

## SHENZHEN SPECIAL



Growing from a small fishing town four decades ago, Shenzhen is now one of the main innovation hubs in China. ZHAN YAN / XINHUA

# Shenzhen plans future with cutting-edge tech

Shenzhen, a southern metropolis that used to be a small fishing town four decades ago, has become legendary for its transformation into a renowned innovative city boasting cutting-edge technologies and strong industries.

The GDP of the city in Guangdong province has soared from 1.3 trillion yuan (\$181.1 billion) in 2012 to more than 3 trillion yuan in 2021, ranking it third among Chinese mainland cities, official figures showed.

In 1980, when the city was selected as one of China's four special economic zones, its GDP was just 270 million yuan.

Two Shenzhen-based companies were added to the latest list of Fortune Global 500 in 2022, bringing the city's total number of such companies to 10. It was three in 2012 — Ping An Insurance, Huawei and China Merchants Bank.

Developing strategic emerging industries has been seen as an important impetus to keep Shenzhen on a fast growth track over the past few years.

In 2013, the city government identified several forward-looking sectors for growth in the future. The sectors developed into seven strategic emerging industries in 2018, which aimed at building colossal clusters with global competitiveness that could each generate at least 100 billion yuan or even 1 trillion yuan in industrial output value annually.

These industries include new-generation information technology, high-end equipment manufacturing, green and low-carbon economy, biomedicine, the digital economy, new materials and the marine economy.

Now these industries have nurtured a total of 20 industrial clusters, which contributed nearly 40% to the city's GDP in 2021 and recorded faster growth than the city's average.

This year, the city government of Shenzhen will begin to prioritize another eight industries in its development plan for 2022-25, to create a new driving force for socioeconomic progress.

The eight industries include synthetic biology, blockchain, cell and gene technology, aerospace technology, brain science, deep-earth and deep-sea engineering, visible light communication and optical computing, and quantum information.

So far, the city has advanced innovative capabilities in the fields of 5G communications, metamaterials, gene sequencing, 3D display, graphene terahertz chips, flexible display, new energy vehicles and unmanned drones, said the city government.

Guangming district is at the core of the innovative development of Shenzhen by owning an advanced scientific research base.

The base, also known as Guangming Science City, will make contributions not only to the technological development of Shenzhen but also to the Guangdong-Hong Kong-Macao Greater Bay Area, where Shenzhen is one of the core cities, officials said.

The science city will mainly focus on research and development in the fields of information technology, life sciences and new materials.

The science city's long-term development plan said a total of 23 significant platforms for scientific innovation will be built and operated in the area by a group of R&D institutions

with internationally leading technologies.

Three years after its establishment, the science city has become increasingly attractive to investors and professionals.

More than 90 research teams with 1,000 professionals moved into the Shenzhen Bay Laboratory in September. They are expected to launch more than 80 experimental projects in the near future, said the Guangming district government.

Official figures showed that Guangming district is home to about 70% of the new synthetic biology companies in Shenzhen.

Pingshan district in the northeast of Shenzhen is another innovation hub. It has three leading industries in smart vehicles, new medicines and chips.

The district government has set up the city's first industrial fund for intelligent network-connected vehicles and Pingshan is a pioneering area for the operation of autopilot taxis.

Nearly 1,000 biomedicine companies have been registered in Pingshan and they have generated more than 21 billion yuan in annual industrial output.

As a hub for the biomedicine industry of Shenzhen, Pingshan has issued policies to encourage companies to develop innovative drugs, high-end preparations, vaccines, cell therapies and genetic therapies. It also has a biomedicine industrial chain ranging from R&D and technological transfer to production.

Pingshan has seen at least 100 new biomedicine companies established annually, said the district government.

— CHEN HONG

## Foreign investors flock to southern metropolis

Raj Oswal is an Indian-American who grew up in the San Francisco Bay Area in the United States and is now pursuing a career as a tech geek in Shenzhen, a part of the Guangdong-Hong Kong-Macao Greater Bay Area.

"I have noticed that a lot of tech companies with lots of interesting technologies are from Shenzhen," he said.

Oswal came to Shenzhen in April 2019 to represent a San Francisco-based tech company called Gupshup, and started to run his own company last year.

Shenzhen was rated first in China in ease of doing business, in a report jointly published by China Development Research Foundation and PwC China in early September.

The evaluation of ease of doing business includes five key factors. They are logistics, entrepreneurial vitality, foreign trade dependence, balance of payments and business environment.

"The first place in the ranking demonstrates Shenzhen's excellent business-friendly environment," said Zhang Lijun, a partner of PwC China.

Shenzhen was selected by the State Council as one of six cities to carry out business environment innovation last November. It issued an implementation plan in May to propose tasks in fields such as market environment, rule of law, openness and government affairs.

"Besides the 101 reform requirements set by the central government, we proposed another 99 assignments highlighting three areas regarding strengthening the supply of resources, connecting with new international rules and cultivating high-quality new market entities," said Wang Jun, an official with the city's development and reform commission.

The city recorded more than

3.8 million market entities by the end of July, up 4% from a year before, ranking it first among Chinese mainland cities, according to official statistics.

