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AI for Humanity

Xi Offers Four Observations on AI Development, Governance

Chinese President Xi Jinping on Friday presented four observations on artificial intelligence (AI) development and governance while addressing the opening ceremony of the 2026 World AI Conference and High-Level Meeting on Global AI Governance.

First, adhering to the principle of openness and win-win cooperation while boosting innovation-driven development. Xi highlighted the importance of encouraging open-source, openness, collaboration and sharing to facilitate technological innovation, industrial development and scenario-based application of AI.

Second, strengthening risk awareness and ensuring that AI is secure and controllable. Stressing the need to ensure that AI is always under human control, Xi urged all sides to jointly oppose overstretching the national security concept in the field of AI or placing one country's security over that of others.

Third, encouraging inclusiveness and promoting mutual learning among civilizations. AI development and its application should not erode or undermine the diversity of world civilizations or the uniqueness of cultures of different countries, according to Xi.

Fourth, advocating solidarity and improving global governance. The important role of the United Nations should be recognized, Xi said, calling for further alignment and coordination on AI development strategies, governance rules and technical standards.

"We must carry out extensive international cooperation and help Global South countries with capacity building to bridge the AI and digital divides, promote sustainable development and prevent creating new historical injustice in AI," he said.

Source: XINHUA

The 2026 World AI Conference and High-Level Meeting on Global AI Governance is held in Shanghai from July 17 to 20. (PHOTO: VCG)

Chinese Foreign Minister Wang Yi, also a member of the Political Bureau of the Communist Party of China Central Committee, attends the signing ceremony and signs the agreement on establishing the World Artificial Intelligence Cooperation Organization on behalf of the Chinese government in Shanghai, east China, July 16, 2026. (PHOTO: VCG)

Steering AI for an Inclusive, Beneficial Future

By Staff Reporters

The 2026 World AI Conference (WAIC) and High-level Meeting on Global AI Governance kicked off in Shanghai on July 17 with Chinese President Xi Jinping delivering a keynote speech.

Since its inception in 2018, the conference has evolved into a key multilateral platform for the international community to engage in dialogue on AI and build consensus on global governance.

Themed "AI Partnership for a Brighter Future," this year's conference envisions AI empowering all industries and serving production and daily life. It will see collective discussion on technological innovation, the translation of achievements into real-world applications, and fostering an inclusive ecosystem, steering AI toward greater good and injecting new momentum into global AI development.

How can AI be truly harnessed, becoming an international public good that benefits all? Facing this shared challenge, China has consistently anchored its efforts in the common well-being of all, contributing Chinese wisdom and solutions to promote healthy and orderly development of AI in a beneficial, safe, and fair direction.

China upholds a people-centered approach and AI for good.

It opposes the use of AI as a tool for seeking hegemony, resource monopolization, domination of rule-making, and the formation of exclusionary blocs. It rejects artificial technological barriers that hinder other countries' development. The China-proposed Global AI Governance Initiative, with the principles of extensive consultation, joint contribution, and shared benefits, has fostered cooperative consensus in global AI development and garnered broad support from the international community.

China adheres to multilateral coordination to solidify the institutional foundation for improving global AI governance.

It supports the United Nations in playing the primary role in AI governance, is engaged in deliberating and formulating global ethical norms and technical standards, and safeguards the equal right of all countries to participate in rule-setting.

China has launched the Global AI Governance Action Plan to translate the existing consensus into practical measures, the AI+ International Cooperation Initiative to expand pathways for sustainable development enabled by smart technologies, and proposed a World AI Cooperation Organization for multilateral cooperation and governance.

Through all this, China has consistently resolved differences through dialogue. It has aligned development strategies, coordinated governance rules, and promoted mutual recognition of technical standards among countries, expanding the greatest common denominator of global governance consensus.

China embraces openness, sharing, inclusiveness, and benefit for all to bridge the global AI divide.

It has facilitated the UN General Assembly's consensus adoption of a resolution on strengthening international cooperation on AI capacity-building, placing developing countries' capacity development on the global AI governance agenda.

It has proposed and implemented the AI Capacity-Building Action Plan for Good and for All, initiated the Group of Friends for International Cooperation on AI Capacity-Building, and carried out multi-dimensional technical and talent collaboration.

