New Strategy of Dalian Urban Development

Ms. CAO Aihua
Deputy Mayor of Dalian City

The theme of this summit is “Sustainable Development of Asia Pacific Cities, New Urban Policies under the Global Economic Crisis”, which is closely keeping with pulse of the times. Dalian has always paid a great attention to foreign cooperation and exchange, and has already made many searching and attempt. It is a great pleasure to share the valuable experience and make up for each other’s deficiencies to mutual development. Today, we are here to discuss local exchange and cooperation. The aim of these discussions is to find out how to realize mutual benefit and win-win progress effectively in order to take the leading edge of urban construction and creating the new advantages of economic development. And now, I would like to brief some information and recent practices of Dalian.

Outline of Dalian

Dalian is located on the southern tip of Liaodong Peninsula. With a population of 6 million and a land area of 12570 kilometers, Dalian is an important city of port, industry, trade, finance and tourism in northern China. It is also one of the most opened and vigorous cities in China. In recent years, Dalian is comprehensively revitalized by promoting old industry base. With the aim of constructing Dalian into an international city in Northeast Asia, Dalian continuously implements a large-scale urban construction and reformation and comprehensive environment management. It now presents a fine situation with all-round social improvement, prosperous culture and a harmonious and safe society.

Environmental City

Dalian has been conferred by the United Nations “Scroll of Honor Habitat Award”, “Global 500” for its environmental achievements and “LivCom Award”. It was also titled “National Civilized City” twice in China. In 2007 and 2009, “Summer Davos”, which is also known as “Annual Meeting of the New Champions” was successfully held in Dalian.

Energetic development and growth of Dalian

Since the international financial crisis broke out in 2008, Dalian took a positive act to promote internal needs, and made a great effort in developing oversea market. It insists on transforming development mode and further develops low-carbon and green economy. In particularly, strategic emerging industry has realized a fast and fine development. In 2009, Dalian's GDP was estimated 440 billion yuan, general local fiscal budgetary revenue reached 40.02 billion yuan, fixed assets investments was 327.3 billion yuan. Under the severe impact of global financial crisis, Dalian’s economy is still stable and the economic indicator growth is one of the top on the national list. Economic aggregate makes to a new high. In the first half of the year, Dalian’s total output value
reached 251 billion yuan, up 16.6%. General local fiscal budgetary revenue reached 24.56 billion yuan, up 25.8% over the first half of the year in 2009. Foreign investment in actual use was 3.72 US dollar, an increase of 51.7%. These figures show a vigorous development and a bloom growth momentum.

Now, Dalian has entered into a new development stage. The development and opening up of Liaoning coastal economic belt has updated to the national strategy. State council further unveils the policy of revitalizing Northeastern old industry base. These all bring a historical golden opportunity to Dalian. It now fully pushes the building of international shipping center in northeast Asia, international logistic center in northeast Asia, regional financial center and modern industry cluster. In addition, Dalian accelerates the progress of urbanization process, opening up and reformation and innovation. It shows a great potential of development.

Dalian would like to strengthen the cooperation with all cities present here on the following issues:

1. **Strengthen shipping logistic cooperation**
   Dalian is grown up because of port. To build a international shipping center of Northeast Asia is the core concept of the construction of Dalian “3 centers and 1 cluster zone”. It focuses on building global logistic network and plan to construct an effective logistic platform. We will study the foreign advanced experience of logistic management and operation and use for reference, and further strengthen the exchange with other ports.

2. **Tighten up the cooperation with IT industry**
   At the present, Dalian software and outsourcing service industry develops fast. The IT cooperation scale would be gradually enlarged besides Japan to further enhance exchange in IT technology and outsourcing industry between countries of the world. Dalian now has already built a Dalian Software Park in Tokyo in order to promote the bilateral cooperation in this field. Furthermore, the construction of the 3rd stage of Software Park has started, it would further provide favorable terms in developing software service outsourcing industry.

3. **Reinforce cooperation in green industry, such as energy saving and environment protection**
   Asian Pacific region shares a one ecosystem. Strengthening the development of green industry suits every nation’s benefit. Dalian now speeds up the development of strategic emerging industry and promotes research and development of new energy equipment, energy saving and new energy vehicle, biopharmaceutical and new material. It also takes an active role in building ecological park, for instance, Venous Industry Based Eco-industrial Park, Ocean Economic Industrial Park. During the building process, we learn the foreign experience and advanced technology and use for reference, so that a wider cooperation will be carried out in field of energy saving, environment protection and resource utilization.

