Decoding the Outline Development Plan for Guangdong-Hong Kong-Macao Greater Bay Area (GBA)

Deloitte China
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Characteristics of the Greater Bay Area
Why the Greater Bay Area (GBA)?

To explore synergistic development model for city clusters

New and old economy coexist with a sound industrial foundation

High degree of market openness and internationalization
GDP growth of GBA exceeds overall economy

Total GDP of GBA (RMB billion) & YoY growth in 2018

- Total GDP of GBA reached RMB11 trillion in 2018, growing by 7% YoY, slightly higher than national GDP growth (6.8%).
- GBA accounted for 13% of total economy, with less than 5% of total population nationwide.
- Shenzhen’s GDP in 2018 was RMB2.42 trillion, surpassing Hong Kong as No.1 in GBA for the first time.
- YoY growth of Shenzhen and Guangzhou were 7.6% and 6.2% respectively, higher than Hong Kong’s 3%.

Source: Talking Data, Deloitte Research

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# Institutional diversity creates room for institutional innovation

## 1. The first world-class bay area across two systems

GBA has international financial center and shipping center developed under highly market-oriented environment, as well as world manufacturing center and leading technology innovation hub nurtured during economic transition.

## 2. Leveraging institutional complexity as unique strength, GBA anchors in different city clusters with multiple positioning

<table>
<thead>
<tr>
<th>Bay area</th>
<th>Total area (10k km²)</th>
<th>Permanent residents (10k)</th>
<th>GDP (USD trillion)</th>
<th>GDP per capita (USD 10k)</th>
<th>GDP growth</th>
<th>Port container throughput (10k TEU)</th>
<th>Share of service industry</th>
<th>Pillar Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tokyo Bay Area</td>
<td>3.67</td>
<td>4,383</td>
<td>1.86</td>
<td>4.24</td>
<td>3.6%</td>
<td>766</td>
<td>82.3%</td>
<td>Manufacturing (auto, petrochemical)</td>
</tr>
<tr>
<td>New York Bay Area</td>
<td>3.45</td>
<td>2,370</td>
<td>1.83</td>
<td>7.72</td>
<td>3.5%</td>
<td>465</td>
<td>89.4%</td>
<td>Financial services, real estate, healthcare</td>
</tr>
<tr>
<td>San Francisco Bay Area</td>
<td>1.74</td>
<td>768</td>
<td>0.82</td>
<td>10.53</td>
<td>2.7%</td>
<td>227</td>
<td>82.8%</td>
<td>Tech innovation, professional services</td>
</tr>
<tr>
<td>GBA</td>
<td>5.65</td>
<td>6,765</td>
<td>1.38</td>
<td>2.04</td>
<td>7.9%</td>
<td>6,520</td>
<td>62.2%</td>
<td>Tech innovation, financial services, manufacturing</td>
</tr>
</tbody>
</table>

*Source: people.cn, China Index Academy, Deloitte Research*

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Amble room exists for contribution of city clusters to economic growth

Contribution of city clusters to GDP (% of national GDP)

Source: statistic bureaus of local governments, Guotai Junan, Deloitte Research
China-specific bay area model: top-down and multi-lateral negotiation

1. State-level strategic planning with policy dividends

- Belt and Road Initiative
- Made in China 2025
- Coordinated development of regional economy
- Deepening opening up

- SARs: Hong Kong, Macao
- SEZs: Shenzhen, Zhuhai
- Guangdong FTZ: Nansha, Qianhai & Shekou, Hengqin areas

- Overlap of policies for free ports, SARs, SEZs and FTZ pilot areas, offering enormous room for trade and industry cooperation

2. Central government and governments of Guangdong, Hong Kong and Macao need to negotiate to move forward

- "One country, two systems, three customs zones" requires multilateral negotiation to develop policies for GBA.
- Compared with other city clusters in China, resource allocation and regional development is more balanced in GBA, whose cities are more closely connected (relative to Bohai Economic Rim) and more internationalized (relative to Hangzhou Bay Area).
- Future policy negotiations will focus on supporting regional investment & financing exchanges, decentralization and tax reform (in favor of R&D investment and SMEs) to enhance GBA's overall business environment.
## Five characteristics of GBA

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institutional diversity</td>
<td>Leverage its complementary institutional diversity of “one country, two systems, three customs zones” to pursue institutional innovation, and enhance cooperation in talent attraction, capital flow, trade clearance and foreign investment; avoid fragmentation and duplication.</td>
</tr>
<tr>
<td>Manufacturing-heavy industrial structure</td>
<td>Most GBA cities, except Shenzhen and Hong Kong, are still transforming from manufacturing towards high-end manufacturing and services. Manufacturing makes up a large portion of GBA’s economy, thus the focus should be increasing the share of services industry and enhancing GBA’s effects and impact as a whole.</td>
</tr>
<tr>
<td>Room for infrastructure development</td>
<td>Intermodal transport to improve freight turnover and reduce transportation cost. There’s room for intercity rail transportation to grow in terms of precision, and inherent silos in particular need to be broken for coordinated information management.</td>
</tr>
<tr>
<td>Division of work among cities to be refined</td>
<td>Differentiation of dominant industries in many GBA cities is less apparent, and core positioning of these cities needs to be further refined and clarified, including differentiation of port functions, which requires division of work by transport categories, competing globally with an industrial chain mindset.</td>
</tr>
<tr>
<td>Innovation potential to be tapped</td>
<td>GBA has abundant R&amp;D resources, with a number of well-known colleges and universities, state key laboratories and startup incubators. Platforms such as alliance of enterprises, universities and research institutions may be established in the future to speed up the progress of new technology from research to application.</td>
</tr>
</tbody>
</table>
Decoding the GBA Outline Development Plan
### Decoding the GBA Outline Development Plan

<table>
<thead>
<tr>
<th>Two objectives</th>
<th>Five strategic positioning</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>By 2022:</strong></td>
<td></td>
</tr>
<tr>
<td>• Substantially increase overall strength of GBA, deepen and broaden cooperation among Guangdong, Hong Kong and Macao, and further enhance internal driving forces for development in the region;</td>
<td>A vibrant world-class city cluster</td>
</tr>
<tr>
<td>• Essentially form a framework for an international first-class bay area and world-class city cluster that is vibrant and highly innovative with an optimized industrial structure, a smooth flow of various factors and a pleasant ecological environment.</td>
<td>A globally influential innovation and technology hub</td>
</tr>
<tr>
<td><strong>By 2035:</strong></td>
<td></td>
</tr>
<tr>
<td>• Shape an economic ecosystem and mode of development underpinned by innovation;</td>
<td>An important pillar for the Belt and Road Initiative</td>
</tr>
<tr>
<td>• Markets within GBA are highly connected;</td>
<td>A showcase for in-depth cooperation between the mainland and Hong Kong and Macao</td>
</tr>
<tr>
<td>• Remarkably improve coordination of regional development;</td>
<td>A high-quality sphere for living, working and travelling</td>
</tr>
<tr>
<td>• People become wealthier;</td>
<td></td>
</tr>
<tr>
<td>• Further cultural development, and enhance exchanges between different cultures;</td>
<td></td>
</tr>
<tr>
<td>• Effectively protect ecological environment, and build an world-class bay area agreeable for living, working, and travelling.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Eight priorities</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Spatial layout</td>
<td>Putting forward ecological conservation</td>
</tr>
<tr>
<td>Developing an international innovation and technology hub</td>
<td>Developing a high-quality sphere for living, working and travelling</td>
</tr>
<tr>
<td>Expediting infrastructural connectivity</td>
<td>Strengthening cooperation and jointly participating in the Belt and Road Initiative</td>
</tr>
<tr>
<td>Building a globally competitive modern industrial system</td>
<td>Jointly developing Guangdong-Hong Kong-Macao cooperation platforms</td>
</tr>
</tbody>
</table>
Priorities of the GBA Development Plan

