

Regional Cooperation Plan on Building a Quality Living Area

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The English version of this document is translated from the Chinese version. In case of discrepancies between the two versions, the Chinese version shall prevail and take precedence.

Foreword

The initiative of transforming the Greater Pearl River Delta (PRD) region into a quality living area was embraced in the “Outline of the Plan for the Reform and Development of the Pearl River Delta (2008-2020)” (the PRD Outline) released by the National Development and Reform Commission on 8 January 2009. This important strategic initiative has also been agreed among the leaders of Guangdong, Hong Kong and Macao with a view to transforming the development of the Greater PRD region. The PRD Outline also promotes closer cooperation between the PRD region and Hong Kong and supports the latter’s suggestion to jointly transform the Greater PRD region into a green and quality living area. The proposal for “building a quality living area” underscores the sustainable development concept of striking a balance between economic and social development and the environment, putting quality living at the heart of regional development. It also recognises that whilst people in the Greater PRD region live in different administrative regimes under “One Country, Two Systems”, we are closely connected and interrelated. It has also helped to take forward the direction of continuous enhancement in regional cooperation.

The Greater PRD region, comprising nine cities in Guangdong Province – Guangzhou, Shenzhen, Zhuhai, Foshan, Huizhou, Dongguan, Zhongshan, Jiangmen and Zhaoqing and two Special Administrative Regions – Hong Kong and Macao, is economically important. It plays a prominent role and assumes a vital strategic position in facilitating the socio-economic development, as well as the reform and opening up of China.

Over the past three decades, the Greater PRD region has undergone major developments and reforms. These, coupled with closer cooperation within the region, have brought about phenomenal economic and social development. As a result, the quality of life of people in the region has been improved significantly. Amidst the profound changes taking place both within and outside China, the Greater PRD region should continue to act as a pioneer in China’s quest for change in its mode of economic development and in facing challenges from the international arena.

In October 2009, Guangdong, Hong Kong and Macao jointly commenced a study on the Regional Cooperation Plan on Building a Quality Living Area (the Plan), which aims to propose the long-term cooperation directions of the Greater PRD region. This Plan has been prepared based on background research, topical studies and discussions among the three sides. It has put forth proposals on the vision and cooperation directions for building a quality living area in recognition of the need to address our common problems through a regional approach. Specifically, the Plan recommends cooperation proposals in five areas: environment and ecology, low-carbon development, culture and social living, spatial planning, and transportation systems. The Plan will serve as a reference for government departments of the three sides to follow up. The planning horizon of the Plan covers the period up to 2020, which is in line with that of the PRD Outline.

During the study process, the three sides have collected stakeholders’ views on the topics

covered by the Plan through a variety of channels. In mid-2008, the Environmental Protection Bureau of Guangdong Province (now the Department of Environmental Protection of Guangdong Province) commissioned the Chinese Academy for Environmental Planning under the Ministry of Environmental Protection of China to study the idea of transforming the Greater PRD region into a green and quality living area as proposed by Hong Kong. The study team met with stakeholders in Guangdong, Hong Kong and Macao in July 2008 to collect their views. In addition, discussion fora involving relevant experts and academics were conducted in the three places from April to May 2010. The Hong Kong side also presented the proposals on environmental protection and ecological conservation cooperation under the Framework Agreement on Hong Kong/Guangdong Cooperation to the Legislative Council, the Advisory Council on the Environment and green groups during May to July 2010. The views collected have been suitably incorporated into the study. Overseas and mainland experience regarding regional and metropolitan development, urban planning and regional cooperation have also been taken on board.

To foster community consensus with a view to supporting the future implementation of the Plan, the three governments jointly commenced a three-month public consultation on the Plan's initial proposals on 1 September 2011. During the consultation period, comments and suggestions were collected from various community sectors in the three places. The Guangdong Province received 16 written submissions; Hong Kong received 72 written submissions; and Macao received 4 written submissions. The three sides have also collected feedback from their respective public fora and related consultation meetings. Most respondents supported the initiative of jointly compiling a regional plan by the three sides. Respondents also pointed out that the Plan has a wide vision, and the Greater PRD region is presented with massive opportunities and potential for cooperation and they have urged the three governments to take joint action so that the region will become a sustainable quality living area. Some respondents have expressed enthusiasm for the Plan's implementation and anticipated that the three governments could formulate specific action plans and monitoring systems. Some respondents had put forward specific comments and suggestions on the areas of improving environment and ecology, promoting low-carbon development, optimising regional land use, facilitating green transportation systems, and culture and social living.

Guangdong, Hong Kong and Macao are governed under different administrative and legal systems. Under "One Country, Two Systems", the three sides will respect each other's differences and will take into account their respective administrative, legal and social systems during implementation of the various cooperation proposals recommended under the Plan. In addition, the three sides will seek room for tripartite cooperation or bilateral cooperation with a view to making contributions to building a quality living area in the Greater PRD region.

I. The Opportunities and Challenges

The Greater PRD region is one of China's most important economic zones, which plays a significant role in East-West cultural and economic exchanges. For many centuries, numerous forward-looking talents, brought along with their innovative ideas and advanced technologies, have been aggregating here to realise their dreams. Their admirable achievements in different aspects, such as finance, trade, science and technology, logistics, culture and electronic communications, have helped to develop the region into one of the most important international economic and trading centres. In the coming future, we envision talented and creative people will continue to thrive in this beautiful and resource-rich land and will contribute to its sustainable prosperity and growth. This will also help maintain the region as the “testing ground” and “pioneer” in both implementing the national strategy of promoting scientific development and accelerating the transformation of its mode of development.

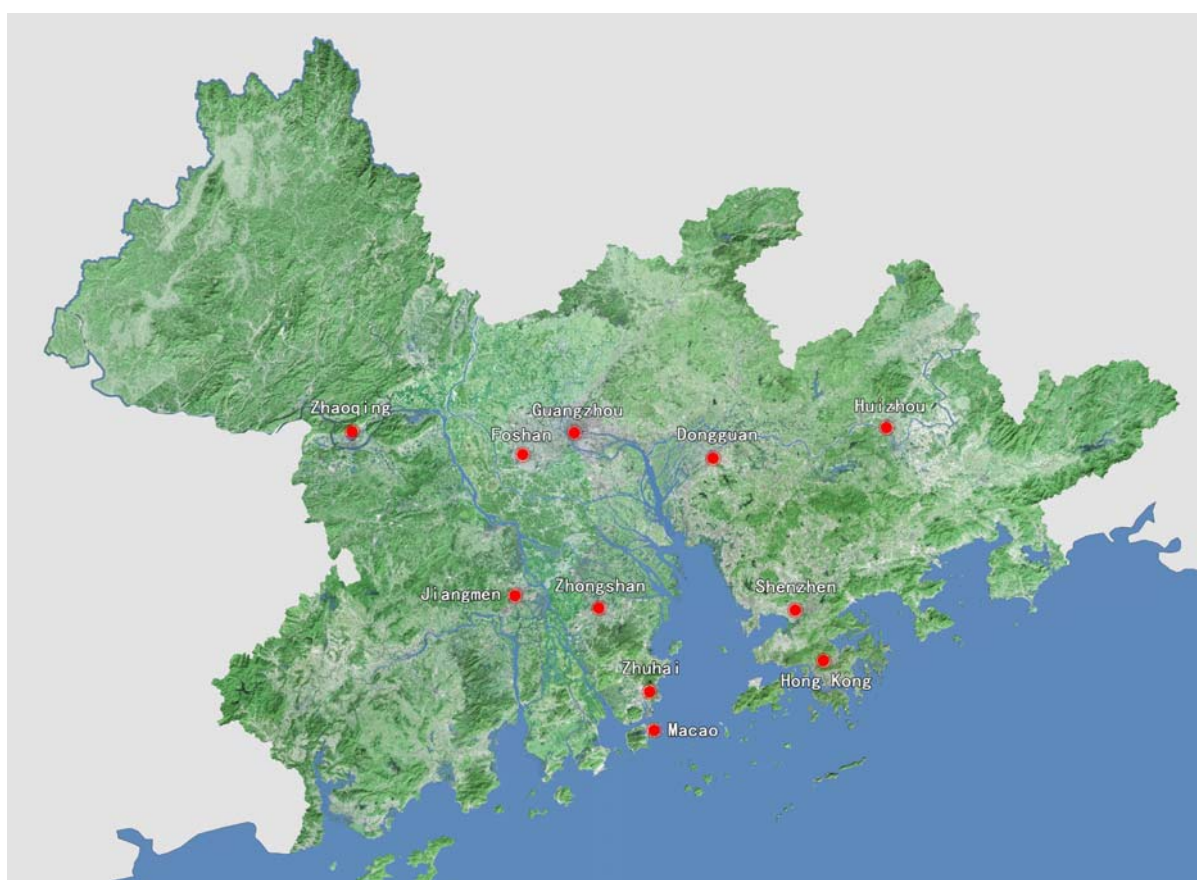


Figure 1-1 The Greater PRD region: Guangdong Province (Guangzhou, Shenzhen, Zhuhai, Foshan, Huizhou, Dongguan, Zhongshan, Jiangmen, Zhaoqing¹) and the two Special Administrative Regions, i.e., Hong Kong² and Macao³, which cover a total area of 55880.5km².

Looking backward, the Greater PRD region has been a fabulous success story with

¹ Source: "Guangdong Statistical Yearbook 2010", http://www.gdstats.gov.cn/tjnj/ml_c.htm

² Source: "Hong Kong Annual Digest of Statistics 2010", http://www.censtatd.gov.hk/products_and_services/products/publications/statistical_report/general_statistical_digest/index_tc_cd_B1010003_dt_back_yr_2010.jsp

³ Source: "Macao Yearbook of Statistics 2010", <http://www.dsec.gov.mo/Statistic.aspx>

remarkable achievements. In anticipation of future development, new circumstances will bring along great opportunities as well as challenges for the region.

First of all, world trends have been moving towards the direction of putting more importance on a balanced and coordinated economic, social and environmental development. Quality of life has also become a key factor in measuring the competitiveness of a region and even a country. The Greater PRD region, gifted with natural resources such as pleasant weather, sunshine, seashores and forest, as well as a solid economic foundation, is one of the most advanced city clusters in China. In view of the new challenges brought about by the change in development mode, the pursuit of quality living as a strategic goal for regional development is in line with the worldwide trend. It will also help attract international talent, thereby maintaining the region's overall competitiveness.

Secondly, it is worth noting that restructuring the mode of economic development is one of the core elements of the national growth strategy. Special attention has also been given to addressing the issues relating to resource utilisation, environmental problems as well as improving people's livelihood. The PRD region is a pioneer in taking forward national reforms. With its close connection with Hong Kong and Macao, the Greater PRD region should shoulder the responsibility of taking forward new modes of development. This is indeed an important challenge facing the entire region. At present, the impact of the global financial turmoil still prevails. Depletion of energy resources, pressure on the environment, unbalanced economic development and keen competition from other regions, within and outside the country, are amongst the challenges confronting us. To reinforce regional competitiveness, an urgent need exists to accelerate the transformation in the mode of economic development of the PRD region, and to seek balanced and coordinated economic, social and environmental development.

Thirdly, tackling the common problems encountered in regional development calls for cooperation beyond administrative boundaries. The ever-increasing population, industrial development and traffic flow have posed serious challenges to regional air and water quality. At the same time, people look for improvement in both the quality and quantity in the provision of public services. Inefficient use of land resources, improper urban and industrial development planning, excessive reliance on automobiles, and the need to upgrade the standard of regional and urban management, etc., also require attention. It is necessary to adopt an overall regional perspective in approaching and resolving these problems. Cities, towns and villages in the Greater PRD region are, after all, closely connected and interrelated.

To meet these challenges and create a better future for the Greater PRD, all regional cities, towns and villages should be taken as an inter-connected entirety. By following the principle of sustainable development, and through regional cooperation and planning in the respective areas, it will be possible to redefine the relationship between economy, society and environment, which should complement each other and avoid unduly tilting in favour of one aspect at the expense of the other two.

This Plan has been prepared based on the consensus of the three governments within the Greater PRD region. The intention is to offer ideas and cooperation proposals for taking forward cross-boundary matters or promoting transformation in the mode of development in the region. However, the cooperation directions proposed in this Plan should not be taken as specific plans for the purpose of allocation resources, nor should they be taken as design options for specific projects.

II. Vision and Cooperation Directions

(A) Our vision for regional development

The overall objective of building a quality living area is to transform the Greater PRD region into an exemplar city cluster of green and quality living. The region will be characterized by a safe and healthy ecology and environment; low-carbon sustainable economic development; orderly spatial planning; pleasant urban and rural landscapes; green and highly efficient transportation networks; and well-established, comprehensive, and convenient public services supported by effective means of coordination and collaboration. Building on existing efforts, the proposed objectives of the various cooperation areas are set out below:

1. creating a clean and safe ecological system and natural environment: to strengthen protection of our natural forests, green spaces⁴, coastlines, wetlands and agricultural lands of high ecological value so as to facilitate the establishment of a regional ecological system; to prevent deterioration in regional water and air quality; and to prevent land contamination with a view to protecting the natural environment and safeguarding human health.
2. steering economic development along a low-carbon and sustainable pathway and fulfilling residents' employment and consumption needs: to adopt an environmentally-friendly and sustainable approach in using natural resources and energy in the economic sector with a view to gradually setting up a low-carbon, circular and cleaner economic system; changes in the mode of economic development, technology advancement and productivity enhancement to become the main driving forces for further economic development; and to substantially increase the share of innovative and service economies.
3. providing more convenient public services and adequate livelihood security: to focus on "expediting the transformation of the mode of economic development and realising blissful living", including actively promoting community development and providing essential public services in a fair manner in the PRD region⁵; and to establish preliminary regional and cross-boundary public service mechanisms in the Greater PRD region to improve the convenience for people living or working across boundaries.

⁴ Green space aims to protect regional ecological safety, highlighting the natural and human characteristics of the area and improving the environmental landscape of towns and villages. Green space is designated in certain regions and subject to long-term stringent protection and development restrictions. This green open space has significant natural and human values, as well as regional significance. [Source: Guangdong Province Regional Greenway Planning Guidance, http://www.gdcic.net/download/greenRoad_20100224.pdf]

⁵ According to the "Notice on Printing of the Outline of the Plan for Equalization of Basic Public Services in Guangdong Province" (GD Gov No.[2009]153), provision of essential public services in a fair manner refers to giving equal rights to citizens for enjoying basic public services as far as possible such that all citizens enjoy more or less the same level of basic public services. However, it does not mean that every citizen will enjoy the same basic public services. Rather, it means that all citizens will enjoy a certain standard of basic public services taking into account the differences between regions, cities, various urban areas and groups of people.

4. well-planned spatial development and a pleasant living environment: to systematically plan and locate key development areas mainly in major towns and industrial parks; to enhance land use efficiency and orderly undertake urban renewal works as well as to gradually adopt them as the major development mode for various levels of town centres; and to preserve and revitalize the pleasant landscapes of cities and villages as well as streets, districts and buildings of historical value.
5. establishing a green, highly efficient and people-oriented transportation system to facilitate convenient cross-boundary connections: to develop a public transportation system with rail networks as its major backbone, and to increase its share relative to other modes of passenger transport; to provide convenient interchange arrangements for different transportation modes; to progressively promote and improve non-motorised transportation, where appropriate, taking into account practical considerations; to improve the planning of transportation networks as well as the connectivity of the various modes of transportation for hassle-free commuting; and to promote energy efficient and clean transportation systems as well as the use of new energy in order to effectively control pollution and greenhouse gas emissions.

(B) Cooperation directions

Guangdong Province, Hong Kong SAR, Macao SAR, and the nine PRD cities in the Greater PRD region share the common vision of building a quality living area. The governments of the three places will cooperate and work towards realising this vision.

1. According priority to protecting natural resources and environment

- (1) Utilising natural resources in a sustainable way: to adopt the option with the least impact on natural resources and environment in planning the development of industries and towns; to carry out environmental impact assessment on construction and development works such as factories, buildings, public facilities and infrastructure, etc. in accordance with the respective legal requirements of Guangdong, Hong Kong and Macao; and to conduct ecological impact assessment where necessary to ensure that the principle of sustainable development is being met, and that the required environmental or ecological measures are implemented to mitigate any adverse impact.
- (2) Safeguarding regional ecological systems: to enhance research and studies on natural landscape resources in urban and rural areas within the region to help gradually establish a natural resource database; to establish a comprehensive assessment, grading and classification system for ecological resources, building on existing cooperation on protecting regional green space; and to

draw up appropriate protection and control measures to ensure proper conservation of natural habitats and biodiversity that are critical to preserving the ecosystems.