Beijing continues to promote technology open-source, knowledge sharing, and industrial synergy, leveraging the WAIC to facilitate cross-regional flows of quality intelligent resources.

These measures translate inclusive visions into tangible outcomes, helping developing countries address gaps in their intelligent transformation and fulfilling the commitment of "leaving no one behind."

The 2026 WAIC and High-level Meeting on Global AI Governance presents a vital opportunity to consolidate consensus and deepen cooperation.

The fruits of smart technology development can be shared more equitably only by abandoning the zero-sum game mindset, embracing an open and win-win cooperative philosophy, and jointly building a fair, reasonable, inclusive, and beneficial global AI governance system.

Observer

Comprehensive Measures Bolster Original Innovation

By Staff Reporters

A symposium on strengthening basic research in April urged greater efforts and more concrete measures to strengthen basic research, enhance China's capacity for original innovation, and solidify the foundation for building the country's strength in science and technology.

In two months, a series of measures have been rolled out across the country for platform construction, talent cultivation, diversified capital investment as well as institutional reform.

Cradle of original innovation

In the national comprehensive science center in Beijing's Huairou district, 37 world-class facilities and platforms are arranged in clusters. They integrate multiple extreme conditions, such as strong magnetic fields, extremely low temperatures and ultra-high pressure to support basic research in over a thousand domestic and foreign universities, research institutions and enterprises, promoting original innovation.

After the symposium, the acceptance and open sharing work of the High Energy Photon Source (HEPS) project in the national comprehensive science center was accelerated. After 10 years of dedicated work, HEPS was completed with the support of the Beijing municipal government.

"We are striving to put it into operation within this year," said Jiao Yi, a researcher at the Institute of High Energy Physics, Chinese Academy of Sciences (CAS).

Favorable ecology for innovation

Comprehensive efforts have been made to cultivate, introduce, and utilize talent and expand the talent pool for basic research. ***See page 3***

China's Innovative Rocket Recovery by Net-capture System

By Staff Reporters

China has achieved its first controlled recovery of a carrier rocket's first stage, representing a major breakthrough in its reusable rocket technology.

It launched a Long March-10B carrier rocket from the Hainan commercial spacecraft launch site in southern Hainan province on July 10.

The first stage of the rocket returned and was successfully captured by a net system on a seaborne platform. This is different from the traditional recovery method. In the unique sea-based net recovery system, the rocket flies directly into a massive sea-based net and is captured.

Science and Technology Daily interviewed experts from the China Aerospace Science and Technology Corporation (CASC) to learn more about the homegrown technology.

According to the CASC, the first stage of the rocket's return occurred in a complex air current. It had to perform a series of high-difficulty and high-precision tasks such as turning around, decelerating and landing precisely in less than six minutes.

As the altitude decreased, the rocket needed to restart its engine to slow down and obtain the precise position of the recovery platform through navigation and positioning devices.

After entering the net system, the rocket slowly descended, and its lanyard mechanism unfolded. The LiDAR units at the four corners of the platform measured the position and attitude of the rocket in real time, driving the cables to hold the rocket and eliminate its kinetic and potential energy.

The recovery technology was a process of coordination between the net platform and the rocket — they needed to "head towards each other" and complete a high-dynamic "docking" amid the disturbance of waves.

The platform can't remain still due to the wind and waves, and the rocket does not descend in a completely straight line, maneuvering and rolling to a certain degree.

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Plan to Advance 'Beautiful China' Lists 15th FYP Goals

Policy Express

By TANG Zhexiao

China's State Council has released a plan for the "Beautiful China" initiative, laying out the general requirements, targets and indicators, key tasks and major projects for comprehensively advancing the vision during the 15th Five-Year Plan (FYP) period (2026-2030).

The plan sets the goal of achieving all-round improvement in ecological and environmental quality and making significant progress by 2030.

It emphasizes scientific and law-based pollution control, coordinating industrial restructuring, pollution treatment, ecological conservation, and climate change responses. It will synergistically promote carbon reduction, pollution mitigation, and green expansion, while accelerating comprehensive green transformation of economic and social development.

A green production and lifestyle will be largely established by 2030, and the carbon peaking target met as scheduled. Total emissions of major pollutants will keep dropping, urban and rural living environments will see remarkable improvements, and ecosystems grow more diverse, stable and sustainable. The safety level of nuclear and radiation facilities will be raised.