Deepening regional economic integration
- Spatial layout
- Guangdong-Hong Kong-Macao cooperation & development
- Participating in the Belt and Road Initiative

Developing an international innovation & technology hub
- Regional coordinated innovation
- Developing innovation & technology carriers and platforms
- Enhancing environment for innovation

Building a modern industrial system
- Advanced manufacturing industry
- Strategic emerging industries
- Modern service industries
- Marine economy

Developing a quality working and living sphere
- Infrastructural connectivity
- Cultural soft power
- Education
- Ecological conservation
Building a spatial network driven by poles, supported by axes and radiating to nearby areas

**Driven by poles:**
- Strong combinations of Hong Kong-Shenzhen, Guangzhou-Foshan and Macao-Zhuhai

**Supported by axes:**
- A rapid transport network involving mainly high-speed rails, intercity railways and high-grade motorways, as well as port and airport clusters
- Utilize the Hong Kong-Zhuhai-Macao Bridge, speed up the construction of key transport infrastructures such as Shenzhen-Zhongshan Bridge and the Shenzhen-Maoming Railway

**Radiating the development of the Pan-Pearl River Delta (PRD) Region:**
- A key economic support zone with GBA as its vanguard and the Pearl River-Xijiang economic zone as its hinterland, propel development in South Central China and Southwest China as well as Southeast and Southern Asia.

**Guangzhou:**
- Comprehensively strengthen its functions as an international commerce and industry center and **integrated transport hub**
- Enhance its function as technological, educational and cultural centers

**Macao:**
- Develop into a world-class **tourism and leisure center** and a commerce and trade cooperation service platform between China and Lusophone countries
- Develop into a base for exchange and cooperation where Chinese culture is the mainstream and diverse cultures coexist

**Shenzhen:**
- Expedite its transformation into a modern and international city
- Strive to become a city of **innovation and creativity** with global influence

**Hong Kong:**
- To consolidate and enhance Hong Kong’s status as **international financial, transportation and trade centers** as well as an **international aviation hub**
- Make great efforts to develop innovation and technology industries, nurture **emerging industries**
- Establish itself as the **center for international legal and dispute resolution services** in the Asia-Pacific region

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Connecting Hong Kong and Macao and developing into a hub for the Belt and Road Initiative

Guangdong-Hong Kong-Macao cooperation

Enhancing the functions of Shenzhen-Hong Kong modern service industry cooperation zone in Qianhai of Shenzhen:
• Strengthening the role of Qianhai as an engine of cooperation and development: Develop systems for open and innovative industries through links with Hong Kong, and take forward the opening up and innovative development of the financial sector;
• Enhancing cooperation in legal matters: Strengthen judicial cooperation and exchanges between Hong Kong and Shenzhen, and reinforce administrative protection of intellectual property rights;
• Developing a new international city center: Expand the scope of implementation of Hong Kong’s engineering construction model, and develop a top-tier international forest city.

Developing Nansha of Guangzhou into a demonstration zone for comprehensive cooperation among Guangdong, Hong Kong and Macao:
• Developing a high-standard gateway for opening up: Adjust and optimize the urban layout and spatial structure, and develop a “half-hour transport circle”;
• Jointly developing a demonstration zone for innovative development: Carry out proactive planning for frontier technological areas, and nurture new business models;
• Developing a key financial service platform: Develop specialized financial services, and explore the establishment of an account management system that is conducive to the development of GBA;
• Developing a quality living circle: Strengthen core ecological competitiveness, highlight cultural features, and develop a special zone for international talents.

Taking forward the demonstrative functions of Hengqin of Zhuhai for in-depth cooperation among Guangdong, Hong Kong and Macao:
• Developing a demonstration zone for in-depth cooperation among Guangdong, Hong Kong and Macao: Develop Hengqin of Zhuhai into a high-standard international leisure and tourism island, and build a Guangdong-Macao information hub and the Traditional Chinese Medicine Science and Technology Industrial Park of Cooperation between Guangdong and Macao;
• Enhancing cooperation in livelihood matters: Support Zhuhai and Macao in jointly developing livelihood projects with integrated services in Hengqin;
• Strengthening cooperation in opening up: Support Hengqin and Macao in jointly developing the China-Latin America economic and trade cooperation platform.

Developing special cooperation platforms

Jointly participating in the Belt and Road Initiative

Creating a globally competitive business environment:
• Establish systems and regulations that are in line with advanced international standards for investment and trade regulation;
• Transform the function of the government, refine the pre-establishment national treatment and negative list management approach for foreign investments, and strengthen interim and ex-post supervision;
• Strengthen judicial exchanges and cooperation among Guangdong, Hong Kong and Macao;
• Refine the mechanism for international commercial dispute resolution, and develop the international arbitration center;
• Create and innovate the service model of “Internet + government services”;
• Establish a sound management structure for industry association legal persons;
• Speed up the establishment of a social credit system in the nine PRD municipalities.

Increasing the degree of market integration:
• Promoting investment facilitation: Implement the Agreements under CEPAs, and enable Hong Kong, Macao professionals and enterprises to enjoy national treatment;
• Promoting trade liberalization: Speed up the establishment of single windows for international trade, promote the formulation of performance standards for the service industry that is in line with international standards, and expand the scope of mutual recognition of professional qualifications;
• Facilitating the flow of people and goods: Provide more convenient arrangements for exit endorsements, and formulate cross-boundary transport policies for vehicles and ancillary traffic management measures.

Expanding opening up
• Developing an important support area: Strengthen cooperation among Guangdong, Hong Kong and Macao, and jointly participate in the BR Initiative;
• Participating in international economic cooperation: Take forward GBA enterprises’ joint efforts in ‘going global’, encourage overseas Chinese to participate in the development of GBA, attract investment from developed countries, introduce advanced technology, managerial experience and talents;
• Expanding international markets: Leverage the advantages of Hong Kong and Macao in international professional services, and enhance information exchange among the overseas offices of the Mainland, Hong Kong and Macao.
Key points of the plan for developing an international innovation and technology hub

1. Strengthening regional cooperation in innovation and technology
   - Pursue the development of the “Guangzhou-Shenzhen-Hong Kong-Macao” innovation and technology corridor;
   - Support the development of major technological infrastructure facilities, R&D institutes as well as innovation platforms in the GBA; support institutes in Guangdong, Hong Kong and Macao to proactively participate in national technological programs (special projects, funds, etc.)
   - Develop a system of technological innovation built up primarily by enterprises, led by market forces and with an in-depth integration of industries, academia and research, and implement the Guangdong-Hong Kong-Macao collaboration program in innovation and technology and the Guangdong-Hong Kong Technology Cooperation Funding Scheme.