- (3) Strengthening protection of water and air quality: to progressively improve the joint monitoring work on regional air quality in order to identify critical issues in protecting regional water and air quality and adopt prompt and effective measures to address prominent environmental problems; and to strengthen environmental emergency alert and response arrangements to avoid deterioration in environmental quality.
- (4) Increasing public resources for environmental protection and preservation of natural resources: to make protection of natural resources an important public administration goal; to substantially increase the resources allocated for environmental pollution control, ecology conservation, establishment of nature conservation areas, and preservation of natural landscapes; to encourage administrations at the local level to undertake land resumption for the purpose of protecting natural resources and landscapes as well as supporting agricultural development; to gradually establish a comprehensive mechanism in the PRD region to support diversified agricultural development, including the provision of support to farmers, farming villages, and related activities as well as protecting agricultural, forestry, water and oceanic resources; and to continue to implement and strengthen existing measures on natural resources conservation in Hong Kong, including designation of country parks, special areas, marine parks, and the designation of coastal protection areas and conservation areas under the Town Planning Ordinance, as well as carrying out conservation planning for important habitats and species.
- (5) Exploring the setting up of an ecological compensation mechanism in Guangdong Province and continuing to improve the fund transfer and payment systems to enable those areas preserved for nature conservation to also share the benefits of regional economic development.

2. Speeding up the transformation of the mode of economic development

- (1) Expediting the transformation and upgrading of the economic structure: to support development of a modern services industry, high-technology industry and “urban agriculture”; to promote creativity and innovation in the region; and to deepen reforms in the areas of financing and management of service industries with a view to driving the region to become a knowledge-based and service-oriented economy.

- (2) Expediting improvement in the energy and resource utilisation patterns of trades and industries to enhance their efficiency: to augment research and promotion of new energy and energy efficiency technologies and products; to promote wider use of clean and renewable energy; to provide strong impetus to support the development of environmental industries, including promoting circular economy, raising cleaner production levels and facilitating recycling and reuse of resources; and to strive to achieve breakthroughs in enhancing energy efficiency and reducing emissions for setting up low-carbon and circular economy in the Greater PRD region.
- (3) Enhancing the quality of urbanisation in the PRD region: to raise the development level and quality of services, induce advancement in the surrounding areas, accelerate the rate of increase in income for people working in the region; and to raise the consumption power of citizens and enterprises to facilitate a progressive change towards a regional economy driven by domestic demand.

3. Improving the provision of public services and addressing livelihood issues in the region

- (1) Providing essential public services in a fair manner in the PRD region: Guangdong Province to allocate more resources for the provision of public services, with a view to implementing the “Planning Outline for Equalization of Basic Public Services in Guangdong Province (2009-2020)”⁶ and putting more focus on education, public health, transportation, cultural and sports activities, security of livelihood, housing, employment, and medical services, etc.; to reform and improve public service systems so that the availability of these services are more evenly distributed in both urban and rural areas and supported by effective management systems; and to enhance the standard of essential public services to render them amongst the best in the Mainland and comparable to those of a moderately developed country.
- (2) Speeding up the introduction of innovative concepts to the social management system for the PRD region: Guangdong Province to gradually extend the coverage of the pilot scheme on social management system reform, and encourage PRD cities to consider making changes to their social management and public service systems to best suit their own situation and environment; to take forward restructuring of government functions, improving relevant legislation and regulations, establishing government service procurement systems, setting up and engaging the non-governmental organization and

⁶ http://www.gd.gov.cn/govpub/zfgb/qi/201001/t20100114_111431.htm No. 01.2010, Official Journal of the People's Government of Guangdong Province (Chinese version only)

residential communities in the social management system; to promote the development of non-governmental organizations by improving their registration and management system; to help the establishment of social worker teams; to create innovative mechanisms for urban and rural community management to facilitate and promote the adoption of self-management and self-servicing systems; to reform household management systems by allowing more opportunities for the migrant population to participate in social and local affairs management; and to establish an innovative registration system on migrating people which is unique to the PRD with a view to progressively stabilising the population growth and enhancing the population structure in the region.

- (3) Improving the mechanism for providing a diversified public services: to expand the services' scope and relax the prerequisite for allowing non-governmental organizations and enterprises to provide such services, whilst upholding the principle that public welfare services are to be led mainly by government; to strengthen regional cooperation to encourage local and foreign investment and participation in the provision of public services as well as in the setting up, operation and management of related facilities; and to accelerate the pace of developing and improving the quality of these services in the region.
- (4) Improving the quality of life for people living across boundaries: to continuously improve cross-boundary coordination and cooperation mechanism in providing social services; to encourage social service providers to operate across boundaries; and to establish suitable mechanisms to safeguard the welfare of people living across boundaries and enhance their convenience of living.

4. Changing the mode of spatial development

- (1) Making better use of land resources to promote transformation in the economic development mode: to actively promote “double transfers” within Guangdong, i.e., relocating population and industries between the PRD region and the eastern, western and northern parts of Guangdong Province as well as between the region's core and peripheral areas; to promote better planning and distribution of industries and more balanced regional development; for places to which industries are to be relocated, to put more emphasis on energy conservation, emissions reduction and environmental protection to minimise environmental impact caused by such relocation; for service-oriented cities, to encourage their reliance on public transportation hubs to develop multi-functional centres with commercial, offices, hotels, apartments and leisure facilities, etc. and making them as key drivers for development of modern service industries; for the PRD region, to formulate criteria for

industrial land use and development, taking into account the level of technological innovation, investment, production and output, energy usage and emissions, and infrastructure required for supporting circular economy, etc.; and to promote upgrading of trades and industries, facilitate more integrated development for industrial parks and urban cities and accelerate the development of service-oriented economies and creative industries.

- (2) Adjusting land supply and land use planning to improve the quality of life: carrying out more in-depth investigation of housing needs on the basis of Guangdong Province; to progressively establish systems for providing diversified housing to meet the different needs of the community and ensuring adequate land supply; to steadily establish a land use protection system; to continue to develop greenways⁷ in the PRD region, including expansion and improvement of regional greenway networks⁸, progressively developing urban and communal greenway systems, connecting cities and communities with greenway networks, and establishing extensive ecological corridors between urban and rural areas; to uphold the principle of preserving natural landscapes and conserving ecology in the process of establishing greenways so as to maintain and strengthen the foundation of the natural ecology; for Hong Kong, to continue to implement and strengthen existing measures on nature conservation, including designation of country parks, special areas, marine parks, and the designation of coastal protection areas and conservation areas under the Town Planning Ordinance, as well as carrying out conservation plan for important habitats and species for the protection of the natural environment and ecological resources.
- (3) Encouraging public transport-led spatial development: Guangdong Province to improve the planning and layout of urban development in the PRD on the premise that priority be accorded to the development of public transportation; to restrict urban sprawl along highways and at areas not properly supported by public transportation services; to encourage more intensive development around public transportation hubs; and to promote high density mixed development at transportation hubs after taking into account the carrying capacity of the supporting infrastructure (such as transportation systems).

⁷ Greenways are linear open space developed along natural and man-made corridors such as riversides, valleys, ridges and scenic roads. Greenways provide landscaped and recreational routes for pedestrians and cyclists and are connected to major parks, nature conservation areas, scenic spots, historic sites, and urban and rural residential areas, etc. The development of greenways will better protect and make use of natural, historic and cultural resources, and provide recreational and social space for citizens. Greenways are composed of two major parts, viz the natural green corridors and the ancillary man-made systems that provide the recreational functions of the greenways. [source: The Outline of the Master Greenway Network Plan of the Pearl River Delta, http://www.gdcic.net/download/greenRoad_20100224.pdf]

⁸ Greenway networks comprise regional greenways and urban greenways. Greenway networks are networks of corridors connecting regional green space and they are the ribbon-like open space with recreational functions. Greenway networks can protect the ecological environment as well as reflect the recreational values of natural and human resources. [source: The Outline of the Master Greenway Network Plan of the Pearl River Delta, http://www.gdcic.net/download/greenRoad_20100224.pdf]

- (4) Promoting coordinated spatial development in the PRD region: on the basis of pursuing differential development patterns in places serving different functions, Guangdong Province to consider introducing policy measures to coordinate spatial development so as to protect the development rights of different areas, in particular those that are relatively backward; to explore the creation of an ecological compensation mechanism in areas covered by the Guangdong Province river basins; on this basis, to look into the feasibility of setting up an ecological compensation mechanism for nature conservation areas and important ecological zones in Guangdong Province; in respect of agricultural land use, to explore measures that promote coordinated spatial development taking into account the prevailing agricultural land protection policy; in parallel to increasing the government resources on supporting agricultural land protection and on developing modernized farming techniques, to consider establishing a cross-regional land use index to balance the amount of land set aside for development purposes and that for agricultural uses, and to consider setting up a “trading mechanism” to try out the notion of “shared development rights” where priority development zones will share development rights with areas designated for agricultural purposes or to cooperate with the latter to undertake or operate the developments; and to strengthen regional planning coordination and provide resources and technical support to relatively under-developed regions.
- (5) Actively exploring regional cooperation in spatial development: to encourage cooperation between towns and cities in the PRD region as well as with Hong Kong and Macao to actively explore development of different forms of regional cooperation in spatial development, including allowing greater flexibility in adopting new and innovative approaches in the relevant planning, land and resources provisioning, and socio-economic analysis.

5. Provision of convenient, green and people-oriented transportation services

- (1) Establishing a transportation system with main line railway and railway networks as backbone, together with other modes of public transport and long distance passenger transport services in the PRD region: to better coordinate the development of different modes of transport such as regional-based vs. city-based transportation; public vs. private transportation; rail vs. road transportation; and air/sea vs land transportation, etc.; and to enhance the development of integrated transportation hubs.
- (2) Promoting the development of regional green transportation: to improve the transportation structure and gradually raise the fuel and emission standards of various modes of transport such as motor vehicles and vessels; to undertake trials on new modes of transport that are energy efficient and

environment-friendly, and promote their wider use on the basis of trial results such that the development of green transportation in the Greater PRD region is more advanced than other places in the Mainland; to improve and upgrade infrastructure, where appropriate, for supporting non-motorised transportation such as cycling and walking with a view to improving the environment and raising the degree of comfort for such means of transportation modes.

- (3) Continuously facilitating and enhancing the convenience and efficiency of cross-boundary movement: subject to compliance with national policies, meeting practical needs and availability of necessary resources, to progressively relax the boundary control policies for citizens and tourists in the region; to streamline clearance procedures and enhance boundary-crossing facilities and services; and to improve transportation connections between boundary crossings and cities as well as intercity transportation networks. These will allow more integrated and convenient cross-boundary transportation and better facilitate the movement of people and goods within the Greater PRD region.

Of the cooperation areas outlined above, those relating to the economy, society and environment are the core elements of regional transformation and quality living. Land supply and land use planning play important roles in catalysing the coordinated development of these three elements. Furthermore, transportation provides mobility for people living in the region, and serves as a major support system in connecting different parts of the region. These five areas are closely connected and interrelated. To enhance the future development of the Greater PRD region, it is therefore necessary to strengthen regional cooperation focusing on these areas.

III. Cooperation Proposals

The Plan is of great significance to Guangdong, Hong Kong and Macao. Based on the regional cooperation directions outlined earlier, and taking into account the inputs and suggestions from members of the public as well as the circumstances and issues common to the three sides, this Plan addresses mutual issues in the areas of environment and ecology, low-carbon development, culture and social living, spatial planning, and transportation systems. In particular, cooperation proposals regarding the most pressing and well founded issues are recommended for future reference by the three governments when drawing up their own plans and action agendas.

(A) Improving the environmental and ecological quality

1. Strengthening and improving the ecosystems of the Greater PRD region

To effectively protect the environment and natural resources, and to address the serious challenges encountered in preserving ecological areas during regional development, it is recommended that the three sides take joint action, with establishment of clear and complete conservation policies for sustainable development and biodiversity protection, to strengthen and improve the ecosystems of the Greater PRD region on the basis of enforcing existing measures for preserving ecological areas, and by considering requests from various sectors. Such regional cooperation may involve the preservation of ecosystems and ecological resources, developing ecological service functions, and sharing ecological protection knowledge and techniques in restoring damaged ecosystems, etc. Favourable conditions for resolving major regional environmental and ecological issues can thus be created. Areas of cooperation include:

- (1) drawing up a regional ecological system preservation plan;
- (2) embarking on conservation planning for adjoining ecologically sensitive areas; and
- (3) carrying out in-depth studies for further cooperation in ecological protection.

(1) Drawing up a regional ecological system preservation plan

The three sides should jointly study the formulation of an overall plan and supporting systems for preserving regional ecosystems. The layout of this plan may comprise “one nucleus”, “six axes”, “nine ecological resources zones”, and the “23 regional ecological nodes”, “37 ecological sensitive areas”, “ecosystem webs”, and also the “multi-tier and multi-dimension protection areas”.

- ① “The Bay Area of the Pearl River Estuary” should become the core area for preserving ecosystems in the Greater PRD region. Cooperation proposals include:
- ▶ protecting coastline ecological resources and enhancing wetland protection;
 - ▶ jointly strengthening the work in establishing and managing the nature reserves in the Bay Area, and taking forward the “Work Plan for Protection of Mangrove Wetland at the Pearl River Estuary”. Actively working to restore the ecosystems and setting up a network with the nearby nature reserves for protecting water birds and wetlands at the Estuary and further enhancing the habitats of the Bay Area with a view to reinforcing its roles and functions in biodiversity and ecological protection;
 - ▶ clearly identifying the roles and functions of the different Greater PRD cities in protecting Pearl River Estuary water quality, and expediting the protection work on the Estuary aquatic environment; and
 - ▶ carrying out detailed comprehensive feasibility assessments on the impacts on environment and natural resources arising from future large scale land use development projects in the Bay Area. During this process, stringent environmental assessment procedures and standards should be followed to ensure that the concerned development projects do not undermine the overall objective of protecting the Bay Area’s ecological resources.
- ② Preparing a plan to create a three-tier ecological protection and management system comprising ecological resource zones, regional ecological nodes, and ecologically sensitive areas within developed urban areas so as to strengthen the protection of existing vegetation patches. Cooperation proposals include:
- ▶ integrating large scale natural vegetation patches outside the Greater PRD region into several ecological function zones, forming an ecological barrier circle for the entire region to maintain ecological stability and complex ecological functions; strengthening the protection of natural vegetation, focusing on enhancing biodiversity protection, soil and water conservation, eco-tourism and multi-functional development through the development of high-level nature reserves and forest parks;
 - ▶ identifying several regional nodes in the transitional zone between high density urban built-up areas and ecological function zones to become organic links between the two in order to open up and expand the service functions of ecological energy zones; depending on the intensity of human activities, existing protection levels and planning objectives, these nodes are classified by types and ranks. Through the mid-level nature reserves, forest and country parks, and

basic ecological control lines, protection and management work are strengthened; and

- identifying several most endangered vegetation patches of ecologically sensitive areas in urban built-up zones and, according to their location, intensity of human activities and planning functions, classify them into different types and ranks. Through the means of low- or mid-level nature reserve developments or basic ecological control lines, their protected status and ecological functions are designated and human interference during the urban development process is strictly controlled.
- ③ Through the strengthening of major development in ecological reserves in Guangdong Province, and riding on the establishment of river networks and greenways, for connecting the Bay Area's ecological core with nearby ecological areas. These ecological "axes" will form the backbone in preserving regional ecosystems and in containing the scale of both urban sprawl and land development activities.
 - ④ Embarking on planning and improvement works for preserving regional ecosystems at different levels, including urban, rural and community areas.



Figure 3-1 A conceptual plan for preserving ecosystems in the Greater PRD region: this is based on the natural ecology baseline and takes into account existing regional collaboration efforts. Emphasis is placed on the connection between natural ecological resources at different places and their extension towards the urban developed areas.

(2) Embarking on conservation planning for adjoining ecologically sensitive areas

Embark on ecological conservation collaboration with priority given to adjoining ecologically sensitive areas, i.e., the Shenzhen Wutong Shan National Forest Park-Robin's Nest in Hong Kong, Futian National Nature Reserve in Shenzhen-the Mai Po Inner Deep Bay Ramsar Site in Hong Kong, Cotai, Coloane-Taipa Ecology Reserve in Macao-Hengqin Island, and the Pearl River Estuary Chinese White Dolphin Nature Reserve.

