

Promote the Northern Metropolis to a High-quality Greater Bay Area Development Pilot Zone

Head of Hong Kong Economics and Policy Research Division, Wang Chun Xin

Once the Northern Metropolis plan was released, it received extensive attention and brought huge imagination room. Recently, the Chief Executive-elect, Mr. Lee Ka-chiu, proposed that the Northern Metropolis will become a new development engine at his briefing political platform. A department will be established to manage its planning and development, indicating that this super-project is about to launch.

We believe the first priority is to give it an appropriate development orientation and core content to implement the planning of the Northern Metropolis. Considering the internal and external situations, the country's needs, the mission of the Greater Bay Area, and the strengths of Hong Kong, the Northern Metropolis should be transformed into a high-quality development pilot zone of the Greater Bay Area, assisting China and the Greater Bay Area to build a high-quality development economy, promoting Hong Kong to better integrate into the overall development of the country, and accelerating the transformation of Hong Kong into an innovative economy.

1. Country's needs and Hong Kong's first responsibility

First, it should be noted that high-quality development is the most important thing at this stage and is related to the needs of the country in the whole area of modernization. The "14th Five-Year Plan" takes high-quality development as the theme at the national level. This is a reasonable judgment based on the continuous evolution of the country's development stage, development environment, and development conditions. It has been transformed into many practical strategies and actions, including launching a three-year action plan for the reform of the scientific and technological system, formulating and implementing a ten-year plan for basic research, launching several industrial base reengineering projects to enhance the core competitiveness of the manufacturing industry, accelerating the digital transformation to promote the upgrading of traditional industries, etc. Financial support for high-quality development has continued to increase. In recent years, scientific research and technology loans have increased by 29%. The Ministry of Finance is also building a modern fiscal and taxation system to service high-quality development. In the above series of actions, formulating and implementing a ten-year plan for basic research and laying out several basic scientific research centers are the top priorities. These actions are important supports for innovation as the primary driving force for high-quality development.

At the local level, the national "14th Five-Year Plan" supports Shanghai, Beijing, and the Guangdong-Hong Kong-Macao Greater Bay Area to form international technological innovation centers, and builds four comprehensive national science centers including Beijing Huairou, Shanghai Zhangjiang, Greater Bay Area, Anhui Hefei. Meanwhile, it also supports the construction of regional science and technology innovation

centers where conditions permit. It can be seen from this that the Greater Bay Area ranks among them, whether it is to form the highest-level international science and technology innovation center or the next-level comprehensive national science center, playing the most important role in science and technology innovation.

To implement the requirements of the national “14th Five-Year Plan”, Guangdong Province has adhered to the core position of innovation in recent years. Based on scientific and technological self-reliance and self-improvement, Guangdong accelerated the construction of a higher-level scientific and technological innovation and strives to assist the province to make breakthroughs in a batch of key core technologies through the continuous implementation of R&D plans in key areas. Guangdong also focuses on laying out the innovation chain around the industrial chain, driving the collaborative innovation of more than 60,000 high-tech enterprises in the province, and actively promoting the construction of strategic emerging industrial clusters, making them a model for high-quality industrial development. These actions have greatly enhanced Guangdong’s energy for high-quality development. In 2021, Guangdong’s regional innovation and comprehensive capabilities continue to lead the country. There are about 60,000 high-tech enterprises with 8.7 trillion Yuan high-tech output products. The total number of authorized patents, effective invention patents, and PCT international patent applications has reached 872,000, 103,000, and 26,000 respectively, all ranking the first in China. The growth of strategic new industries is promising. The Integrated Circuit Greater Bay Area International Science and Technology Innovation Center ranks top 10 among the global science and technology innovation clusters. The added value of Shenzhen’s strategic emerging industries is as high as 1.2 trillion Yuan, accounting for about 40% of the GDP, ranking the first among cities in the country.

However, it should also be noted that there are some shortcomings in basic research and other fields, both at the national level and Guangdong level, especially in the fields of compound semiconductors and materials science. The country’s vigorous promotion of basic research is precisely to make up for its shortcomings of basic research. Guangdong Province recently formulated the “14th Five-Year Plan” for scientific and technological innovation, proposing that it will implement the “Ten Key Action Plans for Scientific and Technological Innovation”. Increasing the basic research funding proportion of R&D funding up to 10% to make up for the shortcomings of Guangdong’s long-term low investment in basic research and weak original innovation capabilities. The Huawei has now become a leading company in the global information industry. Its founder, Ren Zhengfei, has always maintained a sense of crisis. He believes that a company cannot be short-sighted and only pursue pragmatism. It needs more theoretical breakthroughs. Therefore, more than 15% of the research and development funds are invested in basic research, mainly marked by the “2012 Laboratory” established by Huawei in 2011. Huawei’s total R&D expenses in 2021 reached 142.7 billion Yuan.