2. Enhancing the environment for innovation in the region
   - Implement facilitation relating to immigration and customs clearance, working, living as well as the flow of goods within GBA, and encourage interaction and exchanges between technological and academic talents;
   - Support Guangdong, Hong Kong and Macao in establishing in-depth collaboration in areas such as entrepreneurship and incubation, financial technologies, commercial application of technological achievements, international technology transfer and the technology services industry, and develop Hong Kong into a financing center for high-tech industries in GBA;
   - Step up IP administrative law enforcement and judicial protection, and support the development of Hong Kong as a regional IP trading center.

3. Developing innovation carriers and platforms
   - Optimize the allocation of resources for innovation, develop and nurture a batch of platforms for technological innovation for industries, manufacturing innovation centers and enterprise technological centers;
   - Take forward the development of national innovation demonstration zones: military-civilian integration in innovation development in the nine PRD municipalities, five Hong Kong R&D centers, platform for the traditional Chinese medicine science and technology industries in Macao, etc.
Innovation and technology resources in GBA

2017 regional innovation clusters index ranking (selected)

<table>
<thead>
<tr>
<th>Rank</th>
<th>Regional cluster</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Tokyo-Yokohama</td>
<td>Japan</td>
</tr>
<tr>
<td>2</td>
<td>Shenzhen-Hong Kong</td>
<td>China</td>
</tr>
<tr>
<td>3</td>
<td>San Francisco</td>
<td>US</td>
</tr>
<tr>
<td>4</td>
<td>Seoul</td>
<td>South Korea</td>
</tr>
<tr>
<td>7</td>
<td>Beijing</td>
<td>China</td>
</tr>
<tr>
<td>10</td>
<td>Paris</td>
<td>France</td>
</tr>
</tbody>
</table>


% of patents owned by Guangdong’s top 100 innovation enterprises (by industry)

- GBA ranked 2nd globally in regional cluster innovation capability
- Market value of SZSE and HKEX combined exceeds USD6.5 trillion, ranking 3rd globally
- Has four of the world’s top 100 universities
- Has more than 3,000 VC institutions

Unicorns in Shenzhen

<table>
<thead>
<tr>
<th>Enterprise</th>
<th>Industry</th>
<th>Date established</th>
<th>Latest round of financing</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSOT</td>
<td>LED display</td>
<td>16/11/2009</td>
<td>A</td>
</tr>
<tr>
<td>Zendai Credit</td>
<td>Internet micro finance</td>
<td>19/4/2010</td>
<td>A</td>
</tr>
<tr>
<td>Fangdd.com</td>
<td>Information portal</td>
<td>10/10/2011</td>
<td>C</td>
</tr>
<tr>
<td>Royole</td>
<td>Hardware</td>
<td>8/5/2012</td>
<td>D</td>
</tr>
<tr>
<td>Suishouji</td>
<td>Internet finance</td>
<td>1/10/2012</td>
<td>C</td>
</tr>
<tr>
<td>Cainiao</td>
<td>Other network services</td>
<td>16/5/2013</td>
<td>B</td>
</tr>
<tr>
<td>Fenqile</td>
<td>Internet finance</td>
<td>15/8/2013</td>
<td>D</td>
</tr>
<tr>
<td>COFCO Property (Shenzhen)</td>
<td>Real estate development &amp; operation</td>
<td>21/10/2013</td>
<td>A</td>
</tr>
<tr>
<td>Jubao Interconnection</td>
<td>Other financial services</td>
<td>14/5/2014</td>
<td>A</td>
</tr>
<tr>
<td>WeBank</td>
<td>Banking</td>
<td>4/6/2014</td>
<td>A</td>
</tr>
<tr>
<td>Ping An Good Doctor</td>
<td>Healthcare</td>
<td>20/8/2014</td>
<td>A</td>
</tr>
<tr>
<td>CECport</td>
<td>Electronics &amp; components manufacturing</td>
<td>28/9/2014</td>
<td>B</td>
</tr>
<tr>
<td>Hive Box Technology</td>
<td>Logistics management</td>
<td>8/4/2015</td>
<td>A</td>
</tr>
<tr>
<td>iCarbonX</td>
<td>IT service</td>
<td>20/10/2015</td>
<td>B</td>
</tr>
</tbody>
</table>

Source: pedata.cn, Deloitte Research

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With accelerated flow and aggregation of industrial elements, AI has become a new symbol of innovation and technology in GBA.

Guangdong released planning for the development of new-generation AI by three steps in 2018. The scale of Guangdong’s AI core industries was about RMB26 billion, accounting for about one-third of the country, driving the scale of related industries such as robots and smart equipment to exceed RMB200 billion.

Major GBA cities complement each other in joint development of AI industrial ecosystem

Guangzhou - Resources
- Guangzhou municipal government launched IAB strategy in March 2017 to promote manufacturing upgrade.
- Guangzhou municipal government and GAC signed strategic cooperation framework agreements with Tencent, aiming to build “smart city” in multiple aspects.
- GPHL signed a strategic cooperation agreement with iFLYTEK to explore new development model of “pharma + intelligence” and jointly build a smart healthcare services system.
- Government of Baiyun District, Guangzhou and Huawei signed a strategic cooperation agreement on cloud computing to build a new generation information industrial cluster in Baiyun District.

Shenzhen - Application
- Integrated corporations such as Tencent with AI deployments at base, technology and application levels help elevate Shenzhen’s overall AI development.
- Shenzhen offers a variety of scenarios for application and houses numerous innovation enterprises that transform AI technologies into specific applications in people’s lives, covering robotics, mobile phones, disease screening, finance and many other areas.

Hong Kong - R&D
- Hong Kong has many scientific research institutions with international influence in AI research. For example, SenseTime and CUHK jointly developed an automatic face recognition system with over 99% of accuracy.
- Hong Kong can attract international talents, as well as enterprises in the Mainland to work with Hong Kong enterprises. Tencent and HKUST joined hands to set up WeChat-HKUST Joint Lab on Artificial Intelligence Technology.
- Policy support. In May 2018, Ministry of Science and Technology and Ministry of Finance announced a policy that allows universities and scientific research institutions in Hong Kong to directly apply for Central Budget-Funded S&T Programs, and funds may be disbursed in Hong Kong for use.

Source: Collated by Deloitte Research, Ping An Securities
Accelerated integration of AI with manufacturing and service industries

AI has huge potentials for application products and solutions with more scenarios for its application in GBA

### Underlying level
- Stronger support at underlying level
- Gap filling in AI chip
- More resources in super computing and cloud computing data centers are being allocated to AI

### Technology and algorithm level
- Increased R&D investment at technology level
- GBA has made positive progress in computer vision, natural language processing (NLP), etc.

### Application level

#### AI + manufacturing
Drawing on Guangdong’s strengths in high-end new electronic communications and smart manufacturing, AI can serve as strong support for smart manufacturing and other applications.

#### AI + service
With well-established service industries, especially in highly digitalized healthcare, finance, logistics and education sectors, Guangdong, Hong Kong and Macao are more likely to apply AI.

#### AI + e-government
As leaders in terms of government data connectivity and transparency in China, Guangdong, Hong Kong and Macao have great potentials in applying AI to e-government.

