



交椅洲人工島 KAU YI CHAU ARTIFICIAL ISLANDS

中部水域人工島研究
STUDY ON THE ARTIFICIAL ISLANDS
IN THE CENTRAL WATERS

公眾參與 PUBLIC ENGAGEMENT



背景 Background

根據2021年公布《香港2030+：跨越2030年的規劃遠景與策略》(《香港2030+》)最終建議的概念性空間框架，發展位處維港都會區延伸部分策略性位置的交椅洲人工島，可提供約 1 000公頃土地，應對香港中長期的部分用地需求。

2022年《施政報告》進一步指出交椅洲人工島將為香港發展擴容擴量，提升香港作為金融、商業和貿易中心的競爭力，並將交椅洲人工島部分土地(1 000公頃當中約300公頃)納入未來十年全港 3 280 公頃可供發展土地預測。

土木工程拓展署和規劃署於2021年6月開展中部水域人工島研究，主要包括為交椅洲人工島進行規劃及工程研究，以及就連接人工島的策略性道路和鐵路進行技術可行性研究，有關研究預計於2024年年底完成。

策略定位 Strategic Positioning

- 1 交椅洲人工島將提供土地發展新一代的核心區域，一方面增加公營及私營房屋供應，另一方面透過發展第三個核心商業區，進一步提升香港的經濟競爭力

The KYCAI will provide land to develop a core area of a new generation 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)

- 2 支援人工島發展而建議的策略性運輸基礎設施，將大幅提升維港都會區與北部都會區的連接，亦鞏固大嶼山連接世界及大灣區其他城市的「雙門戶」優勢，以及進一步完善香港整體交通網絡

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 Greater Bay Area (GBA) cities, and further refine Hong Kong's overall transportation network

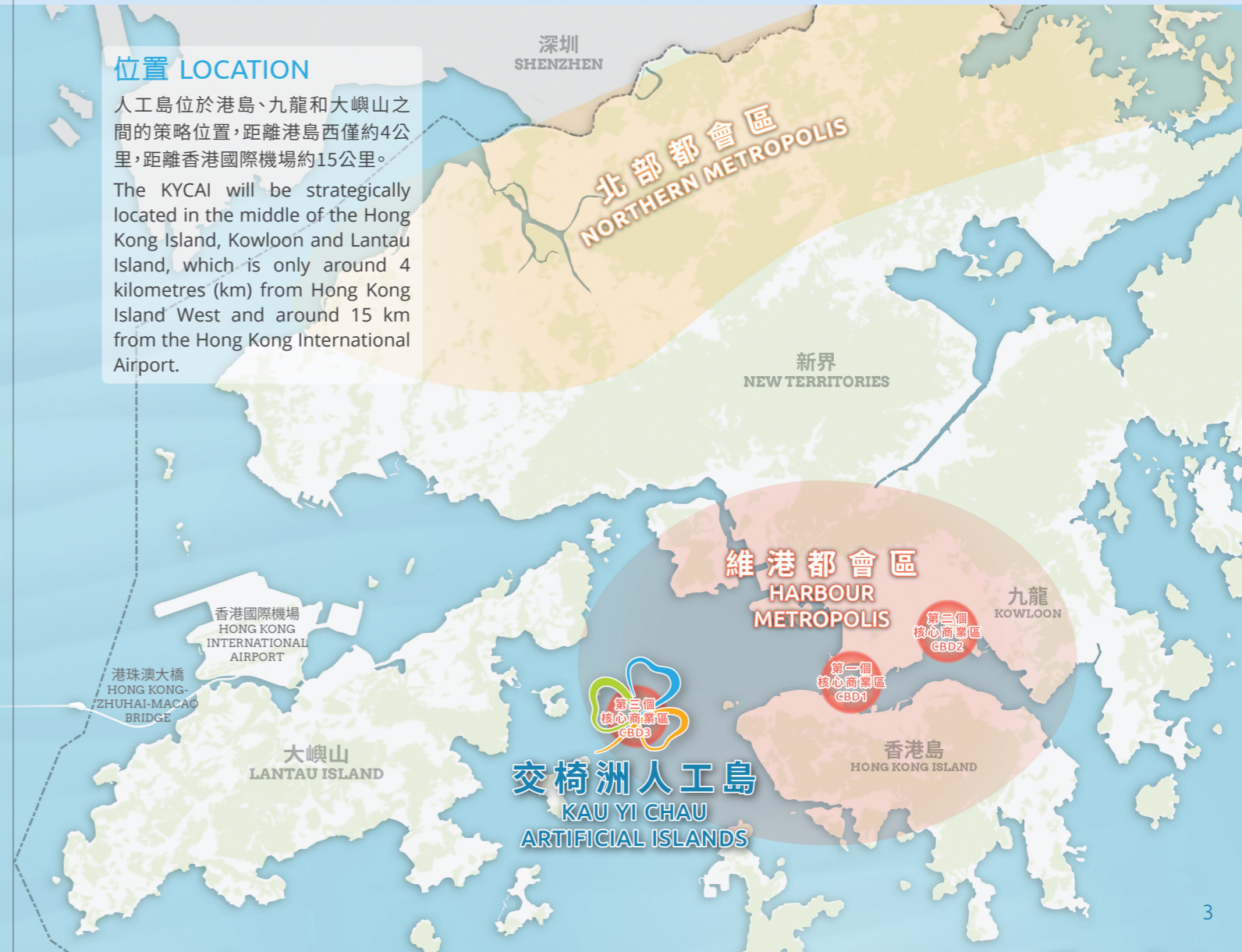
- 3 人工島距離現有市區不遠，能提供調遷空間支援港島和九龍舊區重建所引起的連鎖流動

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

According to the Conceptual Spatial Framework under the final recommendations of "Hong Kong 2030+ Towards a Planning Vision and Strategy Transcending 2030" (Hong Kong 2030+) promulgated in 2021, the development of the Kau Yi Chau Artificial Islands (KYCAI), which is at a strategic position within the expanded Harbour Metropolis, can provide about 1 000 hectares (ha) of land for meeting part of the medium to long-term land requirement of Hong Kong.

It is further elaborated in the 2022 Policy Address that the KYCAI will expand the scope and capacity of Hong Kong's development and enhance Hong Kong's competitiveness as a financial, commercial and trade centre. It also includes part of the land of the KYCAI (about 300 out of the 1 000 ha) as one of the supply sources of the 3 280 ha of developable land in the entire territory in the coming 10 years.

The Study on the Artificial Islands in the Central Waters commissioned by the Civil Engineering and Development Department and the Planning Department in June 2021 mainly comprises a planning and engineering study on the KYCAI and a technical feasibility study on strategic road and rail connecting the artificial islands. The Study is targeted for completion by end 2024.