① Shenzhen Wutong Shan National Forest Park-Robin's Nest in Hong Kong. Cooperation proposals include:

- ▶ jointly setting up a liaison and coordination group between Shenzhen and Hong Kong to focus on protecting vegetation cover and establishing ecological corridors, and jointly formulating the necessary preservation and management measures;
- ▶ Hong Kong and Shenzhen to plan and coordinate regional ecological protection work for this area and to raise the protection grading; increasing and enhancing protection of vegetation cover by referring to the management model of the nature conservation area under the terrestrial vegetation ecosystem category; and appropriately zoning the area and adopting corresponding ecological protection, restoration and development measures;
- ▶ jointly undertaking ecological baseline studies to confirm the biodiversity, its community characteristics and spatial distribution in the region; jointly studying the approach in tackling the impact on native species caused by invasive exotic species, with a view to providing the background information for creating future management initiatives in protecting the ecological systems of native plants;
- ▶ carrying out more in-depth ecological studies and conservation action plans for the purpose of protecting those highly endangered species in the region;
- ▶ setting up permanent integrated observation points in Hong Kong and Shenzhen accordingly to be used as constant sampling sites for studying the regional terrestrial vegetation coverage and the changes in ecological function in the suburban areas caused by rapid urbanisation, with a view to facilitating the protection of the ecosystems in the region;
- ▶ commencing a study on cross-boundary greenway connections between Shenzhen and Hong Kong to facilitate further work in this area;
- ▶ launching the feasibility study and consultation work on designating

Hong Kong's Robin's Nest as a country park; using the experience of conserving Wutongshan-Robin's Nest for extending such experience in protecting the forest and mountain areas in the Guangdong Province; and

- ▶ exploring the feasibility of establishing a tripartite ecological and environmental education and science base for sharing of knowledge and information on ecological protection with the public of the three sides.
- ② Futian National Nature Reserve in Shenzhen-Mai Po Inner Deep Bay Ramsar Site in Hong Kong. Cooperation proposals include:
- ▶ setting up a regular liaison and management coordination system; consolidating relevant management policies and measures; and discussing and implementing management action plans to substantially enhance the ecological structure and functions of the two wetlands;
 - ▶ improving basic facilities at the two protected wetland reserve areas and actively undertaking cooperation on management, staff training, experience sharing, etc.;
 - ▶ jointly formulating region-based water pollutant emission reduction management proposals and action plans with a view to improving water quality at Deep Bay and preserving the estuary wetland system ;
 - ▶ jointly carrying out, in collaboration with research institutions, monitoring and baseline research programmes on the ecological structure and functions of wetland systems, and formulating more scientific management strategies;
 - ▶ considering the establishment of integrated mangrove ecosystem monitoring systems in both Shenzhen and Hong Kong, and working to incorporate these systems with the PRD mangrove resources monitoring network being planned by Guangdong Province; and
 - ▶ Guangdong to proactively make preparations for the application of listing the Futian Nature Reserve in Shenzhen as a “Wetland of International Importance”. Consideration will be given to expanding the wetland nature reserve, and an overall ecological protection strategy covering the Shenzhen River Estuary as well as the whole catchment area will be undertaken.
- ③ Cotai, Coloane-Taipa Ecology Reserve in Macao-Hengqin Island. Cooperation proposals include:
- ▶ designating the Erjingwan mangrove on Hengqin Island and its surrounding wetland as a wetland park. This will help preserve the habitat for migratory birds, and even help mitigate the possible short-term ecological impacts on migratory birds in the Cotai,

Coloane-Taipa area;

- ▶ carrying out environmental impact assessment for development and construction projects in this area with a view to identifying mitigation measures for minimising environmental and ecological impacts, as far as possible, on natural environment in the region; and
- ▶ Zhuhai and Macao authorities to carry out joint monitoring and research studies on protecting the mangroves and migratory birds, such as Black-faced spoonbills, and to define the role played by these wetland ecosystems in protecting migratory bird species. The information collected will also form the foundation on supporting the formulation of future conservation initiatives.

④ Pearl River Estuary Chinese White Dolphin Nature Reserve.
Cooperation proposals include:

- ▶ Guangdong, Hong Kong and Macao to jointly study and devise a management plan on conservation of Chinese White Dolphins at Lingding Bay (including Pearl River Estuary) to manage and control activities that may affect the Chinese White Dolphins' habitats and threaten their survival. These activities may include fishing, shipping, reclamation works, effluent discharge, etc.;
- ▶ Guangdong Province to study and consider enacting "Management Regulations on National Chinese White Dolphin Nature Reserve at the Pearl River Estuary" as soon as possible. The feasibility of including the northern waters of Wanshan Islands in the National Pearl River Estuary Chinese White Dolphin Nature Reserve as well as upgrading the provincial Chinese White Dolphin Nature Reserve at Jiangmen to a National Reserve should be examined. These initiatives will further enhance the level of protection rendered to the Chinese White Dolphin species;
- ▶ Hong Kong to consider, when the time is opportune, to suitably extending its marine parks into the waters of The Brothers;
- ▶ Exploring the feasibility of setting up a joint research centre on Chinese White Dolphins by the governments of Guangdong, Hong Kong and Macao so as to strengthen the basic ecological research work on the species; and
- ▶ undertaking studies to objectively assess the possible overall adverse impacts on Chinese White Dolphins arising from development projects and economic activities around the waters of Lingding Bay; and formulating effective mitigation measures to minimise the risks posed to Chinese White Dolphins.

(3) Carrying out in-depth studies for further cooperation in ecological protection

Taking account of the current and future requirements in protecting the

ecological environment in the Greater PRD region, and also the different circumstances in Guangdong, Hong Kong and Macao, it is proposed that the following in-depth studies be carried out for taking forward cooperation in ecological protection:

- ▶ a baseline study to look into regional biodiversity, fill information gaps and examine the associated protection strategy;
- ▶ a study on management and control strategy for protecting ecosystems in highly urbanised areas;
- ▶ a study on options for developing regional ecological woodlands;
- ▶ an investigation into regional eco-tourism resources and associated study on eco-tourism development and management;
- ▶ a study on publicity, education as well as community engagement mechanisms on protecting the nature conservation areas in the region; and
- ▶ a scientific investigation on the marine ecosystem of the Pearl River Estuary to assess the degree of damage and stress factors of the ecosystem, based on the eco-environmental characteristics of the waters and using physicochemical and biochemical techniques to carry out marine ecosystem restoration projects, sea ranching, shoreline remediation, pollution sources control, marine refuse management and ecological landscape restoration projects, etc.

2. Undertaking joint measures to improve the water environment of the Pearl River Basin and Estuary

Working jointly towards effectively protection of the regional environment and natural resources, and taking into account the challenges encountered in protecting water quality in the Greater PRD region, it is proposed that Guangdong, Hong Kong and Macao jointly embark upon comprehensive water quality management measures for the Pearl River Basin and Estuary. Building on the foundation of the tripartite collaboration, such efforts will aim to resolve prominent water quality issues and to progressively restore the region's water environment. This will also contribute to the setting up of a long-term water quality management mechanism across administrative boundaries. Areas of cooperation include:

- (1) enhancing the joint management of water quality and water pollution control objectives;
- (2) embarking on collaboration on regional water pollution control;
- (3) strengthening cooperation in improving the quality of adjoining waters; and

- (4) improving the regional cooperation mechanism to improve the water quality of the river basins.

(1) Enhancing the joint management of water quality and water pollution control objectives

- ① The three sides to consider formulating water quality management objectives by phases for the PRD, Hong Kong and Macao, taking account of the water quality management systems and standards as well as measures being implemented respectively at the three places.
- ② Guangdong and Hong Kong to consider respectively drawing up water pollution control objectives by phases, taking account of the water quality management systems and standards as well as measures being implemented respectively at the two places.

(2) Embarking on collaboration on regional water pollution control

- ① Strengthening pollution management and control on industrial activities: jointly stepping up management and control efforts to reduce pollution from local industrial activities, taking effective measures for discharging industrial wastewater to ensure compliance with discharge standards for industrial wastewater in all regions, promoting cleaner production practices to help reduce pollutant discharge, accelerating the phasing out of outdated production technologies, implementing accountability systems for achieving emission reduction targets, urging industrial enterprises to reduce consumption of water resources, reducing environmental impact of industrial processes, strengthening cooperation in scientific research on industrial wastewater treatment technology, formulating plans to strictly prohibit the discharge of industrial wastewater within certain range from the intakes for drinking water to ensure the quality of supplied drinking water is meeting the safety standard.
- ② Actively constructing central wastewater treatment facilities at PRD cities: taking proactive steps to set up such facilities, including the necessary site search, planning design, construction works, etc., in order to minimize the pollution of urban effluent discharge to the water environment.
- ③ Strengthening the development of supporting works and facilities for water quality control: integrating such works with new districts' development and old districts' renewal programmes in the PRD region; strengthening development of the sewerage network and enhancing urban wastewater collection and making full use of the treatment capacity and efficiency of central wastewater treatment facilities.
- ④ Recognising the importance of improving the technology for protecting water quality: developing and promoting cost-effective, highly adaptable, small and medium-sized, centralised wastewater treatment technologies in the PRD region, strengthening cooperation in scientific research on

wastewater treatment technologies to satisfy the demand for centralised wastewater treatment in villages and towns.

- ⑤ Increasing the utilisation efficiency of water resources as a critical measure for relieving pressure on the water environment: striving to reduce water consumption and wastewater discharge for every unit of production; boosting industrial wastewater recycling; increasing the ratio and scope of wastewater re-utilisation; and lowering water consumption and effluent discharge in certain places.
- ⑥ Upholding the principle of “Total Quantity Control, Rational Allocation, Water Source Protection and Water Saving”. The PRD would, in collaboration with Hong Kong and Macao, strive to reduce water resource wastage and pollution of the water environment at source with a view to enhancing the water resource utilisation efficiency and establishing a water saving conscious community.
- ⑦ Considering to extend the scientific researches and pilot programmes on water resources studies, e.g., seawater desalination, reclaimed water reuse, etc.
- ⑧ Continuing to promote efforts in monitoring and safeguarding water pollution control in the PRD region.

(3) Strengthening cooperation in improving quality of adjoining waters

- ① Cooperation in protecting the water environment of Deep Bay. Cooperation proposals include:
 - ▶ taking further steps to implement the “Deep Bay (Shenzhen Bay) Water Pollution Control Joint Implementation Programme (Revised version 2007)”. Such measures would include improving urban wastewater discharge interception and central treatment facilities; enhancing treatment of polluted sediment in Shenzhen River; strengthening control on industrial wastewater discharge; increasing the scope of reusing treated wastewater; further studying the possibility of reusing treated wastewater to supplement Shenzhen River and helping re-create its neighbouring ecological landscape; and exploring options to increase the pollution load carrying capacity of rivers and marine water in the region;
 - ▶ Shenzhen and Hong Kong jointly undertaking environmental monitoring for the Shenzhen River and Deep Bay areas, and regularly exchanging monitoring data; and improving the joint monitoring and information sharing mechanisms; and
 - ▶ in recognition of the importance of ecological conservation, introducing suitable amendments to the “Regional Plans on Protection of the Water Environment in Deep Bay”, and conducting research on the aquatic ecosystem and water quality management of Deep Bay to provide a scientific basis for implementing long-term

management and improvement measures in Deep Bay.

② Cooperation in protecting the water environment of Mirs Bay. Cooperation proposals include:

- ▶ strengthening water environment management at Mirs Bay: Shenzhen and Hong Kong should consider setting more stringent water quality objectives and standards to protect the water environment, jointly revising the functional zoning and upgrading water quality protection efforts for Mirs Bay;
- ▶ giving consideration to jointly setting up a water quality monitoring network to closely monitor any changes in the water quality of Mirs Bay;
- ▶ giving consideration to jointly formulating appropriate economic development strategies for the Mirs Bay area to avoid causing any significant adverse effect on its water quality;
- ▶ Shenzhen to consider continuing to focus on tourism and port services in the comprehensive development strategy for the Mirs Bay area to ensure a proper balance between economic development and environmental protection;
- ▶ Hong Kong to consider maintaining, as far as possible, the current environment status of the Mirs Bay catchment area to protect its water quality; and
- ▶ reviewing the “Mirs Bay Water Quality Regional Control Strategy”.

③ Cooperation in protecting the water environment in the Pearl River Estuary. Cooperation proposals include:

- ▶ commencing the study on the pollution load carrying capacity of waters in the Pearl River Estuary to provide solid scientific basis for formulating water quality management strategy in the region;
- ▶ considering the formulation of a comprehensive control and improvement plan for the Pearl River Estuary to control and reduce the total pollution load from agricultural, industrial and urban discharges;
- ▶ the three governments to set up large-scale systems at major ports to meet their respective needs for the collection and treatment of wastewater discharge, used oil and sludge from port-related activities; restricting the scale and location for land reclamation to avoid causing significant adverse impact on the water environment;
- ▶ further enhancing the Pearl River Estuary water monitoring network; drawing up a Pearl River Estuary pollution incident response plan, reporting and communication mechanism, as well as a marine pollution emergency response mechanism; closely adhering to the

“Pearl River Estuary Regional Maritime Oil Spill Response Cooperative Arrangement” to minimise the environmental damage caused by oil spillage from vessels; establishing a monitoring system on wastewater discharge from ship building and repairing industries in the Pearl River Estuary to eliminate any discharge of toxic pollutants; and

- ▶ setting up real time online water quality monitoring systems at PRD fresh water intake points for timely monitoring of drinking water quality.

(4) Improving the regional cooperation mechanism to enhance river basin water quality

- ① Strengthening coordination with provinces in Xijiang river basin and exploring the feasibility of planning and coordinating the utilisation of Xijiang water resources. This can help increase water resource utilisation efficiency and resolve problems caused by saline water intrusion at the Pearl River Estuary. Cooperation proposals include:

- ▶ striving to launch a comprehensive cooperation plan at the national level, which should set out the overall targets for protecting the water environment of Xijiang river basin, distribution of roles and responsibilities, formulation and implementation of pollution control measures, investment arrangements, and cross-boundary coordinating mechanisms. It is intended that, through policy steering and facilitation at the national level, as well as implementation of various works and control measures in this cooperation plan, the deterioration in Xijiang basin water quality will be reversed;
- ▶ exploring the feasibility and possible option of establishing a long-term water resource and environment coordination management mechanism among the six provinces (regions) in the Pearl River basin as well as Hong Kong and Macao; and
- ▶ strengthening water resource management in the Pearl River basin, including the implementation of a centralized water distribution mechanism for all the areas of the river basin during dry seasons so as to safeguard water security to the cities in the Greater PRD.

- ② Progressively exploring the implementation of an ecological compensation mechanism along the Pearl River basin. Cooperation proposals include:

- ▶ Guangdong to explore setting up a pilot ecological compensation mechanism to cover the river basin areas within the province. For this purpose, a topical study on Dongjiang and Xijiang river basin will be carried out to examine the necessary policies, standards, technical methods, participation arrangements, supervision mechanisms, etc. Suitable river basin areas will be identified for launching the pilot scheme; and further work will be carried out to explore and enhance the sources of funding, the form of

compensation and its distribution methods, and the assurance mechanism, etc. Studies and work in this area will facilitate implementation of river basin ecological compensation mechanisms on a wider scale; and

- ▶ the three sides to consider implementing the river basin ecological compensation system as a possible environmental cooperation item in the future. On the basis of Guangdong Province's pilot scheme, the three sides will examine the possibility of setting up a regional ecological compensation mechanism when ready to do so with a view to creating the necessary conditions for promoting this policy to the entire Greater PRD region.

- ③ Continuing to promote protection of the regional water environment and emergency response arrangements through the Emergency Management Office of Guangdong Province.
- ④ Addressing the problems of saline water intrusion in Greater PRD cities. Actively respond to possible emergency water pollution incidents in the lower reach of the Pearl River.

3. Undertaking enhanced measures to improve air quality in the Greater PRD region

Working along the cooperation direction to effectively protect the regional environment and natural resources, and focusing on challenges encountered in protecting air quality in the Greater PRD region, it is proposed that Guangdong, Hong Kong and Macao collaborate to undertake enhanced control measures for tackling prominent regional air pollution problems so as to gradually improve the regional air quality. Such experience will be useful in addressing complex air pollution issues in urbanized or industrialized areas as well as setting up long-term air quality management systems. Areas of cooperation include:

- (1) taking forward joint management of regional air quality and emission reduction targets;
- (2) embarking on regional cooperation on air emission reduction control;
- (3) enhancing regional air quality monitoring network;
- (4) exploring opportunities in controlling air pollutant emissions from vessels in Greater PRD waters; and
- (5) carrying out scientific researches and studies on regional air pollution problems and control measures.

