Translation

CSET CENTER for SECURITY and EMERGING TECHNOLOGY

The following document outlines the near-term AI industrial policy of Guangdong Province, a technologically advanced region in southern China. The policy's main objective is to increase Guangdong's total compute by 50% between 2025 and 2027 to support the AI industry. The policy also emphasizes strengthening AI-related industries and resources such as specialized AI chips, smart sensors, industrial design software, Chinese-language datasets, and domestically developed algorithms.

Title

Certain Measures of Guangdong Province for Empowering Thousands of Industries with Artificial Intelligence

广东省关于人工智能赋能千行百业的若干措施

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Source

Official website of the Guangdong Provincial Government, June 6, 2024.

The Chinese source text is available online at:

https://www.gd.gov.cn/xxts/content/post_4436503.html An archived version of the Chinese source text is available at: <u>https://perma.cc/MA22-ZA8J</u> U.S. $$1 \approx 7.1$ Chinese Yuan Renminbi (RMB), as of September 6, 2024.

Translation Date	Translator	Editor
September 6, 2024	Etcetera Language Group, Inc.	Ben Murphy, CSET Translation Manager

Certain Measures of Guangdong Province for Empowering Thousands of Industries with Artificial Intelligence

These measures were formulated in order to implement the decisions and deployments of the Party Central Committee and the State Council on promoting the development of artificial intelligence (AI), to spur high-quality development of the AI industry in our province, to accelerate the formation of new productive forces (新质生产力), to establish a modern industrial system, to empower thousands of industries to improve quality and efficiency, and to create a new economic model, a new experience of life, and new approaches to governance in the intelligence age.

I. Overall Objectives

By 2025, the province's computing power ("compute") is to exceed 40 EFLOPS and the core AI industry to surpass 300 billion Chinese yuan Renminbi (RMB). By 2027, the foundation of the province's AI industry is to be further consolidated, with compute in excess of 60 EFLOPS and a nation-leading algorithm system and a compute network system essentially having taken shape. Smart terminal products will be plentiful, with more than 100 widely used smart terminal products developed in eight major categories including mobile phones, computers, home appliances, and robots. The core AI industry is expected to surpass RMB 440 billion. Additionally, more than 500 application scenarios are to be developed with a focus on sectors such as manufacturing, education, and elder care, leading to a significant increase in labor productivity across various industries.

- II. Consolidate AI's Base, and Accelerate the Formation of New Productive Forces
- (i) Increase the supply of AI core chips and components.
- 1. We must build an AI chip ecosystem. We must establish a development ecosystem for adaptive chips (适配芯片), target areas such as home appliances, security monitoring, and medical devices, and increase the development and production of high-performance, low-power terminal-side chips. We must encourage enterprises to advance the research and development (R&D) of modules for communication, display, and audio through the integration of processors, radio frequency (RF) communication, intelligent sensors, and memory. We must cultivate a chip innovation and development ecosystem and explore chip R&D and applications in areas such as in-memory computing, brain-inspired computing, chiplets, and instruction sets. We must promote cloud-side and terminal-side chip applications and expand the deployment of high-performance cloud-side intelligent servers. By 2027, we must take the first steps towards establishing an AI chip ecosystem.
- 2. Build an intelligent perception industrial system. We must develop industrial clusters and characteristic (特色) industrial parks for intelligent sensors, promote the development and industrialization of image, sound, and touch sensors, and accelerate the development and mass production of biometric feature recognition and image perception sensors in the fields of consumer electronics and home appliances. We must promote ecological synergies among industries such as processing and manufacturing, integrated packaging, and metrology and testing. We must double the size of the high-end intelligent sensor industry by 2027.