### Vast potentials for “AI + robots”
- GBA has the most complete robotics industrial chain and an long-term accumulation of technology expertise.
- In 2017, Guangdong had 156 key robot manufacturers producing 20,662 industrial robots, a YoY increase of 50.2%, accounting for 16% of the total output in China.
- Application of industrial robots is speeding up, and robots in GBA are being applied in areas including equipment manufacturing (auto), electronic communications (3C manufacturing), packaging and printing, logistics and warehousing, with the most industrial robots manufactured and applied in Guangzhou, Foshan and Dongguan.
- Smart service robots are rapidly growing. GBA is facilitating the R&D and industrialization of smart service robots in specific scenarios including education and entertainment, healthcare and rehabilitation, elderly service and caring. Educational robot business is growing mature, represented by UBTECH and Hanwuji Intelligence in Shenzhen and Aawant in Guangzhou.

### Accelerated deployment of “AI + service” in smart home and healthcare
- GBA is an important R&D and production base for home appliance and lighting in China as well as a key entry area for the integration of AI into family services
- GBA leverages AI to make traditional appliances smarter while focusing on home security, healthcare, smart entertainment, environment monitoring, resource management, etc. to realize interconnection of smart products
- Focuses of “AI+ service” in the region:
  - **Foshan**: Smart appliance
  - **Dongguan**: Smart living
  - **Zhongshan**: Smart lighting, lockset, security
  - **Guangzhou, Huizhou**: 4K HD interactive appliance
  - **Zhuhai**: Smart home products related chips

#### AI + healthcare
Supported by Sun Yat-sen University, hospitals affiliated to Southern Medical University and Guangdong Provincial People’s Hospital, GBA is building an AI-based diagnosis and treatment center and promoting smart semantic electronic medical record (EMR) systems.

Source: Deloitte Research collation, Ping An Securities
## Key points of the plan for building a modern industrial system

<table>
<thead>
<tr>
<th>Advanced manufacturing industry</th>
<th>Strategic emerging industries</th>
<th>Modern service industries</th>
<th>Marine economy</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Enhance the ecosystem of innovation development for the manufacturing industry in the Pearl River Delta;</td>
<td>• Pursue the development and growth of new pillar industries including new-generation information technology, biotechnology, high-end equipment manufacturing and new materials;</td>
<td>• Develop an international financial hub and develop special financial products and services, and build financial platforms and systems in Hong Kong, Guangzhou, Macao and Shenzhen with their own strengths;</td>
<td>• Develop a modern marine industry system, optimize and upgrade industries with traditional comparative advantages such as marine fishery, sea transport and shipping;</td>
</tr>
<tr>
<td>• Develop an industrial belt for advanced equipment manufacturing on the west bank of the Pearl River spearheaded by Zhuhai and Foshan;</td>
<td>• Nurture and develop industries such as new energy, energy conservation and environment protection, and new energy vehicles, and form a belt of industry aggregation with R&amp;D of energy conservation and environmental protection technologies as well as the development of headquarters and bases as its core;</td>
<td>• Progressively promote mutual financial markets access and expand the scale and scope of the cross-border use of RMB in GBA. Support Mainland, Hong Kong and Macao insurance institutions in developing cross-border RMB reinsurance business. Continue enhancing the Shanghai-Hong Kong Stock Connect, Shenzhen-Hong Kong Stock Connect and Bond Connect.</td>
<td>• Nurture and strengthen the development of emerging industries and maritime services such as marine biomedicine, ocean engineering equipment manufacturing, integrated seawater utilization, port and logistics;</td>
</tr>
<tr>
<td>• Develop a cluster of world-class high-end manufacturing industries, such as electronic communications, on the east bank of the Pearl River with Shenzhen and Dongguan as its core;</td>
<td>• Leverage the strengths of Hong Kong, Macao, Guangzhou and Shenzhen in innovation and R&amp;D;</td>
<td>• Proactively pursue the development of a digital economy and a sharing economy, and promote the application of digital creativity in areas such as convention and exhibition, e-commerce, medical and healthcare, education services, tourism and leisure.</td>
<td>• Develop specialized financial services such as marine insurance, reinsurance and ship finance.</td>
</tr>
<tr>
<td>• Leverage the advantages of complete industry chains in Zhuhai, Foshan, Huizhou, Dongguan, Zhongshan, Jiangmen, Zhaqoing, etc.</td>
<td>• Leverage the advantages of complete industry chains in Zhuhai, Foshan, Huizhou, Dongguan, Zhongshan, Jiangmen, Zhaqoing, etc.</td>
<td>• Support Hong Kong’s efforts in exploring “re-industrialization” in sectors where it enjoys advantages.</td>
<td>• Develop a system of modern service industries and further the development of Guangdong, Hong Kong and Macao in professional services such as industrial design, culture and creativity, high-end convention and exhibition, accounting and auditing, legal and dispute resolution services, management consultancy.</td>
</tr>
</tbody>
</table>

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GBA has a solid foundation in advanced manufacturing, and each of the nine cities in Guangdong has their own focuses.

**Zhaoqing:** auto parts, electronic communications, agricultural products, metal processing, food and beverage, chemical

- **Foshan:** furniture, home appliances, lighting, ceramics, machinery
- **Guangzhou:** auto, petrochemical, electronics, electrical machinery and equipment manufacturing, transportation
- **Huizhou:** digital products, petrochemicals, apparel, shoemaking, cement, auto and auto parts
- **Shenzhen:** electronic communications, biomedicine, new energy, new material

- **Zhongshan:** medicine, electronics, appliances, chemicals, hardware, lighting, apparels, furniture
- **Zhuhai:** electronic communications, home appliances, biomedicine, petrochemicals, machinery manufacturing, electric power

- **Dongguan:** electronic communications, electrical machinery, furniture, textile and apparels, papermaking, toy, chemicals, food and beverage
- **Jiangmen:** auto, motorcycle, shipping, microphone, hardware ceramic, textile, electronic communications, petrochemicals, printing, new material, shoemaking

Lingyi iTECH

Customized industrial internet platforms

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Strategic emerging industries are expected to achieve breakthroughs and industrialized application in GBA

Distribution of top 100 growth hi-tech companies in Guangdong in 2017

<table>
<thead>
<tr>
<th>Industry</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronic communications</td>
<td>44</td>
</tr>
<tr>
<td>Advanced manufacturing and automation</td>
<td>21</td>
</tr>
<tr>
<td>New materials</td>
<td>12</td>
</tr>
<tr>
<td>New energy and energy conservation</td>
<td>11</td>
</tr>
<tr>
<td>Hi-tech service</td>
<td>7</td>
</tr>
<tr>
<td>Biology and new medicine</td>
<td>3</td>
</tr>
<tr>
<td>Aerospace</td>
<td></td>
</tr>
<tr>
<td>Environment and resources</td>
<td>1</td>
</tr>
<tr>
<td>Environment and resources</td>
<td>1</td>
</tr>
</tbody>
</table>

Output of strategic emerging industries in Guangdong Province is expected to reach RMB1.5 trillion in 2020

