

This exhibition showcased the future planning of Hong Kong with innovative, smart, inclusive and sustainable exhibits. The general public were invited to the exhibition through various channels, and their engagement facilitated a knowledge exchange on planning topics between the planning professionals and people from all walks of life. The exhibition recorded a total visitation of 264 000, with extensive media coverage of about 600 local and overseas news articles and up to 1.3 million impressions and 174 000 interactions on social media platforms. These figures spoke for themselves that the exhibition attracted widespread attention both locally and from overseas and thereby enhanced Hong Kong's international image.

Innovative and interesting exhibits appealed to the public

Comments on the exhibition from across the community were positive, and its innovative design concepts were well recognised as demonstrated by the international awards received.

Hong Kong & Bay Area Design Awards 2022 – Gold Prize and Silver Prize

A'Design Award 2022 – Gold Prize and Silver Prize

THE HONG KONG INSTITUTE OF PLANNERS AWARDS 香港規劃師學會 周年大獎 2022

The Hong Kong Institute of Planners Awards 2022 – Honourable Mention for Promotion of Planning in Hong Kong

Golden Pin Design Award 2023

MUSE Design Awards 2022 – Two Gold Prizes

Shanghai Design Awards 2023 – Gold Prize and Silver Prize and GOV Design Awards 2023 – Two Silver Prizes

iF Design Award 2023 – Two Prizes

FX International Interior Design Awards 2022 – Finalist