- (ii) Promote iterative upgrading of AI software.
- 3. Strengthen intelligent software R&D innovation. We must develop an engine framework tool system and create high-performance distributed and parallel computing frameworks and platforms oriented towards inference acceleration engines and ultra-large-scale deep learning. We must develop intelligent operating systems and accelerate the development of server-level intelligent operating systems and terminal intelligent operating systems with independent intellectual property rights. We must encourage enterprises to deeply explore the needs of key industries such as manufacturing, healthcare, and education, enhance the mutual adaptation, performance optimization, and application promotion of AI framework software and hardware, and build an integrated software-hardware ecosystem. The intelligent software industry is expected to reach a scale of RMB 27 billion by 2027.
- 4. Expand the scope of intelligent software applications. We must implement an industrial software enhancement project and use AI to improve R&D efficiency for underlying technologies of industrial software such as 3D modeling, parametric design, and solid splitting (实体分割). We must implement an application software quality improvement project and integrate scenario data, technology, and processes in each industry to provide professional industrial software solutions. We must implement a terminal software promotion project and support software companies in developing various AI-oriented commercial apps and office software. Autonomous AI software is expected to reach a coverage rate of 50% by 2027.

(iii) Systematically build an algorithm industry matrix.

5. Develop high-quality Chinese-language datasets. We must strengthen the integration of data resources in governmental information systems and build trustworthy data spaces and public datasets that are based on governmental networks and that are open to the public and for the public good. We must support localities in selecting, on the basis of AI capabilities, well-positioned (优势) industrial fields for the exploration of public data operations and promote the efficient integration and utilization of public and social data. We must encourage enterprises to build industry-oriented, high-quality Chinese corpora databases and promote data aggregation, sharing, and use in typical industries. We must build more than 50 high-quality industry datasets by 2027.

- 6. Accelerate the supply of algorithm products. We must develop specialized algorithm products and tools centered on mainstream domestic Al development frameworks. We must encourage enterprises to expand algorithm applications and create a number of algorithm products and application demonstration projects. We must accelerate the R&D iteration of general purpose large models and vertical domain industry large models, make highly specialized models for specific scenarios, and support lightweight, efficient, and easily deployable small and medium-sized models. We must support R&D of independently controllable (自主可控) large model products and publish a catalog of products and services. We must create 100 algorithm products with demonstrative and promotional effects by 2027.
- 7. **Build an open-source community for large models.** We must establish a resource pool for original foundation models, encourage the establishment of an open-source community for large models, and support free and open access, parameter tuning, and application development for large models and their derivatives. We must optimize the development environment for large models and reduce obstacles posed by non-technical factors. We must cultivate large model development talent and conduct training, knowledge dissemination, and other activities for community members. We must basically establish a one-stop, open-source service system for the research, development, collaboration, deployment, and demonstration of AI by 2027.

(iv) Push forward deployment of compute network construction to an appropriate degree.

- 8. Accelerate the construction of intelligent compute infrastructure. We must introduce and implement policy measures to accelerate the development of compute infrastructure in our province and promote efficient complementarity and coordinated interaction between the Pearl River Delta and eastern, western, and northern Guangdong. We must accelerate the construction of national hub and node data centers and strengthen urban edge intelligent computing centers around key application scenarios. We must enhance government-enterprise cooperation, accelerate the aggregation of existing training compute, and boost shareable compute. We must significantly improve intelligent computing coverage capacity in key industries by 2027.
- 9. Strengthen the intensive (集约) supply of compute. We must promote the coordinated development of intelligent compute and general purpose compute of different operators, cloud service providers, and various compute platforms and satisfy the compute needs of various businesses, such as balanced,

compute-intensive, or storage-intensive. We must accelerate the construction of public compute platforms such as Guangzhou AI Public Compute Center, Peng Cheng Cloud Brain (鹏城云脑), and Hengqin Advanced Intelligent Computing Center and support the construction of Peng Cheng Laboratory's "China Computing NET" R&D. We must explore the construction of a flexible multi-level compute scheduling platform and, by adopting a cloud-serve approach to integrating compute resources, realize the cross-domain scheduling and orchestration of multifarious heterogeneous compute resources. We must essentially achieve efficient sharing, autonomous collaboration, and unified service of compute resources by 2027.