<table>
<thead>
<tr>
<th>Drivers</th>
<th>Guangdong’s strategies for developing strategic emerging industries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall planning</td>
<td>Guangdong Province’s 13th Five-Year Plan for strategic emerging industries, development plan for GBA</td>
</tr>
<tr>
<td>Funding</td>
<td>Fiscal subsidies for basic research, social capital, guiding funds</td>
</tr>
<tr>
<td>Innovation resources</td>
<td>Talent attraction policies, colleges and universities, innovative enterprises</td>
</tr>
<tr>
<td>Innovative organizational models</td>
<td>Model of startup-incubation-acceleration-cluster</td>
</tr>
<tr>
<td>Market nurturing</td>
<td>Fiscal subsidies, government procurement, demonstration projects</td>
</tr>
</tbody>
</table>

Source: Guangdong Economics and Technology Research Institute

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Four trends of M&As in GBA reshape an innovative and collaborative ecosystem

M&As help reallocate GBA’s elements to drive the development of cross-city clusters

Intra-industry M&As help build innovative cooperation platforms

Case 1: Jiangmen Kanhoo Industry Co., Ltd., a leading domestic supplier of LIB cathode materials, wholly acquired Shenzhen Utimes Automation Equipment Co, Ltd. and Shenzhen Chengjie Intelligent Equipment Stock Co., Ltd. in 2018 to expand its scale and competitiveness in Li-ion equipment and completed its leading business layout of “material + equipment”.

Case 2: Shenzhen Dynagreen Environmental Protection, a company focused on urban waste treatment, bought 100% stake in Guangdong Promising Environmental Protection, whose main business is waste incineration power generation, to reinforce its leading position in waste incineration power generation sector.

Cross-industry M&As facilitate the transformation and optimization of traditional manufacturing industries

• Case 1: Suna Co., Ltd., focusing on industry finance and asset management, plans to buy 51% stake in big data application service provider Guangzhou MC. Science and Technology with RMB127.5 million to drive its digital transformation.

• Case 2: Guangdong Super Telecom bought 51% stake in Connectek to step into the intelligent IoT sector.

Active upstream and downstream M&As open up the industry chain

• Case 1: Focusing on mobile intelligent data and payment terminal solutions, Shen Urovo acquired 100% stake in Zhuhai Gainscha Technology, a leading manufacturer of label and POS printers in China at RMB815 million, connecting its upstream and downstream industry chain of manufacturing and application with both hardware and software capabilities.

• Case 2: LED lighting manufacturer Guangdong Huizhou NVC Lighting invested RMB315 million to 40% stake in Hong Kong Blue Light Trading, a company focused on e-commerce and lighting products. The acquired company is dominant in selling and distributing lighting products through e-commerce platforms and distribution channels. The acquisition helped connect the upstream and downstream chain of manufacturing and international trade.

Advance basic research through M&As

• Case: Yunfeng Capital and Livzon Pharmaceutical Group Inc. jointly acquired part of the stake in Livzon Mabpharm, Inc. to achieve the strategic goal of transforming into a high-end biomedicine company and stepping into McAb biomedicine.

Source: Collated by Deloitte Research, mergermarket

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Key points of the plan for developing GBA’s financial market

Promote mutual financial markets access.

Support Shenzhen in developing a capital market with the Shenzhen Stock Exchange as its core.

Consider further lifting or relaxing investor restrictions of qualification requirements on Hong Kong and Macao.

Explore the establishment of a GBA international commercial bank.

Allow eligible innovation and technology enterprises to secure listing in Hong Kong for capital financing.

Support Mainland, Hong Kong and Macao insurance institutions in developing cross-border RMB reinsurance business.

Progressively promote cross-border transactions of financial products such as funds and insurance with GBA.

Expedit the process of financial liberalization and innovation with the Shenzhen Stock Exchange as its core.

Develop a pilot zone for development in insurance innovation.

Establish a platform for investment and financing serving the Belt and Road Initiative.

Key points of the plan for developing GBA’s financial market

- Develop a regional private equity trading market;
- Establish an innovative futures exchange that takes carbon emission as its first trading commodity.
- Develop as an RMB clearing center for Lusophone countries;
- Develop as a securities market denominated and cleared in RMB, a green finance platform and a Sino-Lusophone countries financial service platform.
- Expedite the process of financial liberalization and innovation with the Shenzhen Stock Exchange as its core;
- Develop a pilot zone for development in insurance innovation.
- Establish a platform for investment and financing serving the Belt and Road Initiative;
- Set up an internationally recognized green bond certification institution.
Vibrant capital market in GBA

- Hong Kong Stock Exchange (HKEx) and Shenzhen Stock Exchange (SZSE) will provide new strategic development opportunities for each other in terms of mechanisms and financial product collaboration.

- GBA is an agglomeration for incubating small and medium-sized enterprises (SME) and a cluster of VC institutions in China.

GBA’s rising position among global financial centers

<table>
<thead>
<tr>
<th>Global Financial Centres Index (GFCI24*)</th>
<th>Guangdong-Hong Kong-Macao Greater Bay Area</th>
<th>San Francisco Bay Area</th>
<th>New York Bay Area</th>
<th>Tokyo Bay Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>HK 783</td>
<td>Shenzhen 726</td>
<td>Guangzhou 708</td>
<td>724</td>
<td>788</td>
</tr>
<tr>
<td>3%</td>
<td>16%</td>
<td>30%</td>
<td>6</td>
<td>1</td>
</tr>
</tbody>
</table>

- Hong Kong and Shenzhen, as an agglomeration of IPOs of Chinese companies in 2018 (by number of deals, 100%=232)

* Global Financial Centres Index ("GFCI") is a competitiveness ranking of financial centers published twice a year by the UK think-tank Z/Yen. GFCI24 was updated on 12 September 2018.

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Opportunities for developing financial services in GBA

Infrastructure financing
- Huge fund demands for mutual market access (e.g. RMB1.2 trillion needed to invest in transportation infrastructure during the 13th Five-Year Plan period in Guangdong Province)

Asset management
- Private wealth management

Cross-border finance
- Cross-border investment products
- Cross-border two-way RMB capital pool
- Cross-border RMB bonds
- Cross-border RMB settlement

FinTech
- FinTech startups
- Payment and clearing
- Electronic currency
- Smart investment advisory

Insurance
- Shenzhen to develop a pilot zone for development in insurance innovation
- Cross-border insurance (motor vehicle, medical insurance)

Rising RMB deposits in Hong Kong

Source: WIND, Deloitte Research

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GBA is expected to be the first in implementing “competitive neutrality” for the development of private economy

With a higher level of private economic development, a more vigorous market system, as well as references from Hong Kong and Macao’s prolonged experience in running a market-oriented economy, GBA is expected to be the first in implementing the principle of “competitive neutrality”

Overview of private enterprises in GBA

- **Economy underpinned by private enterprises**: The added value of private economy in Guangdong Province was RMB5,261.159 billion with an increase of 7.3%, accounting for 54.1% of the regional GDP, 60% of investments, 75% of innovative achievements, over 80% of new jobs and 95% of market entities.

- **Large number of export-oriented enterprises**: Guangdong’s foreign investment in actual use in 2018 amounted to RMB145.09 billion, an increase of 4.9%, four percentage points higher than national average. Private enterprises are the largest trade entity, and foreign investment in actual use within the hi-tech manufacturing industry grew by over 80%. In 2019, the State Administration of Foreign Exchange decided to launch a pilot scheme to facilitate foreign exchange receipts and payments for trade in goods.