As an old saying in Chinese: “a distant relative is not as good as a near neighbor”, so no matter when, Dalian is willing to cooperate with bordering country, and cherishing the deep friendship with the member cities present here. I believe that through our unremitting efforts, the exchange and cooperation between us will surely be tightened to achieve a fruitful result.
New Strategy of Dalian Urban Development

CAO AIHUA
Standing Committee Member of the CPC Dalian Committee, Vice Mayor

Develop the New Industrial Structure:
High and New Technology—Leading Role;
Advanced Manufacturing and Modern Services—Support

Nuclear Power Equipments
Wind Power Equipments
New Energy Vehicles
LED
PV
Electronic Information
Software

A Panoramic View of Dalian Downtown

Location: the southern tip of Liaodong Peninsula;
Land Area: 1,233 km²; Population: 6 million

Honors

UNEP Global 500
LivCom International Competition

Annual Meeting of the New Champions

GDP in 2009: RMB 440 billion (2.66 times as in 2003)
Despite of the tough situation, Dalian has made impressive progress of economic growth in the first half of 2010, and the growth rate takes the lead in Chinese cities of the same level.

**General Budgetary Revenue from Local Economy in 2009:**
RMB 40.02 billion (3.62 times as in 2003)

**Fixed Assets Investment in 2009:**
RMB 330 billion (8.05 times as in 2003)

**Objective: An International City in NE Asia**

- International Shipping Center for NE Asia
- International Logistics Center for NE Asia
- Regional Financial Center
- Modern Industry Cluster Area

**I. Enhance Shipping and Logistics Cooperation**

**II. Enhance IT Industry Cooperation**

**III. Enhance Energy Saving and Environment Friendliness Industry Cooperation**
Develop the New Industrial Structure:
High and New Technology—Leading Role;
Advanced Manufacturing and Modern Services—Support

- Nuclear Power Equipment
- Wind Power Equipment
- New Energy Vehicles
- LED
- PV
- Electronic Information
- Software
Kai Tak Development
Planning for a Sustainable and Green Environment

Mr. YUE Chi Kin
Chief Town Planner, Planning Department
Government of the Hong Kong Special Administrative Region

1. Introduction
Kai Tak, with an area of about 323 hectares, is the ex-airport site of Hong Kong. It has been vacant since the relocation of the Hong Kong International Airport to Chek Lap Kok in 1998. The Planning Department commissioned the Kai Tak Planning Review in 2004 to prepare a new development scheme for the ex-airport site under a “no reclamation” scenario so as to preserve the heritage of the Victoria Harbour. The study proceeded with extensive public engagement activities under the theme of “Planning with the Community” to help building up public consensus on the development proposals. After three rounds of public participation programme, a new Kai Tak Outline Zoning Plan was published in November 2006, amalgamating the ‘shared’ vision of a “Distinguished, Vibrant, Attractive and People-oriented Kai Tak by Victoria Harbour”.

The community generally supported the following guiding principles for the planning of Kai Tak:

- Planning Kai Tak as a sustainable and environmentally friendly development to contribute to Hong Kong as a world-class international city;
- Developing Kai Tak as a hub for sports, recreation, tourism, business and quality housing;
- Designing Kai Tak as Hong Kong’s showcase for urban design and landscaping;
- Promoting pedestrian-oriented environment, integrated public spaces and maximising the waterfront for public enjoyment;
- Preserving the heritage assets in Kai Tak and respecting the legacy of the ex-Kai Tak Airport and its runway; and
- Integrating Kai Tak with its surrounding, providing opportunities for revitalising the surrounding districts and promoting local and diversified economy.

Kai Tak is envisaged to become a new urban node in South East Kowloon as well as a new heritage, green, sports and tourism hub of Hong Kong. The planning intention is to pursue a low to medium density development in Kai Tak to achieve quality living environment, to enhance the townscape as well as to meet public aspiration. Upon completion of the Kai Tak Development, 30,000 flats will be provided to accommodate 86,000 population and 83,000 job opportunities will be created.

2. Towards a Sustainable City
The land use proposals for Kai Tak Development are supported by the following preliminary technical assessments to ascertain their broad feasibility:
In particular, the Sustainability Assessment ensures the project to plan, design, construct and operate in a sustainable way. A Preliminary Sustainability Assessment (PSA) has been conducted using the Computer-Aided Sustainability Evaluation Tool (CASET) developed under the Study on Sustainable Development in Hong Kong for the 21st Century (SUSDEV21) as the evaluation framework. The CASET aims to assist Government in evaluating new strategic initiatives or major programmes from a sustainable development perspective. It is built upon 42 sustainability indicators and eight guiding principles. The assessment has shown that the land use proposals in Kai Tak will bring general improvements to the economy, society and social infrastructure, leisure and cultural vibrancy and mobility.