10. Promote the optimization of compute network layouts. We must support the R&D of optical communications products and equipment and create a 400G/800G all-optical, high-speed, low-latency transmission network. We must promote the deployment of optical transmission equipment to comprehensive access nodes and the user side in cities and ensure that the latency between important compute infrastructure in urban areas is no higher than 1 ms. We must support the transformation of fiber-optic links in key locations and enhance the service and scheduling capabilities of the transport network. There will be a major increase in support capabilities for a province-wide, high-bandwidth, low-latency compute network by 2027.

III. Build Guangdong into a New Bastion of Smart Terminal Products, and Shape a New Image for Guangdong Brands

- (i) Raise the intelligence of high-end equipment.
- 11. Promote the innovative development of smart robots. We must accelerate the R&D and production of products such as robot brains, robot limbs, robot bodies, and general purpose products and promote the development and application of humanoid robots and other embodied AI robots. We must develop high-precision industrial robots such as collaborative robots and adaptive robots that have flexible interaction and dynamic path planning and accelerate the application and promotion of service robots with intelligent human-computer interaction and precise multi-degree-of-freedom control. Operating revenues from the smart robot industry are expected to reach RMB 90 billion by 2027.
- 12. Accelerate the intelligent upgrading of high-end equipment. We must promote the intelligent transformation of high-end equipment such as high-end computer numerical control (CNC) machines, marine engineering

equipment, aviation equipment, satellites and their applications, and rail transit equipment. We must support the development of highly autonomous, highly seaworthy, and highly reliable unmanned surface vessels and unmanned underwater vehicles. We must strengthen the development and industrialization of equipment for deep-earth resource exploration and extraction, urban underground space development and utilization, and polar surveying and operations. Operating revenues from the high-end equipment manufacturing industry are expected to reach RMB 380 billion by 2027.

13. Smart network-supported new energy vehicles. We must create intelligent connected vehicle terminals that integrate functions such as safe travel, smart lifestyle, and mobile office. We must develop intelligent networked terminals such as driverless taxis, smart public transit, and smart heavy trucks and encourage the application of intelligent, one-stop transportation and travel services. Annual production of new energy vehicles is expected to surpass 3.5 million vehicles by 2027.

(ii) Expand consumer terminals and empower them with AI

- 14. Innovate operating systems to create AI phones. We must support the deep integration of operating systems with efficient and low-loss lightweight large models and promote the application and innovation of terminal-side model algorithms and architectures. We must support enterprises in combining multimodal natural interaction technologies on AI OS to enhance real-time interaction capabilities, expand mobile phone application scenarios, and create individual personalized digital assistants. Production of AI phones is expected to surpass 100 million units by 2027.
- 15. Deploy personalized models to create AI computers. We must use AI technology to continuously learn users' personal data and habits and form a local knowledge base on the terminal that does not leave the terminal, does not go to the cloud, and is migratable, inheritable, and capable of growing. By combining this with lightweight technologies such as model compression, we must create individual personalized models and new intelligent production tools. Production of AI computers is expected to surpass 30 million units by 2027.
- 16. Strengthen intelligent care and rehabilitation products with a focus on "the old and the young" ("一老一小"). We must enhance the intelligence and

safety¹ of everyday assistive smart products such as household service robots, health monitoring devices, and wheelchairs, rehabilitative training- and health-promoting assistive devices such as walkers and incontinence training aids, and elder care products such as smart bath aids, patient lifts, and rehabilitation care beds. We must support the research, development, and production of intelligent interactive toy products that integrate chatting, early childhood education, and entertainment companionship. More than 1,500 new specialized products in the field of care and rehabilitation supplies are expected to appear by 2027.