The city also issued new regulations on foreign investment in late August, which will come into force on Nov 1. The regulations aim to promote foreign investment, protect the legitimate rights and interests of foreign investors, and further optimize the business environment of the city.

The regulations said foreign investors are encouraged to invest in Shenzhen's key sectors, such as advanced manufacturing, energy conservation and environmental protection.

They highlight the equal treatment for foreign-invested enterprises to join the city's government-backed science and technology programs and other research platforms.

Technological cooperation between foreign businesses and Shenzhen's universities, research institutions, trade associations and enterprises are being encouraged as well.

Shenzhen has become increasingly attractive to foreign investors, thanks to its favorable business environment. Its actual use of foreign capital reached about \$5.8 billion in the first half of the year, up 11% year-on-year, the city's commerce bureau said.

In September, ABB set up the headquarters for its e-mobility business in Shenzhen.

Frank Muehlon, CEO of ABB E-Mobility, said Shenzhen's high-quality resources and environment have created a great opportunity for ABB.

"In the future, ABB E-Mobility will continue to increase investment in Shenzhen and China, creating a smarter, and more sustainable transportation sector through close cooperation with local enterprises."

— CHEN HONG AND SHENZHEN DAILY



Shenzhen's excellent environment proves to be a draw for international investors and professionals. PROVIDED TO CHINA DAILY

## Chinese culture and AI inspire fashion designers

Chinese fashion designer Zhao Huizhou presented her latest creations carrying the ethnic cultural elements of Miao during Milan Fashion Week held from Sept 20-26.

It has been her 11th year at the show since Zhao founded her fashion company in Shenzhen in 1997. For her, a modern city like Shenzhen is an "ideal cradle" for designers to keep pursuing innovation.

"What I've experienced every year at Milan Fashion Week has encouraged me to seek inspiration from my roots — the Chinese culture," Zhao said. She has been endeavoring for years to inject new life into China's intangible cultural heritage through fashion.

Also in Milan Fashion Week, Yang Zi, another Shenzhen fashion designer, used frontier technologies to better design her latest collection.

Known for bold and futuristic designs, Yang was the first fashion designer to have presented an artificial intelligence-powered collection at the event, in collaboration with Shenzhen-based tech company Huawei.

An increasing number of Shenzhen designers are making an impact overseas. Many of them have established overseas sales channels in fashion capitals like London and Paris. Some of the Shen-

zhen-based fashion companies acquired brands in Italy and France.

Official statistics showed that more than 2,500 garment companies have been registered in Shenzhen, of which 90% have their own brands. The city has a strong advantage in women's wear, especially in the middle-to-high-end domestic garments market.

During the 2022 Shenzhen Fashion Week held in April, AI and virtual reality were used for the first time to demonstrate its theme of "Fashion Metaverse".

The industry will positively embrace the development of digital technologies as the city government plans to build a fashion hub with global influence, said Pan Ming, president of the Shenzhen Garment Industry Association, one of the fashion week's organizers.

Huawei recently signed an agreement with Longhua district to develop a digitalized fashion base — the Dalang Fashion Town.

The Dalang Fashion Town in the district has been home to more than 700 fashion companies, including most of the top garment brands for women in China and some of the international brands across the world.

— CHEN HONG

## City takes lead in renminbi globalization

The financial hub of Shenzhen in South China has been taking the lead in advancing the internationalization of renminbi, promoting the facilitation of cross-border renminbi settlement and exploring cross-border business innovation over the past decade.

Cross-border renminbi settlements in Shenzhen surpassed 3 trillion yuan (\$417.9 billion) for the first time in 2021, a fivefold increase from 2012, according to statistics released by the Shenzhen branch of the People's Bank of China — the country's central bank — in late September.

Sixty-seven commercial banks and 97,000 companies have participated in Shen-

zhen's cross-border renminbi settlement targeting 189 countries and regions.

The PBC Shenzhen branch has taken on a number of pilot projects to facilitate renminbi settlement over the past decade. The moves have expanded the use of the Chinese currency in foreign trade, improved efficiency and lowered the costs for domestic companies as a result.

It launched a pilot project for cross-border renminbi asset transfer business targeting trade financing operations such as bank forfeits, bills and factoring in 2016.

The move could help domestic companies approach financial channels abroad and lower financing

costs as a result. Overseas financial institutions are able to allocate high-quality assets in the country since the use of offshore renminbi is expanded, the branch's officials said.

By the end of August 2022, 17 banks had participated in the pilot project, with a total transfer amount of 197.22 billion yuan and a balance of 2.86 billion yuan. Overseas transferees were distributed in 16 countries and regions across the globe, statistics from the branch showed.

As a part of the pilot project, the central bank's Shenzhen branch has also guided local commercial banks to provide a package of financial services such as cross-border renminbi receipts, domestic clearing, and income and expenditure declaration for export-oriented e-commerce businesses.

Residents in Shenzhen and its neighboring areas have also been able to purchase personal cross-boundary investment products through the commercial banks under the Cross-Boundary Wealth Management Connect, a local wealth management scheme, since October 2021.

— CHEN HONG AND SHENZHEN DAILY



Shenzhen has developed into a financial hub in South China in recent decades. FAN SHICHAO / FOR CHINA DAILY