

# High-level Opening-up Surge at Shanghai FTZ

## Policy Express

By LIN Yuchen

An increase of 77 pilot measures for the China (Shanghai) Pilot Free Trade Zone (FTZ), are on the cards after the State Council issued a notice to expand in July 2025. The initiative aims to advance high-standard institutional opening-up and alignment with international economic and trade rules. Of these, 34 measures will be extended to other FTZs, and 43 to the national level.

According to the Ministry of Commerce, the measures focus on seven areas: trade in services, goods trade, digital trade, intellectual property rights (IPR) protection, government procurement reform, post-border regulatory frameworks and risk management. The rollout includes mechanisms such as digital RMB pilot application scenarios, optimizing the management policy of centralized cross-border fund operations for multinational companies, negative lists for outbound data, and the broader use of electronic trade documents.

The 43 nationwide measures include reforms related to cross-border electronic payments, commercial encryption certification, data security certification systems, the opening up of



Commercial buildings from the air in the Shanghai FTZ. (PHOTO: XINHUA)

government data, and digital upgrades to procurement platforms. A total of 36 measures concern areas beyond trade and investment, covering IPR enforcement, labor protection, state-owned enterprise reform and environmental regulation.

Shanghai FTZ has served as a platform for testing regulatory reforms since the measures establishment. From January to May 2025, it recorded a total import and export value of over 900 billion

RMB, accounting for more than 26 percent of all Chinese FTZs. Customs authorities also implemented joint mechanisms to streamline procedures. For example, they will endeavor to simplify in-country quarantine measures for fruits that already receive quarantine treatment overseas, reducing clearance time and facilitating market access. In the shipping sector, reforms allow for integrated bonded fuel warehousing, reducing costs for international bunkering operations.

In digital governance, Shanghai has opened over 300 public datasets in sectors such as healthcare and transportation. The city established standards for secure data circulation and usage. In 2024, digital trade in Shanghai reached 109.5 billion USD, 30.1 percent of the national total.

In the financial sector, the Shanghai FTZ is applying the digital RMB in offshore trade scenarios. Certain enterprises have been authorized to open digital RMB wallets and conducted cross-border settlements through mechanisms such as multilateral central bank digital currency bridges and digital RMB bilateral cross-border cooperation.

Going forward, China will closely track the trend of the evolution of international high-standard economic and trade rules, further take the initiative to expand the scope of pilot docking, and pilot a number of institutional innovations that are conducive to the development of new industries and modes around the promotion of trade in services, green trade and digital trade. At the same time, it will focus on system innovation in frontier areas such as AI and science and technology finance to create an ecological model for high-quality development.



# China Leads World in Autonomous Car Testing

By Staff Reporters

A new international standard led by China on test scenarios for autonomous driving systems has been officially released, according to the Ministry of Industry and Information Technology (MIIT) of China.

Test scenarios are fundamental for evaluating the functionality and performance of automated driving systems. They serve as a cornerstone of the "multi-pillar" approach to autonomous vehicle safety validation, supporting simulation, closed-course testing and other methodologies. The di-

versity, coverage, and representativeness of these scenarios directly affect the validity and reliability of test outcomes.

The newly published standard outlines the evaluation processes and testing methods for such scenarios. It defines key evaluation metrics — including scenario exposure rate, complexity and risk level — and sets clear requirements for their determination. In addition, the standard establishes general methods for generating test cases and specifies the essential features these cases must possess.

According to an official from the MIIT, the release and implementation of this standard mark a significant international consensus on autonomous driving verification technologies. It lays the groundwork for a comprehensive scenario-based application framework,

spanning from conceptual design and modeling to simulation, to scenario database development, and physical test site construction. The standard provides a foundational reference for the simulation development and evaluation of automated driving systems, effectively addressing urgent needs for safety assessments and testing.

Looking ahead, the MIIT plans to coordinate with organizations such as China Automotive Technology and Research Center Co., Ltd. to actively participate in the formulation and revision of international automotive standards. These efforts aim to further enhance China's influence and contributions in the harmonization of global automotive standards and regulations.



