

# Sci-tech Force Strengthened Amid GDP Growth in 2025

## Policy Express

By LU Zijian & LIU Yin

Based on preliminary estimates, China's GDP in 2025 exceeded 140 trillion RMB, growing by five percent over the previous year. The expenditures on R&D were 3.9 trillion RMB in 2025, up by 8.1 percent over that in 2024, accounting for 2.80 percent of GDP.

The statistics came from a recently released communiqué by the National Bureau of Statistics (NBS).

As China's economic scale continues to expand, the five percent economic growth translates to an additional five trillion RMB, according to Sheng Laiyun, deputy commissioner of NBS. This breakthrough in economic aggregate is a demonstration of the solid foundation, multiple advantages, strong resilience and large potential of China's economy, he said.

Looking from a global perspective, China's five-percent growth is among the highest in major economies, with its contribution to global economic growth expected to remain around 30 percent.

China has been advancing high-standard opening up and actively participating in global economy governance, injecting stability into the global supply system.

In 2025, the value of goods imported reached 18.48 trillion RMB, making China the second largest import market for 17 consecutive years.

In addition, the total value of trade in services in 2025 surpassed eight trillion RMB. The new establishment of for-



An engineer adjusts an industrial intelligent robot at a laboratory of Leju Robotics in Hefei, east China's Anhui province, February 26, 2026. (PHOTO: XINHUA)

eign-funded enterprises rose by 19.1 percent over that of the previous year. Non-financial outbound direct investment exceeded one trillion RMB.

Science, technology and innovation are a crucial part of this economic progress. China has been enhancing the capability of original innovation. In 2025, China's R&D spending as a share of GDP exceeded the average level of OECD countries for the first time.

It is worth noting that the integrated development of sci-tech innovation and industrial innovation achieved fruitful results with high-end equipment and information technology gaining an edge.

In 2025, the value added of high-tech manufacturing increased by 9.4 percent, accounting for 17.1 percent of that of all industrial enterprises above the designated size. The output of service robots increased by 16.1 percent over the previous year, and the production of 3D printing devices surged by 52.5 percent.

Digital technologies are accelerating their integration into daily life. By the end of 2025, there were 4.84 million 5G base stations all over the country, and Internet penetration reached 80.1 percent.

Massive orders flowed through the

cloud, injecting more digital momentum into the economy. Online retail sales reached nearly 16 trillion RMB in 2025, up by 8.6 percent over the previous year. The value added of digital product manufacturing grew by 9.3 percent, accounting for 12.5 percent of that of all industrial enterprises above the designated size.

According to Sheng, the output of intelligent products such as industrial control computers and systems, CNC metal-cutting machine tools and 5G smartphones increased by 86.5 percent, 13.7 percent and 12.5 percent respectively in 2025.

Green and low carbon transformation also witnessed progress. In 2025, clean energy consumption, such as natural gas, hydropower, nuclear power, wind power and solar power accounted for 30.4 percent of the total energy consumption.

According to preliminary estimates, the energy consumption per 10,000 RMB worth of GDP decreased by 5.1 percent over that of the previous year after deducting energy consumed for raw materials and non-fossil energy consumption.

The national carbon dioxide emissions per 10,000 RMB worth of GDP in 2025 dropped by five percent over that of the previous year.

Of the 3,641 sections under the national monitoring program for surface water, 91.4 percent were of fairly clean water quality (Grade I to III), maintaining a 90 percent for the second consecutive year.

Looking ahead, the 15th Five-Year Plan (2026-2030) has commenced, and Chinese modernization will unfold with an even brighter future, Sheng said.

## Case Study

# Taicang: A Thriving Hub for German Enterprises

By SUN Jin

Taicang, a county-level city in Jiangsu province in east China, just 50 kilometers from Shanghai, is widely known as the hometown of German enterprises in China.

Since welcoming its first German investor in 1993, the city has attracted more than 560 German companies, including over 60 "hidden champions" — small but highly successful companies that excel in their niche but are not well-known to the general public — and several leading manufacturers.

Its rise as one of China's most concentrated hubs for German investment reflects sustained efforts to improve the business climate and integrate more deeply into global industrial supply chains.

### How it started

Taicang's journey began in 1993.

With German automaker Volkswagen Group setting up its plant in Shanghai, Kern Liebers, a supplier of automobile seat belt spring, wanted to invest in China too. It finally chose Taicang for its proximity to Shanghai, convenient transport, rich culture and skilled workforce.

Kern Liebers started with a 400-square-meter factory, a modest beginning that marked the start of a long partnership between the city and German industry.

By 2000, more than 10 German enterprises had arrived. The number reached 100 by 2007, and surpassed 500 by 2024.

Taicang's investment environment, efficient local administration and strong industrial support have helped create a clustering effect: One company arrives, others follow, then a cluster forms.

For German enterprises, Taicang is not simply a factory location, but a base for long-term development.

Today Kern Liebers has grown into an industry leader with an annual output exceeding 1.5 billion RMB. Its trajectory mirrors that of many German

businesses in the city.

Taicang now hosts nearly 10 percent of all German manufacturing enterprises in China. More than 90 percent of the early German investors have expanded their operations.

### Fertile soil for German firms

Why has Taicang become the second hometown for so many German enterprises? The answer lies in the high-quality industrial ecosystem this city has cultivated.

Taicang has developed three German-led industrial clusters: automotive components, high-end equipment, and new energy, supported by over a thousand supply chain companies.

Yang Xinhua, general manager of Huber Ranner Environment Equipment Taicang Co., Ltd., said the company has added investment and expanded production three times in Taicang.

"We can find 90 percent of our suppliers within a 10-kilometer radius," he said. This reduces logistics costs and duration, while providing certainty and stability.

