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## Two Sessions

# China Sets Greater Sci-tech Strength Goal

Edited by WANG Xiaoxia

China will accelerate efforts for greater achievements in science and technology in 2026 and build world-class sci-tech innovation engines, according to a draft government work report submitted to the country's top legislature for deliberation on March 5.

The report reviewed that dynamic, innovation-driven, and high-quality development had been achieved over the past year. New quality productive forces grew steadily, and numerous new advances were made in science and technology.

China led the way in the research, development, and application of artificial intelligence (AI), biomedicine, robotics, and quantum technology.

In 2026, China will drive advances in original innovation and breakthroughs in core technologies in key fields, deepen reform of research institutes and the evaluation system, as well as promote sci-tech literacy among the public, according to the report.

Integration of technological and industrial innovation is underscored. The report said China will build three

international centers for sci-tech innovation (Beijing — the Beijing-Tianjin-Hebei region, Shanghai — the Yangtze River Delta, and the Guangdong-Hong Kong-Macao Greater Bay Area) and turn them into world-class innovation engines.

The principal role of enterprises in innovation will be reinforced.

The draft outline of the 15th Five-Year Plan was also submitted, detailing the main objectives and major tasks for the 2026-2030 period.

In terms of innovation, China projects an annual average increase of at least 7 percent in nationwide R&D spending.

The leading role of sci-tech innovation is underscored in pursuing high-quality development. Technological innovation will be encouraged in areas including multi-modal AI, AI agent, embodied AI and swarm intelligence, and artificial general intelligence development paths will be explored.

Extraordinary measures will be taken to drive decisive breakthroughs across full chains in integrated circuits, machine tools, high-end instruments, basic software, advanced materials and bio-manufacturing, the plan said.



The opening meeting of the fourth session of the 14th National People's Congress (NPC) is held at the Great Hall of the People in Beijing, China, March 5, 2026. (PHOTO: XINHUA)

## Minister Highlights Innovation Cultivation for Next 5 Years

By LU Zijian

During the 15th Five-Year Plan period (2026-2030), original and pioneering scientific research will be further strengthened. Efforts will be made to promote the systematic deployment of basic research and advance breakthroughs in frontier sectors such as AI and quantum technology, China's Minister of Science and Technology Yin Hejun said.

He was speaking at an interview after the opening meeting of the fourth session of the 14th National People's Congress (NPC) at the Great Hall of the People in Beijing on March 5.

China's sci-tech course has developed rapidly, reaching new heights, with its Global Innovation Index ranking rising to 10th place, Yin said.

In 2025, China's total R&D expenditure exceeded 3.92 trillion RMB, with an R&D intensity of 2.8 percent. Investment in basic research reached nearly 280 billion

RMB, comprising 7.08 percent of total R&D investment. This is the first time investment in basic research exceeded seven percent, setting a new record.

Yin emphasized the role of sci-tech innovation in steering the development of new quality productive forces over the next five years. The focus will be on building a modernized industrial system to drive the transfer and upgrade of traditional industries.

Emerging industries will be fostered to create more trillion-RMB-level industrial clusters, and industries of the future planned to cultivate new economic growth drivers.

The comprehensive efficiency of the national innovation system needs to be enhanced, Yin said. Strategic sci-tech strength and collaborative innovation will be strengthened, as will regional innovation systems.

Yin emphasized the importance of developing a world-class innovation ecosystem. The foundational sci-tech capabilities will be enhanced and the development

of world-class journals and databases bolstered while promoting open access to resources. Intellectual property protection will be strengthened.

China will strengthen international exchanges and cooperation, and lead or participate in international big science projects and organizations.

Regarding the integrated development of sci-tech innovation and industrial innovation, Yin said a new pattern of planning, deployment and advancement of sci-tech innovation and industrial innovation as a unified whole will be formed.

Strengthening high-quality sci-tech supply will be a priority. A batch of national major sci-tech projects will be implemented to provide industrial development with more powerful sci-tech support. Particular emphasis will be placed on achieving breakthroughs in fields such as integrated circuits, AI, biomanufacturing, quantum technology, brain-computer interfaces and nuclear fusion energy. *See page 2*

## Global Spotlight on China's Two Sessions

By LIANG Yilian & QI Liming

As China holds its 2026 Two Sessions — the fourth session of the 14th National People's Congress (NPC) and the 14th National Committee of the Chinese People's Political Consultative Conference (CPPCC) — in Beijing, international media outlets are closely following the meetings, viewing them as a key signal of China's policy direction.