# Pilot-scale Testing Platforms Boost Innovation

## Case Study

By Staff Reporters

In order to rapidly incubate and nurture a new generation of innovation-driven enterprises, Quanzhou, a major manufacturing hub in southeastern China's Fujian province, is accelerating the transformation of scientific and technological achievements by developing pilot-scale testing platforms.

Notable progress has already been made. The Fujian (Quanzhou) Institute of Advanced Manufacturing Technology has successfully commercialized six technologies and incubated seven tech-based firms. Meanwhile, at the Qingyuan Innovation Laboratory, five pilot projects have attracted over 480 million RMB in investment, with market valuations exceeding 1.5 billion RMB.

"We are leveraging Quanzhou's rich industrial application scenarios, especially in fields such as AI, nuclear medicine, and low-altitude economy, to build fully equipped public pilot testing lines," Shi Siqian, director of the Quanzhou Science and Technology Bureau told *Science and Technology Daily*.

These facilities aim to attract national talent to conduct sample development and scenario-based testing, enabling projects to seamlessly move in and start operating.

### Removing bottlenecks

One breakthrough in skin-friendly textile technology led to over 1.2 billion RMB in added output for a local company. As one of China's first "Sci-tech Innovation China" demonstration bases, the Shishi Garment and Accessories Industry Research Institute worked with Sunable (Fujian) Textile Technology Development Co., Ltd. and Xtep (China) Co., Ltd. to establish a performance evaluation system for fabrics and successfully industrialize the technology.

"Pilot-scale testing platforms played a key role in this success," said Wu Feixiang, director of the Shishi Industry and Information Technology Bureau. The institute focused on green textile processes and collaborated with Professor Zheng Laijiu's team from Dalian Polytechnic University to develop a pilot-scale platform for the research and application of supercritical CO<sub>2</sub> waterless dyeing technology, creating a full chain from R&D to scaled production. This has helped companies validate new technologies, accelerate product updates,

and bring innovation to market.

Quanzhou has invested over one billion RMB at city and county levels to co-establish more than 30 high-end innovation platforms with leading universities, institutes and enterprises.

### Flexible construction and operation models

Quanzhou is pioneering flexible and diverse models to build and operate pilot-scale testing platforms that bridge the gap between research and industrial application.

The Qingyuan Innovation Laboratory, jointly established by the Quanzhou government, Fuzhou University, and Sinochem Quanzhou Petrochemical Co., Ltd., has built eight pilot lines focused on advanced fiber materials, wet electronic chemicals, and hydrogen-ammonia catalysis. Five of these lines follow a lab-enterprise co-construction model, attracting 61.6 million RMB in corporate investment.

According to Wu Zhiyun, an official at the Quanzhou Science and Technology Bureau, a new model involves enterprises purchasing pilot equipment while universities provide facilities and R&D teams. They then participate in project profit-sharing through technical equity or patent transfers. Through

joint efforts in prototyping and real-world application testing, these partnerships accelerate the incubation and transformation of new technologies in Quanzhou.

### Stronger platform infrastructure

The Fujian (Quanzhou) Institute of Advanced Manufacturing Technology is focused on intelligent manufacturing and robotics. It has established a pilot testing base of approximately 5,000 square meters, where debugging and pilot production can be carried out for projects such as automated guided vehicles, inspection robots, and force and speed feedback systems. Researchers are currently planning the construction of a full production line for intelligent inspection robots, including manufacturing, assembly and debugging.

According to Zhang Jing, director of the Science and Technology Bureau in Fengze district of Quanzhou, the institute has established a technology investment company to convert research results into equity. By partnering with investors to create new ventures and leveraging the pilot testing platform, they are improving processes and iterating products to accelerate commercialization.

The platform has already incubated seven tech-based enterprises. Among them is a company specializes in intelligent operation and maintenance robots for the railway sector, with an annual output value exceeding 20 million RMB.

## Vibrant China

# Jiangxi: A Province Brimming with Vitality

By Staff Reporters

From cultural heritage to technological innovation and industrial transformation, ancient pavilions have been revitalized, traditional prescriptions have been modernized, and agricultural yields have soared... Across Jiangxi province in east China, innovation is thriving at every turn.