規劃目標 Planning Objectives

繁榮多元 PROSPEROUS AND DIVERSE

提升香港的國際競爭力和區域重要性，
為長遠多元經濟發展作出準備

Enhance Hong Kong's international
competitiveness and regional significance
and prepare for long-term diversified
economic development

綠色宜居 GREEN AND LIVEABLE

構建可持續、易達及以人為本的社區，採
用15分鐘生活圈規劃概念，鼓勵居民以步
行或騎單車等健康模式出行

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

前瞻創新 FORWARD-LOOKING AND INNOVATIVE

全面落實智慧、環保及具抗禦力的城市
策略，讓人工島成為城市創新典範，迎
接全球和區域性的變化

Comprehensively implement a smart,
green and resilient (SGR) city strategy
with a view to making the artificial islands
an exemplar of urban innovation which
embraces global and regional changes

六大亮點 Six Highlights



採用「三個島嶼」設計以配合周邊環境
Adopt a "three-island" design to match the surrounding environment



透過智慧、環保及具抗禦力的城市策略，達致碳中和目標
Achieve the target of carbon neutrality through SGR city strategy



聯通世界及大灣區，開闢關鍵路線，打通香港策略交通
網絡
Connect the world and GBA and develop key routes for opening up
Hong Kong's strategic transportation network



採用15分鐘生活圈規劃概念，創造宜居社區
Adopt a "15-minute neighbourhood" concept for a liveable community



構建一個集工作、居住及休閒娛樂的核心商業區
Create a "Work-Live-Play" CBD

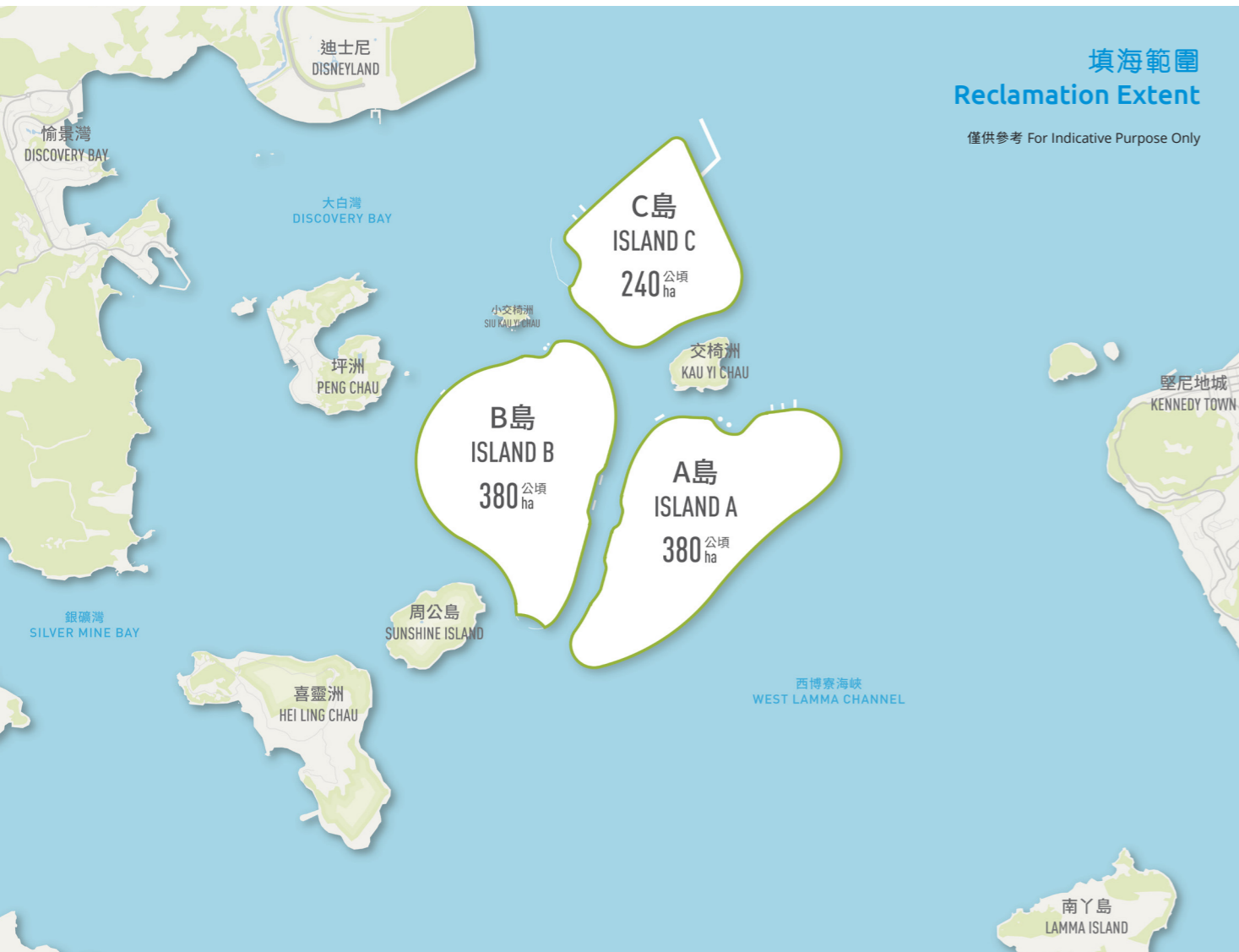


邀請專業學會組成平台細化人工島的設計，體現民間
參與規劃這個新一代的核心區域
Invite professional institutes to set up a platform to develop the detailed
design of the artificial islands, realising community participation in
planning this core area of the new generation

填海範圍 Reclamation Extent

我們初步建議1 000公頃的交椅洲人工島由三個島嶼組成(即A島約380公頃、B島約380公頃和C島約240公頃),並以「Y形」水道分隔各島。擬議的「三島設計」充分考慮生態、水質、工程可行性、海上交通及港口運作等因素。

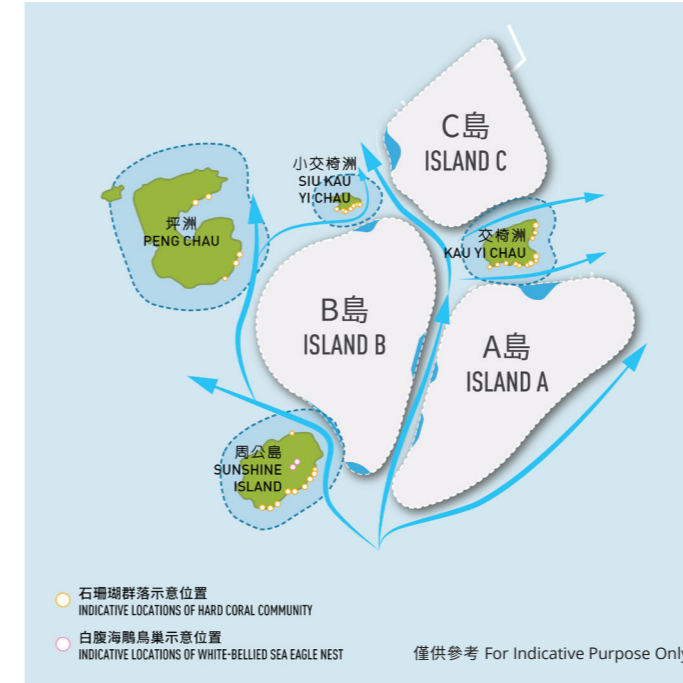
We preliminarily propose 1 000 ha of KYCAI which comprises three islands (namely Island A – about 380 ha, Island B – about 380 ha and Island C – about 240 ha), which forms a Y-shape channel separating the islands. In formulating the proposed “Three-island configuration”, factors including ecology, water quality, engineering feasibility, marine traffic and port operation have been fully considered.