Danjiangkou Reservoir in Shiyan, central China's Hubei province. (PHOTO: VCG)

A host of demonstration models will be established, and people will gain a stronger sense of fulfillment, happiness and security from the sound ecology and environment.

The plan also looks ahead to targets for 2035 and calls for faster formation of an overarching layout.

It details seven key tasks: advancing the campaigns to keep the sky blue, waters clear and land clean; carrying out initiatives for solid waste and emerging pollutant treatment; coordinating the optimization of ecosystems; and addressing climate change. The tasks also include accelerating green production and living patterns; safeguarding the bottom line of security; and improving the supporting system for the initiative.

Major projects are specified, including upgraded air pollution prevention and control, governance, protection and restoration of aquatic ecosystems, and marine ecological conservation and restoration. Source prevention and remediation of soil pollution is also part of the projects, as well as investigation, rectification and comprehensive utilization of environmental risks from industrial solid waste, and coordinated treatment of emerging pollutants.

The plan will also ensure dynamic monitoring, mid-term evaluation and wrap-up assessment of the implementation.

Registration Guide for Int'l Science Organizations

By TANG Zhexiao

China has released an official guideline for the establishment of international scientific and technological organizations in the country, clarifying standardized registration requirements and application procedures.

Issued by the Ministry of Civil Affairs (MCA), the Ministry of Science and Technology, and the China Association for Science and Technology, the document will support the sound establishment and operation of international sci-tech organizations in China and further regulate their registration procedures.

It applies to international sci-tech organizations seeking registration with the MCA. These are international or regional, non-profit and non-governmental legal social organizations jointly initiated by Chinese and foreign universities, research institutions, sci-tech bodies, enterprises and individuals. Registered and headquartered in China, their objective is to advance international cooperation, academic exchanges and industrial governance in the fields of natural sciences and engineering technologies.

Relevant provisions can also serve as a reference for the establishment of international social organizations covering economy, education, culture, healthcare, sports, environmental protection and other sectors.

The document stresses that international sci-tech organizations must uphold their international and non-profit nature throughout operations, conduct all activities in compliance with laws and regulations, observe the legal rules of China and other host regions, and respect local customs and practices.

It specifies the basic qualifications for an international sci-tech organization to register as a legal social entity. They include eligible Chinese and foreign initiators, a standardized membership system, a formal institutional name, a complete organizational structure, a fixed venue, qualified leading personnel and professional staff, as well as legitimate assets and funding sources.

All registered organizations must adopt standardized officially approved names prefixed with terms such as "International", "World", "Global" or "Asia" to denote their international or regional attributes. The initial operating capital, sourced entirely from donations, should be a minimum of two million RMB.

The application process has five major procedures: confirming the competent supervisory authority, obtaining review approval from the supervisory body, undergoing examination by the registration administration authority, completing official registration and certificate issuance, and finishing subsequent formalities including seal engraving, tax registration and corporate bank account opening.

Beijing, Tianjin and Hebei: Synchronized in Sci-tech Development

Case Study

By Staff Reporters

Achievements in synthetic biology made in Beijing's Changping district have been transformed into 10,000-tonne level production capacity in Qinhuangdao, Hebei province. Over 100 enterprises from Beijing have settled in the Huayuan Science and Technology Park, part of the Tiankai Higher Education Innovation Park in Tianjin.

This gives us a glimpse of how Beijing, Tianjin and Hebei are boosting sci-tech development through coordinated efforts.

Data from the Tianjin Municipal Bureau of Science and Technology show that since the beginning of 2026, Beijing, Tianjin and Hebei have shared information on 240 technology achievements and technical needs and jointly held 12 technology matchmaking events, keeping the regional technology market vibrant.

By the end of May, the value of technology contracts signed by Tianjin entities to acquire technologies from Beijing had crossed 3.75 billion RMB, an increase of 84 percent from a year earlier.

Wang Weilin, an official from the Beijing Municipal Science and Technology Commission, Administrative Commission of Zhongguancun Science Park, said measures introduced to promote the transformation and application of sci-tech achievements in the Beijing-Tianjin-Hebei Region have enhanced the efficiency of such transformation and application by addressing three key aspects: the supply side, the demand side and the transformation chain.