(1) Taking forward joint management of regional air quality and emission reduction targets

- ① following the Pearl River Delta Regional Air Quality Management Plan

(2002-2010), Guangdong and Hong Kong should jointly draw up an emission reduction plan for the PRD region and Hong Kong up to 2020 with a view to progressively reducing the emission levels of major air pollutants to below those of 2010;

- ② it is proposed that Macao may build on the joint efforts of Guangdong and Hong Kong at ① above and contribute to the formulation of a regional air pollutant emission reduction plan, so as to further strengthen the management of regional air quality;
- ③ air quality objective system should be enhanced to facilitate better and more comprehensive air quality management for the region. It is proposed that the three sides give consideration to progressively including air quality objectives for more pollutants, such as PM_{2.5}, O₃ in the current system;
- ④ Hong Kong and Macao should continue upgrading their local air quality objectives and associated air quality management plans;
- ⑤ Guangdong and Hong Kong will complete the study on emission reduction plan for the PRD region up to 2020 shortly. On this basis, it is proposed that the two sides formulate clear air quality management targets for the PRD region; and
- ⑥ it is proposed that the regional air pollutant emission inventory be updated regularly. In the long term, the feasibility of establishing an emission inventory for PM_{2.5} should be studied.

(2) Embarking on regional cooperation on air emission reduction control

It is proposed that Guangdong, Hong Kong and Macao to further enhance their emission control efforts by taking proactive measures to reduce both the sources and emission levels of air pollutants. Such initiatives can be carried out locally or jointly by authorities of the three sides to improve regional air quality.

- ① The following key areas of air pollutant emission reduction control are suggested to be carried out by Guangdong, Hong Kong and Macao:
 - ▶ PRD region to follow the “Measures for Prevention and Control of Air Pollution in the PRD Region of Guangdong Province” and the national requirements on reducing air pollutant emissions, with a view to drawing up emission reduction policies for controlling the total emissions of major air pollutants;
 - ▶ Hong Kong to amend the Air Pollution Control Ordinance as planned, with a view to putting into effect the new air quality objectives announced in January 2012 and the related transitional arrangements, and to take on board the phased emission reduction measures recommended in the Final Report of the “Review of the Air Quality Objectives and Development of a Long Term Air Quality Strategy

for Hong Kong - Feasibility Study". Consideration should be given to improving the fuel mix on power generation; developing and utilising renewable energy; reducing vehicular emissions; strengthening efforts in greening and conservation; and mandating the implementation of Building Energy Codes and further tightening its standards; and

- ▶ Macao to actively contribute to addressing the regional air pollution problem, including formulating local plan(s) for air pollution control and phased emission reduction measures; as well as carrying out a general survey on air pollution sources; improving its existing emissions inventory; and reducing emissions from major sources such as power generation, commercial and industrial activities and transportation.

② Emission reduction cooperation initiatives to be jointly undertaken by Guangdong, Hong Kong and Macao are proposed to focus on the following areas:

- ▶ progressively adopting motor vehicle and vessel fuel and emission standards⁹ that are more advanced than other places in the Mainland, and closely monitoring the development of biofuels;
- ▶ drawing up an emissions inventory with analysis and breakdown on the associated emission sources; setting up a data and information system on pollution sources; further enhancing the coordination mechanism for regional air quality management; and establishing a forecast and alert system as well as an emergency response plan on air pollution incidents; and
- ▶ riding on the PRD outline, which seeks to promote development of advanced manufacturing industries and reform and upgrade those traditional manufacturing industries with a competitive edge, and making reference to the latest technologies and management practices adopted in other cities within the country and overseas for handling VOC emissions, the three sides should consider formulating and mandating implementation of technical specifications and requirements on cleaner production for reducing VOC emissions from high emission sources (including chimney and fugitive emissions). Furthermore, actions should be taken to explore options in regulating the VOC content of different products (including

⁹ The National III motor vehicle emission standards (which are on a par with the Euro III standards) is now implemented throughout China. Hong Kong's prevailing vehicle emission standards are Euro IV, and Euro V standards are scheduled to come into force in June 2012. Guangdong has advanced the implementation of the National IV standards in 2010, becoming the second region adopting the same after Beijing. As for the motor vehicle fuel, Guangzhou and Shenzhen has advanced the supply of National IV standard petrol in 2010 and the supply has been extended to Dongguan since 2011. The Ministry of Environmental Protection issued a notice on 10 January 2012 requiring that all compression-ignition vehicle engines and motor vehicles produced, imported, sold and registered must comply with the National IV standards from 1 July 2013. Regarding Hong Kong, the statutory specifications of motor vehicle diesel and unleaded petrol were tightened to Euro V standard on 1 July 2011.

consumer goods) and capping their maximum levels. Paints and coatings with high VOC content will be gradually phased out.

(3) Enhancing the regional air quality monitoring network

① Cooperation proposals for enhancing the regional air quality monitoring network include:

- ▶ Guangdong and Hong Kong to each select areas for establishing supersites; developing the management centre for the PRD Regional Air Quality Monitoring Network in Guangdong; setting up an open research base to analyse and study air pollution mechanistic pathways in the Greater PRD region, which will provide the basis and technical means for drawing up cost-effective strategies for reducing regional air pollution;
- ▶ setting up four new general monitoring and background stations at places downwind of heavily polluted areas, such as Huizhou, Zhaoqing, Jiangmen and Guangzhou-Foshan so as to assess the impact of various pollution sources on the regional air quality;
- ▶ setting up one additional city-level general monitoring station in Macao for inclusion into the regional monitoring network; and
- ▶ setting up roadside air quality monitoring stations at busy commercial and heavily trafficked districts.

② Cooperation proposals for enhancing the parameters of the air quality monitoring network include:

- ▶ increasing air monitoring parameters such as PM_{2.5} and CO at all city-level monitoring stations to better reflect the air quality of these areas;
- ▶ adding new air monitoring parameters such as NO_y, non-methane hydrocarbon (NMHC), VOCs, PM_{2.5} filter sampling and chemical analysis (including soluble ions, organic carbon and elemental carbon), LIDAR, visibility, black carbon and toxic air pollutants at regional monitoring stations on top of the existing six parameters (SO₂, NO₂, PM₁₀, O₃, PM_{2.5} and CO);
- ▶ adding the supersites with monitoring of other air pollutants such as H₂O₂, HNO₃, VOCs, OVOC, UV, J(NO₂), PM_{2.5}/PM₁₀ sampling and chemical analysis, online measurement of chemical composition of PM_{2.5}, and PAN on top of those parameters being monitored by regional stations; and
- ▶ apart from routine air quality monitoring, adding to the roadside monitoring stations with other parameters such as VOCs, OVOC and Pb that can represent and reflect the impact of road traffic on the regional air pollution problem.

- ③ Cooperation proposals for further developing air monitoring data sharing mechanisms include:

- ▶ setting up an air pollutant information sharing platform on the basis of the management centre for the PRD Regional Air Quality Monitoring Network. The platform can help manage air pollutant monitoring data from different cities in the region, as well as serving as the database and information dissemination centre;
- ▶ improving the information notification mechanism to regularly publishing various types of air monitoring data and reports; establishing gradually a comprehensive information dissemination system on regional air quality to allow the three sides to make joint announcements on regional air quality monitoring information; and
- ▶ establishing an effective forecast and alert system on air pollution for the three places.

(4) Exploring opportunities in controlling air pollutant emissions from vessels in Greater PRD waters

- ① conducting a joint basic study on controlling air pollution from vessels in Greater PRD waters by the three sides, including compilation of an emissions inventory on vessels in Greater PRD waters so as to predict vessel emissions from 2012 to 2020; and
- ② formulating cooperation proposals on controlling vessel air pollutant emissions. Cooperation proposals include:
 - ▶ making reference to Annex VI to the International Convention for the Prevention of Pollution from Ships (“MARPOL”) in dealing with the vessel emission problem; taking into overall consideration the technical feasibility and effectiveness in emission reduction as well as cost effectiveness; jointly formulating emission reduction targets for vessels and their fuel standards; and actively encouraging other equally effective emission reduction measures in order to further strengthening vessel emission control;
 - ▶ restricting emissions from vessels, including NO_x emissions from new vessels, which should be in line with the latest developments in the engine manufacturing and ship building industries as well as the shipping sector;
 - ▶ examining measures to encourage vehicles entering port areas to use cleaner fuels; regulating other pollution sources from non-road mobile machineries (NRMMs) such as cranes, tracked vehicles and mobile generators; and enhancing transport mode, with a view to reducing air pollutant emissions in the vicinity of the port;
 - ▶ exploring the possibility of using cleaner energy by providing onshore power supply to cruise ships and ocean-going vessels berthing in Greater PRD ports;

- ▶ considering requiring ocean-going vessels at berth and at anchorage in Greater PRD ports to use low sulphur fuel or onshore power;
- ▶ providing incentives to encourage more ocean-going vessels berthed in Hong Kong waters to switch to clean fuels; and
- ▶ studying and exploring the establishment of an “Emission Control Area” in Greater PRD waters.

(5) Carrying out scientific research and studies on regional air pollution problems and control measures

Taking account of the current and potential requirements for further improving air quality in the Greater PRD region as well as the different circumstances in Guangdong, Hong Kong and Macao, it is proposed that the following studies on air pollution mechanistic pathways and control be carried out for the Greater PRD region:

- ▶ a study on the air pollutant emission inventories;
- ▶ a study on air pollution mechanistic pathways;
- ▶ a study on air pollution monitoring technologies;
- ▶ a study on an ambient air quality forecast system;
- ▶ a study on the application of air pollutant control technologies; and
- ▶ a study on formulating technical guidelines for reducing VOC emissions and drawing up cleaner production practices for high VOC-emitting industries.

(B) Promoting low-carbon development

To accelerate the pace of economic transformation and to achieve balanced and coordinated economic, social and environmental development in the Greater PRD region, it is proposed that the three sides should join hands in promoting regional low-carbon development. Taking into account the present regional economic foundation as well as the cooperation needs of various parties, and leveraging on the unique strengths rendered by cooperation amongst the three governments, it should be possible to establish a low-carbon and circular economy, and set up low-carbon exemplary areas at the three places. Together we can be a forerunner in China’s quest to transform its mode of economic development and serve as a model amongst other fast-developing regions in the world in addressing climate change. Cooperation areas include:

1. establishing a regional low-carbon development cooperation mechanism;
2. enhancing cooperation in cleaner production;

3. strengthening cooperation in development of environmental industries;
4. cooperation in developing and applying new energy and renewable energy; and
5. cooperation in clean energy supply and related infrastructure.

1. Establishing a regional low-carbon development cooperation mechanism

(1) Jointly promoting low-carbon development

- ① It is proposed that the Greater PRD region be transformed to become a “low-carbon development exemplary region” to combat climate change. It is also suggested that cooperation in scientific research, technological development, development planning and policy making be taken forward among the three places, and low-carbon exemplary areas be set up in major cities and districts. Cooperation proposals include:
 - ▶ transforming the Bay Area of the Pearl River Estuary to become a low-carbon development exemplary area within the Greater PRD region. Its demonstration effect will help facilitate the development of other low-carbon cities and communities in the region; and
 - ▶ selecting representative cities in the Greater PRD region, e.g., Hong Kong¹⁰, Macao, Shenzhen, Zhuhai, Guangzhou, Jiangmen, as pilot projects for promoting low-carbon city development in the Greater PRD region.
- ② Furthermore, it is proposed that cooperation in low-carbon development be incorporated into the existing cooperation frameworks of the three sides, including taking forward the cooperation in combating climate change through the Hong Kong-Guangdong Joint Liaison Group on Combating Climate Change.

(2) Establishing a low-carbon economy

Provide policy incentives and resources with a view to upgrading the industrial and economic structure; expediting regional energy conservation and emissions reduction; and progressively establishing a low-carbon economy. Cooperation proposals include:

- ① strengthening policy steering and incentives to promote low-carbon trades and industries; rigorously containing the expansion of

¹⁰ The HKSAR Government proposed setting a target for Hong Kong to reduce carbon intensity by 50-60% by 2020 when compared with 2005; drawing up a strategy for combating climate change, including enhancing energy efficiency and increasing the use of clean and low-carbon fuel, etc., with a view to reducing greenhouse gas emissions; and enhancing the adaptation and resilience capacity for the areas identified to be more vulnerable to climate change

energy-intensive or high-emission industries; and actively encouraging the development of less resource-intensive and low-emission trades and industries, particularly modern services industry, high technology industry and new energy industry, etc.; if resources permitted, considering strengthening financing support for small and medium enterprises, such as provision of loan guarantee, and supporting upgrading and restructuring of the enterprises;

- ② promoting cleaner production: rigorously implementing energy efficiency and emission reduction monitoring systems; encouraging different forms of cooperation in cleaner production to promptly raise the level of cleaner production in the region; the three governments to jointly implement green procurement policies and undertake priority procurement of low-carbon emission products;
- ③ implementing energy demand-side management; stepping up efforts in energy conservation; enhancing energy efficiency; improving energy supply structures; developing new and renewable energy, biofuels; strengthening waste management; developing waste to energy facilities and renewable energy generation technologies suitable for use in remote rural areas; promoting the development of clean energy infrastructure in the region and the Guangdong Province to set industrial energy consumption limitation standards for high energy consumption industries;
- ④ fully leveraging on Hong Kong's strengths in management, certification, finance and auditing, in exploring and facilitating the establishment of a carbon trading market and associated standards, technical processes and trading mechanisms in the PRD region; with suitable conditions, promoting carbon audit and energy audit, and evaluating enterprises' performance in carbon reduction and energy saving in the PRD region; establishing a quality services platform with timely provision of information, reliable testing and analysis, certification and accreditation, staff training services, etc.; and
- ⑤ the Guangdong Province to embark studies on and application of marine biological sequestration technologies to cultivate and develop marine carbon sink fisheries.

(3) Promoting low-carbon communities

It is important to widely promote low-carbon consumption and lifestyle to realise a low-carbon society. Cooperation proposals include:

- ① formulating long-term policies to combat climate change; planning associated mitigation and adaptation measures;
- ② carrying out assessment of vulnerability and adaptation in combating climate change, and pledging enough resources to implement relevant measures;
- ③ enhancing public education efforts to promote better understanding

within communities of climate change science; and encouraging adoption of green consumption characterized by the principle of “Reduce, Reuse, Recycle and Responsibility” to reduce greenhouse gas emissions;

- ④ actively promoting low-carbon regional spatial planning; formulating strategies for establishment of low-carbon districts, cities and communities by adopting a two-pronged approach, i.e., reducing and controlling greenhouse gas emissions as well as increasing green space, and strengthening the adaptation capacity to climate change; using Hong Kong as a pilot area to explore the feasibility of formulating the “Urban Climatic Map”;
- ⑤ developing carbon sinks to combat climate change: preserving regional green space; strengthening protection of natural forests and wetlands; carrying out afforestation and restoration of woodlands, grasslands and wetlands; implementing ecological development works on woodland carbon sink in Guangdong and embark the pilot project on trading of woodland carbon sink in Guangdong.
- ⑥ Hong Kong and Macao continue to take forward flood prevention planning and strengthen coordination with the PRD region to combat possible flooding caused by climate change;
- ⑦ Continuing monitoring and maintaining the conservation value of wetland systems; providing support for protecting biodiversity of marine life such as coral, etc.; promoting good practices for aquaculture with a view to adapting to climate change;
- ⑧ enhancing building energy efficiency: formulating and promoting green building standards; encouraging existing buildings to carry out energy audits, as well as green and energy improvement works; requiring publicly funded development projects to implement mandatory energy efficiency measures; pursuing building energy consumption disclosure schemes; exploring opportunities in conducting energy audits for large scale public development projects; promoting energy efficiency and emission reduction at high-rise buildings; developing best feasible technologies for enhancing energy efficiency of buildings; promoting the Building Energy Code and wider use of low-carbon building technologies; promoting green building industry; increasing the capacity for constructing low-carbon buildings; and tightening energy efficiency standards;
- ⑨ improving transportation structure and developing green transportation: providing policy incentives, where appropriate, to increase wider usage of public and non-motorized transportation; improving connectivity between transportation services and raising transport efficiency; gradually tightening fuel and emission standards for various types of vehicles; promoting the use of new energy vehicles and encouraging energy conservation and emission reduction measures for transportation; and

- ⑩ strengthening scientific and technological research on low-carbon development. This can include studies on regional greenhouse gas emission patterns, their causes, and their impact on climate change; technologies for mitigating and adapting to climate change; and background studies to support low-carbon spatial development, such as research on the impact of land use changes on regional carbon sinks, and spatial planning and design technologies suitable for the region.