- 17. Integrate and upgrade smart home appliance products across different domains. We must deeply integrate new technologies such as application learning algorithms, image recognition, and intelligent speech into appliance products so as to develop new high-end smart products and enhance the international influence of brands. We must promote the interconnectivity of smart home products such as appliances, furniture, and everyday necessities, develop individualized, special-purpose, and special group-adapted smart appliances, and enrich the supply of high-end smart appliances and services. Operating revenues from the smart appliance strategic industry cluster are expected to reach RMB 1.9 trillion by 2027.
- 18. Enrich virtual reality smart terminals. We must deepen the integration and innovation of AI technology with key virtual reality technologies such as near-eye display, rendering and processing, perception and interaction, network transmission, content production, compression and encoding, and security and trustworthiness. We must research, develop, and produce diverse terminal products such as all-in-one and separate (分体式) devices and achieve breakthroughs in key areas such as industrial production, cultural tourism, integrated media, education and training, sports and health, commercial creativity, and smart cities. More than 3,000 new virtual reality terminals and applications are expected to appear by 2027.
- IV. Create a New Engine for Intelligent Integrated Applications, and Form a New Opening for Economic Growth
- (i) Empower new drivers for the real economy.

¹ Translator's note: The Chinese word $\overline{\mathcal{G}}$ encompasses the meanings of both "safety" (protection from accidental harm) and "security" (protection from deliberate harm). In this translation, it is variously translated as "safety," "security," or "safety and security" at the translator's discretion.

- 19. Promote the digitalization and intelligentization (智能化) of industry. We must push forward the full-process intelligentization of the manufacturing sector by "substituting machines for humans and data for brains" and deepen the integrated application of AI technology in scenarios such as R&D and design, pilot testing and verification, production and manufacturing, and operations and management. We must accelerate the empowerment of key industries such as raw materials, equipment manufacturing, consumer goods, and electronic information. We must build a large model for carbon emission management, accelerate the green transformation of production, and strengthen energy conservation and carbon reduction in high energy-consuming key industries such as steel, non-ferrous metals, and building materials, with the goal of reaching 700 national-level green factories.
- 20. Deeply integrate and promote intelligent construction. We must use multimodal large models as vehicles to integrate technologies such as building information modeling (BIM) and digital twins and promote informatization (信息化) integration and design collaboration across all specializations. We must realize the automatic completion of tasks such as design analysis, consistency checks between construction blueprints and building models, and data matching, shorten the time required for the conversion of design models to construction applications, and raise the intelligentization levels of project management and quality and safety supervision.
- 21. Drive intelligent agriculture with intelligent systems. We must accelerate the application of smart facilities, use smart sensors to monitor parameters such as soil moisture and temperature, strengthen the application of AI algorithms in areas such as yield assessment, weather forecasting, and market analysis, and build digital fields and gardens and intelligent agricultural (or livestock or fish) farms. We must improve the intelligentization level of plant and animal protection and strengthen pest and disease control. We must accelerate the manufacturing and promotion of "both large and small" (" $-\chi$ - η ") intelligent agricultural machines and equipment and encourage new mechanisms and models for the agricultural machinery industry production chain and supply chain.
- 22. Create a modern transportation system through smart transportation. We must implement demonstration projects for smart railways, highways, waterways, and ports, promote smart hubs, postal services, and maritime affairs, and build a smart operating system for the core road network of the [Guangdong-Hong Kong-Macao] Greater Bay Area. We must advance

"vehicle-road-cloud" integrated applications for intelligent connected vehicles, build digitalized and intelligentized infrastructure and city-level service management platforms, and explore the secure application of high-precision maps. We must efficiently promote infrastructure construction for the low-altitude economy² and accelerate the construction of its production and supply system. We must develop new types of logistics infrastructure such as intelligent logistics parks and digital warehouses and encourage cities with favorable conditions to build intelligent logistics "brains."