A special program for disruptive technology innovation was leveraged to drive the innovation of the region, according to Wang. In 2025, the number of projects added to the program's project pool across the three places increased by more than 300 percent compared to the previous year.

The program also incubated 140 hard-tech enterprises in Tianjin and Hebei, and 25 enterprises were established as part of an industrial layout centered on six key industrial chains and five advanced manufacturing clusters, Wang said.

As an example of coordinated efforts to boost innovation, an integrated SPECT/PET/CT imaging system, jointly developed by Hebei-based enterprise Rayseeker, Tsinghua University and Tianjin Medical University Cancer Institute and Hospital, has attracted considerable attention.

Boasting 100 percent domestically developed core components, the system can perform precise quantitative whole-body imaging in under 10 minutes with a single scan and supports millisecond-resolution 4D dynamic imaging.

Brain-computer interface (BCI), an industry of the future, is also a key area for coordinated development. The Haihe Laboratory of Brain-Computer Interaction and Human-Machine Integration at Tianjin University plays an important role in this.

Huang Shuaifei, a scientist at the lab, said the research team developed core BCI algorithms and possess core technologies for non-invasive BCI. Three core metrics — EEG recognition accuracy, the number of control commands and the information transmission rate — have reached internationally leading levels.

In addition, the lab jointly established a BCI technology lab with the Jingjinji National Center of Technology Innovation in Beijing, and took the lead to establish a BCI and human-machine integration industrial alliance for Beijing, Tianjin and Hebei, building a collaborative ecosystem for the BCI industry in this region.

To transform achievements from laboratories into real world applications, pilot-scale testing platforms are crucial. They help bridge the gap between ideal laboratory conditions and the complex operating conditions of industrial production.

In Xiong'an New Area, Hebei province, there is a shared testing center that provides commercial space companies with a full suite of professional pre-launch inspections for complete satellites.

Gao Jianfeng, deputy general manager of a space company in Xiong'an, said the center offers convenient services and helps reduce production cost, so they can focus more on research and development.

Hebei is now communicating with relevant departments, universities, research institutions and tech enterprises in Beijing and Tianjin to become their top destination for the validation, refinement, pilot-scale production and demonstration applications of their new technologies and products.

An automated liquid-weighing robot at a company in Fengtai district of Beijing. (PHOTO: XINHUA)

Vibrant China

Shanghai to Build Basic Research-driven Innovation Hub

By FANG Linlin, WANG Chun, CHEN Chunyou & LI Jun

As construction of the Shanghai (Yangtze River Delta) International Science and Technology Innovation Center accelerates, Shanghai, a prime window into China, is channeling scientific momentum into the region's high-quality development.

A symposium on strengthening basic research in April has enhanced researchers' determination to "venture into the unknown." Scaling the peak of discovery demands fresh approaches that will aid pioneers in their ascent and provide a safety net for the arduous journey from lab to market.

New paradigms of discovery

"China today offers the best opportunity for basic research," said Zhang Jie, an academician of the Chinese Academy of Sciences (CAS) and director of the Tsung-Dao Lee Institute (TDLI) at Shanghai Jiao Tong University. "As we push the frontiers of fundamental science, we must leverage the big-science paradigm to conduct focused research. TDLI is a proving ground for this approach."

At the TDLI, different disciplines collaborate and theoretical and experimental scientists work side by side. A tolerant, pluralistic atmosphere drives iterative progress on fundamental questions. Anchored by mega science initiatives like the TRIDENT project, the TDLI has built a global collaborative network.

"Our goal is to create a new model of international cooperation where Chinese institutions set goals, build facilities, assemble teams and lead the charge," Zhang said. "We aspire to build an institute like Denmark's Niels Bohr Institute in the 1920s — one that advances human civilization, fulfilling physicist Tsung-Dao Lee's vision of making 'fundamental contributions to the progress of humankind.'"

Young talent pours in from around the globe. International scholars now account for nearly 40 percent of the TDLI's researchers.

Innovative talent selection

Between basic biology and clinical medicine lies a notorious "valley of death": Thousands of biological targets are identified and hundreds of thousands of papers published — yet only a fraction become approved diagnostics or therapies. CAS's Interdisciplinary Research Center on Biology and Chemistry (IRCBC) is building a bridge across that chasm.