就交椅洲人工島的地理位置,我們已在設計中充分考慮極端天氣及氣候變化帶來水浸及越堤浪的風險,並採取循序漸進的策略,為人工島制訂一套能應對沿岸災害的初步計劃,包括為人工島設定合適的土地平整水平、設計具適應力和抗禦力的海岸防護設施、規劃海岸線與發展用地之間的緩衝區等。

For the geographical location of the KYCAI, we have thoroughly considered in the design the risk of flooding and overtopping waves and will adopt a progressive adaptive approach by formulating a preliminary plan that can tackle coastal hazards, including setting a suitable site formation level for the artificial islands, designing adaptive and resilient coastal protection measures and planning a buffer zone between shoreline and development area, etc.

主要考慮 Key Considerations



水流及水質 Water Flow & Water Quality

擬議人工島的「Y形」水道能保持鄰近水域的水流適度流動,有效應對填海對水質和生態造成的影響。

The Y-shape channel of KYCAI will effectively cope with the impact of reclamation on water quality and ecology by maintaining sufficient water flow velocity in the waters nearby.

其他考慮 Other Considerations

「Y形」水道的設計配合盛行風向,有助減低城市熱島效應。人工島海岸線的設計會與附近島嶼呼應,並增加海濱休憩空間及便利進行水上活動,提供多元活動場地,優化生活空間。

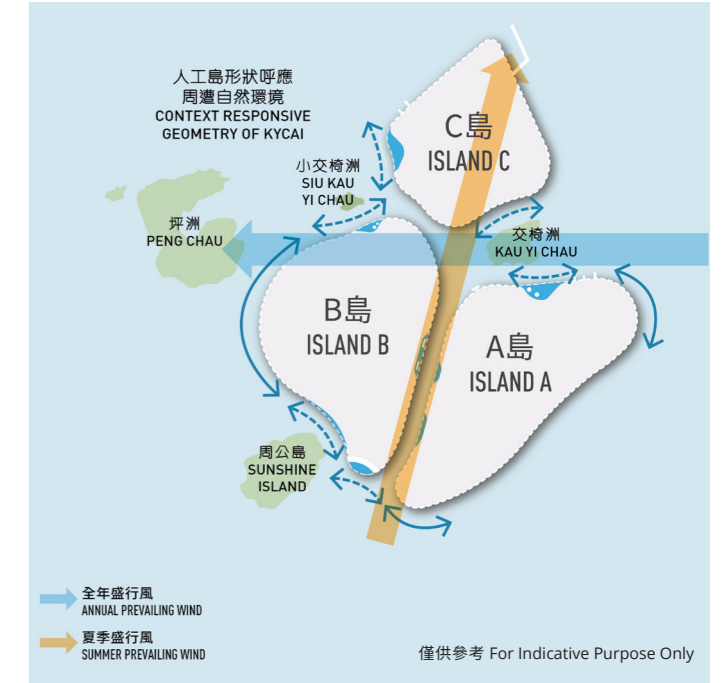
為提升施工效率及成本效益,我們建議於較淺水的水域填海,擬議填海範圍亦盡量減低對現有航道和錨區的影響。

我們現正就交椅洲人工島發展進行環境影響評估研究。初步結果顯示,擬議填海工程在生態和漁業方面沒有不可克服的問題。政府亦會檢視向受本港水域海事工程影響的漁民發放特惠津貼的機制。

The design of Y-shape channels is aligned with the prevailing wind direction to reduce the urban heat island effect. The coastline design on KYCAI will echo the surrounding islands, increase waterfront open space, and promote water sports. It also provides diversified activity venues and optimises living space.

In order to enhance construction efficiency and cost effectiveness, we propose carrying out reclamation in shallower waters. The proposed reclamation extent has also minimised impacts on the existing fairways and anchorage areas.

We are conducting an Environmental Impact Assessment (EIA) study for the KYCAI development. The preliminary findings show that the proposed reclamation works would not cause insurmountable impacts on ecology and fisheries. The Government will also review the system of granting the ex-gratia allowances for fishermen affected by marine works projects in Hong Kong waters.



生態 Ecology

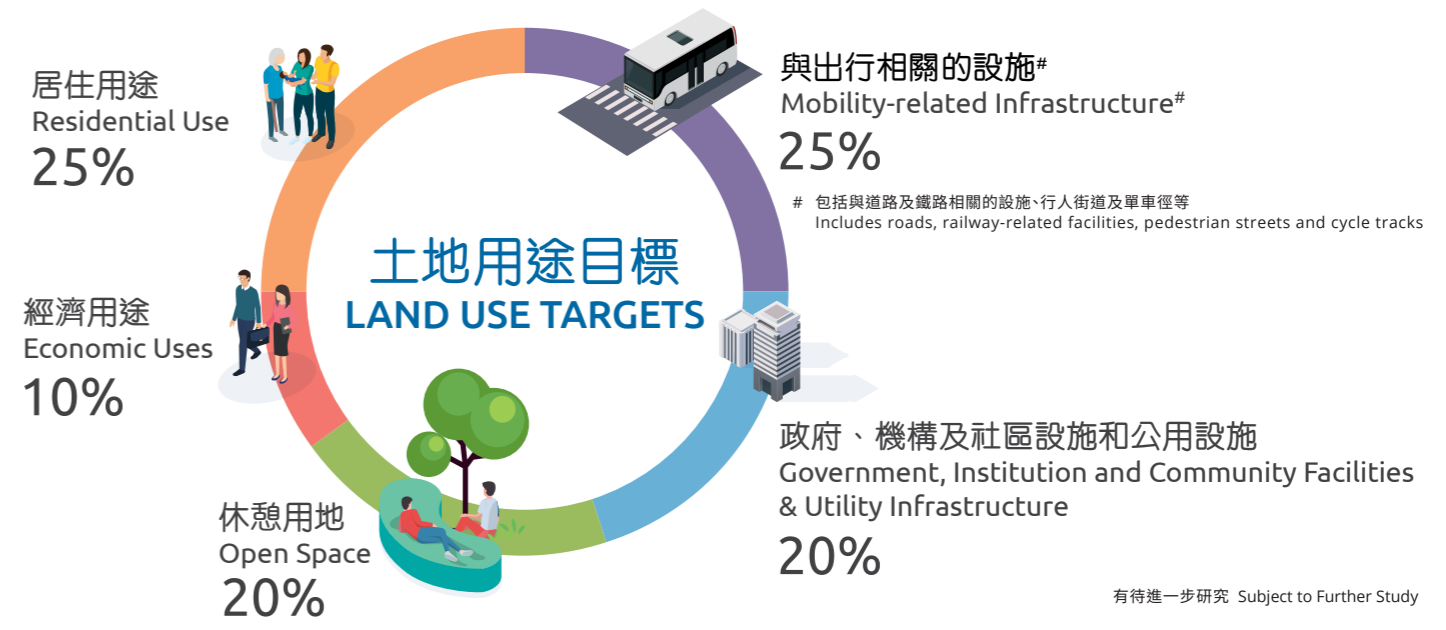
綜合初步生態調查結果,我們認為交椅洲人工島位處的中部水域並非海洋哺乳動物的重要生境。我們建議交椅洲人工島與鄰近島嶼之間以水道作分隔,以避免填海工程對沿岸具生態價值的石珊瑚群落及於周公島築巢的白腹海鷗造成直接影響。

In view of the preliminary ecological survey findings, the Central Waters (where KYCAI is situated) is not considered as an important habitat for marine mammals. We propose to set back the reclamation extent from the nearby islands in order to avoid direct impact to the hard coral communities with ecological value along the shorelines, as well as the White-bellied Sea Eagles nesting on Sunshine Island due to reclamation works.