- 23. Jointly build smart energy in a multi-faceted, integrated way. We must accelerate the integrated application of AI with equipment and systems in the fields of electric power, the industrial internet for energy, and all-encompassing electric power internet of things (IoT). We must promote the construction of intelligent substations and complementary multi-energy integrated energy networks and build a province-wide intelligentized power grid that can accommodate large-scale new energy access and meet the "plug-and-play" requirements of distributed energy.
- (ii) Empower new experiences in smart people's livelihoods.³
- 24. Raise the quality of education and teaching with smart assistive devices.

We must promote the development and application of new resources such as intelligent teaching assistants, intelligent tutoring, and educational robots. Through human-computer collaborative teaching and education, we must help reduce burdens, increase efficiency, and innovate teaching models. We must develop intelligentized evaluation tools and advance education and teaching evaluation method reforms. We must enhance equipment for virtual simulation and intelligent perception, provide adaptive learning resources and intelligent learning services, and create smart classrooms and smart campuses.

25. Improve medical service capabilities through interconnectivity and sharing. We must build smart hospitals and integrate and establish access to related online service terminals. We must establish a cross-departmental, cross-institutional public health data sharing and dispatch mechanism and an

² Translator's note: The term "low-altitude economy" (低空经济) refers to aerial drones, helicopters, electric vertical take-off and landing (eVTOL) aircraft, and other low-altitude flying devices and their applications in industries such as logistics, transportation, and tourism.

³ Translator's note: The Chinese term "the people's livelihoods" (民生) refers to things necessary for the health and well-being of the Chinese population in their daily lives, such as clothing, food, housing, transportation, employment, education, healthcare, entertainment, the home, social organizations, companies, and tourism.

intelligent multi-trigger advance warning mechanism and strengthen intelligent monitoring of drug supply assurance. We must create "smart medical assistant" systems to help doctors improve diagnostic efficiency and quality and assist patients with self-examination of medical conditions, with medication guidance, and with report interpretation. We must strengthen the application of robots in pre-hospital management, in-hospital diagnosis and treatment, and post-hospital rehabilitation tracking service systems for patients.

- 26. Boost the silver-haired economy with smart elder care. We must strengthen the integrated allocation and effective linkage of health and elder care resources among individuals, families, communities, and medical institutions and create a smart elder care service system encompassing "platform + service + products + response + supervision." We must promote the elder-adapted intelligent transformation of internet applications, apps, mobile terminals, and home appliances often used by the elderly in the fields of healthcare, civil affairs, and payment for daily necessities.
- 27. Boost everyone's fitness with intelligent customization. We must support the integration of multimodal large models with professional knowledge in areas such as physiology, diet, and exercise machines and create personal health coaches. We must promote the deep integration of AI with fitness for everyone, develop smart exercise products, build smart sports venues and intelligent outdoor exercise facilities, and popularize fitness apps and platforms and other smart exercise technologies, products, and application scenarios.
- 28. Create life assistants through smart housekeeping. We must promote comprehensive housekeeping robots that integrate functions such as cleaning, education, food and beverage service, shopping, caregiving, and entertainment. By extracting and analyzing deep information in human language and generating action commands, we must complete machine replacements for household tasks and provide individualized services.
- (iii) Empower new efficiency in social governance.
- 29. Build a smart government for the benefit of businesses and the people. We must utilize large government models to intelligentize the Guangdong Government Service Network (广东政务服务网) and the "Guangdong Series" ("粤系列") government service platforms and provide round-the-clock online Q&A and search services. We must build a foundational video compute

support platform for party and government agencies at all levels throughout the province and raise the level of video intelligentization. We must integrate economic algorithm models into the "Guangdong Economy" ("粤经济") platform and provide the government with decision-making support in scenarios such as economic operation monitoring, analysis and assessment, and policy simulation.