When Yuan Junying, a foreign member of CAS and director of the IRCBC, first spotted Liu Cong, the latter was then a young postdoctor without any prestigious academic title. The center created an environment that fostered close interdisciplinary collaboration between biologists and chemists. Liu spent 10 years focusing on a key protein in Parkinson's disease. Together with organic chemist Tan Li, he found the "bridge" — a world-first early diagnostic method that teams worldwide had been hunting for. In collaboration with Wang Jian, director of neurology at Huashan Hospital in Shanghai, they brought it to clinical use, making early Parkinson's detection possible.

For Li Dangsheng, chief scientist at the Shanghai Academy of Natural Sciences, Liu is a standout example of the academy's new funding model. As one of the first batch of young scientists backed through its closed-loop system — select and evaluate, fund and empower, exchange and collaborate — Liu has moved his research from lab to clinic, cracking a challenge that stumped the global scientific community.

"Liu's success fills us with pride," Li said. "Our mission is to provide long-term, stable support for high-risk, high-value basic research based on proposal merit. We aim to explore replicable models for talent identification, evaluation and funding that can drive original and disruptive discoveries."

Luo Dajin, director general of the Shanghai Science and Technology Commission, said Shanghai will deepen institutional reforms of science and technology, enhance original innovation capacity and improve overall system efficiency.

Elevating scientific support

"The success may not be mine, but I'm proud to have contributed" — this motto captures the spirit of the Shanghai Synchrotron Radiation Facility (SSRF), one of China's key national science and technology infrastructures.

The SSRF is China's first third-generation synchrotron light source. Located in Shanghai's Zhangjiang, it opened in 2009. To date, its 38 beamlines and 55 experimental stations have served over 6,000 users from more than 1,000 institutions nationwide, supporting some 30,000 experiments and yielding about 17,000 papers. It has facilitated breakthroughs in life sciences, materials science, condensed matter physics, chemistry, energy, environmental science and medicine.

More such facilities are coming up. Shanghai has built, or is building or planning 20 major facilities across fields like matter, chemistry, life sciences and marine studies — with a total investment of 35 billion RMB. These facilities are working to enhance openness and sharing, serving corporate innovation and supporting industrial development.

China's 15th Five-Year Plan period (2026-2030) has begun. "Under the guidance of the Ministry of Science and Technology, Shanghai is expected to strengthen strategic alignment with Jiangsu, Zhejiang and Anhui provinces," said Wang Weinan, an associate researcher at the Chinese Academy of Science and Technology for Development. "Together, they will build a world-class research environment and innovation ecosystem, accelerating Shanghai's emergence as a global innovation powerhouse."

An aerial view of Tsung-Dao Lee Institute of Shanghai Jiao Tong University. (COURTESY PHOTO)

Who Is Real 'Supervillain' in Global AI?

Clear Voice

By LIANG Yilian & HU Dingkun

People attend the AI for Good Global Summit in Geneva, Switzerland, on July 7. (PHOTO: XINHUA)

While the U.S. is the "superhero" of global AI, China is the "supervillain." This claim was made by U.S. House Foreign Affairs Committee Chairman Brian Mast at a recent think tank event on "Securing America's AI Advantage: A Discussion on U.S. Export Control Policy."

Just two days before the event, U.S. Treasury Secretary Scott Bessent said China surpassing the U.S. in AI was the "biggest risk," outweighing concerns over safety and job losses.

Such rhetoric highlights a troubling reality: For some American politicians, AI has become deeply politicized. China's rapid progress in AI is increasingly portrayed as the foremost challenge to U.S. technological dominance. Statements like those made by Mast and Bessent are intended to demonize China's AI development and provide political justification for further U.S. efforts to contain and suppress China's technological progress.

This narrative, however, is convincing only to themselves and a handful of those who are either misinformed or deliberately obtuse. China's AI development has never posed a threat to the world. On the contrary, it is generating tangible benefits for countries across the globe — including the U.S.

Due to the sweeping U.S. export controls on advanced chips, Chinese AI companies have continued to pursue independent innovation while embracing an open-source development model. In recent months, they have successively released open-source large language models such as DeepSeek-V4, Zhipu AI's GLM-5.2, and Meituan's LongCat-2.0. These models not only contribute new technical approaches to global AI research but also provide affordable, accessible solutions for countries — particularly developing economies — seeking to accelerate digital and intelligent transformation.