Basic research is the strength of Hong Kong. Hong Kong has the global resource research of top universities and institutions. Its basic research is at the top level in the world. Five universities have entered the world’s top 100 universities, with rich scientific and technological resources, outstanding achievements, and international reputations. Currently, there are 72 disciplines ranked within the top 50 in the world. Many of them have been at the forefront of the world, including biomedicine, neuroscience, genomics, vaccine technology, stem cell technology, traditional Chinese medicine, artificial intelligence, computing science and information technology, smart city, etc. Other fields, such as the Internet of Things, big data analysis cloud computing, information and risk management, and network security also have greater advantages. With a highly open and international scientific research system, a world-class financial services industry, a world-class business environment, and easy- access of global technology talents, Hong Kong have the main advantages to upgrade the Northern Metropolis into a high-quality development pilot area in the Greater Bay Area. More importantly, the national “14th Five-Year Plan” clearly proposes to support Hong Kong in consolidating and enhancing its competitive advantages, building an international innovation and technology center, deepening the cooperation between the mainland and Hong Kong in trade, science, and technology,

building a high-quality Guangdong-Hong Kong-Macao Greater Bay Area. These provide an important basis and fundamental driving force for Hong Kong to build a high-quality development pilot zone in the Greater Bay Area. It can be seen from this that promoting the high-quality development of the country and the Greater Bay Area is the primary responsibility of Hong Kong in the new era. Hong Kong must give full play to its advantages and shoulder the heavy responsibility to promote the Greater Bay Area to become a highland for high-quality development.

It must be mentioned that it is far from enough to rely on the existing foundations and conditions for Hong Kong to become an important fulcrum for the high-quality development of the Greater Bay Area and even the country. It is not only necessary to further strengthen basic research capabilities, but also to strive to lead the world in some basic research fields. It is also essential to aim at the general trend and core content of the oncoming fourth scientific and technological revolution, as well as the content of the list of Western countries' sanctions on China's science and technology. Hong Kong needs to carry out in-depth research on technology applications and product development, providing supports for the rise of strategic emerging industries across the country.

2. Specific content and strategic actions

According to our proposed new urban development layout of “Innovation Technology in the North, Finance in Central, Commerce and Trade in the South” and the successful experience of US Silicon Valley, Taiwan Hsinchu Science Park, and Singapore Science and Technology Park, the entire Northern Metropolis has been re-planned and transformed into a high-quality development pilot zone in the Greater Bay Area. Key content and actions could include:

2.1 Building a world-class innovation and technology industry town

The primary strategic action to promote the Northern Metropolis to a high-quality Greater Bay Area development pilot zone is to build a world-class project with a total area of about 3,000 hectares in the Yuen Long waterfront area in the northwestern New Territories of Hong Kong. The world-class innovation and technology platform, “Hong Kong International Innovation and Technology Industry Town”, will be dominated by the local creation model. It is also a seaside new urban area comparable to Hong Kong and Kowloon, with the innovation and technology industry as the mainstream:

First, the Lau Fau Shan area is fully included in the development scope. Lau Fau Shan area is located at the westernmost of Yuen Long, including Lau Fau Shan Hang Hau Tsuen, Sheung Pak Nai, Ha Pak Nai, Sha Kong Miu Tsuen, Fu Cho Tsuen, Sha Kiu Sheung Wan Tsuen, Shum Wan Road, and Fui Yip Street. The total area is about 12 square kilometers. It is a long and narrow area facing Shenzhen Bay, with the Hong Kong-Shenzhen Western Corridor passing through. The area has beautiful scenery and faces Shenzhen Shekou across the sea. Except for tourist spots and food, it is an undeveloped area with great potential for development at present.

The second is to start the reclamation project in the western coastal area of Yuen Long (i.e. the coastal area of the Lau Fau area). This reclamation is about 18 square kilometers of land and plans to develop it into the Yuen Long West Waterfront Area. This part of the coastal area is shallow water, mainly oyster fields in Lau Fau Shan. Many Hong Kong and Shenzhen residents (Shenzhen residents accounts for 70%) keep oysters in the sea, but the value-added is not high. According to the Government's Environmental Protection Agency,

the Deep Bay area in the western part of Hong Kong has obvious estuarine characteristics. The seawater is diluted by river water, and the salinity is low. The water layer is generally shallow (the average water depth is 4 to 10 meters) and the water quality is turbid (the sediment content is high with low transparency) and with a lot of sand and mud. The ecological value of the south of Deep Bay is not high. About 60 square kilometers of the sea area in the western part of Yuen Long are under the administrative management of Hong Kong. The 18-square-kilometer reclamation area is only 30% of the sea area. Besides, it is far away from the Deep Bay Reserve area and has little impact on the overall environment.