(4) Promoting the Clean Development Mechanism

Promoting further development of the Clean Development Mechanism (CDM) in the Greater PRD region to help reduce greenhouse gas emissions. Hong Kong and Macao enterprises are encouraged to invest in suitable areas of energy efficiency enhancement, new or renewable energy development through CDM projects in the Mainland, with a view to developing green business opportunities and helping reduce emissions of greenhouse gases (GHG).

2. Enhancing regional cooperation in cleaner production

(1) Deepening cooperation in promoting cleaner production

Further promote the Cleaner Production Partnership Programme (CPPP) and enhance cooperation mechanisms on regional cleaner production initiatives. Cooperation proposals include:

- ① Guangdong and Hong Kong continue advancing the CPPP initiative. Further efforts can be undertaken in compiling and regularly updating the list of environmental technological services providers; recognising those enterprises which proactively take part in the programme and actively pursue cleaner production as “Hong Kong-Guangdong Cleaner Production Partner”; and promoting successful case examples to the industries through demonstration projects and compiling practical guidelines on cleaner production, etc.; and, building on the past experience, actively liaising with the industries and relevant stakeholders to explore the direction for further encouraging enterprises to adopt cleaner production;
- ② considering the establishment of a Guangdong-Macao cleaner production cooperation mechanism to encourage relevant enterprises in the Greater PRD region to adopt cleaner production: expanding the scope of cooperation in cleaner production among Guangdong, Hong Kong and Macao and increasing the level of resources allocated for this purpose to enable the whole region to play a more important role in this area; actively encouraging relevant enterprises in Guangdong, as well as operators of large industrial parks in the PRD region, to adopt cleaner production; encouraging and progressively mandating industries with high energy consumption and pollution emissions to conduct cleaner production audits with a view to achieving energy conservation, emission

reduction and enhancing cost-effectiveness; strengthening the establishment of interactive mechanisms for establishing connections and sharing information on cleaner production among enterprises; and

- ③ conducting a study on mechanisms for promoting cleaner production.

(2) Setting up and improving a cleaner production service platform for the three places

It is proposed that the PRD market in cleaner production technology and consultancy services be opened up to both Hong Kong and Macao service providers; the three sides will consider establishing a mutual recognition mechanism for cleaner production technology service providers; and consideration will be given to expanding the coverage of the Guangdong-Hong Kong Technology Co-operation Funding Scheme to encourage more scientific research institutes in Guangdong and Hong Kong to make applications on cross-boundary projects.

3. Strengthening regional cooperation in development of environmental industries

(1) Facilitating development of environmental industries

Enhance the cooperation mechanism for environmental industries in the Greater PRD region and jointly promote the development of the market for environmental industries. Cooperation proposals include:

- ① exploring the feasibility of setting up a regional cooperation committee on environmental industries; leveraging on the advantage of the policy of pilot trial in Guangdong Province; strengthening dialogues and exchanges amongst the three sides on policies and regulations; further opening up the environmental service market in the Guangdong Province; simplifying the approval procedures for environmental services; supporting training for the management and operation personnel of environmental services, with a view to creating a favourable policy environment for joint development of environmental industries;
- ② jointly exploring opportunities to facilitate the development of regional eco-conference and exhibition trade and to promote outstanding environmental technologies and products under the principle of mutual benefits; establishing quality branding for environmental industries in the region through environmental exhibitions and trade missions;
- ③ attempting to organise regional eco-trade fairs to facilitate cooperation between enterprises in the region in respect of application of technologies, capital investment, operation, tendering, and research and development for joint development of the environmental market;
- ④ setting up regional environmental industry websites and promoting the

establishment of e-commerce platforms for environmental industries in the Greater PRD region to enhance regional cooperation of the industries;

- ⑤ Hong Kong to facilitate the development of environmental industries by leveraging on her strengths of a well established legal system and professional services, etc.; and
- ⑥ continuing to enhance the capacity of the business sector and tertiary institutions in technology innovation; nurturing local scientific research talents; and promoting the development and upgrading of regional environmental industries .

(2) Fostering cross-boundary cooperation in recycling of reusable materials

Explore new modes for cross-boundary cooperation in recycling reusable materials, subject to compliance with national legislation and environmental standards. Cooperation proposals include:

- ① building on the existing legislation and regulatory requirements on environmental and quality control, the three sides to discuss the technical standards for processing reusable materials into resources, cross-boundary cooperation procedures, and monitoring systems with a view to establishing relevant arrangements;
- ② explore the feasibility of a new mode of cross-boundary cooperation in the recycling of reusable materials through pilot projects under the joint supervision of the relevant national authorities and environmental protection authorities of Guangdong-Hong Kong or Guangdong-Macao. Recycling enterprises complying with environmental requirements may be selected to undertake the relevant treatment, reprocessing and reuse processes;
- ③ Hong Kong and Macao to strengthen the reprocessing treatment of reusable materials to render them hazard-free and ready for use as resources at the pre-export stage such that these materials can meet the relevant prerequisite for recycling and reuse in line with the relevant policy requirements; and
- ④ while introducing advanced technologies, the three sides to promote research and application of reprocessing and reuse of reusable materials technologies. This will enhance the overall research capability of the Greater PRD region in technologies relating to the region's circular economy.

4. Developing and applying new and renewable energy

(1) Facilitating cooperation in development of new energy industries

It is proposed that the three sides jointly conduct an assessment of the development potential of new energy industries in the Greater PRD region

with a view to identifying important issues and areas for cooperation and coordination; and exploring the possibility of developing a cooperation mechanism for mapping out future cooperation plans and projects.

(2) Adopting measures to promote new energy industries

Strengthen cooperation with different stakeholders and explore formulation of measures beneficial to the development of new energy and renewable energy industries. Cooperation proposals include:

- ① Guangdong to fully implement the “Renewable Energy Law”, “Energy Conservation Law” and “Guangdong Energy Conservation Ordinance”; expediting amendments to local legislation such as the “Guangdong Electric Power Construction Regulations”; and strengthen policy support for the development and usage of renewable energy;
- ② taking account of their own policies on the energy industry and the future energy development direction of the Greater PRD region, Hong Kong and Macao to pursue measures promoting the development of new and renewable energy industries as well as wider application of related products and services; and
- ③ the three sides to carry out studies on standards for products, technologies and services of new and renewable energy sectors; introducing such standards as soon as possible for enhancing the development of these industries; progressively establishing the associated certification and labelling systems on these products and services; and striving to participate on a larger scale in drawing up relevant trade standards.

(3) Providing support to promote new energy and renewable energy industries

Provide more support for the development of new energy and renewable energy industries with a view to enhancing their competitiveness. Cooperation proposals include:

- ① taking into consideration their respective directions for developing new energy, the three sides are to identify the priority areas for development; consider formulating tax concession policies for supporting the development of new energy industries and related services;
- ② encouraging financial institutions to increase credit extension to enterprises and projects in the new energy field; raise export credit limits for these enterprises and products; and provide loans and credits for their buyers with a view to supporting the trade of new energy products; and
- ③ encouraging local authorities in the PRD region to provide more support to loan guarantors of new energy industries, in particular to support the latter in increasing their capital-raising scale.

(4) Promoting wider use of low-carbon vehicles

Embark upon cooperation in promoting wider use of new energy and renewable energy products with particular focus on new energy vehicles. Cooperation proposals include:

- ① providing subsidies or tax incentives to encourage the purchase of vehicles meeting higher emission control standards; improving the supporting infrastructure for new energy vehicles, including the planning and setting up of public charging networks, and designating priority parking spaces for new energy vehicles in public car parks;
- ② the three sides to jointly encourage vehicle manufacturers to initiate cooperation with local authorities to promote new energy vehicles; and to consider introducing environmentally friendly vehicles, such as electric vehicles, into the public transport networks;
- ③ taking Shenzhen, Guangzhou, Hong Kong, and Macao as pilot cities for promoting the production and wider use of new energy vehicles through market mechanisms as well as active cooperation among the three sides; and
- ④ striving to establish a new energy vehicle production centre at a suitable location in Guangdong; and seeking tax concessions from relevant national authorities on research and development, production and purchase of new energy vehicles.

5. Developing clean energy supply and related infrastructure

(1) Improving regional energy supply

To improve the regional energy supply structure, it is proposed that the three sides to jointly commence short- to long-term planning on the production and supply of clean energy in the Greater PRD region. Cooperation proposals include:

- ① short-term planning: ensuring stable energy supply to Hong Kong and Macao; carrying out discussions on pressing projects requiring joint development by Guangdong, Hong Kong and Macao, as well as related issues and management cooperation; and ensuring or increasing the stable supply of clean energy, such as natural gas and nuclear power, etc., to Hong Kong and Macao in accordance with the agreements reached; and
- ② medium- and long-term planning: jointly studying the overall demand and development potential of clean energy in the Greater PRD region; and formulating a regional plan for the supply of clean energy and its supporting infrastructure to jointly achieving the long-term goal of sustainable production and supply of clean energy within the region.

(2) Developing clean energy infrastructure

Increasing investment in the development of regional clean energy infrastructure; improving the energy supply network; upgrading design standards and services quality; and seeking the central government's support for developing the infrastructure for providing clean energy to Hong Kong and Macao, and its agreement to continue the tax concession arrangement for supplying natural gas to Hong Kong and Macao.

(3) Facilitating management of clean energy infrastructure

The three sides to jointly develop clean energy infrastructure and facilities on the basis of relevant international standards. This will enable shared usage and co-management of these infrastructures and facilities.

(C) Taking forward cooperation in culture and livelihood issues

Based on the cooperation direction of improving the provision of public services and addressing livelihood issues in the region, and with regard to the specific needs of people living across boundaries as well as aspirations for cross-boundary cooperation in culture and social development, it is proposed that the three sides build on existing collaboration and jointly cooperate in regional culture and livelihood issues to, as a key focus, facilitate cross-boundary living of residents of the three sides and to progressively take forward regional cooperation in such issues in a comprehensive manner. Areas of cooperation include:

1. cross-boundary cultural exchange;
2. cross-boundary cooperation in education;
3. cross-boundary cooperation in social welfare; and
4. cooperation in food safety.

1. Cross-boundary cultural exchange

The Greater PRD is multicultural. It is proposed that the three sides strengthen cross-boundary cultural exchange with a view to maintaining their own cultural characteristics while benefitting from the strengths of each side; promoting public participation in cultural policy discussions; and promoting coordinated development of the cultural creative industries in order to jointly establish a regional cultural image with significant international impact.

(1) Establishing a pluralistic regional cultural system

With the three places drawing on their respective advantages and encouraging multiple destinations in trips to the Greater PRD, it is proposed that the PRD be transformed into the cultural centre of Southern

China, Hong Kong to become an international cultural metropolis, and Macao to be developed as a global centre for leisure and cultural tourism so as to establish a pluralistic regional cultural system. Cooperation proposals include:

- ① taking forward the implementation of initiatives under the Greater Pearl River Delta Cultural Exchange and Cooperation Development Plan (2009-2013) regarding arts programmes, manpower training, cultural information network development and library resource sharing system, cooperation in cultural heritage and museums, exchanges and cooperation as regards intangible cultural heritage, and cooperation in the cultural creative industries so as to enrich supply in the regional cultural market;
- ② developing the regional culture consumer market: recommending quality arts programmes; organizing outstanding arts groups; holding international/national events on culture exchanges, and using platforms established under the Greater Pearl River Delta Cultural Cooperation Meeting, Asian Arts Festival, the Pearl River Forum and the Asian Forum of Ministers of Culture as platforms to promote the regional culture market; examining the possibility of aligning and coordinating public holidays of the three sides to create a domestic culture consumption market in Southern China; and
- ③ setting up a tangible culture market/exhibition area: identify cultural facilities, such as the West Kowloon Cultural District in Hong Kong, historic areas of Macao, distinctive neighbourhoods and villages in PRD, etc., for development of tangible culture markets and exhibition areas; continuing to enhance the connection between the Kaiping Diaolous and the historic areas of Macao with a view to establishing a cross-boundary cultural exhibition area under the theme of “cultural heritage” with multiple destinations.

(2) Facilitating development of cultural and creative industries

It is important to strengthen Guangdong-Hong Kong-Macao cooperation in the cultural and creative industries on the basis of accelerating reform in the PRD cultural industry management system. Cooperation proposals include:

- ① fostering the branding of cultural and creative industries: improving the institutional setting for developing well-known products and enterprises; focusing on key sectors such as software, comics and animation with a view to achieving breakthroughs; and facilitating the establishment of cultural corporations with core competitive edges and well-known brand names;
- ② strengthening protection of intellectual property: encouraging cultural and creative products to make use of intellectual property rights to capture and increase market share for enhancing protection of intellectual

property ; and

- ③ improving the investment and financing management system for PRD's cultural and creative industries; introducing market mechanisms into the cultural industries in respect of investment, financing, development, operation and management so as to optimize the market-oriented approach in allocating resources for the regional cultural industry.

(3) Facilitating regional cultural exchange

Drawing on the advantages of Hong Kong and Macao in close liaison with the international communities and open dissemination of information, strengthen exchanges and cooperation of cultural departments of the three sides and promote joint development of culture in the region. Cooperation proposals include:

- ① strengthening tripartite cooperation in developing the ticketing systems and implementing linked ticket sale through ticket agents, so as to facilitate cross-boundary ticket booking and sale;
- ② progressively resolving technical problems such as conversion between traditional and simplified Chinese, English-Chinese and Portuguese-Chinese translation, etc.; encouraging cooperation and exchanges between translators and literary professionals; giving recognition to these activities in an effort to improve the region's language conversion platform;
- ③ enhancing cooperation in the use of library resources; the libraries of the three sides to regularly exchange books and publications to complement the library resources of each side; each side to provide a list of outstanding books and publications published locally to serve as a reference for procurement with a view to enriching the resources of the libraries of the three sides and for the convenience of the readers;
- ④ promoting multicultural folk exchanges through various types of media; and encouraging cooperation between foundations to enhance regional cultural ambience and foster cultural integration;
- ⑤ coordinating resource arrangement for protection of historical and cultural heritage, and improving the means for exchange and cooperation in practical experience and technology development so as to strengthen joint protection and sustainable development of historical and cultural heritage; and
- ⑥ drawing on academic conferences and forums as a way to explore effective measures for joint promotion of regional culture, strengthening the Greater PRD's cultural competitiveness and its international influence, as well as facilitating sustainable cultural development.

2. Cross-boundary cooperation in education

The level of development in education is an important factor in determining the future economic competitiveness and quality of life in the Greater PRD region. Guangdong, Hong Kong and Macao should therefore leverage on the complementary advantages of the three places and focus on cooperation in basic, higher, and vocational education, as well as national education and related support work with a view to facilitating cross-boundary education for residents in the region and substantially enhancing the region's overall education standards.

(1) Promoting cooperation in basic education

Further promote cooperation in basic education on the basis of the present collaboration. Cooperation proposals include:

- ① optimizing transportation arrangements for cross-border students: continual improvement and promotion of immigration clearance measures such as provision of designated immigration counters and channels, and facilitating measures for cross-boundary school coaches, etc., to provide a more convenient and safer cross-boundary student commute;
- ② advancing the development of classes for Hong Kong and Macao children in Mainland: strengthening convergence of curricula and teaching materials with Hong Kong and Macao and enhancing the teaching methods and examination systems with a view to facilitating prospective students, who have the status of Hong Kong or Macao residents, in subsequent enrollment for secondary schools in Hong Kong and Macao respectively; and studying the operation of such classes at suitable locations in accordance with the actual demand; and
- ③ promoting bilateral sharing of educational resources; examining the possibility of allowing PRD students to pursue studies at senior secondary levels of non-public sector schools in Hong Kong and Macao; strengthening the convergence between Hong Kong and the Mainland regarding primary and secondary education curricula and student places; considering implementing an exchange programme for teachers to understand the differences in educational statuses between locations so that appropriate arrangements can be made for cross-boundary students; promoting the same opportunity for Hong Kong and Macao citizens in the free use of patriotic education bases in the PRD region.