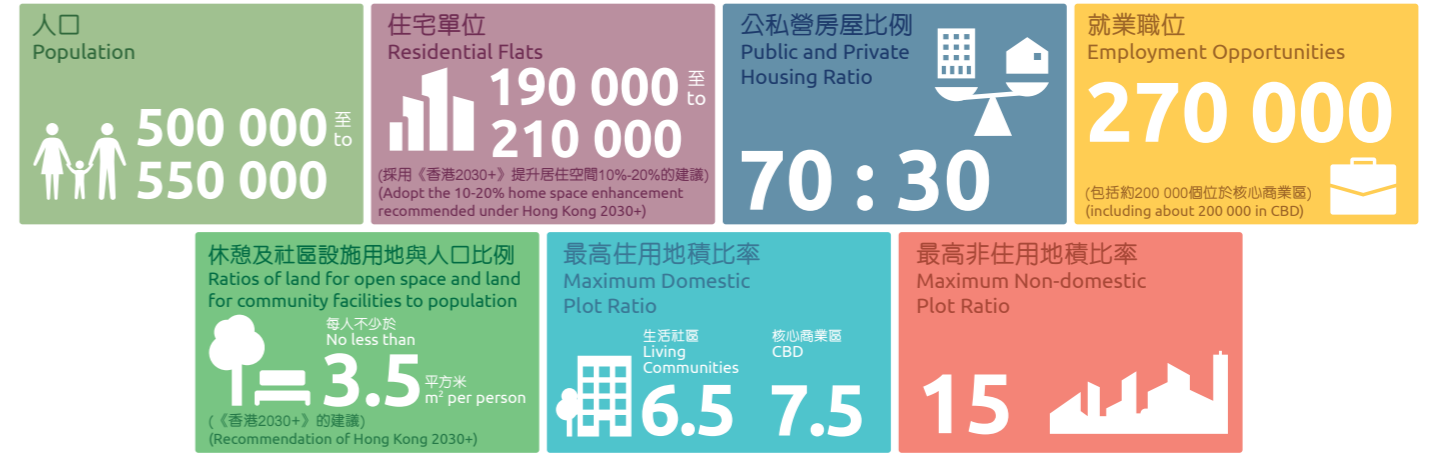
概括土地用途 Broad Land Use



* 包括污水處理廠、海水化淡廠、廢物轉運站、先進廚餘處理設施、區域供冷系統及洗盥污水處理廠
Covers sewage treatment works, desalination plant, refuse transfer station, advanced food waste treatment facilities, district cooling system and grey water treatment plant



完成後的主要發展參數 Major Development Parameters upon Full Development



主要規劃概念 Major Planning Concepts

- 一個集工作、居住、休閒娛樂的第三個核心商業區
A "Work-Live-Play" CBD3
- 以15分鐘生活圈概念規劃七個宜居生活社區
Seven liveable living communities planned with 15-minute neighbourhood concept
- 推廣健康生活和生物多樣性的藍綠網絡
Blue-green network for promoting healthy living and biodiversity
- 採用智慧、環保及具抗禦力的城市策略
Adopting smart, green and resilient (SGR) city strategy

1 一個集工作、居住、休閒娛樂的第三個核心商業區 A "Work-Live-Play" CBD3

第三個核心商業區佔地共約100公頃(當中包括商業、住宅、文化康樂、休憩及與出行相關等不同用途),位處A島東面,享有較近港島的地理優勢,將提供約400萬平方米的商業總樓面面積,打造一個新時代的核心商業區、香港未來的發展引擎,配合國家推動香港成為國際金融和貿易中心,以及法律服務樞紐的政策。

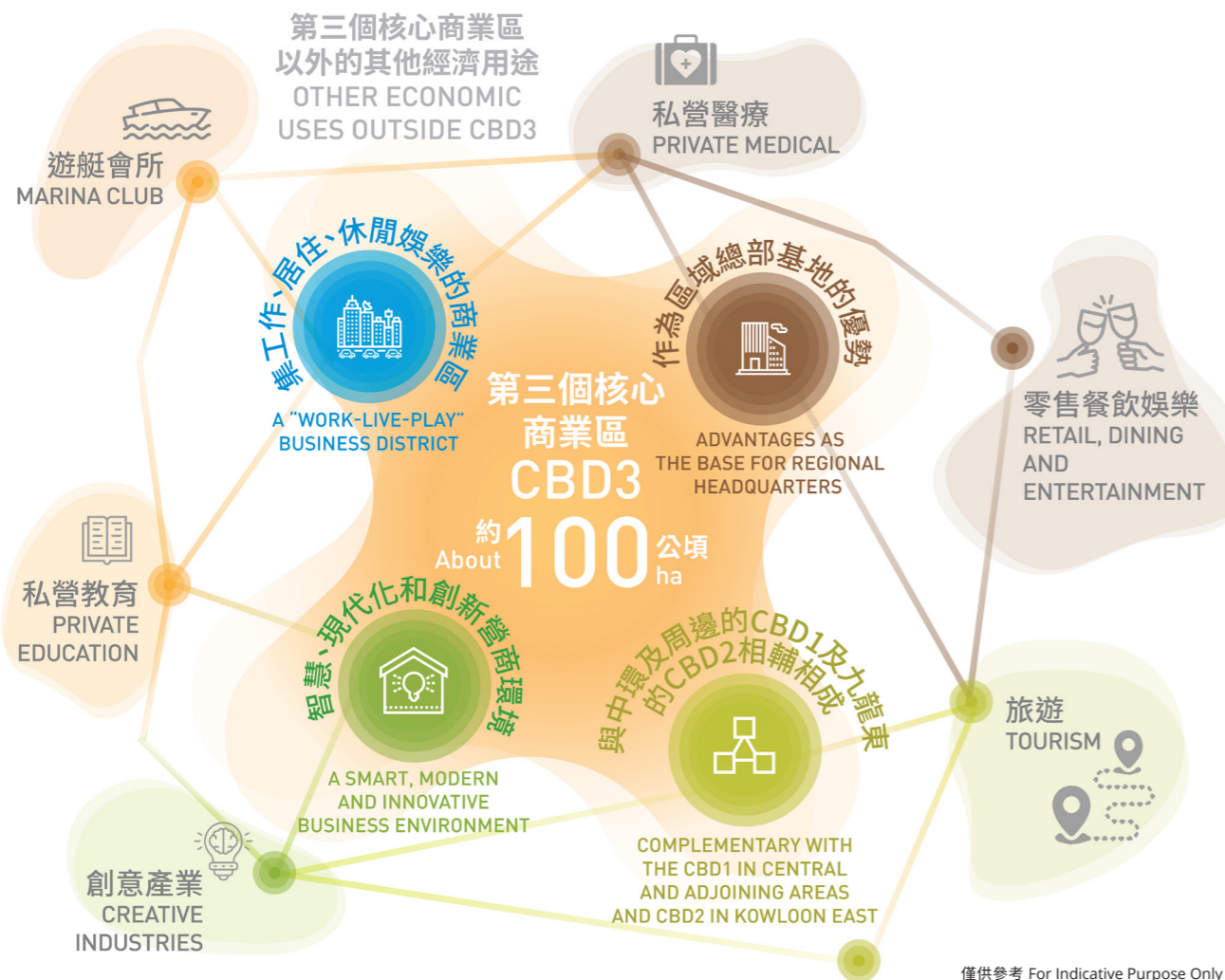
參考海外近年先進城市規劃新或改造現有核心商業區的經驗,並考慮到新一代青年人對工作生活平衡的期望,人工島上的第三個核心商業區將採用有別於傳統核心商業區的創新規劃理念,以城市設計及地方營造方式,塑造集工作-居住-休閒娛樂的優質生活和工作環境。