The third is to connect the above two areas into one and plan to build a super-large world-class innovation and technology area mainly based on the local self-created model, the so-called “Hong Kong International Innovation and Technology Industry Town”. Various new policies should be introduced for the development of innovation and technology industries, including the introduction of senior talents, special housing supply, government financial support, tax incentives, etc. The total area of this innovation and technology area is three times as the first phase of the Lantau Tomorrow Vision and twice as the first phase of Shenzhen Qianhai. Together with Kwu Tung North and New Territories North districts that are currently planned by the government, this area will be a new urban area with waterfront new towns, which is comparable to Hong Kong and Kowloon, becoming a highlight of the Northern Metropolis. It echoes Shekou and Qianhai’s new urban areas in Shenzhen with only a bridge. In the future, the SAR government headquarters can also be relocated from Central to Yuen Long Waterfront New District, driving the development of this new district and forming a new global metropolitan pattern of “one city and two districts” with Shenzhen, becoming a new landmark in the 21st century for Greater Bay Area.

2.2 Establishing “Hong Kong International Higher Education Town “

The second strategic action to promote the Northern Metropolis to a high-quality development pilot zone in the Greater Bay Area is to find suitable places (such as near the “Hong Kong International Innovation and Technology Industry Town “ or Sha Tau Kok), and set up a University Park---”Hong Kong International Higher Education Town “ with a total area of 10 -15 square kilometers, attracting top universities (especially engineering colleges) from all over the world and mainland China to set up branch campuses in the Higher Education Town. Hong Kong’s Top-8 universities can also set up branch campuses, nurturing all kinds of professionals needed for the future development of Hong Kong. The total number of students in the university town can reach 300,000-500,000. The purpose of this move is to develop Hong Kong into an international city of higher education, provide basic research support for Hong Kong to serve as an international technology center, and fully cooperate with the national innovation-driven strategy to promote the rapid rise of Hong Kong’s innovation and technology industry.

2.3 Building a modern Chinese medicine town

The third strategic action to promote the Northern Metropolis into a high-quality development pilot zone in the Greater Bay Area is to build a modern Chinese medicine town that integrates pharmaceutical research and development, production, and medical services. Chinese medicine is the traditional medicine of the Chinese nation. The development of Chinese medicine is a major event in the revival of national culture. Hong Kong has many favorable conditions and should take this mission. In this regard, a modern Chinese medicine town can be built in a suitable location in the Northern Metropolis. The main projects include: (1) Establishing a modern Chinese medicine hospital, “Asian Chinese Medicine Hospital”. The total scale will exceed that of the Hong Kong Chinese Medicine Hospital which is under construction. (2) Building a high-level Hong Kong University of Chinese Medicine or the Hong Kong Academy of Chinese

Medicine to conduct in-depth research on Chinese medicine and provide supports for building a modern Chinese medicine center in Hong Kong. (3) Setting up a Chinese medicine industry base, specializing in the production of high-end Chinese medicine products like heart-saving pills, or as a test and development base for Chinese medicine products, and selling them all over the world under brands made in Hong Kong.

The above three strategic actions have different functions and can cooperate and promote each other. Together with the ongoing “Hong Kong-Shenzhen Innovation and Technology Park” and the newly planned “San Tin Science Town”, the future high-quality development pilot zone of the Greater Bay Area in Hong Kong will exhibit multiple towns/parks in one district.

Although innovation-driven is the key content of high-quality development, it is not the whole. Coordination, greenness, openness, and sharing are also the basic contents of high-quality development. These requirements need to be fully reflected in the future construction of the Northern Metropolis, truly playing a leading demonstrative role.

3. Making plans and deepening cooperation

To better achieve the above-mentioned development goals, the government should learn from successful experiences from all over the world and formulate a medium-and long-term development plan for Hong Kong to build a high-quality development pilot zone in the Greater Bay Area. By establishing development priorities, development strategies, promotion policies, and supporting measures, these goals could act as a major action plan for Hong Kong’s transformation into an innovative economy. It unites and leads all sectors of the community to work together, and regularly reviews and revises it to ensure the smooth realization of the development goals. At the same time, specific plans could be formulated for encouraging innovation and technology industries, such as biotechnology development plans, Chinese medicine development plans, etc., striving to make significant breakthroughs. In the past, the United States has successively formulated and implemented multiple development plans for the development of the chip industry, such as the Sematech plan focusing on IC manufacturing processes and equipment, the “Information Highway Plan” (NII), and the National Nanotechnology Plan (NNI). etc. These plans have achieved great success and can be used as a reference for Hong Kong to build a high-quality development pilot zone in the Greater Bay Area.