A *Foreign Policy* article in June noted that developers across Africa are widely adopting Chinese AI platforms, including DeepSeek, Qwen, and Kimi, to build AI models capable of supporting local languages. According to the article, Chinese models have become the "overwhelming choice" for African developers.

China's AI models are openly available to users worldwide, without discrimination based on nationality. Statistics from OpenRouter, a major AI model aggregation platform, indicate that more than 60 percent of the platform's token traffic is now processed by Chinese models. Reports also indicate that major U.S. companies, including Microsoft, Airbnb, and Coinbase, are exploring ways to integrate Chinese AI models into their businesses.

By contrast, leading U.S. AI companies such as OpenAI and Anthropic continue to impose strict restrictions on users from China. Anthropic also faces allegations that its AI coding tools contain mechanisms specifically designed to monitor or restrict Chinese users.

Equally noteworthy is Washington's growing tendency to invoke "national security" to limit international access to its most advanced AI models. In reality, this reflects an "America First" approach to AI policy — one aimed at preserving U.S. technological supremacy by restricting other countries' access to cutting-edge models and widening the global technology gap.

On June 12, the U.S. Department of Commerce reportedly imposed export controls on two Anthropic AI models, temporarily restricting access for foreign organizations and individuals. Later that month, OpenAI's GPT-5.6 model was reportedly released under government oversight, with access limited to government-approved "trusted partners."

China is not only one of the world's leading developers of AI technologies but also a major advocate of global AI governance. In October 2023, China introduced the Global AI Governance Initiative, becoming one of the first major countries to propose a comprehensive international framework for AI governance.

The initiative emphasizes AI for good, safety, fairness, and inclusiveness, while specifically calling on all countries to "adopt a prudent and responsible attitude to the research, development, and application of AI technologies in the military field."

The U.S., however, appears to be moving in the opposite direction by accelerating the "militarization" of frontier AI technologies.

Last month, the *Financial Times* reported that the U.S. National Security Agency had partnered with Anthropic to employ its Mythos AI model in offensive cyber missions. Shortly afterward, U.S. media outlets reported that the U.S. military had begun using xAI's Grok Gov model to support lethal military operations, claiming the system had assisted in striking approximately 2,000 targets within a 96-hour period.

As the world's two leading AI powers, China and the U.S. share a responsibility to advance the intelligent transformation of human society, strengthen international cooperation on AI governance, and jointly manage the security risks posed by rapidly evolving technologies.

What the U.S. should do is not continue to smear and suppress China's AI development, but rather reflect on its own role in shaping the future of global AI. It cannot proclaim itself the world's "superhero" while acting increasingly like the very "supervillain" it claims to oppose.

Voice of the World

China's Rocket Recovery Shows Commercial Promise

Edited by QI Liming

On July 10, China achieved its first-ever controlled recovery of its Long March-10B carrier rocket's first stage, marking the world's first successful sea-based net-capture recovery of a launch vehicle. This milestone has drawn widespread international attention and comments, with many experts and media outlets praising the breakthrough. Numerous foreign netizens congratulated China on the achievement on social media platforms.

Scientific American said China made a giant leap in its ongoing effort to be a dominant player in 21st-century spaceflight. The feat places the nation in an elite club. No other nation has achieved a first-stage booster recovery on a vehicle's inaugural launch.

Space commented that China had notched a huge spaceflight milestone. It recovered a rocket during an orbital launch and that recovery was unique: The rocket's first stage nestled softly into a net-like structure carried by a ship at sea.

CNN considered the successful test of China's reusable rocket technology as key to both space exploration and travel, as well as to building satellite infrastructure, critical to China's ambition to send crewed missions to the moon.

Sam Bresnick, a research fellow at the U.S. think tank Center for Security and Emerging Technology, and a China expert, said in *The Wall Street Journal* that it would be a "big deal" if China's space program could regularly recover and reuse parts of its rockets. "It pretty radically decreases the cost of building out these giant satellite constellations that China has made very clear that it wants to build out," Bresnick said.

Reuters said China's success marked a major advance in its push to develop reusable launch systems. China has now joined the small group of space powers that can recover orbital-class booster rockets.