- **High proportion of hi-tech enterprises**: GBA has 1,800 listed companies, of which 456 are listed in Shenzhen. Hi-tech companies account for over 70%, and strategic emerging companies take up 50%, higher than that of the entire market which stands at 40%. Average R&D investment of Shenzhen-listed companies is 50% higher than that of the entire market.

- **Private enterprises to drive the building of new infrastructure**: GBA will lead the 5G commercial applications, and step up their involvement in new infrastructure through PPP based on the strengths of its private enterprises in AI, industrial internet and IoT.

Profits and growth of industrial enterprises above designated size in Guangdong in 2018

<table>
<thead>
<tr>
<th>Index</th>
<th>Total profits (RMB100 million)</th>
<th>Growth from last year (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial enterprises above designated size</td>
<td>8309.69</td>
<td>-0.1</td>
</tr>
<tr>
<td>State-owned and state-controlled enterprises</td>
<td>1533.82</td>
<td>-8.2</td>
</tr>
<tr>
<td>Collectively-owned company</td>
<td>5.81</td>
<td>-21.5</td>
</tr>
<tr>
<td>Joint-stock company</td>
<td>4947.09</td>
<td>2.1</td>
</tr>
<tr>
<td>Foreign, Hong Kong, Macao and Taiwan invested enterprises</td>
<td>3107.82</td>
<td>-3.8</td>
</tr>
<tr>
<td>Private enterprises</td>
<td>4123.08</td>
<td>2.8</td>
</tr>
</tbody>
</table>

Zhuhai-Tax reduction

- Zhuhai’s private economy maintains a good momentum of growth with 32,000 newly-established private enterprises, an increase of 36.3%. Total taxes cut for companies amount to RMB26.2 billion as a result of policies on tax cuts and fee reductions.

- Hengqin established the first system of reporting tax-related matters with integrity for exemption and the first arbitration platform for internet finance in China, and implemented the policy of "Hong Kong people taxed as per Hong Kong laws and Macao people taxed as per Macao laws". There are 2,744 Hong Kong and Macau companies with 735 new establishments.

- Zhuhai tax authority further promoted the “interaction between banks and tax authorities" and "tax preservation program" and 1,092 more small and micro businesses gained RMB2.445 billion of unsecured loans based on their taxpaying credit.

Nanshan District, Shenzhen-Intellectual property protection

- Nanshan District has nearly 380,000 private enterprises and has nurtured 148 listed companies, of which private enterprises account for over 90%.

- Nanshan District has stepped up efforts in research of key and core technologies, developed a system of technological innovation built up primarily by enterprises, led by market forces and with an in-depth integration of industries, academia and research, and encouraged companies to undertake national key R&D plans and major special technological projects.

- Develop a protection mechanism of fast-track authorization, confirmation and rights protection and build a pioneer district for the most stringent protection of intellectual property rights.

Source: Collated by Deloitte Research, Statistics Bureau of Guangdong Province
Encouraging entities in GBA to fund private enterprises and efficiently utilize assets with intellectual property rights

Various new measures by traditional financing entities in GBA

Commercial banks:
- Provide targeted financial products to meet the demands of private micro and small-sized enterprises: Such as ICBC Guangdong Branch’s “Yishuitong”, “Jingyingkuaidai”, etc.
- Moderately improve credit risk tolerance: Constantly improve the proportion of credit granted to private micro and small-sized enterprises and reduce financing costs

Shenzhen Stock Exchange:
- Continuously deepen GEM reform: Relax GEM listing and refinancing requirements, and be more inclusive to new economy
- SZSE’s V-Next platform now covers 35 countries and has provided services for nearly 8,000 outstanding tech companies in total

Foreign banks target cross-border finance
- In order to expand market, businesses and overseas presence, enterprises in Guangdong, Shenzhen and Hong Kong are in great demand of cross-border financial services such as financing and settlement, which has attracted many foreign banks;
- In line with the establishment of an account management system to support the development of GBA as proposed in the Outline Development Plan, pilots on cross-border capital management, RMB cross-border usage and capital account convertibility may be implemented to facilitate cross-border trade as well as investment and financing settlement

Develop supply chain finance as a special industry in GBA
- Facilitate the cooperation between commercial banks and core supply chain enterprises, focus on core enterprises in the industrial chain, transform the “brick culture” of traditional banks into “data culture” through technologies, so as to effectively resolve the financing dilemma of micro and small sized enterprises due to the lack of collaterals.

Local governments take the lead in supporting private enterprises
- Establish platforms with local policy guarantee to serve quality private enterprises with real trading background, and induce financial institutions to provide stable loans; meanwhile, it can effectively reduce the default impact of private enterprises on banks and optimize client structure for banks

New IP measures will likely mitigate the financing dilemma for innovation-driven private enterprises
- Effective IP protection - reduce taxes and administrative fees: taking Hong Kong as an model, extend the policy on raising the proportion of additional tax-deductible R&D costs to all enterprises, introduce patent box regime, enabling enterprises or individuals to pay less taxes on profits derived from patented inventions
- Efficient use of assets with intellectual property rights - extend IPRs pledge loan: the Outline Development Plan proposes to include GBA and Guangdong Pilot Free Trade Zone in the pilot program on securitizing assets with intellectual property rights

Hong Kong supports the development of private enterprises in GBA
- Explore packaging the receivables of quality private enterprises based on the model of asset backed securities (ABS), and issue them on Hong Kong’s public market for overseas investors
- Public offering will help private enterprises improve their transparency of corporate governance, enhance market awareness and reduce direct financing costs

Source: Deloitte research
**Developing a quality production and living circle**

**Livable**

**Shaping a healthy bay area**
- Support medical and healthcare service providers from Hong Kong and Macao to set up healthcare facilities in the form of sole proprietorship, joint venture, cooperation etc. in nine PRD municipalities;
- Raise the level of informatization with regard to food safety monitoring in GBA

**Social security and social governance**
- Allow Hong Kong and Macao residents who are working in Mainland to enjoy the same treatment as that for Mainland residents in terms of education, medical care, elderly care, housing, transport etc.;
- Strengthen synergy in GBA’s anti-corruption mechanism, establish a quality, efficient and clean government

**Expanding the scope for employment and entrepreneurship**
- Improve policy measure to facilitate Hong Kong and Macao residents, especially students from Hong Kong and Macao graduating from Mainland schools, to live and work in nine PRD municipalities;
- Extend local entrepreneurship subsidies and support to cover eligible entrepreneurs from Hong Kong and Macao

**Software: ecological conservation**

**Establishing ecological protection barrier:**
Implement major conservation and restoration projects relating to ecosystems; take forward “Blue Bay” remediation action plans, conserve coastal mangroves, and establish a coastal ecological belt; step up cooperation in ecological and environmental protection among Guangdong, Hong Kong and Macao, and strengthen ecological and environmental systems in a concerted manner

**Strengthening environment protection and management:**
Take forward cooperation in the management of water resources, water environment and water-related projects in the Pearl River Estuary region; expedite the development of a regime for controlling the overall amount of pollutants discharged into the sea as well as a system for the real-time online monitoring of the marine environment; and implement the management of target-based air quality control in the nine PRD municipalities.