- 30. Unleash new urban vitality with intelligent construction. We must advance the application of technology in areas such as community governance, natural resources, and market regulation, expand scenario applications such as integration of the digital and real economy (数实融合) on city information modeling platforms, and realize the monitoring, early warning, and prevention of ecological risks and urban operational safety risks (城市运行安全风险). We must promote smart outreach to those with baseline people's livelihood needs and support AI products and services that protect the rights and interests of special groups such as the elderly, the weak, the sick, and the disabled.
- 31. Improve judicial efficiency through full-process assistance. We must advance AI technology to provide high-level full-process auxiliary support for tasks such as trials and enforcement and litigation services and realize intelligent functions such as automatic generation of evidence guides and examination records, warnings of the degree of case verdict deviation (案件裁 判偏离度预警), automatic archiving of electronic case files, and Q&A for litigation and mediation consultations so as to efficiently guarantee a clean judiciary (廉洁司法).
- 32. Enhance assurance capabilities with smart safety and security. We must promote the construction of intelligent food and drug supervision and strengthen intelligent safety regulation of food and drugs. We must deepen the application of technologies such as intelligent prevention and control and intelligent perception in the public security field and deepen intelligent early warning systems for natural disasters. We must promote the use of intelligent robots and unmanned aerial vehicles (UAVs) for rapid emergency response. We must advance the intelligentization of public safety installations for gas lines, bridges, and underground pipelines and of fields such as mining and firefighting to ensure safe production.
- 33. **Collectively create beautiful homes and gardens with smart environmental protection.** We must build a diverse, intelligent environmental governance system and comprehensively enhance capabilities for pollution tracing, pollution prevention and control, situation assessment, and decision-making

support. We must improve ecological environment monitoring networks and advance intelligentization of remote sensing monitoring, carbon monitoring, new pollutants monitoring, and environmental monitoring and assessment. We must promote the intelligentization of ecological environment regulation and enforcement.

(iv) Empower the new business format (新业态) of digital consumption.

- 34. Arouse the hidden potential of business with smart commerce. We must promote new business services such as precision marketing, smart commercial districts, and intelligent delivery, develop "unmanned retail stores," and foster the intelligentization of commercial circulation services. We must, on the basis of segment data such as consumer historical purchasing behavior and transaction records, intelligently identify significant consumer characteristics, generate user profiles, predict preferences and interests, and enhance user experiences through individualized marketing.
- 35. Enhance financial services with smart finance. We must permeate all product and service processes with intelligent models and use technologies such as robotic process automation (RPA), natural language processing, and intelligent character recognition for end-to-end reconstruction of digital workflows. We must establish diverse financing service channels and promote the upgrading of physical branches to multimodal, interactive smart branches. We must focus on everyday, high-frequency financial scenarios for groups such as the elderly, disabled, and minorities and create an intelligentized service system.
- 36. Upgrade the tourism development model with innovative experiences. We must build smart scenic areas and realize large-scale development of scenario applications such as smart guides, virtual reality/augmented reality (VR/AR) immersive tourism, and cloud tourism. We must expand the application capabilities of large model technology in tourism areas with respect to visitor flow statistics, consumption analysis and forecasting, and emergency response, and widen marketing channels for tourism products.
- 37. Enrich culture and entertainment with intelligent interaction. We must build smart libraries and museums and create information and digital service platforms for smart radio and television and for film digital program management. We must encourage enterprises to use intelligent technology to transform and enhance the production chain, create intelligence-driven digital humans, and promote the modernization of content production and dissemination methods such as text-to-video. We must cultivate immersive

and interactive formats and construct a number of new scenarios and applications.

(v) Empower new fields in various industries.

38. Fully promote intelligent scenario applications. We must actively bring into play AI's role in scientific research areas such as drug design and discovery, materials science, and physical and chemical simulations and promote scientific progress and innovation. We must accelerate the diversified application of AI in fields such as biomanufacturing, commercial aviation, food and beverages, and real estate and accelerate the formation of new consumption scenarios, new business formats, new models, and new brands, further freeing up labor and significantly increasing the number of new positions related to AI applications.