Tanzania Insight analyzed the associated benefits of rocket recovery, saying China's milestone was a pivotal moment that could reshape the global space industry.

This achievement represents more than China's technological progress alone. China's success could accelerate innovation and potentially drive down costs across the entire sector, benefiting research and commercial space ventures worldwide.

As of mid-July, the video of the launch and recovery had received over one million views on Facebook, Reddit, and YouTube, with over 100,000 likes and over 10,000 comments. Some netizens commented that it showed "impressive progress" and was an "awesome solution, and it can be reused for easier moon or Mars landings."

The offshore recovery platform successfully recovered the first stage of the Long March-10B carrier rocket using the net-capture method on July 10, 2026. (PHOTO: XINHUA)

Steady, Upward Chinese Economy Draws More Foreign Capital

Comment

By QI Liming

The IMF has raised its growth forecast for China's economy by 0.2 percentage points this year in its July report. Against the backdrop of overall downward revisions to global economic growth projections, China is one of the few major economies whose growth outlook has been upgraded.

The IMF report pointed out that China's economic performance in the first quarter exceeded expectations. The main reasons for this were the outstanding performance of China's high-tech manufacturing sector, as well as the strong boost from related exports.

Goldman Sachs expects China's economic growth to rebound in the third quarter on faster fiscal spending and lower oil prices.

Manufacturing saw the clearest improvement, according to the China Beige Book, an independent survey of Chinese businesses released in July. The survey, covering 1,321 businesses from June 1 to 22, pointed to a surge in luxury goods sales.

According to Reuters, the Chinese renminbi is seen as going further, with global banks revising up year-end forecasts for gains beyond June's 3-1/2-year high of 6.7522 per U.S. dollar. "There has been renewed demand for China bonds, which we believe was driven by relative safety and low volatility," said Wee Khoon Chong, Asia-Pacific macro strategist at American financial services company BNY.

CNBC reported that Singapore's state investment firm Temasek Holding's China exposure grew by about 7.7 billion USD over the past year, its highest net investment in the country since 2021. The China exposure has grown by about 18.57 billion USD over the past decade. Temasek is repositioning its China portfolio toward AI-related hardware and infrastructure, robotics, biotech and energy transition.

More and more overseas businesses are realizing that China's energy transformation strategy is focused on the long term, its production and supply chain system is complete and efficient, and the market resource advantages continue to be prominent. These elements have formed the "resilience code" that enables China's economy to move forward steadily and effectively cope with external shocks and challenges.

Nicholas Wagner, head of the Energy Initiative at the World Economic Forum, said countries that start investing in renewable energy earlier will demonstrate greater resilience in the face of energy crises. China, with its abundant energy reserves, diversified energy supply, and rapidly developing renewable energy industry, has to some extent mitigated the price shocks caused by the conflict in the Middle East. This experience holds significant reference value.

AllianzGI's chief information officer for equity, Michael Heldman, said, "China represents long-term investment opportunities." The Chinese market has great potential and abundant innovation vitality, and Chinese assets have long-term holding value.

China's Innovative Rocket Recovery by Net-capture System

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Therefore it needs to receive the platform's position data in real time and compensate for the angular deviation.

This requires intelligent control and autonomous flight technology, the rocket engine's ability to maintain stable operation in extreme environments, as well as the recovery platform's rapid response, which accurately determines the timing of the rocket's entry, and absorbs the energy the rocket gives off through buffering, fixing and other mechanisms.

The recovery system has a 67 meters high tower structure weighing 5,400 tonnes, making the design extremely challenging. Overall, the seaborne net-capture system integrates technologies from multiple fields such as mechanical engineering, automatic control, and material science.

In the future, the net capture recovery system can be redesigned for the recovery of rockets of different scales. This program will assist China's space industry in conducting low-cost, high-frequency and sustainable space exploration.

AI Reshapes Software Industry

AI Ripples

By QI Liming & ZHANG Ye

China's software industry has surpassed 15 trillion RMB in scale. The rapid development of AI technology is bringing transformative challenges, with traditional models of R&D, business operations, and underlying technical systems facing multiple bottlenecks. All this has made transformation necessary and urgent.