多元化的活動和混合用途的規劃將為商業區注入活力,亦會成為香港另一個獨特和具吸引力的旅遊目的地。

Taking the geographical edge of situating closer to the Hong Kong Island, a CBD3 of 100 ha (including commercial, residential, culture and recreation, open space and mobility-related use) will be located in the eastern part of Island A for providing about 4 million m² of commercial gross floor area (GFA) to create a CBD for the new era and Hong Kong's future economic engine matching the national policy of promoting Hong Kong as an international finance and trade centre as well as a node for legal services.

With reference to the overseas experience in planning new or transforming existing CBDs in advanced cities in recent years and considering the aspiration of the new generation of young people for work-life balance, the planning of the CBD3 on the artificial islands will adopt an innovative planning concept different from that for traditional CBDs by using urban design and place-making approach to create a quality "Work-Live-Play" environment for living and working.

The diversified activities and the planning of mixed uses will inject liveliness in the business district and make it another unique and attractive tourist destination for Hong Kong.



住宅發展 Residential Development

除了提供商業空間及便捷交通網絡之外,第三個核心商業區亦會預留土地作房屋、文化、創意藝術、時尚娛樂、熱門城市運動和日常生活相關設施,以及大量優質的公共空間。

Apart from providing commercial spaces and convenient transportation network, land will be reserved in CBD3 for housing, culture, creative arts, fashion and entertainment, popular city sports and facilities related to daily living, as well as a large amount of quality public spaces.



文化娛樂設施 Cultural and Entertainment Facilities

在第三個核心商業區以外亦會預留土地作其他經濟用途(例如創意產業、私營醫療、私營教育、旅遊、遊艇會所及零售餐飲娛樂)。

Land outside CBD3 will be also reserved for other economic uses (e.g. creative industries, private medical, private education, tourism, marina club and retail, dining and entertainment).

沿海濱長廊的休閒康樂設施 Leisure and Recreation Facilities along Waterfront Promenade

我們同時考慮在島上的規劃加入離島文化旅遊元素,例如漁人碼頭,為本地漁業界提供升級轉型機會。

We will also consider adding cultural tourism of outlying islands such as fisherman's wharf to provide upgrading and transformation opportunities for the local fisheries industry.



未來第三個核心商業區模擬圖 Rendered Illustration of CBD3

僅供說明的構想圖 Artist's Impression for Illustrative Purpose Only



2 以15分鐘生活圈概念規劃七個宜居生活社區 Seven Liveable Living Communities planned with 15-minute Neighbourhood Concept



未來生活社區模擬圖
Rendered Illustration of Living Communities
僅供說明的構想圖 Artist's Impression for Illustrative Purpose Only

這些宜居生活社區將以環保集體運輸系統連接，並由藍綠走廊分隔，沿岸更設有綠化海濱長廊。

根據 15 分鐘生活圈的規劃概念，每個社區會佔地約 80 - 100 公頃，並以環保集體運輸系統車站為中心，合理分布社區內的公共交通站點、日常購物及餐飲設施、基本社區設施、休憩用地等。

同時規劃完善的行人及單車徑網絡，讓居民可以以步行或騎單車等健康出行模式，在 15 分鐘內從居所到達不同目的地，獲取各種生活所需。

此外，每個社區亦預留土地作大型社區康樂設施及/或經濟用途，希望在提升職位多元化之餘，亦增加居民原區就業的比率。總體而言，核心商業區以外將會有約 100 萬平方米的商業樓面面積分布於這七個社區。

These liveable living communities will be connected by a green mass transit system and separated by blue-green corridors with green waterfront promenade along the shorelines.

Based on the concept of 15-minute neighbourhood, each community will be around 80-100 ha and has a green mass transit station 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, comprehensive pedestrian and cycle track networks will be planned to allow residents to travel by healthy modes such as walking or cycling within 15 minutes from their homes to different destinations to obtain various necessities.

In addition, land will be reserved in each community for large-scale community and recreational facilities and/or economic use(s) with a view to diversifying the employment opportunities and increasing the local employment rate within the community. Overall, there will be about 1 million m² commercial GFA in the seven communities outside the CBD.



僅供參考 For Indicative Purpose Only

3 推廣健康生活和生物多樣性的藍綠網絡 Blue-green Network for Promoting Healthy Living and Biodiversity

人工島會同時規劃一套完善的藍綠網絡，包括蔚藍水體和綠化空間，為島上居住及工作的市民提供多樣的康樂及運動機會，並創造多元化的動植物棲息地，提升生物多樣性。這些網絡包括為各個生活社區之間的藍綠走廊、逾20公里鼓勵親水文化的易達海濱長廊、生態海岸線，以及不同的鄰舍、地區及區域休憩用地。此外，人工島附近的水域(包括島與島之間約200米寬的水道)，亦非常適合作遊艇停泊處及進行各類水上活動的場地，包括舉辦本地/國際比賽。

A comprehensive blue-green network comprising water bodies (blue) and green spaces (green) will be planned on the artificial islands to provide a variety of recreational and sports opportunities for people living and working on the islands and create a diverse range of flora and fauna habitats to enhance biodiversity. The network comprises the blue-green corridors between living communities, over 20 km of accessible waterfront promenades to encourage water-friendly culture, eco-shorelines, and various local, district and regional open spaces. In addition, the waters surrounding the artificial islands (including the water channels of about 200 m wide between islands) are very suitable for marinas and a variety of water sports venues including those for hosting local/international competitions.