On the economic aspect, the proposed office sites at Kai Tak provide a land reserve for developing into a well-planned prime office node as recommended in the HK2030 Study. It is expected to enhance Hong Kong as a competitive and prosperous market-based economy through the creation of business and employment opportunities as well as increase in the number of tourists visiting Hong Kong. In addition, positive financial returns are also expected to be generated from land sales.

On the environmental aspect, the Kai Tak Development would provide extensive open space and contribute to the area-based significant landscape features of the territory. The environmentally friendly initiatives (e.g. district cooling system, water recycling) are expected to enhance its energy and freshwater efficiency, thus contributing to the principle of promoting the sustainable use of natural resources to minimize its ecological footprint through improving consumption efficiency. The environmental improvement measures at Kai Tak Approach Channel will also bring about improvements to the marine water quality of the area.

On the social aspect, about 30,000 flats would be provided for Kai Tak Development. It is expected to contribute positively to enhancing living space, stabilizing private rent and relieving the housing inadequacy of the territory, fostering a stable, equitable, ethical and progressive society.

On leisure and cultural vibrancy aspect, the provision of an easily accessible waterfront, Metro Park and an extensive open space network will help alleviate the shortfall of open space in surrounding districts, and improve the vibrancy of Hong Kong’s recreational opportunities and leisure activities. The planned multi-purpose stadium complex and other sports and recreation venues are all positive measures in promoting sports, recreation, cultural and entertainment activities.
On mobility aspect, the co-location of living and employment areas within Kai Tak development will reduce commuting or journey to work. The planned road links and rail-based transport are expected to promote a safe, accessible, efficient and clean transport network of Hong Kong.

3. Sustainable Design Concepts
Sustainable design concepts have been applied in the conceptual design stage within the whole Kai Tak Development to establish a sense of community and uniqueness for Kai Tak through the creation of a comprehensive network of parks and gardens for integrating the residential and commercial neighborhood. The design also echoes with the vision for the landscape to create Kai Tak as “A Green Web for Sustainable Development”.

A comprehensive network of opens space to integrate with key developments and to create distinctive landscape concepts with a view to achieving a high quality of living environment. These concepts include:

“Station in the Park”
Station Square is one of focal points of the new city centre, where visitors come off from Kai Tak Station of the mass transit railway. Lush green will be provided and surrounded by small shops. This is the only station in the urban area with no overhead development and located within a park. Developments are planned around the station to form the Kai Tak city centre.

The Kai Tak Nullah will be opened up and turned into the Kai Tak River to improve the micro-climate in dense urban core area. It is located within the Kai Tak City Centre and on the west of the Station Square. A riverside walk on both sides of the river channel is planned with shop frontage and eating places to create a vibrant and festive public gathering place.

A special design residential area, Grid Neighborhood, is located to the south of the Station Square. It comprises 12 smaller development sites with pedestrianized streets, podium free and better ventilation considerations in the planning stage. This unique form of residential development with intimately scaled urban street blocks 3-storey townhouses and tree-lined streets inspiring more creativity in the Hong Kong property development sector.

“Shop in the Park”
Variety of commercial, office, hotel and retail developments around the Kai Tak Station of the mass transit railway and extending along the Prince Edward Road East to the future Sung Wong Toi Park. This area, surrounded by a dynamic environment of diverse buildings and the contemporary park with cafes, restaurants and shops, serves as a gateway to Kai Tak.

“Stadium in the Park”
The multi-purpose stadium complex with a 45,000-seat main stadium, a 5,000-seat secondary stadium and a 4,000-seat indoor sports arena is located in the waterfront to achieve a new icon in Victoria Harbour. The concept of “Stadium in the Park” is intended to integrate the sports facilities with the other leisure activities and to help the revitalization of the adjacent old districts.
“Living on the Runway”
The distinctive waterfront setting is planned to accommodate quality hotel and residential developments under the concept of “Living on the Runway”. With water on two sides and adjacent to the Metro Park, the Runway community enjoys spectacular views at a unique location. An open space corridor is planned at the centre of the Runway Precinct so as to reminisce the previous aircraft landing activities.