### A defining political moment

This year's sessions are particularly important as 2026 marks the start of the 15th Five-Year Plan (2026-2030).

"The Two Sessions usually tell us what Beijing wants to do over the next 12 months. This year, they'll also set out a much bigger strategy for navigating a decisive period of geopolitical and technological change," Ruby Osman, a senior policy adviser at the London-

based Tony Blair Institute for Global Change, told *The Guardian*.

Channel News Asia called the meetings a defining political moment, listing "technology self-reliance" among the central issues to watch. In its analysis titled "five things to watch at China's Two Sessions," the outlet pointed to semiconductors, AI, and next-generation telecommunications as key themes shaping both domestic policy and global expectations.

Malaysia's English-language daily *Malay Mail* described the gathering as unusually significant, writing that the 2026 session "matters more than any in recent memory" due to its connection to the forthcoming development blueprint and long-term industrial strategy.

### Technology and innovation take center stage

In international reporting, one area has consistently stood out: technology and innovation.

Reuters reported that China is expected to clarify its strategy to strengthen high-tech industries and reduce external vulnerabilities, especially in areas such as AI chips, robotics and advanced manufacturing. The agency noted that the meetings come roughly a year after Chinese AI developers drew global attention for rapid advances in capability.

DeepSeek, the Chinese startup whose viral AI model release last year triggered a global tech share selloff, is widely expected to roll out a next-generation model in the coming days.

"Now there is an expectation of what China can come up with next," Alfredo Montufar-Helu, a managing director at Ankura Consulting, a global expert services and advisory firm, told Reuters, reflecting the heightened global anticipation of China's technological trajectory.

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Source: 2026 Government Work Report  
Designed by Science and Technology Daily

# 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 percentage 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

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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 and hard technology to provide more financial products for the integrated development of sci-tech and industrial innovation.

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.

# China's Role in Global Innovation Enters New Phase

## Voice of the World

By Staff Reporters

From humanoid robots developed by Chinese companies making a strong debut at the 2026 International Consumer Electronics Show in Las Vegas, the United States, to stunning performances on the Chinese New Year Gala stage, and from large AI models evolving from simple conversation to task execution and creative generation, China's AI sector has entered 2026 with remarkable momentum. A number of AI firms have gone public or secured multiple rounds of financing, drawing widespread international attention.

Global observers note that China's high level of social acceptance of new technologies has created fertile ground for rapid AI experimentation and deployment in areas such as healthcare, education and poverty reduction. This broad societal consensus is increasingly viewed as a structural advantage underpinning the country's long-term AI competitiveness.

Yet AI is only part of a broader wave of breakthroughs.

Chinese researchers recently built the world's first scalable quantum network relay node, enabling secure communication over 100 kilometers. The "Caihong YH-1000S," the world's first hybrid-powered unmanned cargo aircraft, completed its maiden flight in Chongqing.



Engineers work on the transmission lines of the China-Laos 500-kilovolt interconnection project. (PHOTO: XINHUA)

A 300- megawatt- class F- grade heavy- duty gas turbine prototype has generated 196 million kilowatt- hours of grid- connected electricity, validating its operational stability. A series of "firsts" across multiple fields has captured global attention at the start of the year.

Behind these early 2026 milestones stands a strong 2025 performance. China's national innovation index ranking entered the global top 10 for the first time. The country has led the world for three consecutive years in the number of top 100 global innovation clusters.

Several basic research achievements were recognized internationally as major scientific breakthroughs. Re-

searchers from the Chinese mainland now account for the second- largest share of highly cited scientists worldwide, and six of the world's top 10 leading research cities are located in China.

International discourse increasingly reflects this shift. A report released by Clarivate Analytics says China's scientific collaboration network is expanding across Asia-Pacific, the Middle East and Africa, while China-Europe research partnerships have strengthened steadily, with their citation impact comparable to that of U.S.-Europe cooperation.