**Adopting an innovative, green and low-carbon development model:**
Strengthen exchanges and cooperation in low-carbon development as well as energy saving and environmental protection technologies, and further promote clean production technologies; implement near-zero carbon emission demonstration projects; and take forward studies and demonstrations of the mutual recognition mechanism for carbon labelling across Guangdong, Hong Kong and Macao.

**Business-friendly**

**Developing an education and talents hub**
- Support higher education institutions from Guangdong, Hong Kong, and Macao in jointly operating education institutions;
- Vigorously bring in high-level international talents to participate in the development and management of GBA

**Tourist-friendly**

**Jointly developing a cultural bay area**
- Strengthen the cultural soft power and jointly shape a shape and enrich the substance of a cultured bay area;
- Improve the systems of public cultural services as well as the cultural and creative industries in GBA;
- Strengthen exchanges among the youth of Guangdong, Hong Kong and Macao

**Building a bay area for leisure**
- Develop a system with diverse tourism products including culture and history, leisure and vocation, healthcare and well-being as well as cruise and yacht travel;
- Explore suitable regions for developing a free port for international yacht tourism

**Hardware: infrastructural connectivity**

**Building a modern comprehensive transport system:**
Form a complementary and mutually beneficial system of port, shipping, logistics and ancillary services with Hong Kong; raise the competitiveness of Guangzhou’s and Shenzhen’s airports as international hubs, promote the connectivity in GBA in terms of logistics, public transportation and railways.

**Enhancing and upgrading information infrastructure:**
Promote the development of wireless broadband systems in the PRD city cluster; step up real-time surveillance, notification and warning as well as emergency response, and establish a comprehensive cybersecurity defense system; and strengthen the cooperation among Guangdong, Hong Kong and Macao in building smart cities

**Developing an energy security protection system:**
Develop a clean, low-carbon, safe and efficient energy supply system

**Strengthening protection for the security of water resources:**
To expedite the PRD water resource allocation project and step up the construction of the fourth Macao water supply pipeline works; develop and improve the flood and storm surge prevention as well as drainage systems in Macao, Zhuhai, Zhongshan etc.
Infrastructural connectivity

**High-speed railways**
- Build highly efficient connectivity between GBA with other provinces and other cities in GBA
- Guangzhou-Shenzhen-Hong Kong Express Rail Link was completed in 2018
- It takes 14 minutes to travel from Hong Kong to Shenzhen
- It takes 48 minutes to travel from Hong Kong to Guangzhou

**Cross-border bridges**
- Resolve the bottleneck problem at the Pearl River estuary
- Build three new bridges on top of the current Humen Bridge
- Reduce the time of driving within the Pearl River estuary to 1 hour

**New airports**
- Located in Foshan, west of GBA
- Benefit domestic tourists and business travelers
- To upgrade several airports in GBA
- To increase the number of international flights from 160 to 210

Greater connectivity will positively stimulate the housing market in second and third-tier cities
Foreign investments
Build business parks in the west of GBA
Talents and investors flock into second and third-tier cities
Measures to promote the development of education industry

1. Jointly operating education institutions
   - Jointly develop academic programmes, laboratories and research center in fields where they have a competitive edge
   - Promote cooperation in **vocational education** and jointly build specialized vocational education parks

2. University alliance
   - Higher education institutions in Guangdong, Hong Kong and Macao to explore the mutual recognition of academic credits of specified courses, implement more flexible arrangements for exchange students, and share the results of scientific research
   - Encourage young people from Hong Kong and Macao to **study in Mainland** schools and provide convenience for them on entrepreneurship and employment

3. Basic education
   - Encourage kindergartens, primary and secondary schools of Guangdong, Hong Kong and Macao to link up as “sister schools”
   - **Teacher exchange**: to allow kindergarten, primary school and secondary school teachers from Hong Kong and Macao to teach in Guangdong

4. Equal access to education
   - Policy guarantee: children accompanying parents who take up cross-regional employment who meet eligibility requirements **could take university entrance examinations**
   - Enrollment expansion: from pre-school stage to high school stage

Support
CAS to set up research organizations in Hong Kong

52 universities in Guangdong province to enroll students from Hong Kong and Macao

Teachers from Hong Kong and Macao can apply for teaching qualification in Mainland

Enjoy the same favorable policies in terms of transportation, ticket etc.
Developing a talent pool

1. Technical talents
   - Skilled immigrants
   - Several Policies and Measures on Further Promoting Scientific and Technological Innovation issued by the Guangdong provincial government: taking the lead in granting permanent residency to outstanding talents

2. Urgently needed talents
   - Establish the list system of urgently-needed talents
   - Regularly publish urgent talent demands; expand channels to recruit international talents

3. International talents
   - International talent training model
   - Draw experience from Hong Kong and Macao: attracting high-end international talents
   - Strengthen the mechanism for the two-way flow of talents across regions, industries and organizations

4. Innovation programs
   - Take forward innovation and entrepreneurship bases. Expand the scope for employment and entrepreneurship
   - Launch a series of internship and employment plans, programs and funds
   - Core objective: to build an international innovation center

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Shenzhen is the most attractive destination for talents in GBA, the connectivity among Mainland, Hong Kong and Macao needs to be activated

Talent attractiveness of GBA

Talent distribution varies in different cities, mainly driven by basic and integrated digital industries

- Core cities: Shenzhen, Hong Kong and Guangzhou, with Shenzhen as the lead
- Industry distribution: GBA has the highest proportion of high-level talents in manufacturing, consumer products and ICT industries, all exceeding 10%. The degree of talent digitalization in the ICT industry is more than 80%, reflecting a higher development level of the basic digital economy; in terms of integrated digital economy, manufacturing has the highest the degree of talent digitalization
- Educational background: More than 25% of talents have studied abroad; over 30% of talents hold a master's degree or above. In terms of majors, finance-related majors rank top, followed by computer science, electrical engineering and electronic engineering.

GBA is seeing a net inflow of talents, with Shenzhen playing a core role in talent attraction

- International: GBA has a net inflow of talents from UK and US, a net outflow of talents to Australia and Singapore
- Domestic: GBA has a net inflow of talent against Beijng and Wuhan. Its level of talent attractiveness is similar to that of Shanghai and Chengdu, but sees a net outflow of digital talents to Hangzhou.
- Core cities in GBA: Shenzhen is much more popular than other cities in GBA in attracting international, domestic and local high-end talents and digital talents, highlighting the core role that Shenzhen plays as a digital economic center in GBA

Compared with San Francisco and Sydney bay areas, GBA has great innovation and entrepreneurship potentials as well as a large talent pool

- Innovation and entrepreneurship: Among the three bay areas, GBA has the highest proportion of corporate R&D personnel. In Shenzhen, a core technological innovation city in GBA, over 90% of talents are corporate R&D personnel. Therefore, GBA excels in corporate innovation, but is relatively weak in academic research
- Talent characteristics: Among the three bay areas, the proportion of talents with doctoral degrees in GBA needs to be improved. The highest proportion of talents are aged 25-34, and most talents are groups with 1-3 years and 3-5 years of working experience. GBA features a group of talents who are younger but not excessively young with capabilities and potential of development. However, the proportion of talents in high-level positions needs to be further optimized
- International connectivity: Compared with San Francisco and Sydney, GBA heavily relies on talents from developed countries and needs to attract more talents from countries involved in the B&R Initiative. Currently, GBA maintains frequent talent exchanges with other international bay areas and is improving its international influence