(2) Promoting cooperation in vocational education

Actively promote cooperation in vocational education to upgrade the standard of vocational education in the region. Cooperation proposals include:

- ① taking forward cooperation in vocational education and training: establishing a long-term mechanism on continuous teacher training and exchanges among Guangdong, Hong Kong and Macao to promote mutual visits and exchanges of outstanding teachers; exploring new ways to jointly operate both vocational training institutes and vocational schools by the three sides, expediting the establishment of the Guangdong Industrial Design Training Institute by Guangdong and Hong Kong (cooperation institute of the Hong Kong Design Institute); promoting tripartite development of vocational education; strengthening cooperation between vocational education institutions and enterprises to assist students in seeking opportunities for internship and employment in the three places;
- ② initiating cooperation in raising the standard of vocational training services: strengthening cooperation of the three sides in setting out the standards of vocational training courses; inviting relevant industry experts of the three sides to explore and develop the standard of vocational training courses primarily for modern service industries, advanced manufacturing industries and strategic emerging industries; and
- ③ promoting cooperation in mutual recognition of professional qualifications and assessment of vocational skills; accelerating the study of setting up a mutual recognition model of “One Examination, Three Certificates” for human resources assessment.

(3) Deepening cooperation in higher education and research

It is proposed that the three sides deepen the cooperation in higher education and research. Cooperation proposals for exploration with institutions include:

- ① higher education management system: sharing new concepts and experience in the higher education management system and research management system; promoting education cooperation among Guangdong, Hong Kong and Macao through academic cooperation, exchanges in curricula and information, joint training and research, etc.;
- ② exploring new means of cooperation among enterprises, universities and research institutions: improving the policy on promoting cooperation between enterprises, universities and research institutions of Guangdong, Hong Kong and Macao; exploring the feasibility of setting up an information portal; raising the standard of cross-boundary cooperation projects initiated by universities, research institutions and enterprises of the three sides; seeking the Central Government’s support on planning, design and approval for major projects; encouraging qualified tertiary institutions to establish stable partnerships with cities and enterprises in the PRD region to expedite the application of research outcomes and provide strong technical support for local industrial development; and
- ③ supporting programme innovation and information portal building:

promoting innovative development in curriculum design, tertiary-level management programmes and manpower training of enterprises with a view to improving programme arrangement; setting up an information portal for knowledge sharing and academic exchanges; and pursuing cooperation in higher education programmes and information portal building by the three sides through short-term visits, etc.

(4) Facilitating cooperation in education at various levels

Making full use of the advantages of the Lok Ma Chau Loop Area and Zhuhai Hengqin Area to develop Guangdong-Hong Kong and Guangdong-Macao educational cooperation; actively implementing the provision of supporting education facilities in the Hengqin Area development plan; exploring the feasibility of reserving land in the “Guangdong-Macao Hengqin Cooperation Project Sites” for developing secondary education facilities.

(5) Achieving “lifelong learning” goals

Using the progressive achievement of lifelong education as a goal, actively encouraging cooperation in higher education for adults, self-study examination, modern distance learning, etc., with a view to promoting lifelong education and enhancing the competitiveness of manpower and sustainable development capacity in Guangdong, Hong Kong and Macao.

(6) Establishing sister schools

Encouraging more schools to form sister schools and carry out exchanges and mutual visits among principals, teachers and students to take forward collaboration and exchanges in the areas of educational ideologies, pedagogical designs and educational research, etc., as well as exploring the deepening of sister-school partnership with a view to attaining a win-win goal of mutual advancement and co-development.

(7) Promoting youth exchanges among the three places

With the three sides to provide support in provision of venues, facilities and other resources, promoting youth exchanges among Guangdong, Hong Kong and Macao through seminars, forums, information sharing, etc.; encouraging the three places to explore cooperation on development of study tours; and continuing to strengthen environmental education exchanges among Hong Kong, Macao and Mainland cities.

3. Cross-boundary cooperation in social welfare

On the basis of speeding up PRD social welfare reform, and focusing on the community efforts of Hong Kong and Macao in setting up social welfare

organizations in the PRD, as well as facilitating residents of Guangdong, Hong Kong and Macao to enjoy a high quality of life after retirement, the three sides should promote cross-boundary social welfare cooperation and raise the standard of social welfare of the region.

(1) Intensifying social welfare system reform

Advancing the social welfare system reform in PRD, and setting up a comprehensive management system for providing society-wide benefits to retirees in both urban and rural areas; accelerating the pace of standardizing the management in the provision of society-wide benefits to retirees; leveraging on the strengths of the leading demonstrative role of the public elderly homes to expedite reforms of the management mode, employment systems and services etc.; implementing the transformation of the elderly homes from closed to open modes, from simple dependent type to dependent rehabilitation type, from traditional relief type to moderate universal benefit type; encouraging and supporting the development of non-profit-making elderly homes; regulating and steering the development of commercial elderly homes, thus providing a level playing field for fair competition among elderly services providers; and making reference to the advanced mode of operation of elderly homes in Hong Kong and Macao to improve quality of service of elderly homes in PRD.

(2) Establishing social welfare organizations in PRD

Encourage community efforts of Hong Kong and Macao to set up social welfare organizations in PRD to jointly resolve problems encountered by Hong Kong and Macao residents in pursuing cross-boundary retirement. Cooperation proposals include:

- ① Considering suitable supporting policy measures in accordance with the relevant commitments under CEPA; through the Hong Kong-Guangdong Task Force on Social Welfare, and through the setting up of the Guangdong-Macao Task Force on Social Welfare, continuing to conduct exchanges and negotiations on relevant issues of Hong Kong-Guangdong and Guangdong-Macao cooperation; and facilitating Hong Kong and Macao social service providers to operate elderly homes and welfare institutions for persons with disabilities in PRD;
- ② According to the Regulations of Private Social Welfare Institutions in Guangdong Province, the PRD region should work out the implementation details as soon as possible, draw up preferential policies to support private social welfare institutions, provide new bed space and operation subsidies for newly built elderly institutions and welfare agencies for persons with disabilities. On the issue of land use development, priority land allocation may be arranged for newly built non-profit elderly institutions and welfare agencies for persons with

disabilities; for newly built profit-making institutions, legal agreement for land sale may be arranged; and

- ③ Examining the feasibility of bridging social security for Hong Kong and Macao seniors living in Guangdong, such as exploring the feasibility of providing comprehensive old age social security and medical assistance for elderly Macao residents living in Guangdong, setting up a special fund for these persons with disabilities, as well as establishing medical service stations for them. As for Hong Kong, the living and consumption patterns of elders living in the two places may be examined with a view to exploring the feasibility and policy direction of welfare portability, relevant considerations, and far-reaching implications to be brought about by policy changes.

(3) Facilitating training and exchanges

Encouraging Guangdong, Hong Kong and Macao to carry out training and personnel exchanges in social work and social services; promoting mutual exchanges for regional welfare organisations; setting up relevant information centres; promoting complementary and joint development of personnel; strengthening policy research and cooperation in providing retiree social services in the three places; Guangdong Province to promote self-management of interest groups organised by retirees and encourage their mutual exchanges; encouraging tertiary educational institutions in Guangdong, Hong Kong and Macao to provide training for social work and social services personnel in order to take forward the development of social services in the three sides.

(4) Setting up a reciprocal recognition mechanism on qualifications

Taking forward the planning and implementation of a Guangdong-Macao cross-boundary reciprocal recognition mechanism on qualifications of social workers and those in the social services sector.

4. Cooperation in food safety

On the basis of accelerating the pace in raising food safety management standards in the Greater PRD, and focusing on improving exchanges on food safety and contingency mechanisms, it is recommended that the three sides jointly continue cross-boundary food safety cooperation.

(1) Raising food safety standards

Make reference to the food supply safety management mechanism adopted in Hong Kong and Macao for raising the overall food safety standards in the PRD region. Cooperation proposals include:

- ① improving the monitoring of the entire food production process, from planting and culture, production and processing, distribution and sale, through to consumption, so as to implement a tracing system whereby the place of manufacture, source of raw materials, methodology of production and processing, storage and transport conditions are all traceable, enabling prompt tracing responses to minimise possible risks from toxic and hazardous agents;
- ② developing a system for the production processes and management systems of food enterprises supplying food to Hong Kong and Macao with reference to the experience of these food enterprises; and promoting these practices to other food enterprises in Guangdong Province so as to urge the raising of the overall level of food safety in the PRD region;
- ③ taking forward the application of the Hazard Analysis and Critical Control Point (HACCP) system to businesses supplying food to Hong Kong and Macao;
- ④ strengthening communication on food safety technology and standards; since the technology and standards adopted by Guangdong, Hong Kong and Macao are different, and the management mechanism on food for domestic supply within the Mainland and food for supply to Hong Kong and Macao are also different, it is necessary to strengthen exchange and communication between the three sides; and
- ⑤ strengthening publicity, education and public engagement; facilitating development of a food safety system and promoting openness and transparency of food safety management; establishing an effective food safety information system to regularly share results of testing in food markets.

(2) Enhancing the emergency response mechanism

Enhance the exchange and emergency response mechanism on food safety in the Greater PRD. Cooperation proposals include:

- ① improving the notification mechanism on food safety: the three sides to collaborate on sharing scientific food safety information; promoting mutual trust among the three sides and timely notification on food safety and food contamination incidents in order to provide reference information for the governments of the three sides to make policy decisions;
- ② improving means of coordinated food safety investigation: Guangdong, Hong Kong and Macao to strengthen tripartite communication and notification to effectively combat cross-boundary illegal cases; and
- ③ jointly enhancing capacity in food safety risk management and emergency response: exploring options for food safety risk monitoring and assessment; increasing capacity in food safety risk management and emergency response; and enhancing the scientific basis and effectiveness

of the monitoring system.

(D) Taking forward coordinated spatial development

From the viewpoint of spatial planning, the key constraints to promoting a quality living environment are urban sprawl and the proliferation of industries in the PRD and the limited living and development space in Hong Kong and Macao. These are affected by their respective geographic conditions. Therefore, regional planning should focus on transforming the PRD spatial development pattern and promoting coordinated cross-boundary spatial development.

According to the cooperation proposals for transforming the spatial development pattern and with regard to the problems of PRD spatial development, calls for cross-boundary coordinated development, and the work already carried out by the three sides, it is suggested that the three sides cooperate to pursue coordinated spatial development in the region. Enhanced spatial planning could help provide a quality living environment and cater for cross-boundary living and working of the region's residents and enterprises. Areas of cooperation include:

1. optimising the spatial structure of the PRD region; and
2. strengthening cross-boundary spatial cooperation.

1. Optimising the spatial structure of the PRD region

Guangdong Province to optimise the spatial layout of the PRD region in respect of the planning of protected areas, city centres, development areas and corridors. The functions and planned provision of various spatial elements should be enhanced. Spatial development of regional cities and industries should be well planned with a view to establishing a pleasant urban-rural living environment. The overall goal is to provide a spatial environment in Guangdong to “expedite the transformation of the mode of economic development and realise blissful living”.

- (1) Guangdong Province to establish a comprehensive system for protected areas to preserve the ecosystem and achieve quality living and sustainable development. Cooperation proposals include:
 - ▶ fully implementing the spatial management zoning policy formulated in the “Plan for the Coordinated Development of the PRD Townships”¹¹; carrying out comprehensive planning of regional green space systems and promoting the planning of such systems in all cities; and speeding up the designation of ecological control lines, including establishing baseline information for the regional

¹¹ “Plan for the Coordinated Development of the PRD Townships” (Chinese version only)
<http://www.gdcic.net/GdcicIMS/front/message/ViewMessage.aspx?MessageId=110242>

ecosystem in order to facilitate long-term preservation;

- ▶ continuing to establish regional greenways in an environmental and eco-friendly manner; enhancing greenway functions for integrating natural ecological resources as well as linking urban development with natural habitat and improving the integrity of the regional ecosystem; and further enhancing greenway design on this basis to perform various leisure sport, and cultural functions;
 - ▶ strengthening ecological enhancement measures and restoration work for compensating natural habitats damaged by human activity; setting up “special ecological zones” for protecting local habitats and maintaining biodiversity; maintaining and restoring waterfront areas and wetlands within the protection zones; protecting and maintaining arable land;
 - ▶ local authorities to take into account their area characteristics and carry out surveys on cultural and historical heritage and local cultural landscape resources for the purpose of designating the identified resources under the system of protected areas; and
 - ▶ carrying out a study on the above basis to formulate the functional components of regional protected areas, as well as drawing up classification and categorisation guidelines for such protected areas; gradually building a regional protected areas database; and including ecological resources and cultural and heritage baseline data in the system.
- (2) Guangdong Province to enhance the functions of public service and production service in PRD cities so as to provide more convenient services to residents and enterprises in the region, and making the centres at each level of key drivers for quality living and a thriving economy. Cooperation proposals include:
- ▶ strengthening the functional development of major regional cities, such as Guangzhou, Shenzhen and Zhuhai in the PRD region, particularly their new city centres and secondary centres; establishing industrial estates for speeding up the development of specialised centres at the sub-regional level and enhancing the functions and network of production service centres to provide suitable space for modern service industries and promote the transformation and upgrading of production industries in the region;
 - ▶ enhancing the public service centre network: improving the coverage of public services, and specifically strengthening the development of primary public service centres to promote equitable provision of essential public services;
 - ▶ optimising the functions and planning of various levels of centres, enhancing their accessibility and vibrancy by providing easy connection to public transport, cycle tracks and pedestrian walkways;

- ▶ developing “urban complexes” at both city- and sub-city level centres in major cities within the region by benefitting from the creation of transportation hubs for intra-city and intercity rail networks; expediting urban renewal, and optimising the spatial organisation. Such multi-purpose “urban complexes” would provide employment opportunities for nearby residents and promote a clustering and radiating effect of services;
 - ▶ pursuing “urban quality improvement actions” in local centres as well as in central areas of towns and streets with a view to promoting clustering and upgrading of local servicing functions and creating orderly spatial forms; and
 - ▶ identifying the population size to be served by local public service centres as well as characteristics of their living style. This will allow better provision of services reflecting the real needs of local communities.
- (3) Optimising the spatial forms of various PRD development areas in Guangdong Province to improve development standards so as to make them forerunners in transforming regional economic development and lifestyle. Cooperation proposals include:
- ▶ enhancing the spatial forms of intensive urban development areas by using “greenbelts”, which are part of the protected area system and help restrict the scale and extent of proliferation of intensive development areas; vigorously encouraging low-impact land development patterns; and promoting green buildings and construction processes to improve the urban micro-climate and raise comfort levels in development areas;
 - ▶ taking forward sustainable residential development: with respect for local circumstances, to regulate and guide the development of various types of residential districts, including “villages in towns”, to progressively establish a development mechanism catering to diverse residential districts to satisfy residents’ different needs;
 - ▶ improving ancillary facilities and services in residential districts, especially in speeding up infrastructure reorganisation and improving environmental quality for “villages in towns” and old residential areas; and progressively enlarging the coverage of “livable communities” to provide decent public services for all residential districts;
 - ▶ promoting the development of “mixed residential districts” that provide different classes of residential housing; promoting communication between residents of different income levels; and introducing appropriate commercial services to residential districts for promoting integration among communities and societies;
 - ▶ local authorities should work towards expediting the formulation of

land use standards for different trades and industries, and progressively raise requirement thresholds; phasing out polluting industries that employ low technology and pose adverse visual impact to urban and rural environments; encouraging redevelopment of appropriate industrial land at higher intensity; carrying forward the improvement and upgrading of industrial land; and accelerating the transformation of economic development through spatial planning policy;

- ▶ enhancing ancillary and amenity facilities in industrial parks and encouraging a moderate level of mixed commercial and industrial developments. These measures will assist enterprises in adapting to new economic developments and switching to emerging industries in a timely manner;
- ▶ encouraging the opening up of “knowledge parks”, such as university cities, science parks, and innovative industrial parks, to the community through various measures such as planning guidelines, compatible building designs, transport integration, and sharing of facilities and venues, etc. This will help enhance the spread of knowledge as well as promote development of an innovative, knowledge-based economy; and
- ▶ implementing the spatial management zoning policy formulated in the “Plan for the Coordinated Development of the PRD Townships” with a view to carefully restricting urban sprawl; encouraging the development of key industrial areas and regional economic revitalisation zones; and speeding up the promotion of scientific development on the west coast of the Pearl River.