This trend is particularly visible in electric vehicles, batteries and clean energy. In December 2025, Ford Motor

Company announced plans to produce lithium iron phosphate batteries in Michigan using technology licensed from Chinese company Contemporary Amperex Technology Co., Limited. Bloomberg-NEF reported that production of solid-state battery cells and key components in 2025 was highly concentrated in China.

Beyond products, China's model of translating technology into industry and ecosystem development — focused on addressing real- world livelihood needs — has gained traction in Africa, Latin America and Southeast Asia.

At a recent lecture, Shahbaz Khan, director of the East Asia Regional Office of UNESCO, showcased a Chinese-brand smartphone assembled locally in Lahore, Pakistan, highlighting how technology transfer can create jobs and improve livelihoods.

Many foreign analysts say China is not only offering cost-effective technical solutions but also promoting an approach centered on inclusiveness, sustainability and shared growth.

He Guangxi, a scholar at the Chinese Academy of Science and Technology for Development, said the country's global technological influence is evolving from "product substitution" to "solution provision" and increasingly toward shared development concepts.

Taken together, the developments suggest that China's role in the global innovation system is entering a new phase, one defined not merely by scale, but by systemic impact.

In addition, in February this year, several researchers from the Bruegel, a European think tank, published an article stating that the EU should not follow the path of LCRs in order to protect industries, but should rather maintain an open attitude towards international cooperation. The article indicates that industrial policies should take into account the "global comparative advantages," meaning that certain countries can produce certain products at a much lower cost than other countries. The requirements of the IAA will increase the costs of export- oriented enterprises, thereby slowing down the transformation of local industries in the EU.

In light of the growth of China's automotive industry, the EU should focus on technological innovation or policy optimization in related industries, rather than trying to block Chinese cars from entering the market through protectionist actions. It is an approach that will do nothing to make the EU's automotive industry more competitive. Opening up and embracing competition is the right path for the development of the industry.

40 billion USD in the year ending June 2025, representing more than one-fifth of New Zealand's total exports and 16 percent of its imports.

Higher growth targets, combined with supportive policy measures, could bolster domestic demand for imported food and commodities, with New Zealand exporters poised to benefit.

According to the BBC, from electric vehicles and solar panels to humanoid robots and AI apps, China's industrial and technological footprint has expanded at breathtaking speed in recent years. These developments follow a state-driven road map to transform the country's status from the world's factory floor to a global tech powerhouse.

As *The Pakistan Observer* reported, China's Two Sessions signify the continuation of structural reforms, people-friendly policies, enhanced inflows of FDI and sustained industrial growth, alongside modernization, openness, digitalization, AI and quantum technologies.

# FCC Covered List Is Flawed

## Clear Voice

By LIANG Yilian & HU Dingkun

China's leading drone manufacturer DJI has filed an appeal with the U.S. Court of Appeals for the Ninth Circuit, seeking to overturn a decision by the U.S. Federal Communications Commission (FCC) to place DJI drones and related components on its Covered List on December 22, 2025. DJI argues that the decision exceeded the FCC's statutory authority, violated required procedures, and breached the Fifth Amendment of the U.S. Constitution. The FCC uses the Covered List for any telecommunications equipment it deems an unacceptable national security risk.

Before resorting to litigation, DJI attempted to resolve the matter through administrative channels. In January, it formally requested the FCC to reconsider the decision, outlining its legal deficiencies.

DJI's lawsuit advances three main arguments. First, the FCC acted beyond its authority. Under U.S. law, the FCC may only place specific products on the Covered List after a concrete determination that they pose a national security risk. In this case, the FCC relied solely on a generalized "interagency assessment" discussing risks about foreign-made drones, without naming DJI or evaluating any of its products. Moreover, the agencies involved were not authorized by Congress to assess DJI.

Second, the FCC failed to follow due process. DJI received no prior notice of the listing, was not informed which agencies conducted the assessment, and was given no opportunity to respond to any evidence. DJI argues that even in national security matters, due process requires notice and an opportunity to rebut non- classified allegations — rights the FCC denied.

Third, DJI challenges the constitutionality of the legal basis for the decision. The FCC relied on Section 1709 of the FY2025 National Defense Authorization Act, which requires DJI to be placed on the Covered List even if no security

risk is identified within a one- year review period. DJI contends this provision amounts to punishment without due process, in violation of the Fifth Amendment.