A 24-hectare Metro Park is located in the northern part of the former runway. It would be a unique waterfront park in Hong Kong. The elongated shape of the park helps to keep the collective memory of the former airport.

A cruise terminal with 2 berths for mega cruise ships is located at the tip of the former runway to support Hong Kong as a cruise hub in Asia. It is planned to commence operating the first berth around mid-2013. Sustainable design features such as photovoltaic systems, a rain water recycling system for irrigation, service-on-demand controls for escalators and passenger conveyors, carbon dioxide sensors and a building energy management system are incorporated in the cruise terminal building. In addition, a landscaped deck will be provided to facilitate the public to access the waterfront. A heliport located at the runway tip is to cater for the cross-boundary helicopter services in the Pearl River Delta region.

A tourism node of hotel/retail/entertainment facilities located adjacent to the cruise terminal is intended to expand the tourism activities to this part of the metro area. A landmark building with a public observation gallery in this location will form a major icon signifying the gateway to Kai Tak for the cruise ships entering the harbour and achieving a more dramatic height profile. A runway park is located at the end of the runway with an aviation theme.

4. Sustainable Features in Kai Tak Development
Kai Tak is envisaged to become a new urban node in South East Kowloon as well as new heritage, green, sports and tourism hub of Hong Kong. The following sustainable features are proposed:

(1) Podium-Free Design
Developments within Kai Tak area are podium-free; car parks will be located at basement level. This podium-free design will enhance air ventilation particularly at street level and maintain visual corridor.

(2) Greening
Developments within Kai Tak area are encouraged to provide greening measures, such as roof greening, vertical greening and roadside greening, to enhance the overall amenity, to serve as a visual relief on the public utility structures as well as to reduce gas emission and carbon footprint.

(3) Gradation Building Height Profile
Starting with tallest commercial buildings at City Centre, the building height gradates along the residential neighbourhood towards the Stadium Complex and Metro Park, slightly rises again from the Runway Precinct to a new landmark at the Tourism Node.
Gradation building height profile can help to protect the view to ridgeline, to maintain the visual corridor to the mountains and harbours and to enhance visual quality of the Kai Tak development.

(4) **Air Ventilation**
Measures to improve the air ventilation within Kai Tak development, include:
- open space and water body serve as breathing space;
- site disposition and street pattern – the size of most land parcels is reduced to below 2 hectares, grid street pattern is designed to capture prevailing wind;
- pedestrian streets and green corridors serve as breezeways; and
- stepped height concept to minimize adverse visual and air ventilation impacts.

(5) **Environmentally Friendly Transport**
To develop a sustainable living environment, a rail-based Environmentally Friendly Transport System (EFTS) will be provided to minimize vehicular traffic. The proposed EFTS will circulate throughout the Kai Tak area and serve as a feature attraction to the overall tourism appeal of the Kai Tak site.

(6) **Cycle Track & Heritage Trail**
The cycle track within Kai Tak will be the only planned cycle track in the urban area of Hong Kong. It will allow people to access the waterfront easily and to cut down vehicular trips.

It is found that several sites/buildings/structures of cultural and historical significance are located within Kai Tak, which include the Lung Tsun Stone Bridge Archaeological Site, Fishtail Rock and Sung Wong Toi Inscription Rock, etc. These are worthy of preservation. The selected links of the pedestrian network will be packaged and enhanced as the heritage trail of Kai Tak. The heritage trail will be extended to the surrounding districts to connect with the existing heritage assets.

(7) **District Cooling System**
A district cooling system (DCS) is planned to provide chilled water to air conditioning systems of buildings planned for non-residential purpose in the Area, where appropriate. The DCS is more energy efficient with less discharge of direct and indirect effluents to the environment. The system would be supported by two chiller plants and a pumping station, which have been reserved in the Area.

5. **Conclusion**
The planning of Kai Tak is the product of extensive public engagement with Government and the community shared the same vision of developing it into a ‘Distinguished, Vibrant, Attractive and People-oriented Kai Tak by Victoria Harbour’. Kai Tak Development has incorporated a variety of new environmentally friendly initiatives and design concepts. It will serve as a showcase of sustainable planning and development in Hong Kong. It will also be developed as a low-carbon city and a green hub of Hong Kong.
Introduction
The Planning Department commissioned the Kai Tak Planning Review in July 2004 to prepare a new development scheme for the ex-airport site under a "no reclamation" scenario so as to preserve the heritage of the Victoria Harbour. The study proceeded with extensive public engagement activities under the theme of "Planning with the Community" to help building up public consensus on the development proposals.