未來區域公園及水上活動設施模擬圖
Rendered Illustration of Regional Park and Water Sports Facilities
僅供說明的構想圖 Artist's Impression for Illustrative Purpose Only



未來生活社區之間的藍綠走廊模擬圖
Rendered Illustration of Blue-green Corridor between Living Communities

僅供說明的構想圖 Artist's Impression for Illustrative Purpose Only



區域公園 Regional Park



平台花園 Podium Garden

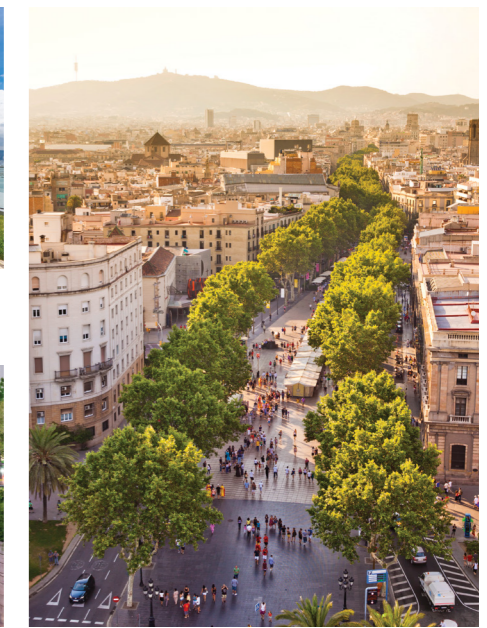
(資料來源: 綠化、園境及樹木管理組, 發展局)
(Source: Greening, Landscape & Tree Management Section, Development Bureau)



天台綠化 Green Roof



藍綠建設 Blue-green Infrastructure



林蔭行人專用街道
Pedestrianised Boulevard

藍綠網絡元素 Elements of Blue-green Network


4 採用智慧、環保及具抗禦力的城市策略 Adopting Smart, Green and Resilient (SGR) City Strategy

有關策略涵蓋下列措施，務求島上發展長遠能應對氣候變化及促使全港在2050年前達致碳中和目標。

The strategy will cover the following measures to ensure that the developments on the islands could, in the long term, adapt to climate change and facilitate Hong Kong to achieve the carbon neutrality target before 2050.

A 可持續規劃及城市設計 Sustainable Planning and Urban Design

提升建築物的環境表現及鼓勵綠色建築
Enhance environmental performance of buildings and encourage green buildings



盛行風 PREVAILING WIND
街道 STREET

考慮盛行風向及樓宇坐向，減低能源消耗
Consider prevailing wind directions and building orientations to reduce energy consumption

採用「組裝合成」建築方法，減低碳排放
Use Modular Integrated Construction method to reduce carbon emissions

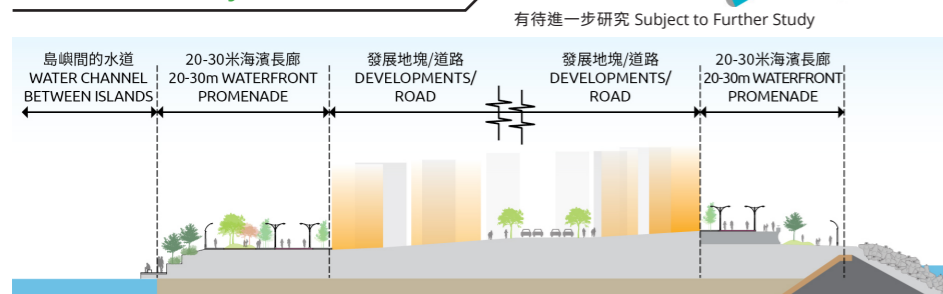
(資料來源：屋宇署)
(Source: Buildings Department)

推動城市林務
Promote urban forestry



(資料來源：財政司司長辦公室)
(Source: Financial Secretary's Office)

規劃便捷及具抗禦力的用途布局
Plan convenient and resilient land use layout



具抗禦力的海岸線設計 Resilient Coastal Design

包括以15分鐘生活圈概念規劃的生活社區、「海綿城市」、按盛行風布置樓宇坐向、應對氣候變化的沿岸設計策略、綠色建築，以及城市林務等措施。

Includes 15-minute neighbourhood concept for the planning of the living communities, "sponge city", building orientations according to prevailing wind directions, coastal design strategy adapting to climate change, green buildings, urban forestry, etc.



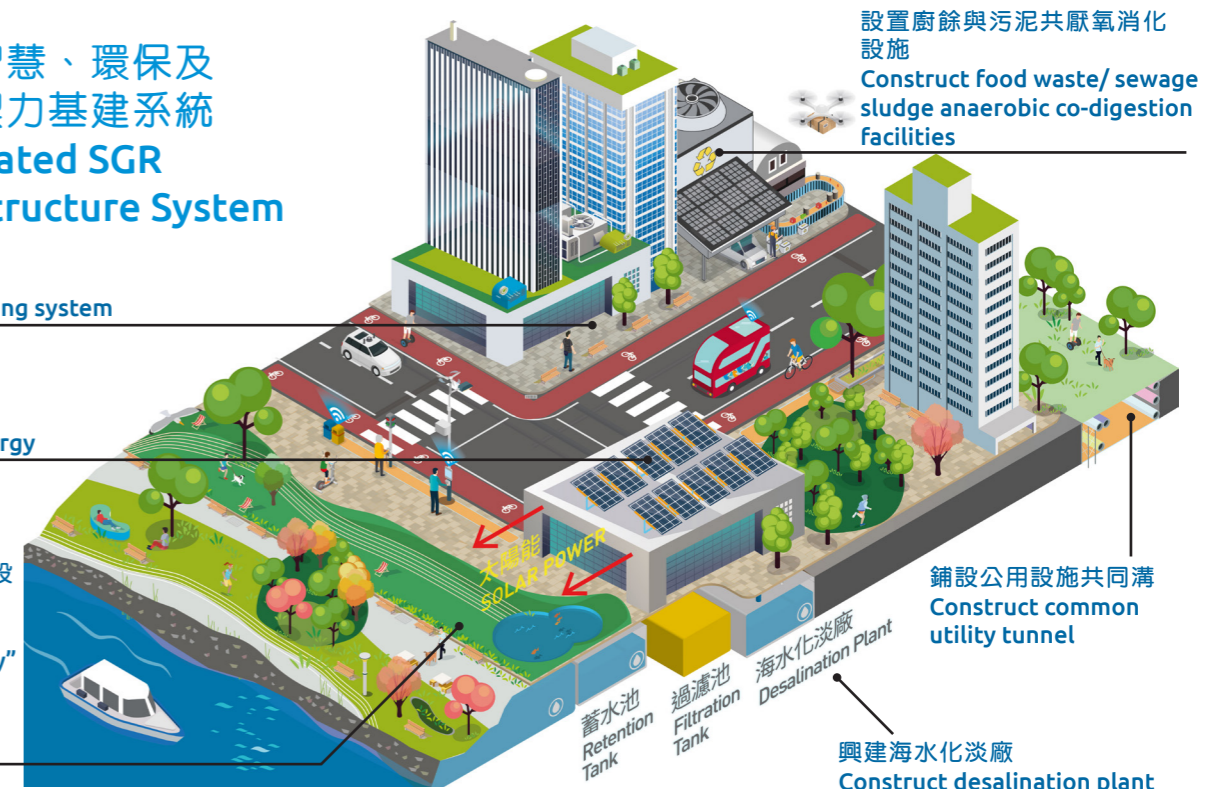
有待進一步研究 Subject to Further Study

B 綜合智慧、環保及具抗禦力基建系統 Integrated SGR Infrastructure System

採用區域供冷系統
Adopt district cooling system

使用再生能源
Use renewable energy

採用「海綿城市」設計(包括可持續城市排水系統)
Adopt "Sponge City" design (including sustainable urban drainage system)



有待進一步研究 Subject to Further Study

包括可持續城市排水系統、區域供冷系統、海水化淡廠、廚餘與污泥共厭氧消化設施及公用設施共同溝等措施。
Includes sustainable urban drainage system, district cooling system, desalination plant, food waste / sewage sludge anaerobic co-digestion facilities, common utility tunnel, etc.