On February 24, U.S. drone industry outlet *DroneXL* highlighted DJI's simple but compelling argument: the FCC has never demonstrated that DJI poses a national security threat. This is imperative as U.S. law requires such a determination before equipment can be listed. If the court finds the FCC failed to follow its own rules, DJI's chances of success are strong.

Questions about the lack of evidence have persisted throughout the process. Despite DJI's repeated requests for security reviews in March, June, and December 2025, no U.S. agency initiated an investigation, collected any evidence or reached any conclusions. DJI's inclusion on the Covered List was merely the result of "a bureaucratic deadline being reached."

The consequences of the FCC's decision fall largely on the United States itself. DJI drones account for roughly 87 percent of public safety drones nationwide, and more than 80 percent of state and local agencies rely on them for firefighting, law enforcement, and search-and- rescue missions. Currently, no U.S. manufacturer offers a comparable alternative. The ban risks depriving public agencies of advanced technology while forcing them to pay more for less capable equipment.

By broadly invoking national security without evidence, the FCC has exposed itself to legal challenge. *DroneXL* concluded that, "If DJI is a genuine national security threat, prove it. Conduct the audit. Show the evidence. The government had a full year to do exactly that and chose not to."

DJI's lawsuit may ultimately compel the FCC to justify a ban imposed without following the evidence-based procedures mandated by Congress.

DJI's legal action is a legitimate defense of its rights. U.S. courts should act promptly to overturn the FCC's improper decision, uphold due process, and ensure that regulatory power is exercised lawfully rather than at the expense of both businesses and public interest.

# Feiyu-1.0: Smart Ocean-atmosphere Coupling

## Hi-Tech

By LIANG Yilian & YE Qing

The Feiyu- 1.0, a South China Sea ocean- atmosphere two-way coupled intelligent large model was officially released in Guangzhou on February 7. Jointly developed by the South China Sea Institute of Oceanology under the Chinese Academy of Sciences and China University of Petroleum (East China), it is the world's first intelligent large model specifically designed for two- way ocean-atmosphere coupling in the South China Sea.

Feiyu- 1.0 delivers three major technological breakthroughs: autonomous and controllable core data, intelligent two- way ocean- atmosphere coupling, and low- cost, flexible, and scalable "plug-and-play" learning. The model is trained on a high- resolution South China Sea reanalysis dataset, independently developed by the South China

Sea Institute of Oceanology. This marks the first time a domestic ocean AI model is no longer reliant on foreign core datasets, breaking long- standing dependence on European and U.S. reanalysis products, while enabling precise representation of small- scale processes such as internal waves and ocean fronts.

Most earlier AI models focused exclusively on either atmospheric or oceanic systems, treating the two as largely independent. Feiyu- 1.0 integrates physical mechanisms with AI, adopting a multi- expert- system- based Swin Transformer architecture. Through a dual "fast- slow" learning framework, the model intelligently simulates two- way exchanges of momentum, heat, and other key variables between the ocean and atmosphere, significantly improving forecast accuracy for critical coupled elements.

Feiyu- 1.0 is expected to play an expanding role in marine environmental protection, resource development, and climate change response, helping advance a smarter and more sustainable paradigm for ocean governance.



A panoramic view of China's Huangyan Island in the South China Sea. (PHOTO: XINHUA)

# Global Spotlight on China's Two Sessions

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An article titled "Why The Two Sessions Mark A Watershed For The Global Economy" in *Eurasia Review* underscored the scale of China's support for sci- tech innovation, noting "record levels of investment in high- tech sectors such as quantum computing, bio- manufacturing, and hydrogen energy."

The article argued that the drive for self- reliance in semiconductors and AI has become "a pillar of national stability," reflecting what it described as "strategic patience" that prioritizes long- term resilience over short- term market fluctuations.

While many observers remain fixated on the headline growth number, the real story lies in a fundamental shift of the Chinese economic model: a move away from the era of growth at any cost toward a sophisticated, technology- driven,

and consumption- led future.

As CNN reported, China spent the last five years cultivating innovation and new technology at home. The next half decade will be dedicated to deploying the fruits of its labor to transform its economy.

"If the (last) Five-Year Plan's innovation policy was largely defensive, this one is much more proactive. The focus is on achieving breakthroughs in key technologies and accelerating the integration of technology and industry," said Yue Su, principal economist for China at the Economist Intelligence Unit.