Towards a Sustainable City
The land use proposals for Kai Tak Development are supported by the following preliminary technical assessments to assert their broad feasibility:

- Traffic and Transport
- Environmental and Cultural Heritage
- Air Ventilation
- Marine
- Drainage and Sewerage
- Water and Utility
- Sustainability

In particular, the Sustainability Assessment ensures the project to plan, design, construct and operate in a sustainable way.

Sustainability Assessment

- A Preliminary Sustainability Assessment (PSA) has been conducted using the Computer-aided Sustainability Evaluation Tool (CASET) developed under the Study on Sustainable Development in Hong Kong for the 21st Century (SUSDEV21) as the evaluation framework
- The CASET aims to assist Government in evaluating new strategic initiatives or major programmes from a sustainable development perspective. It is built upon 42 sustainability indicators and eight guiding principles
- The assessment has shown that the land use proposals in Kai Tak will bring general improvements to the economy, society and social infrastructure, leisure and cultural vibrancy and mobility

Economically

- As recommended in the HK2030 Study, the proposed office sites at Kai Tak provide a land reserve for developing into a well-planned prime office node
- It is expected to enhance Hong Kong as a competitive and prosperous market-based economy through the creation of business and employment opportunities as well as increase in the number of tourists visiting Hong Kong
- Positive financial returns are also expected to be generated from land sales

Environmentally

- The Kai Tak Development would provide extensive open space and contribute to the area-based significant landscape features of the territory
- The environmentally friendly initiatives (e.g. district cooling system, water recycling) are expected to enhance Hong Kong as a competitive and prosperous market-based economy through the creation of business and employment opportunities as well as increase in the number of tourists visiting Hong Kong
- Positive financial returns are also expected to be generated from land sales

Socially

- By providing around 30,000 flats, it is expected to contribute positively to enhancing living space, stabilising private rent and relieving the housing inadequacy of the territory, fostering a stable, equitable, ethical and progressive society
- On leisure and cultural vibrancy aspect, the provision of an easily accessible waterfront, Metro Park and an extensive open space network will help to alleviate the shortfall of open space in surrounding districts, and improve the vibrancy of Hong Kong’s recreational opportunities and leisure activities
- The planned multi-purpose stadium complex and other sports and recreation venues are all positive measures in promoting sports, recreation, cultural and entertainment activities
- The co-location of living and employment areas within Kai Tak development, travel distance is expected to decrease for passengers. The planned road links and rail-based transport are expected to promote a safe, accessible, efficient and clean transport network of Hong Kong

Economically

- As recommended in the HK2030 Study, the proposed office sites at Kai Tak provide a land reserve for developing into a well-planned prime office node
- It is expected to enhance Hong Kong as a competitive and prosperous market-based economy through the creation of business and employment opportunities as well as increase in the number of tourists visiting Hong Kong
- Positive financial returns are also expected to be generated from land sales

Environmentally

- The Kai Tak Development would provide extensive open space and contribute to the area-based significant landscape features of the territory
- The environmentally friendly initiatives (e.g. district cooling system, water recycling) are expected to enhance Hong Kong as a competitive and prosperous market-based economy through the creation of business and employment opportunities as well as increase in the number of tourists visiting Hong Kong
- Positive financial returns are also expected to be generated from land sales

Socially

- By providing around 30,000 flats, it is expected to contribute positively to enhancing living space, stabilising private rent and relieving the housing inadequacy of the territory, fostering a stable, equitable, ethical and progressive society
- On leisure and cultural vibrancy aspect, the provision of an easily accessible waterfront, Metro Park and an extensive open space network will help to alleviate the shortfall of open space in surrounding districts, and improve the vibrancy of Hong Kong’s recreational opportunities and leisure activities
- The planned multi-purpose stadium complex and other sports and recreation venues are all positive measures in promoting sports, recreation, cultural and entertainment activities
- The co-location of living and employment areas within Kai Tak development, travel distance is expected to decrease for passengers. The planned road links and rail-based transport are expected to promote a safe, accessible, efficient and clean transport network of Hong Kong

Sustainable Design Concepts

“Station in the Park”
“Shop in the Park”
“Stadium in the Park”
“Living on the Runway”
**“Station in the Park”**

Station Square
- focal point of the new city centre, where visitors come off from Kai Tak Station
- lush green Square surrounded by small shops
- the only station in the urban area with no overhead development and located within a park
- developments are planned around the station to form the city centre