Building a high-quality development pilot zone in the Greater Bay Area is inseparable from the cooperation with Guangdong and Macao. Since Hong Kong is a small economy, some innovative elements are not fully equipped. Regional cooperation is needed to make up for the shortcomings. From the overall perspective, the construction of high-quality development pilot zones in the future should be based on independent innovation and complementary weaknesses. On one hand, Hong Kong could use the top basic research capabilities to make up for the shortcomings of the Greater Bay Area, working together to create a new path for high-quality development. On the other hand, the superb product development and industrialization capabilities of the Greater Bay Area could make up for Hong Kong’s shortcomings, assisting Hong Kong in realizing the industrialization of scientific research results. Overall, the area will form a reasonable division of labor and synergy in Basic Research (P1), Applied Research (P2), Development Research (P3), Product Development (P4), Product Production (P5), and marketing (P6) and other links. At the same time, Hong Kong should promote the formation and development of a high-quality development pilot zone in the Greater Bay Area by creating a world-class innovation environment. It can lead the Greater Bay Area to catch up with or surpass Silicon Valley in the United States once succeeded.

主要經濟指標 (Key Economic Indicators)

	2020	2021	2021/Q4	2022/Q1
一. 本地生產總值 GDP				
總量 (億元) GDP(\$100 Million)	26,716	28,426	7,545	6,782
升幅 (%) Change(%)	-6.1	6.4	4.7	-4.0
二. 對外貿易 External Trade			2022/04	2022/01-04
外貿總值 (億元) Total trade(\$100 Million)				
總出口 Total exports	39,275	49,607	3,890	15,345
進口 Total imports	42,698	53,078	4,256	16,340
貿易差額 Trade balance	-3,422	-3,471	-366	-995
年增長率 (%) YOY Growth(%)				
總出口 Total exports	-1.5	26.3	1.1	2.8
進口 Imports	-3.3	24.3	2.1	2.7
三. 消費物價 Consumer Price				
綜合消費物價升幅 (%) Change in Composite CPI(%)	0.3	1.6	1.3	1.5
四. 樓宇買賣 Sale & Purchase of Building Units				
合約宗數 (宗) No. of agreements	73,322	96,133	4,852	18,589
年升幅 (%) Change(%)	-2.0	31.1	-47.0	-41.9
五. 勞動就業 Employment			2022/01-2022/03	2022/02-2022/04
失業人數 (萬人) Unemployed(ten thousands)	259.1	250.9	18.9	20.6
失業率 (%) Unemployment rate(%)	5.5	5.5	5.0	5.4
就業不足率 (%) Underemployment rate(%)	3.1	2.7	3.1	3.8
六. 零售市場 Retail Market			2022/04	2022/01-04
零售額升幅 (%) Change in value of total sales(%)	-24.3	8.1	11.7	-3.1
零售量升幅 (%) Change in volume of total sales(%)	-25.5	6.5	8.1	-6.1
七. 訪港遊客 Visitors				
總人數 (萬人次) arrivals (ten thousands)	356.9	9.1	0.5	1.6
年升幅 (%) Change(%)	-93.6	-97.4	-17.8	-27.3
八. 金融市場 Financial Market			2022/03	2022/04
港幣匯價 (US\$100=HK\$)				
H.K. Dollar Exchange Rate (US\$100 = HK\$)	775.2	779.8	783.1	784.7
貨幣供應量升幅 (%) change in Money Supply(%)				
M1	30.1	8.0	5.4	6.3
M2	5.8	4.3	4.0	3.7
M3	5.8	4.3	4.0	3.7
存款升幅 (%) Change in deposits(%)				
總存款 Total deposits	5.4	4.6	4.5	4.2
港元存款 In HK\$	6.2	1.4	0.9	0.9
外幣存款 In foreign currency	4.6	7.9	8.3	7.7
放款升幅 (%) in loans & advances(%)				
總放款 Total loans & advances	1.2	3.8	2.2	1.7
當地放款 use in HK	1.7	4.7	3.0	2.6
海外放款 use outside HK	0.1	1.7	0.4	-0.4
貿易有關放款 Trade financing	-6.2	14.2	15.3	9.4
最優惠貸款利率 (%) Best lending rate (%)	5.0000	5.0000	5.0000	5.0000
恆生指數 Hang Seng index	27,231	23,398	21,997	21,089