*Sharing China's development benefits globally*

For the Global South countries, the role of the Two Sessions in steering China's economy toward an expansion of domestic demand and innovation- driven transformation is of vital importance,

and is expected to open up new market spaces and development opportunities for all countries.

According to *Modern Diplomacy*, the Two Sessions in 2026 represent a strategic focal point for the Global South, outlining the 15th Five-Year Plan, supporting high- quality development through new quality productive forces, and strengthening trade partnerships, particularly in the areas of energy, transportation, and the digital economy.

Its importance to the Global South lies in China's leadership of economic integration. China is promoting openness and cooperation, providing an opportunity for the Global South to benefit from the growth of the world's second- largest economy.

According to New Zealand's public broadcaster RNZ, the two- way trade between China and New Zealand exceeded

**Editor's Note**

China's annual sessions of its top legislature and political advisory body, known as the "Two Sessions," convened in Beijing on March 5 and March 4, respectively. As 2026 marks the first year of the 15th Five-Year Plan, the event carries heightened expectations. The discussions and decisions on sci-tech development, people's well-being and international cooperation will offer a key window into the policies shaping the years ahead.

In this special edition, international experts and observers share their insights on China's evolving role as a global sci-tech hub, the tangible results of its institutional opening-up, and the future industries poised to redefine global collaboration.

## Global Voices on China's Sci-tech Voyage

French Professor Pierre Agostini, 2023 winner of the Nobel Prize in Physics, first came to China about 40 years ago, invited by the Chinese Academy of Sciences (CAS). What he saw back then was a scientific community rebuilding itself, with modest facilities and limited international connections. Today, what he sees is vastly different. A transition is in the making. He sees cutting-edge infrastructure, vibrant research-and-a deep commitment to discovery.

"My recent visits have shown me the incredible advancement of Chinese research compared to my first visit to the Institutes of Optics in Xi'an and Shanghai as a guest of CAS decades ago. It makes me regret not having been more involved with the Chinese scientific community over those years," he said.

That regret speaks volumes not just of personal reflection, but of a broader shift. China has stepped onto the global stage not only as a manufacturing power, but as a rising center for sci-tech innovation. This is evident from the investment in basic research to the rise of world-class laboratories; the foundation is being laid for long-term breakthroughs.

**Foundations of excellence**

At the heart of this scientific growth lies a renewed emphasis on basic science, a domain where curiosity meets national purpose. Russian-American Professor Efim Zelmanov, Fields medalist and distinguished mathematician, has been living and working in China for over three and a half years and likes what he sees. "I'm very impressed by the support that mathematics and other sciences receive from society as a whole and from all levels of government. The support is amazing," he said.

Zelmanov, who solved a century-old problem in symmetry to win the most prestigious award in mathematics, sees China's progress as undeniable. What strikes him most is not just funding, but cultural depth. "China has a respect for education that goes back thousands of years." This enduring value system, now aligned with modern scientific ambition, has created fertile ground for intellectual growth. A decade ago, top Chinese students often pursued graduate studies abroad. But times have changed. "Top Chinese universities are very strong. And more and more young international talent is coming to China for postdoctoral training. Now that's normal," Zelmanov said.

This ecosystem thrives on institutional inclusivity. Dr. Md Altab Hossin, a Bangladeshi expert at the School of Innovation and Entrepreneurship, Chengdu University, noted that China grants foreign researchers "equal and stable access to research funds," enabling true integration into the national scientific fabric. "By fostering both fundamental research and its application," Hossin said, "China positions scientists here at the forefront of global progress. I am proud to be part of this journey."

**The spirit behind China's sci-tech rise**

For international experts like Francesco Faiola, an Italian scientist at the Research Center for Eco-Environmental Sciences of CAS, China's scientific transformation is rooted in three core strengths: a clear mission, seamless synergy and unwavering perseverance. To him, these are not just strategies, but the very essence of China's rise.

In China, research often addresses real-world problems, such as overcoming bottlenecks in specific fields, advancing green energy development or improving public health. Faiola describes this approach as a "tangible act of building the future." He attributes China's success to a synergistic system that connects universities, institutes, industry and local governments into what he describes as a "well-trained scientific symphony orchestra."