V. Assurance Measures

- 39. Establish and strengthen organizational coordination mechanisms for Al industry development. Under the overall guidance of the Provincial Party Committee's Science and Technology Commission, the Provincial Leading Group for Work on the High-Quality Development of the Manufacturing Industry (省制造业高质量发展工作领导小组) will strengthen the organization and coordination of AI empowerment across thousands of industries and give free rein to the Expert Advisory Committee to study and resolve difficulties and problems in industry development. We must establish provincial-city linkages and government-enterprise collaboration mechanisms and encourage municipalities with favorable conditions to incorporate the AI industry into key areas of their strategic emerging industries. We must support the establishment of inclusive and prudent fault tolerance and error correction mechanisms and organize various market entities to implement partnership cooperation plans.
- 40. **Strengthen policy supply through multilateral participation.** We must subject all kinds of provincial and municipal funding to overall planning, strengthen financial support for the AI industry, and support project construction in the AI field. We must study and promote the formulation of regulations related to the supply of trustworthy AI products and services. We must regularly publish a list of application scenarios, establish an incentive mechanism for innovative products, and compile a catalog of innovative provide policy support for the first set of equipment, the first software version, the first

batch of new materials, and the first purchase orders and deploy and use these in application scenario units.

- 41. **Gradually establish an industry standards system.** We must build a patent database for key AI technology fields, conduct patent navigation, organize niche-field patent alliances, and promote intellectual property transfer and conversion. We must accelerate the distribution of standards, regulations, and tools for large-model safety compliance certification, lightweight technology, and performance evaluation and support enterprises in participating in their formulation. We must establish institutional norms for ensuring the healthy and safe development of AI. We must explore the establishment of an AI industry empowerment index system.
- 42. Innovate talent cultivation. We must intensify efforts to attract and gather talent through various policy measures, emphasize cultivating and aggregating high-level talent, and drive the fostering of a cohort of AI innovation teams. We must build bases for continuing talent education and practical training and for highly skilled talent cultivation and conduct training for urgently needed specialized AI talent and highly skilled hybrid talents (复合人才). We must implement the "Smart Craftsman" and "Chief Algorithm Engineer" plans in competitive industries, explore the development of differentiated statistics for AI talent, and regularly publish industry talent standards.
- 43. Strengthen innovative demonstration applications. We must support a set of key projects that have a high degree of innovation, significant application value, and good market prospects, forge AI "advantaged" ("长板") companies, summarize demonstration effects and outstanding cases at appropriate times, and give priority to promotion opportunities. We must organize AI innovation and entrepreneurship competitions, exhibit innovative products, outstanding cases, and application scenarios, provide link-up services such as investment and project promotion, and build a supply-demand platform for new products and technologies.
- 44. Form an industry ecosystem atmosphere. We must fully bring into play the roles of Guangzhou and Shenzhen in building National New Generation Artificial Intelligence Innovation and Development Pilot Zones and National Artificial Intelligence Innovation and Application Pioneering Zones (国家人工智能创新应用先导区) and accelerate the construction of national (provincial) AI open innovation platforms. We must encourage cities and regions to lay out key industrial clusters according to local conditions and build a number of industrial bases such as characteristic AI small towns (人工智能特色小镇) and

industrial parks featuring smart terminals. We must upgrade the intelligence of the industrial support services and operational systems in parks and create smart parks. We must support the construction of AI industry innovation centers, empowerment centers, and cloud computing service platforms and provide one-stop ecosystem services (生态化服务).

45. **Strengthen international exchanges and collaboration.** We must encourage enterprises with foreign investors to establish AI labs and R&D centers in Guangdong. We must actively expand international markets, encourage the conversion of offshore innovation achievements into practical applications within China, and provide them with the same support that domestic innovation achievements receive. We must encourage original design manufacturers to focus on international development and enhance their intelligent product design capabilities. We must deepen domestic and international cooperation and exchanges, improve multi-level communication and cooperation mechanisms for international organizations, industry alliances, and well-known enterprises, and organize and attract high-level international AI academic conferences.