C 智慧出行 Smart Mobility

規劃整全的行人及單車徑網絡
Plan comprehensive pedestrian and cycle track networks



有待進一步研究 Subject to Further Study

包括行人及單車徑網絡，以及電動車及其他新能源汽車(例如氫能車)的支援設施等，並會配合運輸署將會在《交通運輸策略性研究》下建議的措施。

Includes pedestrian and cycle track networks, supporting facilities for electric vehicles and other new energy vehicles (such as hydrogen vehicles), etc, as well as measures to be recommended by the Transport Department under the "Traffic and Transport Strategy Study".

策略性運輸基建 Strategic Transport Infrastructure

交椅洲人工島提供了一個良好契機，讓我們規劃一組策略性運輸基建(即港島西至大嶼山東北連接路及港島西至洪水橋鐵路)，以便開關關鍵路線，打通香港策略交通網絡。

The KYCAI provides a good opportunity for us to plan a network of strategic transport infrastructure (i.e. Hong Kong Island West – Northeast Lantau Link and Hong Kong Island West – Hung Shui Kiu Rail Link) with a view to improving Hong Kong's overall transportation network.

港島西至大嶼山東北連接路 Hong Kong Island West – Northeast Lantau Link

港島西至大嶼山東北連接路(下稱「連接路」)分為南北兩段，全長約13公里。連接路將會是第一條無需經九龍來往香港島和新界西北的主要幹道。連接路的南段的初步設計會以海底隧道的形式建造，連接交椅洲人工島及於港島西接駁四號幹線成為第四條連接港島的過海隧道。連接路的北段的初步設計會以高架橋/隧道連接交椅洲人工島至正在規劃中的十一號幹線及青衣至大嶼山連接路。另外，近竹篙灣的位置亦會興建一條道路連接北大嶼山公路。我們建議於填海工程開展期間同步啟動興建港島西至大嶼山東北連接路，爭取在2033年完成，以支援造地工程及配合交椅洲人工島首批居民在同年入伙的目標。

The Hong Kong Island West – Northeast Lantau Link (HKIW – NEL Link), comprising southern and northern sections, is about 13 km long in total. The HKIW – NEL Link will be the first major trunk road connecting Hong Kong Island and the Northwest New Territories without passing Kowloon. The preliminary proposal for the southern section of the HKIW – NEL Link, as the fourth road harbour crossing, will be in the form of a sub-sea tunnel connecting the KYCAI with Route 4 on Hong Kong Island West. The northern section of HKIW – NEL Link will connect KYCAI with the planned Route 11 and Tsing Yi – Lantau Link via viaducts and/or tunnels in the preliminary design. In addition, it is proposed constructing a road near Penny's Bay for connection with the North Lantau Highway. We propose commencing the reclamation works and the construction of the HKIW – NEL Link concurrently, and strive to complete the HKIW – NEL Link in 2033 so as to support the land formation works and to suit the target of having the first population intake in the same year.

港島西至大嶼山東北連接路走線

Alignment of Hong Kong Island West – Northeast Lantau Link (HKIW-NEL Link)



港島西至洪水橋鐵路走線

Alignment of Hong Kong Island West – Hung Shui Kiu Rail Link (HKIW – HSK Rail Link)

港島西至洪水橋鐵路 Hong Kong Island West – Hung Shui Kiu Rail Link

隨著2021年《施政報告》內提出北部都會區的發展，我們建議將策略性鐵路向北延伸至洪水橋並接駁規劃中的港深西部鐵路(洪水橋至前海)，以加強交椅洲人工島與北部都會區及至港深西部鐵路的連繫，從而更有效地提升交椅洲人工島的策略性地位及香港鐵路網絡的連通性。港島西至洪水橋鐵路全長約30公里，在人工島A島及C島均各設有一個車站。鐵路途經港島西、人工島、欣澳、屯門東，並延伸至北部都會區的洪水橋，接駁至規劃中的港深西部鐵路(洪水橋至前海)。我們初步建議於鐵路沿線增設多個轉乘站，方便市民出行。

With the development of Northern Metropolis proposed in the 2021 Policy Address, we propose extending the strategic railway to Hung Shui Kiu for connection with the planned Hong Kong – Shenzhen Western Rail Link (Hung Shui Kiu to Qianhai) so as to strengthen the connections among the KYCAI, the Northern Metropolis and the Hong Kong – Shenzhen Western Rail Link, thus effectively enhance the strategic position of the KYCAI and the connectivity of Hong Kong rail network. The Hong Kong Island West – Hung Shui Kiu Rail Link (HKIW – HSK Rail Link) is about 30km long which comprises a station on Island A and Island C respectively. The HKIW – HSK Rail Link will pass through Hong Kong Island West, the KYCAI, Sunny Bay, Tuen Mun East and Hung Shui Kiu in the Northern Metropolis for connection with the planned Hong Kong – Shenzhen Western Rail Link (Hung Shui Kiu to Qianhai). We preliminarily propose several interchange stations along the rail link for passengers transferring.

交椅洲人工島環保集體運輸系統 Green Mass Transit System on the KYCAI

我們初步建議以環保集體運輸系統連接三個人工島，於人工島C島預留位置設置車廠，並於島上合適地點轉乘港島西至洪水橋鐵路。人工島內各生活社區將設有新一代運輸交匯樞紐，並以此為中心，有效地覆蓋交椅洲人工島的人口。我們會檢視和制定環保集體運輸系統的模式、走線和車廠位置。

Our preliminary proposal is to link up the three artificial islands by a green mass transit system. Land will be reserved for a depot at Island C. Passengers from this mass transit system can interchange with the HKIW – HSK Rail Link at suitable location(s) on the islands. Each living community on the KYCAI will be supported by a new generation of transport interchange hub allowing a centralised connection with public transport to connect the living communities on the KYCAI. We will review and formulate the transport mode, alignment and location of depot.

可能融資選項 Possible Financing Options

社會及經濟效益 SOCIAL AND ECONOMIC BENEFITS

事實上，基建投資除了土地收益外，也可帶動經濟增長。在交椅洲人工島全面發展後，我們估計相關經濟活動每年可帶來的增加值為：

In fact, apart from the land sales revenue, investment in infrastructure works can also drive economic growth. Upon full development of the KYCAI, the associated economic activities would generate an annual value added of:

加上提供公營房屋用地和策略性運輸基建亦具社會和經濟價值，推展交椅洲人工島項目符合社會及經濟效益。

Furthermore, there will be social and economic value for supplying land for public housing and strategic transport infrastructure. In conclusion, implementation of the KYCAI development is still considered to have social and economic benefits.