(4) Guangdong Province to accelerate development of the PRD regional corridors with transport facilities as focal points; promoting coordinated development between these corridors, city centres and development areas; and facilitating employment and easy commuting. Cooperation proposals include:

- ▶ implementing the spatial management zoning policy formulated in the “Plan of the Coordinated Development of the PRD Townships”, i.e., respective local planning initiatives should take into account space requirements for regional transport corridors and hubs so as to provide space for expediting regional corridor development;
- ▶ implementing the development of the axis system identified in the “Plan of the Coordinated Development of the PRD Townships”; promoting the growth of regional urban areas and industries along major transport corridors, such as intercity and intra-city railways, particularly in respect of development at transport hubs, to gradually create a regional spatial structure with rail transport as the backbone under the Transit-Oriented Development (TOD) model; and

- ▶ setting up a variety of pilot TOD towns, namely, public centre, community living, and transport hub types of projects, taking into account the development of rail network and planning of urban centres in the PRD, key Guangdong-Hong Kong-Macao cross-boundary cooperation areas, and intercity rail transport hubs. Binhai New Town of Nansha in Guangzhou, Eastern New Town in Guangzhou, Qianhai and Longhua in Shenzhen and Songshan Lake in Dongguan are proposed as pilot areas to take forward the TOD mode of comprehensive development, which encourages integration of transport and spatial resources, and will increase the agglomerative effects arising from industrial and population density.
- (5) Embarking upon a number of livelihood improvement projects for enhancing the quality of the urban and rural environment in Guangdong Province; and accelerating environmental improvement of the PRD region's living space. These will be useful in gaining the necessary experience for building a "blissful Guangdong". Cooperation proposals include:
- ▶ adopting innovative planning and management measures to guide the improvement of the urban and rural environment: improving the planning of urban-rural environment in city centres, towns and villages having regard to local conditions; identifying public spaces with natural and historical resources as well as key issues affecting spatial development; drawing up a forward-looking and realistic strategy and action lists for guiding local governments to take actions in improving the quality of urban-rural areas;
 - ▶ establishing rail transit nodes: implementing the TOD model by building on the PRD's intercity or intra-city rail network; and encouraging high-density and mixed land uses as exemplars of innovative spatial development based on the creation of safe, comfortable and continuous pedestrian systems as well as vibrant and high quality public space;
 - ▶ for commercial districts: providing a continuous pedestrian system at commercial centres of towns/districts as the link to improving environmental quality; taking appropriate measures to create attractive streetscapes; making full use of the potential of backstreet space; and enriching commercial, cultural and entertainment activities at such areas to create a pleasant and vibrant commercial environment;
 - ▶ for traditional communities in the old city areas, villages in towns or village areas where resources exist: making full use of historical buildings, traditional structures, and local cultural and natural landscapes for experiencing community life, enhancing vibrancy of the communities as well as displaying the features of Lingnan (Southern China);
 - ▶ for waterfront leisure districts: making full use of the extensive

coastline, lakeside, riverside, etc.; setting up waterfront control areas on the basis of water quality improvement and ecological protection efforts; and improving the design of urban waterfront landscape as well as integrating it with greenways and recreational facilities so as to create waterfront leisure districts with Lingnan characteristics;

- ▶ establishing greenway networks: continuing to expedite the planning and construction of greenways; further improving greenways at provincial level, speeding up their establishment at city and neighbourhood levels; and establishing green living networks with low-carbon and non-motorised systems in suitable areas by connecting the greenway network with urban living space; and
- ▶ taking into account the importance of the natural environment, cultural and historical resources, and provision of safe pedestrian networks in carrying out spatial planning in the region, making them meet communities' needs and have distinctive characteristics.

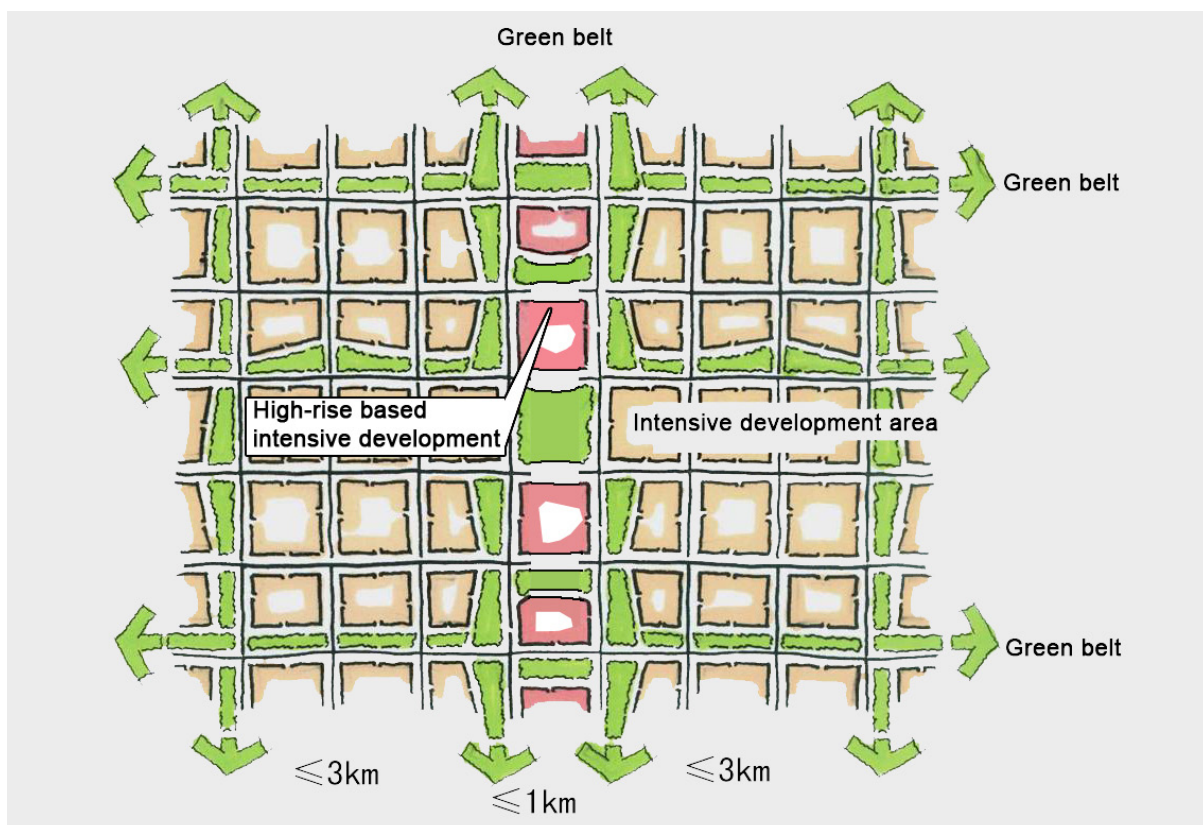


Figure 3-2 A conceptual plan for restricting the scope of intensive urban development: uncontrolled urban sprawl will induce adverse impacts associated with “urbanisation”, “Green belts” are an effective way to control this problem, and can act as an ecological link between city centres and protected areas in the peripheries.

2. Strengthening cross-boundary spatial cooperation

On the basis of progressive implementation of the existing cross-boundary spatial cooperation projects, it is suggested that the three sides consider expanding the scope of cross-boundary spatial cooperation between

Guangdong and Hong Kong as well as between Guangdong and Macao, to continue enabling coordinated spatial development of the Greater PRD region.

- (1) On the basis of strengthening ecological conservation, continuing the planning and development of prioritised cross-boundary cooperation areas – the Lok Ma Chau Loop Area, Qianhai in Shenzhen, Hengqin New District in Zhuhai, and Nansha New District in Guangzhou – to gain experience and explore a wider scope of cross-boundary spatial cooperation.
- (2) Taking on board the outcomes of the “Study on the Action Plan for the Bay Area of the Pearl River Estuary” jointly commissioned by the three governments for considering the development of the Bay Area into a regional centre, traffic hub, ecological core and multicultural area as well as an internationally recognised livable area.
- (3) Considering a study on cross-boundary spatial development along two major types of corridors: railways and greenways. Cooperation proposals include:
 - ▶ conduct a study on coordinated spatial development along the corridors of cross-boundary express railways. This will help promote developing the areas along the cross-boundary express railways corridors into a region with agglomeration of key regional functions, a high degree of convenience and better living quality; and
 - ▶ Guangdong, Hong Kong and Macao to jointly conduct studies on cross-boundary linking of greenways, including the linking of PRD greenways on the west bank of Pearl River with the coastal greenbelt of Macao, as well as the linking of PRD greenways on the east bank with the country parks (or hiking trails) in Hong Kong. This will facilitate cross-boundary greenway connection and creation of cross-boundary ecological corridors, help protect the regional ecosystem, and establish pleasing cross-boundary landscapes.
- (4) Exploring progressive expansion in the scope and coverage of cross-boundary spatial cooperation; with respect for the individual systems of the three sides, actively investigating the feasibility and method of collaboration in setting up cooperation zones for creative industries, modern services, tourism, as well as cross-boundary living. Cooperation proposals include:
 - ▶ cross-boundary joint creative industrial zones: consolidating Hong Kong’s and Macao’s scientific innovation research resources with PRD’s land resources to enhance the Greater PRD’s position in the country’s development of creative industries; Guangdong, Hong Kong and Macao to jointly study the region’s scientific innovation resources and demands for creative industries, and on this basis, devising mechanisms and policy frameworks to promote cross-boundary innovation cooperation; and promoting and

facilitating interested scientific research institutions, industrial parks and businesses to cooperate in carrying out joint innovation projects through policy support and coordination;

- ▶ cross-boundary modern services cooperation zones: giving priority to introducing Hong Kong's and Macao's resources in modern service industries into the PRD region and speeding up their agglomeration in the modern service industries zones in PRD; expanding the development opportunity for the modern service industries in Hong Kong and Macao; promoting the transformation and upgrading of industries in the region; coordinating the implementation of relevant policies of CEPA; and encouraging concerned local governments and authorities in PRD to liaise with the related government departments and business sectors in Hong Kong and Macao to formulate appropriate measures and cooperation methods for importing modern service industries from Hong Kong and Macao;
 - ▶ cross-boundary tourism cooperation zones: attracting Hong Kong's and Macao's tourism industries to participate in the development and operation of natural and cultural tourism resources in the PRD region to expand the development opportunity for Hong Kong's and Macao's tourism industries and enhance the attractiveness and market competitiveness of the Greater PRD's tourism industries; exploring policy arrangements conducive to such development; and encouraging the concerned local governments and authorities to work with Hong Kong's and Macao's tourism industries to foster cooperation in the development and planning of these tourism resources; and
 - ▶ cross-boundary living cooperation zones: considering development of cross-boundary living cooperation zones at residential clusters in the PRD where people from Hong Kong and Macao mainly reside; making reference to the advanced experience of Hong Kong and Macao in social management to attract social services providers of Hong Kong and Macao to operate in PRD, and exploring establishment of a cross-boundary social welfare security mechanism; Guangdong, Hong Kong and Macao to jointly study the living conditions and needs of Hong Kong and Macao people residing in PRD; and considering establishing pilot cross-boundary living cooperation zones on basis of discussion with the relevant local governments on the management framework and arrangement of welfare services provision of the cooperation zones; encouraging non-government organisations of Hong Kong and Macao to advise on the planning, construction, management and service patterns of the cooperation zones; and encouraging the relevant sectors of Hong Kong and Macao to provide services and facilities in education, culture, leisure, and elderly services that can meet the needs of Hong Kong and Macao people.
- (5) Exploring the establishment of pilot Quality Living Areas: by fostering closer cooperation among the three places, exploring the development of

the Nansha New District in Guangzhou, Qianhai of Shenzhen, Hengqin New District in Zhuhai and other new functional zones as pilot quality living areas which fully reflect the quality living concepts including giving priority in environmental and ecological protection, low-carbon development, provision of convenient services, green transport, compact approach of spatial development as well as advocacy of openness and sharing. Cooperation proposals include:

- ▶ establishing a comprehensive system of protected areas: conducting baseline surveys and assessment of ecological, historic, cultural and other special landscaping resources and setting up a database system for these protected areas; on the basis of establishing regional greenways, carrying out land use planning for the protected areas, e.g., integrating the natural coastlines, water courses, forests, historical streetscapes and local landscape features with the aim of progressively setting up a comprehensive and diversified system of protected areas;
- ▶ formulating a spatial layout for industries to promote resource recycling and low-carbon development: making better use of spatial planning to promote industrial upgrading, and providing space to optimise service-oriented and knowledge-based industries such as modern services industries, cultural and creative industries and strategic new industries; promoting relocation of manufacturing, warehousing and logistics industries to industrial parks, and encouraging the setting up of resource and energy recycling systems in these parks; and progressively establishing and raising land use efficiency, and thresholds of environmental impact and carbon footprint for industrial land to balance industrial development, environmental protection, and quality living;
- ▶ setting up high quality public service centres: strengthening cooperation among Guangdong, Hong Kong and Macao to optimise the environment for developing modern services, including finance, communication, convention and exhibition, and trading sectors and promoting the agglomeration of these services, for building high quality regional production service centres; planning and establishing comprehensive public service centre networks to ensure basic public service facilities are available to all residents; raising the planning standards of such centres; and enhancing the quality and vibrancy of public spaces to make them more comfortable and attractive;
- ▶ prioritising the development of a green and people-oriented transportation system: developing a diversified transportation system which comprises the intra-city and intercity rail networks as the major backbone and encourages other modes of public transport; establishing a safe and comfortable cycling and walking environment, where appropriate, in order to provide a transport structure of mainly public and non-motorised transport; actively promoting energy conservation and emission reduction in the transportation sector;

taking the lead in introducing energy-saving and environmentally friendly or new energy vehicles; and implementing comprehensive transport improvement schemes, traffic calming measures, and intelligent traffic management pilot systems to create a green transport environment; and

- ▶ establishing livable urban and rural environments with compact use of land resources: upholding the TOD development concept to control urban sprawl and carry out urban development in a suitably compact approach; establishing a spatial framework with high density urban developments intermingling with open space such as woodlands, parks and agricultural lands; optimising the spatial forms through adopting a low-impact approach of land development and green and energy-saving approaches of construction to balance urban development with environmental protection; creating a system to provide different types of residential areas; raising the standard of infrastructure and ancillary services for different types of residential areas; steadily increasing the coverage of livable communities; and encouraging the development of “mixed residential districts” to achieve diversified population mix in a community for the promotion of social integration.

(E) Facilitating development of green transportation and convenient boundary crossing

To address the need for the development of convenient, green and people-oriented transportation services and to meet the objectives of quality living, it is proposed that the three sides may, by making use of existing mechanisms, consider facilitating the development of coordinated green transportation and convenient boundary crossing in the Greater PRD region to support the growth of a quality living area. Areas of cooperation include:

1. Enhancing regional transportation systems;
2. Promoting energy saving and emissions reduction in transportation systems;
3. Promoting sustainable coordinated development of transportation systems; and
4. Providing more convenient cross-boundary transportation services.

1. Enhancing regional transportation systems

Railways and intercity rail networks will form the backbone of the transportation system in the Greater PRD region, with public transport and long distance intercity coach as main frame. Private vehicle usage will be developed in a regulated manner. Priority will be given to developing a multi-level public transportation system. Non-motorised transportation will be encouraged where appropriate; and the use of

private cars will be regulated. Different transportation modes will also be made available.

(1) Promoting systematic transport planning

It is proposed that the three sides promote systematic transport planning. Cities in the PRD should progressively draw up their planning requirements and standards for transportation, and expedite the compilation of major transport plans.

(2) Facilitating development of rail networks

Promoting the Greater PRD region transportation system with railway as the backbone and facilitating the development of Hong Kong, Macao and PRD rail networks. Cooperation proposals include:

- ① strengthening the planning and development of the intercity rail network for provision of speedy and large capacity rail transport service to enhance the radiation of the central city to important urban nodes; and
- ② strengthening the convergence of intercity rail transportation in the PRD region with Hong Kong and Macao; further exploring the extension of the Guangzhou-Dongguan-Shenzhen intercity lines to Shenzhen Airport and the Qianhai and Futian centre, and to connect the Hong Kong-Shenzhen Western Express Rail; strengthening the docking of Guangzhou-Zhuhai light rail and Macao light rail for the rational planning and construction of a light rail transport hub.

(3) Facilitating development of public transport

Pursue priority policy on public transport development. Cooperation proposals include:

- ① cities in PRD to further strengthen their own planning on public transportation systems and provision of related infrastructure facilities; formulate public transport services standards and enhance service quality; direct resources for public transportation systems; support and promote priority development of public transportation systems;
- ② PRD region to progressively develop public transportation services serving cities in different administrative regions, and gradually begin operating intercity public transportation services;
- ③ relevant PRD cities to explore development of new modes of transport patterns, such as modern tramway, Bus Rapid Transit (BRT), and enhance the public transportation structure.
- ④ in line with rail transport development, where appropriate, providing public transport interchange discounts and free bicycle parking for

park-and-ride passengers with a view to encouraging use of public transport and bicycles; and

- ⑤ Macao to speed up the development of a connection system between light rail, bus and non-motorised transport with a view to expediting the improvement of public transport operations.