Improving talent attractiveness: activate talent connectivity with Hong Kong and Macao

Improving talent attractiveness: activate talent connectivity with Hong Kong and Macao

The inflow/outflow ratio of high-end talents and digital talents in Shenzhen is much higher than other cities in GBA, meaning that talents from other cities in GBA are flowing into Shenzhen

The size of Hong Kong's talent pool ranks top three in GBA, but talent exchanges with other cities in GBA are fewer than Shenzhen and Guangzhou, with Macao even fewer than Hong Kong. Talent exchanges between the two special administrative regions and Mainland cities need to be further improved

In recent years, Shenzhen Qianhai Free Trade Zone has been focused on 'Connecting with Hong Kong and Macao'. The government also has released favorable policies to support and encourage young talents from Hong Kong and Macao to settle in Shenzhen and jointly explore the "Qianhai model"

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Source: Deloitte Research, Digital Economy and Talent Development in the Guangdong-Hong Kong-Macao Greater Bay Area
Breakthroughs in tax system are key to talent policy integration in GBA

**Highlights of talent policy integration**

**Outline Development Plan**
- Encourage Hong Kong and Macao residents who are Chinese nationals to take up positions at state enterprises/agencies on the Mainland in accordance with the law.
- Study the possibility of Hong Kong and Macao residents who are Chinese nationals to apply for public service positions in accordance with the law.

**Qianhai, Hengqin - attracting talents from Hong Kong and Macao with favorable tax policies**
- Qianhai of Shenzhen is the first in China to grant subsidies to overseas high-end talents and urgently-needed talents on their taxes exceeding the rate of 15%, which is equivalent to an IIT rate of 15%. Therefore, talents from Hong Kong would bear much less tax burden if they work in GBA than elsewhere in mainland.
- Hengqin of Zhuhai has fully implemented the policy of applying different tax rates to talents from Hong Kong and Macao. In addition to IIT, Hengqin also provides 15% of tax incentives for eligible Hong Kong or Macao funded enterprises, and has cut taxes for Hong Kong and Macao enterprises by more than RMB270 million since implementation.

**Overseas researchers enjoy special tax arrangements**
- Eligible Hong Kong teachers and researchers could enjoy tax exemption in Mainland over the given period if they pay relevant income taxes in Hong Kong Special Administration Region.

**8 favorable tax policies for talents from Hong Kong and Macao**
- Talents from Hong Kong and Macao should pay individual income taxes in accordance with Mainland’s standards if they stay in Mainland for more than 183 days within one year (less than 24 hours of stay in Mainland should not be regarded as one day).
- To offset the tax rate differentials between Mainland and Hong Kong, the local governments of Qianhai and Hengqin have implemented subsidy policies for overseas high-end talents and professionals in short supply. This subsidy policy has now expanded to be applied in the 9 cities in Guangdong.
- The recruitment of public institutions of Guangdong province will open to Hong Kong and Macao talents.
- To encourage youth from Hong Kong and Macao to participate in innovation programs in GBA. By 2020, a youth innovation alliance will be established in GBA. Young people from Hong Kong and Macao can enjoy the same governmental subsidies as local youth, including innovation and entrepreneurship subsidies, rent subsidies as well as direct subsidies.
- Higher education institutions in Hong Kong and Macao will be allowed to participate in scientific and technological programs of Guangdong province.
- Streamline entry-exit procedures for Hong Kong and Macao residents and provide more convenience to residents holding with Mainland Travel Permit.
- Facilitate the cross-border travel of non-commercial cars. Hong Kong and Macao residents can drive to Guangdong via Hong Kong-Zhuhai-Macau Bridge, but not applicable to cars of Guangdong residents.
- Reduce the time on custom clearance for goods transported between Guangdong and Hong Kong and expand the Single E-lock Scheme to all cities in GBA.

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Source: Deloitte research
Building a livable ecological environment

The Plan mentions ecological conservation for 35 times. The PRD region covered by GBA is not only one of the regions with the highest level of opening up and vitality in China, but also the region with greatest progress made in ecological conservation.

- **Strictest**: Implement the strictest ecological environment protection regime, uphold the most stringent farm land protection and land conservation policies, and enforce the toughest water resource management system;

- **Technology+**: Promote smart and green development of manufacturing industry and adopt appropriate, advanced, energy-saving and low-carbon environmental protection technologies to transform and upgrade traditional industries;

- **Major projects**: Implement major projects to protect and rehabilitate the ecosystem, and comprehensively improve urban water bodies;

- **Industrial chain**: The environmental protection industry is in a period of rapid growth, with huge demands and requiring large amount of investments.

- **Admission**: Allow medical and healthcare service providers from Hong Kong and Macao to set up healthcare facilities in nine PRD municipalities;

- **Technology**: Promote technological and medical innovations; and jointly advance the standardization and internationalization of traditional Chinese medicine;

- **Food**: Track the origins of foods that are sold from Mainland to Hong Kong and Macao; and establish relevant risk and information systems to secure food safety.

- **Cooperation in social security and social governance**: Allow Hong Kong and Macao residents to enjoy the same treatment and enhance the dovetailing of services; act in strict accordance with the Constitution, and strengthen juridical assistance.
Developing a cultured bay area

Cross-boundary protection of cultural heritage sites
- Cantonese Opera
- Dragon boat racing
- Lion dance

Cultural exchanges
- Encourage youth from Hong Kong, Macao to work in Mainland cities
- Exchanges between Chinese and foreign cultures: promote Lingnan culture

Cultural and creative industries in GBA
- Signing of major projects: Pearl River Piano Dream Park
- Establishment of the Association for the Promotion of Cultural and Creative Industries in GBA

A bay area for leisure
- Tourism in GBA - world-class tourism destination
- 144-hour Facilitation Visa
- Multi-destination tourism, convenient transportation
- Diversified products: cruise ships, yachts, island tour, individual travel and high-end tourism
Tourism integration in GBA

- “One Rail Link, One Bridge” has greatly promoted tourism in GBA: Hong Kong section of Guangzhou-Shenzhen-Hong Kong Express Rail Link and the Hong Kong-Zhuhai-Macao Bridge have been put into service (GBA becomes one of China’s top three airport clusters, with most cross-border connecting flights highly concentrated in Hong Kong International Airport)
- Online tourism service platforms become the main actors in cross-border tourism services: 9 ports of entry implement 144-hour Facilitation Visa and provide **policy facilitation**
- Opportunities for **Omni-industrial chain**: Group tours in GBA grow by 150%, and customized tourism products increase by 300%

![Shopping mall scene](image-url)

**Developing a quality production and living circle**

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**GBA outlook**

- Flow of various factors including people, goods and capital is expected to expedite.
- Enhanced regional coordination and industrial cooperation will expand the scope of radiation and drive the development of neighboring regions.
- Strengthened IP protection and trial-and-error mechanisms would improve overall innovation environment.
- “Competitive neutrality” will create greater space for the development of private enterprises.