### Farming gets more intelligent

At the selenium-rich chili industrial park in Shanghu town, Gao'an city, rows of chili varieties greet visitors. This industrial park with an area of 2,000 mu (1 mu equals 666.7 square meters) was completed in 2020. Gao'an also brought in a team led by academician Zou Xuesheng of the Chinese Academy of Engineering to jointly establish the Gao'an chili industry research institute. And it has joined hands with the Jiangxi Academy of Agricultural Sciences (JXAAS) to build a demonstration base for breeding new chili varieties.

"We've adopted green pest control technology using microbial fertilizers, biocontrol plants and natural predators, cutting chemical pesticide use by 60 percent during the seedling stage. The product quality has also been improved," said Wan Xinjian, a researcher at the Institute of Vegetables and Flowers, JXAAS. The township now cultivates 15,000 mu of chilies, generating over 200 million RMB annually.

At Jiangxi Sunner Food Co., Ltd. in Zixi county, Fuzhou city, automated feeding, watering and environmental control systems have made automatic environmental control, precise feeding and disease early warning the norm. "With the help of academician Huang Lusheng's team at the Chinese Academy of Sciences, we've developed a national breeding center for white-feathered chickens," said the company executive Xi Jun. Their high-quality breeding stock now supplies 15 provinces in China, capturing 20 percent of the market.

### Tech rejuvenates ancient wisdom

The Chinese-style garden at the Jiangxi Renhe Group is a comprehensive traditional Chinese medicine (TCM)

sci-tech industrial park integrating R&D, production and logistics functions. At its heart lies the Erdong Decoction Granules, a modern medicine based on the classical TCM formula.

"This Erdong Decoction Granules transforms a traditional decoction into a convenient modern product," explained R&D director Li Xilong, showcasing how ancient prescriptions gain new life through innovation.

In Zhuqiao village in Jinxi county, preserved architecture thrives under a storage and custody mechanism for ancient villages and buildings. The ownership of ancient architecture remains unchanged, while investors can use partial operational rights of the historic buildings as collateral to apply for ancient village financial loans from banks. Over 2,000 historical buildings have been revitalized.

### Cultural heritage flows into future

No visit to Jiangxi is complete without a trip to the Tengwang Pavilion — the province's iconic landmark located in Nanchang city, which holds cross-border cultural exchange activities. From innovative fusion of British tea with Jiangxi cuisine, to cross-temporal dialogues between Italian baristas and Yuzhang tea culture — Nanchang's global influence shines through.

At a Chinese writing brush culture museum in Wengang town, Jinxian county, the staff Zou Feizhi explains how to make writing brushes to visitors. The museum has not only added new exhibition areas for painted porcelain and traditional cultural exchange, but also set up a livestreaming studio inside the exhibition hall.

"Wengang boasts thousands of workshops to make writing brushes, all sharing resources from the Chinese writing brush culture museum and uniformly using the regional brand identity. This creates a division-of-labor model where the government builds the brand while enterprises handle the market," said Kong Jianchun, member of the Wengang Town Party Committee. "When buyers visit the museum, their understanding of Wengang writing brushes is renewed."



Zhuqiao village in Jinxi county, Fuzhou city, east China's Jiangxi province. (PHOTO: XINHUA)

# China's Digital Tech Helps SCO Countries Transform

From page 1

Chinese enterprises have promoted the development of smart railways in Mongolia. With an annual transportation capacity of 30 million tonnes, the smart railways have increased the output of nearby coal mines by two to three times. The transportation cost per tonne has dropped from 32 USD to 15 USD, and the operation and maintenance costs have decreased by 50 percent.

At the recently concluded 2025 SCO Digital Economy Forum, China

signed 12 digital economy cooperation projects with countries including Kazakhstan, Pakistan and Egypt, covering areas such as cross-border e-commerce and smart cities.

For example, China and Egypt are strengthening their ties in digital infrastructure, and have agreed to build a digital intelligence high-tech ecological industrial park. This project will apply China's latest achievements in cloud computing, digital economy and AI to assist Egypt in its digital transformation.