Hossin shares this sentiment, applauding China's "mission-oriented" vision of the future. It is a vision that leverages regional innovation clusters to tackle global challenges like climate change.



Perseverance is equally important, said Hossin. China is increasingly willing to invest in fundamental science even when outcomes remain uncertain.

Projects like the FAST radio telescope, decades in the making, show a patience observers call "a decade-long sharpening of a single sword." Evaluation systems are shifting to reward long-term persistence rather than just quick publications, creating opportunities for high-risk, high-reward work.

"Genuine original innovation cannot be scheduled," Faiola said. He believes that this strategic patience, combined with a clear vision, will elevate China from a major scientific player to a global powerhouse, offering genuine solutions to shared human challenges.

## Future Industries Take Center Stage

The spotlight at this year's Spring Festival Gala fell on a new kind of performer. As the world's most-watched television program unfolded, Chinese humanoid robots commanded the stage with a display of agility that captivated audiences worldwide.

Videos of the event quickly circulated online, showing machines executing precise kung fu moves, synchronized dances, and elaborate gymnastics. This leap from tentative movement to athletic precision reflects a broader trend: the rapid maturation of China's future industries.

Official data released last week underscores this momentum. In 2025, approximately 1.13 million companies were established across eight emerging and nine future industries, a 9.9 percent increase from the previous year.

Behind these figures lies a strategic approach that international experts say blends long-term vision with immediate, real-world application.



**The power of collaboration**

Professor Giampaolo Buticchi, interim vice provost for Research and Knowledge Exchange at the University of Nottingham Ningbo China, views Chinese model as "compelling evidence of how sustained investment in education and innovation can accelerate technological progress."

"In recent years, remarkable advancements in areas such as digital services, renewable energy and robotics have shown how dedicated support for talent cultivation and research collaboration can drive tangible outcomes," he added.

Buticchi also highlighted the ecosystem formed by close cooperation among universities, enterprises and research institutions, where ideas move efficiently from the laboratory to practical use.

"These mechanisms, education, openness to entrepreneurship and cross-sector collaboration, are essential in any country seeking to translate research into societal benefit," he remarked. "China's experience demonstrates how these elements can be effectively mobilized to foster enduring progress."

**From technology push to demand pull**

In frontier fields like quantum technology and brain-computer interfaces, specific strategies are accelerating success. Professor Francesco Faiola, an Italian researcher deeply involved in China's biomanufacturing sector, points to two distinctive approaches: "gradient cultivation" and "industry-driven problem definition."

"China's promise lies in not treating future industries as isolated experiments," Faiola explained. The nation employs "gradient cultivation," leveraging its comprehensive supply chain to extend mature industrial capabilities into frontier technologies.

For instance, the current boom in biomanufacturing builds directly upon the robust foundation of the traditional chemical industry.

More critically, Faiola described a shift from "technology push" to "demand pull." In this model, "industry poses the questions, science provides the answers." By allowing enterprises facing real bottlenecks to define research agendas, China bridges the gap between laboratory discovery and market application.

"This organized, demand-driven research ensures that outcomes possess translational potential from the outset," Faiola said, citing how medical needs directly guide advancements in stem cell technologies. "This alignment of strategic vision with practical execution offers a feasible roadmap from the present to the future."

**From catch-up to frontier**

This strategic evolution is visible in sectors like commercial spaceflight, synthetic biology, and next-generation AI. Dennis Simon, senior fellow at the U.S. foreign policy think tank Quincy Institute, says China's push into these fields reflects a "maturing innovation strategy — one that is increasingly frontier-oriented rather than catch-up-focused."

China has "demonstrated an ability to scale complex engineering systems quickly." The iterative rocket testing resembles the "fast-fail, fast-learn" model pioneered elsewhere, but is "embedded in a state-coordinated system."

According to Simon, "China's advances regarding systems integration capability has been the key to Chinese progress," a situation he compares to high-speed rail. With this capability, he said China can turn long-term bets into real-world impact.

**A global blueprint**

These strategies extend far beyond the laboratory, reshaping the very fabric of daily life. The results are clearly visible in China's urban transformation. Professor Mohammed S. Obaidat, former president of the Society for Modeling and Simulation International, describes China as a "global pacesetter" in converging AI, high-fidelity simulation and digital twin technology.

Obaidat observed that while traditional simulation was used for static predictions, "AI-enhanced simulation" in China has evolved into a living, responsive system.