**“Shop in the Park”**

Commercial/Office Belt
- variety of commercial, office, hotel and retail developments around the SCL Kai Tak Station and extending along the Prince Edward Road East to the future Sung Wong To Park
- surrounded by a dynamic environment of diverse buildings, this contemporary park with cafes, restaurants and shops serves as a gateway to Kai Tak

**“Living on the Runway”**

Runway Precinct
- quality hotel and residential developments will be provided
- low density residential development
- continuous waterfront promenade on both sides of the Precinct
- landscaped deck to separate vehicles and pedestrian traffic
- to enjoy spectacular views of the harbour area
- an open space corridor reminisce the previous aircraft landing activities

**“Living on the Runway”**

Surrounding: Cruise Terminal
- to support Hong Kong as a cruise hub in Asia by providing 2 berths for mega cruise ships
- a landscaped deck will be provided to facilitate the public to access the waterfront
- the heliport located is to cater for the cross-boundary helicopter services in the Pearl River Delta region

**“Stadium in the Park”**

Sports Hub
- sports policy: in hosting major international sports events and encourage community’s participation in sports activities
- a 45 000-seat main stadium, a 5 000-seat secondary stadium and a 4 000-seat indoor sports arena
- the concept of “Stadium in the Park” so as to integrate the sports facilities with the other leisure activities
- located in the waterfront to achieve a new icon in Victoria Harbour
- to help the revitalization of the adjacent old districts

**“Living on the Runway”**

Surrounding: Metro Park
- located in the northern part of the former runway
- a unique waterfront park in Hong Kong
- helps to keep the collective memory of the former airport

**Cruise Terminal Building**

Tourism Node
- hotel/retail/entertainment facilities
- aviation theme runway park
- a landmark building with a public observation gallery will form a major icon for the cruise-ships entering the harbour and achieve a more dramatic height profile
- visitors can command a panoramic view of the harbour and an extended vista beyond Lei Yue Mun
### Sustainable Features in Kai Tak Development

#### Podium-Free Design
Developments within Kai Tak area are podium-free; carparks will be located at basement level. The podium-free design will enhance air ventilation particularly at street level and maintain visual corridor.

#### Gradation Building Height Profile
Starts with tallest commercial buildings at City Centre and gradates along the residential neighbourhood towards the Stadium Complex and Metro Park. Rises again from the Runway Precinct to a new landmark at the Tourism Node.

Gradation height profile can help to protect the view to ridgeline, the views beyond the neighbourhood to maintain one’s orientation within the city, the visual corridor to the mountainous backdrop and to enhance visual quality of the Kai Tak development.

#### Environmentally Friendly Transport
To develop a sustainable living environment, a rail-based Environmentally Friendly Transport System (EFTS) will be provided to minimize vehicular traffic. The proposed EFTS will circulate throughout the Kai Tak area and serve as an icon enhancing the overall tourism appeal of the Kai Tak site.

#### District Cooling System
A district cooling system (DCS) is planned to provide chilled water to air conditioning systems of buildings planned for non-residential purposes in the Area, where appropriate. The DCS is more energy efficient with less discharge of direct and indirect effluents to the environment. The system would be supported by two chiller plants and a pumping station, which have been reserved in the Area.

#### Greening
Developments within Kai Tak area are encouraged to provide greening measures such as roof greening, vertical greening and terrace greening. A green wall and vertical greening is proposed on the public utility structures as well as to reduce gas emission and carbon footprint.

#### Air Ventilation
Measures to improve the air ventilation within Kai Tak development, include:
- open space and water body serve as breathing space
- site disposition and street pattern – the size of most land parcels is reduced to below 2 hectares, grid street pattern is designed to capture prevailing wind
- pedestrian streets and green corridors serve as breezeways
- stepped height concept to minimize ventilation impact

#### Cycle Track & Heritage Trail
The only cycle track in the urban area of Hong Kong. The cycle track will allow people to access the waterfront easily and to cut down vehicular trips.

Several sites/buildings/traces of cultural and historical significance are located within Kai Tak which include the Lung Tsun Stone Bridge Archaeological Site, Fishtail Rock and Sung Wong Toi Inscription Rock, etc. These are worthy of preservation.

Selected links of the pedestrian network will be packaged and enhanced as the heritage trail of Kai Tak. The heritage trail will be extended to the surrounding districts to connect with the existing heritage assets.

**Kai Tak Development will be a showcase of sustainable planning and development in Hong Kong. It will also be developed as a low-carbon city and a green hub of Hong Kong.**