約
\$2 000 億
(2021年價格)

ABOUT
\$200 BILLION
(in 2021 price)

佔本地生產總值約 **7%**

ABOUT **7%** of Gross Domestic Product (GDP)

我們於2019年3月曾對包括交椅洲人工島填海、人工島上的基礎設施配套(例如供水、污水、排水系統)及策略性運輸基建工程作出經濟效益分析，顯示土地收益(按香港測量師學會2019年2月的估算，賣地收入約為9 740至11 430億元)高於建造成本(交椅洲人工島填海和基建連同策略性運輸基建參照同類工程的造價，粗略推算為5 000億元(按2018年9月價格計算))。

鑒於近期樓市及土地價格有所調整，為審慎起見，我們根據了最新的資料及發展參數，為經濟效益評估作了情景測試。就土地收益方面，參考了至2022年11月的土地和物業成交價格，再引入較保守的市況假設，估計約為7 500億元。就建造成本方面，按2018年9月價格推算的5 000億元，純以土木工程相關指數調整，2022年第二季的項目總工程造價粗略推算約為5 800億元。

We conducted in March 2019 a financial analysis for the KYCAI reclamation and the associated infrastructures works (such as water supply, sewerage and drainage system) as well as strategic transport infrastructure. The result showed that the land sales revenue (about \$974 billion to \$1 143 billion according to the estimate of the Hong Kong Institute of Surveyors in February 2019) was higher than the construction cost (by making reference to construction cost of similar works, the ballpark construction cost estimate of the KYCAI reclamation and the associated infrastructure works together with the strategic transport infrastructure is in the order of \$500 billion (in September 2018 price)).

In view of the recent adjustment on property market and land value and for the sake of prudence, we have carried out a sensitivity test based on the latest information and parameters. In terms of land sale revenue, based on the transaction price of land and properties up to November 2022, and then introduce more conservative assumptions, the estimate of the land sales revenue is about \$750 billion. In term of construction cost, the \$500 billion calculated based on the September 2018 price is adjusted solely based on civil engineering related indexes, a rough estimate of the total construction cost of the project in the second quarter of 2022 will be about \$580 billion.

現時工程項目仍在前期規劃階段，正進行生態環境調研、地質勘測等工作，我們要在具體設計工作完成後，才有基礎按更詳細的工程設計提出如何分階段推展及作出造價預算。

The project is still at the preliminary planning stage where the EIA, ground investigation etc. are in progress. After the overall design work is completed, we will have the basis to develop the phased implementation of works and provide a cost estimate with reference to a more detailed engineering design.

既然整項發展屬於有經濟效益的長遠投資，我們認為無須純倚賴公共開支推展項目。除了以基本工程儲備基金支付外，我們也可考慮加入一個或多個融資方法，以便適度運用市場力量。

Since the entire development is a long-term investment with economic benefits, we consider it not necessary to rely solely on public expenditure to take forward the project. Apart from funding using Capital Works Reserve Fund, we have considered introducing one or more of the financing options to make appropriate use of market forces.

發行債券 BOND ISSUANCE

可能應用性 POSSIBLE APPLICABILITY

建築工程
Construction works

先例 PRECEDENTS

綠色債券計劃及香港國際機場三跑道系統
Green Bond Programme and Hong Kong International Airport Three-Runway System

公私營合作：鐵路加物業發展模式 PUBLIC-PRIVATE PARTICIPATION: RAILWAY-PLUS-PROPERTY MODEL

可能應用性 POSSIBLE APPLICABILITY

鐵路
Railway

先例 PRECEDENTS

將軍澳延線、南港島線、觀塘綫延線等
Tseung Kwan O Line LOHAS Park Extension, South Island Line, Kwun Tong Line Extension, etc

公私營合作：建造－營運－移交模式 PUBLIC-PRIVATE PARTICIPATION: BUILD-OPERATE-TRANSFER MODEL

可能應用性 POSSIBLE APPLICABILITY

主要幹道
Major road

先例 PRECEDENTS

海底隧道、東區海底隧道、大老山隧道、西區海底隧道及大欖隧道
Cross Harbour Tunnel, Eastern Harbour Crossing, Tate's Cairn Tunnel, Western Harbour Crossing and Tai Lam Tunnel

公私營合作：填海及基建設施工程 PUBLIC-PRIVATE PARTICIPATION: RECLAMATION AND INFRASTRUCTURE WORKS

可能應用性 POSSIBLE APPLICABILITY

填海、土地平整及基建設施工程
Reclamation, site formation and infrastructure works

先例 PRECEDENTS

沙田第一城及附近合共約59公頃的填海土地
Reclaimed land of about 59 ha at Sha Tin City One and its surrounding area

我們現時所提出的融資選項乃初步提案，其實際應用規模和組合仍需要作進一步評估。同時，我們對其他融資選項持開放態度。

The financing options are preliminary proposals and further assessment on their actual scale of adoption and combination shall be conducted. Besides, we welcome views for other financing options.

共同規劃 Planning Together

為體現民間參與新一代的核心區域的規劃，我們會邀請相關專業學會組成平台就各個主要規劃概念，以及個別重要規劃議題，向政府提出建議，出謀獻策。

To realise community participation in planning the core area of a new generation, we will invite relevant professional institutes to set up a platform to present their proposals to the Government, including the major planning concepts and certain important planning issues.

未來海濱長廊及人工島之間的水道模擬圖 Rendered Illustration of Waterfront Promenade and Water Channel between Artificial Islands

僅供說明的構想圖 Artist's Impression for Illustrative Purpose Only



未來路向 Way Forward

2023年 2024年 2025年

開展環境影響評估的法定程序
Aim to commence the statutory process of EIA

申請撥款以展開詳細工程設計及土地勘測
Apply for funding to commence detailed design and ground investigation of the project

完成《前濱及海床(填海工程)條例》的法定程序
Completion of the statutory procedures under the Foreshore and Sea-bed (Reclamations) Ordinance

完成詳細設計
Completion of the detailed design

2033年

首批建成的住宅發展可供居民入伙
First batch of residential development for population intake will be in place

爭取完成港島西至大嶼山東北連接路
Strive to complete the HKIW - NEL Link

啟動填海工程
Commence reclamation works

為填海工程申請撥款
Apply for funding for the reclamation works

你的意見，可讓交椅洲人工島繼續朝向繁榮多元、綠色宜居和前瞻創新的願景進發。

我們歡迎大家為人工島的填海範圍、概括土地用途、策略性運輸基建，以及可能融資選項的初步建議提供意見。

Your views could help lead KYCAI towards the vision of a prosperous and diverse, green and liveable, and forward-looking and innovative future.

We welcome you all to provide comments on the preliminary proposals for four aspects, including reclamation extent, broad land use, strategic transport infrastructure and possible financing options.

大家可於二零二三年三月三十一日或之前，以郵遞、電話、傳真、電郵形式或經由研究網頁內的電子意見表格向我們提出你的想法。

You may express your views via post, phone call, fax, email or the comment form inside the Study Website **on or before 31 March 2023**.

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研究網頁
Study Website



電子意見表格
Online
Comment Form

一起·我們建島未來

Together We Build the Islands of the Future



發展局
Development Bureau

 土木工程拓展署
Civil Engineering and
Development Department

 規劃署
Planning Department

ARUP

凡在中部水域人工島研究過程中向土木工程拓展署或規劃署提供意見和建議的個人或機構，將被視作同意土木工程拓展署或規劃署可將部分或全部提供的內容(包括個人姓名及團體名稱)公布。如你不同意這個安排，請於提供意見和建議時作出聲明。

A person or an organisation providing any comments and views to the Study on the Artificial Islands in the Central Waters shall be deemed to have given consent to the Civil Engineering and Development Department or Planning Department to publish the whole or part of the comments and views (including personal and organisation name). Otherwise, please state so when providing comments and views.