Experts agree that China's approach holds significance beyond its borders. Faiola emphasized that the efficiency of China's innovation resource allocation accelerates the translation of science into practice. Similarly, Obaidat called China's experience highly scalable and transferable to other rapidly urbanizing regions.

## Consistent Commitment to Global Prosperity

In 2025, China continued to expand its policies of institutional opening-up and optimization of personnel exchanges, with topics such as "Becoming Chinese" and "China Travel" going viral on foreign social media platforms. Backing this up, trendy consumer products like Labubu dolls and China-produced sci-tech devices have emerged as new mediums for the global community to gain an authentic, multi-dimensional understanding of China.

As the country enters a new year of development, a series of policies is being discussed at the ongoing Two Sessions. These policies will not only provide important references for the outside world to understand China's development trajectory but also outline China's posture as a major power that approaches the world through openness and achieves win-win results through increasing exchanges.

In a recent written interview with *Science and Technology Daily (S&T Daily)*, Irina Bokova, former director-general of UNESCO, emphasized that China has a deep understanding of cultural power. From her perspective, with 60 World Heritage sites and 44 intangible cultural heritage elements, "China is one of the leading countries that innovates and expands the interpretation of the World Heritage Convention."

Beyond preserving its own heritage, China is actively sharing its experience globally. Bokova highlighted the robust cooperation between China and ASEAN countries, where Chinese technical expertise and funding have supported heritage conservation and nominations across Southeast Asia. She pointed to the restoration of Cambodia's Angkor Wat as a shining example of this collaborative spirit, where Chinese and Cambodian teams worked together, symbolizing mutual respect and enduring friendship. Furthermore, emerging digital collaborations, such as 3D scanning of monuments, are now safeguarding heritage against climate change and the erosion of time.

This ethos of sharing extends seamlessly from cultural preservation to solving pressing global development challenges.

In the Wuling Mountains, Shibadong village, known as the birthplace of "targeted poverty alleviation," has transformed into a "global classroom." This transformation stems from China's successful campaign that lifted 98.99 million rural residents out of poverty by 2020. The Shibadong model has inspired nations worldwide. According to Xinhua, training institutions authorized by the Ministry of Commerce, such as the Hunan International Business Vocational College, have hosted over 15,000 participants from more than 120 developing countries. Many of these participants visited Shibadong for on-site learning, to adapt these practical solutions to their own local contexts.

Complementing these grassroots development efforts, China is also fostering high-level scientific partnerships to empower the Global South. Professor Felix Dapare Dakora, a member of the African Academy of Sciences, applauded the pivotal role of the Belt and Road Initiative (BRI) in promoting international sci-tech exchanges and supporting mega-science projects. "China's leadership in promoting global scientific partnerships through the BRI has allowed the Global South to realize that unity is strength," Dakora said. "Together, we can solve problems faster, innovate more effectively, and ensure no country is left behind."

China, renowned for its wisdom in development and science, is driving the global green transition with unprecedented speed. Erik Solheim, former UN under-secretary-general, described China as the "indispensable nation" for global green transition.



On February 27, the Ministry of Ecology and Environment held a press conference to announce that China's air quality in 2025 reached the best level since monitoring records began. This impressive achievement shows the country's sustained efforts in pollution control and green development.

"China is now the total dominant force in all green technologies," Solheim said, citing the nation's production of 90 percent of the world's solar panels and over 60 percent of electric vehicles and batteries. He emphasized that China's advantage lies not in cheap labor, but in super-efficient, robot-driven manufacturing and systemic innovation.

Adding that China is also the world's largest tree planter and boasts the largest national park system, Solheim underscored how China's green innovations are developing scaling solutions that benefit humanity as a whole.

China's progress is not happening in isolation; it is increasingly intertwined with global prosperity, offering tangible benefits to the world.

- ① The Meng Xiang, China's first domestically designed and built deep-ocean drilling vessel, in Guangzhou, south China's Guangdong province.
- ② A robot in the exhibition area of the 2025 Global Industrial Internet Conference in Shenyang, northeast China's Liaoning province.
- ③ The kiangs (Equus kiang) at the Changtang National Nature Reserve, southwest China's Xizang autonomous region.

(PHOTO: XINHUA)



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