In December 2025, Beumer Enterprise Management (Taicang) Company, a leading intralogistics systems manufacturer, opened its new workshop. The project took just 115 days from signing to construction.

Huang Xiaohua, CFO of Beumer China, said the local government team provided a schedule down to half-day tasks, praising the precision of local planning as aligned with German business practices.

From a single factory in 1993 to a dense network of German industrial leaders today, Taicang's evolution reflects more than local development. It illustrates how sustained policy support, industrial clustering and cross-border trust can shape long-term international partnerships.

Local officials said Taicang will align more closely with the national strategy during the 15th Five-Year Plan period (2026-2030) and deepen cooperation with German industry.



The Rothenburg Style Street in Taicang, Jiangsu province in east China. (PHOTO: XINHUA)

# China Releases Its First Humanoid Robot Standard System

By TANG Zhexiao

China has unveiled its first top-level standard system covering the entire industrial chain and lifecycle of humanoid robots and embodied artificial intelligence to guide and promote the high-quality development of the industry.

The standard system was released at the annual meeting of the Humanoid and Embodied Intelligence Standardization (HEIS) in Beijing on February 28, marking a new stage of standardized development for the related industries.

The system was collaboratively developed by 120 research institutions, enterprises and industry users in the field under the organization of the technical

committee for HEIS.

It comprises six parts: basic commonalities, brain-like and intelligent computing, limbs and components, complete machine and system, applications, and safety and ethics.

- Basic commonalities are universal and guiding norms that provide compliance guarantees for technological evolution and development.

- Brain-like and intelligent computing standards cover key criteria including the "brain and cerebellum" of embodied intelligence and intelligent computing, regulating the entire data lifecycle and the full process of model training and deployment.

- Humanoid limb and component standards include key specifications for

humanoid torsos, arms, legs, feet, dexterous hands, as well as actuation, perception and communication modules, offering standardized guidance for the modular development of humanoid robots and embodied intelligence.

- Complete machine and system standards focus on key requirements for embodied intelligence complete machines, system software and software-hardware coordination, laying a normative foundation for the integration of software and hardware in humanoid robots and embodied intelligence.

- Application standards govern the development, operation and maintenance of humanoid robots and embodied intelligent agents across various application scenarios.

# New Policy Unveiled for Sci-tech Services Sector

By LIN Yuchen

China has released the Guidelines for the Development of a Standards System for the Science and Technology Services Sector (2025 Edition), aiming to strengthen the institutional foundation of the rapidly expanding sector and support its high-quality development through systematic standardized practice.

Jointly issued by the Ministry of Industry and Information Technology, the Ministry of Science and Technology, and three other departments, the document emphasizes the strategic importance of standards in improving service quality, facilitating technology transfer, and accelerating the commercialization of scientific advancements.

The science and technology services sector, defined as an emerging industry that provides knowledge-based services across the full chain of innovation,

has become a key component of China's modern service economy. It encompasses research and development services, technology transfer and commercialization, business incubation, technology promotion, inspection and certification, information technology services, engineering services, sci-tech finance, intellectual property services, and technology consulting, among others.

The policy outlines the rapid expansion of the sector in recent years, with the rapid emergence of new service entities, business models, and digital applications. As innovation in technology, industry, and service models becomes increasingly integrated, authorities recognize the urgent need for a unified and forward-looking standards framework to regulate and guide development.

The document sets phased targets. By 2027, more than 40 new national and industry standards are to be devel-

oped, forming a preliminary system aligned with high-quality development goals. The system will cover over 1,000 enterprises through standards implementation programs. By 2030, the number of newly formulated standards is expected to exceed 80, establishing a mature and comprehensive standards system that more effectively supports enterprises.

The proposed standards architecture consists of three pillars: foundational general standards, standards for key service fields, and management and assurance standards. Foundational standards will define terminology, classification and coding systems, and basic principles to provide common technical support across the industry. Key field standards will cover specific service areas, including R&D processes, technology evaluation and transactions, incubator operations, inspection and testing procedures, IT lifecycle

services, engineering consulting, sci-tech financial instruments such as intellectual property pledge financing, and knowledge property operations. Management and assurance standards will address institutional governance, personnel qualifications, service quality control, information management, and data statistics.

The guidelines also emphasize coordinated implementation, industry-wide training and promotion, talent development in standardization, and increased participation in international standard-setting activities.

By strengthening the standards infrastructure, China aims to enhance the efficiency of technology commercialization, foster a unified national technology market, and reinforce the science and technology services sector as a key driver of innovation-led growth.

# Minister Highlights Innovation Cultivation for Next 5 Years

From page 1

Yin also stressed reinforcing the principal role of enterprises in technological innovation. More innovation resources will flow toward enterprises and fostering leading sci-tech enterprises will be accelerated.

Enterprises will be supported in spearheading the creation of innovation consortia to undertake more research tasks.

The additional tax deductions on enterprises' R&D expenses will be increased to encourage their greater investment in science and technology.

The efficient transformation and application of sci-tech achievements will be promoted, with deepened reform, building more proof-of-concept and pilot-scale testing platforms, and

developing application scenarios and making them more accessible.

Sci-tech financial services will also be developed, guiding capital toward early-stage, small-scale, long-term investments will flow toward enterprises and fostering leading sci-tech enterprises will be accelerated.

Enterprises will be supported in spearheading the creation of innovation consortia to undertake more research tasks.

Yin also suggested supporting local pilot initiatives, guiding regions to leverage their unique resource endowments to strengthen their innovative strengths and distinctive industries. Cross-regional cooperation and coordinated development among urban clusters will be encouraged. Support will be provided to develop new quality productive forces tailored to local conditions across all regions.