(4) Strengthening marine and river transport developments

Cooperation proposals include:

- ① Guangdong-Hong Kong-Macao to jointly study cross-boundary passenger ferry service development with a view to coordinating the development of initiatives and plans for the marine transportation system, and for promoting systematic marine transportation growth;
- ② carrying out research for the purpose of better planning on locations of respective piers along the Pearl River, ferry routes, and the seashore; taking measures to minimise the cost of marine transport and increase its competitiveness to make this an important alternative or supplement to land transport; and
- ③ accelerating the main construction works of Macao's Taipa Ferry Terminal; promoting the development of water passenger transport between Macao and adjoining areas.

(5) Facilitating development of non-motorised transport

Plan for an environment conducive to the usage of non-motorised transport, where appropriate; encourage the usage of non-motorised transportation modes. Cooperation proposals include:

- ① PRD cities to commence topical planning on non-motorised transport between central urban areas and other major zones with a view to strengthening the planning control on non-motorised transport corridors and development of cycling and pedestrian facilities;
- ② enhancing the provision of facilities for linking rail transport, land public transport, and respective supporting facilities with a view to promoting greenway usage, i.e., “public transport + cycling track” and “public transport + pedestrian walkway”, where appropriate; and
- ③ attaching great importance to the space and quality of non-motorised transport facilities in PRD cities through the design and construction of road systems and planning of city and commercial centres to increase the comfort level of using pedestrian walkways, cycling tracks, and leisure paths.

2. Promoting energy saving and emissions reduction in transportation systems

It is proposed to progressively raise the fuel and emission standards of motor vehicles in the Greater PRD region, and to provide policy incentives and resources to speed up energy saving and emission reduction in the transportation system.

(1) Raising fuel and emission standards

Progressively raise the fuel and emission standards of motor vehicles. Cooperation proposals include:

- ① on the basis of the implementation of National IV emission standards on motor vehicles in the PRD region, progressively adopting motor vehicle emission standards that are more advanced than those in other places in the Mainland; Hong Kong and Macao to each take action to raise their emission standards to the advanced level of international standards¹²;
- ② exploring tax concessions for the purchase of motor vehicles with high emission standards; prioritising the use of environmentally friendly motor vehicles for public transport, taxis, cross-boundary buses, school buses, etc.;
- ③ expediting the replacement of aging public transport vehicles, encouraging the installation of tailpipe emission reducing devices on goods vehicles and promoting the use of ultra-low sulphur diesel; tightening the frequency of and procedures on checking and testing motor vehicles in high emission vehicle fleets, and strengthening the control and management of emissions of motor vehicles from other places travelling in the PRD region, etc.; minimising the emissions from existing motor vehicles; and
- ④ encouraging the introduction of high quality fuels to ensure that fuel quality meets emission standards; striving for more supply of low-sulphur diesel supply and provision of preferential policies for using low-sulphur diesel in the PRD region.

(2) Formulating measures for preventing and controlling pollution from vessels

In light of relevant policies, economy, and technology, etc., explore

¹² The National III motor vehicle emission standard (equivalent to Euro III) is now implemented throughout China. Hong Kong's prevailing vehicle emission standard is Euro IV, and Euro V standard is scheduled to come into force in June 2012. Guangdong advanced the implementation of the National IV standard in 2010, becoming the second region to adopt it after Beijing. As for motor vehicle fuel, Guangzhou and Shenzhen advanced the supply of National IV standard petrol to 2010 while the supply has been extended to Dongguan since 2011. The Ministry of Environmental Protection issued a notice on 10 January 2012 requiring all compression-ignition vehicle engines and motor vehicles produced, imported, sold and registered to comply with the National IV standard from 1 July 2013. In Hong Kong, the statutory specifications of motor vehicle diesel and unleaded petrol were tightened to Euro V standards on 1 July 2011.

formulating specific policies and measures for prevention and control of vessel pollution in order to protect coastal environments and the ecosystem.

(3) Reducing motor vehicle emissions

Through the improvement of transport management, reduce motor vehicle emissions. Cooperation proposals include:

- ① individual cities may consider establishing a traffic congestion monitoring, assessment and management mechanism, and do pilot tests on control measures such as traffic congestion charging, etc.; and
- ② individual cities in the PRD region may investigate the designation of low-carbon emission transportation zones, provision of non-motorised traffic lanes and zones with a view to reducing air pollutant emissions in city centres, cultural and historical sites, and important landscape areas.

3. Promoting sustainable coordinated development of transportation systems

Using existing working mechanisms for coordinating Greater PRD region transportation systems, continuing to improve these systems to promote sustainable regional transportation development.

(1) Facilitating sustainable regional transport development

Guangdong, Hong Kong and Macao to strengthen the planning of regional transportation development and the design and layouts of transport infrastructure. This will help enhance connections between transportation infrastructures.

(2) Facilitating connections between transportation modes

Strengthen communication on the operation of transportation systems, and facilitate the connections between different transportation modes and between various districts. Cooperation proposals include:

- ① promoting the transit connection between national, intercity, and urban railways; strengthening the coordination in planning of major regional transportation corridors; planning transportation hubs as a core to fully utilise the overall effectiveness of the transportation network; and
- ② carrying out a transport development strategy study and comprehensive transport coordination planning in the economic circle of Shenzhen-Dongguan-Huizhou, Guangzhou-Foshan-Zhaoqing and Zhuhai-Zhongshan-Jiangmen; optimising the layouts for major transportation hubs; strengthening the connections between road networks serving boundary areas of adjoining cities.

(3) Strengthening connections between transport infrastructures

Cooperation proposals include:

- ① carrying out studies on the coordinated development of multi-modal transportation in airports, rail stations, intercity rail stations, major road transport hubs, ports, boundary control points, major passenger piers, and major goods transportation hubs; and
- ② improving the layout design of transportation hub facilities, including traveller/pedestrian walkway systems, and design of information systems; strengthening coordinated planning and connection of transport facilities, where appropriate, with the surrounding road networks, public transport facilities and non-motorised traffic systems.

(4) Upgrading transport services

Promote cooperation between the transport operation and services sectors in order to upgrade the level of transport services. Cooperation proposals include:

- ① fully integrating resources and promoting networked electronic toll systems on PRD highways and further combining toll stations on major highways; extending the scope of mutual recognition of vehicle toll annual tickets in the PRD region to progressively promote the concept of “One Card for All” in Guangdong Province; and
- ② extending the scope of the Electronic Toll Collection (ETC) system and increasing the number of ETC toll lanes, and promote the use of electronic payment cards.

(5) Encouraging development of intelligent transport systems

Enhancing and progressively extending the scope of the Intelligent Transport System (ITS) in the PRD region to raise the level of transport management, and promote the continued integration and coordinated development of regional transportation systems in the Greater PRD.



Figure. 3-3 A conceptual plan of the design for the internal layout of a multi-modal transportation hub serving as a focal point for different transportation modes. Improving the coordinated designs of various transportation facilities in the hub helps to promote the coordinated development of transportation systems.

4. Providing more convenient cross-boundary transportation services

Guangdong, Hong Kong and Macao to further cooperate in providing more convenient cross-boundary transportation services to progressively improve the transportation services in adjoining areas of Guangdong-Hong Kong and Guangdong-Macao.

(1) Cross-boundary transport facilitation policies

Refer to the cross-boundary transport management experiences of the USA, Canada and Mexico, to implement policies facilitating cross-boundary transport. Cooperation proposals include:

- ① underpin the “One Country, Two Systems” principle, taking into account the capacity of the boundary crossing facilities as well as the traffic capacities in Hong Kong and Macao, exploring the progressive relaxation of boundary-crossing restrictions for people in the Greater PRD region; considering the progressive extension of the “multiple-entry Individual Visit endorsement” policy for residents with household registration in PRD cities travelling to Hong Kong and Macao; allowing residents with non-household registration ordinarily residing in PRD cities to apply

locally for Individual Visit endorsements; considering allowing such residents who meet certain criteria to apply for “multiple-entry endorsements”; enhancing further the cross-boundary clearance facilitation between Guangdong and Macao; providing the same convenience in boundary clearance for residents of PRD cities travelling to Hong Kong-Macao in the longer run;

- ② studying the implementation of a simplified boundary crossing clearance process: the respective departments managing boundary control points and immigration/customs clearance to study and explore innovative and effective modes of immigration/customs clearance under the principle of “One Country, Two Systems” and without affecting the position of the three sides’ separate immigration/customs territories;
- ③ exploring the feasibility of gradually extending the operating hours of boundary control points, taking into account the capacities of boundary crossing and transport facilities and the demand for transportation services; further promoting the e-Channel automated passenger clearance service and simplifying cross-boundary passenger clearance procedures; if necessary, increasing the number of 24-hour land boundary control points, e.g., exploring the feasibility of 24-hour boundary crossing at the Gongbei boundary control point; for Hengqin boundary control point, extending the opening hours till midnight; and
- ④ considering strengthening transportation connections between boundary control points and urban areas; enhancing, as far as possible, public transportation service connections with boundary control points to increase overall effectiveness.

(2) Facilitating development of cross-boundary transportation services

Enhance coordinated development of cross-boundary transportation services for passengers and goods to raise service quality. Cooperation proposals include:

- ① strengthening communication on cross-boundary transportation services for passengers and goods: Guangdong, Hong Kong and Macao to progressively coordinate the information platform and boundary-crossing facilities, boundary checking and quarantine systems; based on the premise of maintaining the position of separate customs territories of the three sides and as independent jurisdictions for taxation and legal protection of privacy, the PRD to examine the possibility of creating an information sharing system with Hong Kong and Macao and the development of a boundary crossing control information mutual reference index and a mutual recognition mechanism; Guangdong, Hong Kong and Macao to explore a joint survey on cross-boundary travel, if required; and to explore the development of an information platform for cross-boundary travellers;
- ② enhancing and enriching cross-boundary transportation services:

speeding up cross-boundary helicopter services in Guangzhou, Shenzhen, Jiangmen, Foshan and other cities to actively promote this service between Guangdong, Hong Kong and Macao;

- ③ promoting the interoperability of public transportation electronic payment cards in Guangdong, Hong Kong and Macao: striving to implement such usage of the three sides' existing cards; and consider extending the scheme to include Macao's light rail system; and
- ④ providing high quality, convenient transportation services for cross-boundary travellers in Guangdong, Hong Kong and Macao with the progressive completion of cross-boundary transport infrastructure and promotion of cross-boundary facilitation; streamlining arrangements for foreigners travelling to the PRD region through Hong Kong or Macao; providing efficient and convenient services, including baggage movement, for travellers in the Greater PRD region.

IV. Implementation of the Plan

The Guangdong, Hong Kong and Macao governments will take forward the cooperation proposals and specific initiatives under the principle of “One Country, Two Systems” and with mutual respect to different legal systems and social circumstances in the three places. In progressing the specific initiatives, the respective policy bureaux or departments of the three sides will follow the prevailing legal mechanism and established procedures for the relevant consultation and approval processes. The three governments will make full use of existing cooperation mechanisms, including the Guangdong-Hong Kong, Guangdong-Macao Cooperation Joint Conferences (CJCs). Specific cooperation proposals will be put into action by the relevant special panels under these two CJCs as appropriate, and the three sides will take forward and coordinate the implementation of the Plan, taking into account prevailing circumstances. Regular review on the effectiveness of these cooperation proposals will also be conducted during implementation. With due regard the difference in circumstances among the three places, the three sides will seek room for tripartite or bilateral cooperation with a view to contributing to the building of a quality living area in the Greater PRD region.

(A) Consideration of resources allocation

The Plan has set out a framework for joint action in meeting the objective of transforming the Greater PRD region into a quality living area, including specific proposals and initiatives for the five cooperation areas. For the implementation of those cooperation proposals under the Plan, the governments and communities of the three places would need to allocate relevant resources taking into account the respective social circumstances.

The three sides should carefully consider the allocation of more public resources for promoting regional transformation. Among others, the Guangdong Provincial Government would need to consider putting more resources into the following: transferring and re-allocation resources across different areas for ecological protection; strengthening scientific research on low-carbon development and cleaner production; strengthening support and guidance for industrial upgrading and transformation; strengthening equalisation of basic public services and provincial coordinating efforts for relevant resources; allocating dedicated funding and subsidies for the purpose of coordinated planning and provision of planning services to the rural areas; supporting the improvement of regional transportation systems and development mechanisms for Guangdong, Hong Kong and Macao. The Macao government would continue to take actions on their work on protecting the nature ecology and environment, preserving the historical and cultural resources, building an international tourism and leisure centre, promoting industrial upgrading and transformation, increasing investments in the social and livelihood areas, adjusting urban spatial development modes, facilitating green transport development and mechanisms for coordination with nearby regions. Regarding Hong Kong, the respective policy bureaux or departments would take actions on the various cooperation proposals for improving the environmental and ecological quality, promoting low-carbon development, taking forward cooperation in culture and

livelihood issues, strengthening coordinated spatial development, and facilitating development of green transportation and convenient cross-boundary movement, in accordance with prevailing legal mechanism and established procedures, including the relevant consultation and approval processes. In improving environmental quality, Hong Kong would strive for strengthening the management of the regional air quality and pollution control measures, and will provide incentives to promote ocean-going vessels berthing at Hong Kong to use cleaner fuels. To promote low carbon development, Hong Kong is set to reduce its carbon emissions and carbon footprint for developing Hong Kong as a low carbon city.

In implementing the cooperation proposals, the three sides will give priority to proposals with consensus. Proposals with cooperation foundation or continuity, will progressively be implemented when ready. For example, in respect of improving environmental and ecological quality, Hong Kong and Guangdong will complete and publicise the 2011-2020 air pollutant emission reduction plan for Hong Kong and the PRD region. Both sides will also enhance the regional air quality monitoring network, and explore opportunities in reducing emissions from vessels in Greater PRD waters, including looking into possibilities to promote the use of cleaner energy by vessels berthing at Greater PRD ports.

(B) Soliciting support from the Central Government

In view of the wide coverage of the Plan, it is suggested that Guangdong Province or the PRD region be allowed to develop a closer cooperation relationship with Hong Kong and Macao in the areas of environment and ecology, low-carbon development, culture and social development, spatial planning and green transportation systems, with reference to the arrangements under CEPA. This will be pursued subject to compliance with the national constitution, legal systems and the Basic Laws of Hong Kong and Macao, and in accordance with the principles of scientific development and mutual benefits. Taking into account the circumstances, Guangdong Province will coordinate and discuss with relevant departments of the Central Government to study the possibility of suitably innovating the regulations of relevant departments and local areas, and strive for delegating Guangdong Province with the approving authority on respective issues.

(C) Coordinating the implementation of the Plan

In order to facilitate the implementation of the Plan, there should be effective and continue coordination of related matters among relevant parties in the region.

1. Guangdong-Hong Kong, Guangdong-Macao Cooperation Joint Conferences and relevant Expert Groups

With a view to promoting collaboration efforts, the three governments had already established the Hong Kong-Guangdong, Guangdong-Macao Cooperation Joint Conferences as co-operation platforms, under which various special panels had been set up. The existing institutional framework provides a solid basis for taking

forward the various collaboration initiatives proposed in the Plan. Specific cooperation proposals will be taken up and discussed at the relevant special panels, and there shall be coordinated implementation having regard to the prevailing circumstances.

2. Coordination with the Central Government and the Guangdong, Hong Kong and Macao

It is recommended that coordination with the relevant departments of the Central Government be strengthened to solicit its support, in particular in the areas relating to scientific and technological research, qualifying in participating in different pilot testing areas, and advancement in information and technology development. The Greater PRD region must take full advantages of “One Country, Two Systems” and the implementation of pilot policy to facilitate transformation of the Greater PRD region and to turn it as a national exemplar areas.

3. Non-government Organisations and the Public of Guangdong, Hong Kong and Macao

The Non-government Organizations (NGOs) in the region, such as the Guangdong-Hong Kong-Macao Cooperation Association and the Greater PRD Business Council, are encouraged to participate in transforming the Greater PRD into a quality living area. It is anticipated that public views can be solicited through the networking and participation of these NGOs during implementation of respective cooperation proposals, and this can also facilitate a consensus to be reached.