Data from the Ministry of Industry and Information Technology of China shows that in 2025, China's software business revenue reached 15.48 trillion RMB, with a year-on-year growth of 13.2 percent. Out of this, the revenue of industrial software was 333 billion RMB and the revenue of basic software 214.6 billion RMB.

"The old approach of relying on manpower and project-based delivery is no longer feasible," Jia Zijun, deputy director of the Information Software Institute of the China Center for Information Industry Development, said. The core challenges of traditional software industry include the entire process of development relying heavily on manual coding, and engineers spending much time on drawing sketches and searching historical code.

The project iteration cycle is long and the cost of cross-functional collaboration high. Software enterprises have fallen into the growth trap of "the more they deliver, the higher the labor costs and the thinner the profits."

Gao Tongqing, chairman of the Global Intelligent Internet of Things Consortium, made a judgment on the transformation of business models: "AI agents have significantly reduced the demand for human resources, and the original revenue logic is unsustainable. The industry urgently needs to shift from selling software products to a new business model based on tokens and service results."

"Industrial AI should not only generate text, but also build a foundation model for understanding the physical world to develop industrial AI agents that can autonomously plan and handle undefined tasks," Li Peigen, an academician of the Chinese Academy of Engineering, said. He pointed out that intelligent retrieval tools powered by mechanical engineering foundation models can directly read the dimensions and tolerances of the parts, significantly reducing the manpower required for R&D.

Chen Xin, technical director of Alibaba Qoder, an AI coding platform, revealed that AI agents now generate 60 percent of the platform's code. The product iteration cycle has been shortened from two weeks to two or three days, boosting R&D efficiency by nearly 10 times.

He said in the future, routine business systems will be fully handled by AI agents, while human developers will focus on architecture and top-level innovation, forming a new organizational model of "a small R&D team + a large number of AI digital employees."

Comprehensive Measures Bolster Original Innovation

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According to an official with the Jiangsu Provincial Department of Science and Technology, the eastern province has put in place a full-cycle and progressive support system that covers young researchers at all stages — from exceptionally promising top-tier talents to up-and-coming scholars in the early phases of their research endeavors.

In the north, Shanxi's science department on May 9 launched its 2026 basic research program, with a dedicated young scientist track offering up to 50,000 RMB per project over three years, paid in one lump sum.

"We encourage young researchers to dare to think, try, and fail," said Guo Haicheng, director of the science bureau in Jinzhong, a city in Shanxi.

Fujian province in east China has found a way to bring private capital into research beyond public funding. On May 9, it called for more partners for its fourth-phase joint natural science fund, giving contributing firms the right to set topics and join project reviews. So far, it has leveraged nearly 170 million RMB in joint funds.

"We have taken steps to bring industry leaders such as battery giant CATL into the National Natural Science Foundation's joint fund program for private companies, so that more enterprises can lend strong support to original innovation," said an official in charge of the Basic Research and Fund Management Division at the Fujian Provincial Department of Science and Technology.

The Grand Canal in Digital Age

A Canal of Civilization

Along the Grand Canal in Hangzhou, east China, cargo boats make their way to different destinations, just as they have been doing for centuries. Along its banks, people buy coffee or practice tai chi. The canal is not a museum piece. It is still part of people's lives.

On the arch of Gongchen Bridge, a 17th-century stone structure first built in 1631 that has witnessed nearly four centuries of Hangzhou's history, two people look out over the water. One of them, Ke Ning, works at the Hangzhou Arts and Crafts Museum, one of a cluster of canal-side museums dedicated to the crafts that flourished along this waterway. She walks beside the canal every day and crosses it on her way to work. Beside her stands Abubaker Hayaty, who came to China from Sudan nearly a decade ago and now lives in Hangzhou, where the Grand Canal ends its long journey from the north. Over the years, he has watched the boats pass and regards the canal as a living waterway that still shapes the city around it.

Ke asks him, "You see the bridge and the flowing water. But do you truly perceive what this canal means for this country, for this civilization?"

One canal, half a civilization

If you look at the map of China, most of its major waterways, the Yellow River, the Huaihe River, the Yangtze River, and the Qiantang River, all flow eastward. China's geography is naturally divided into north and south. But one waterway runs north-south, connecting what geography had separated. It is the Grand Canal, the world's longest artificial waterway, connecting Beijing in the north to Hangzhou in the east. The first section of the canal, the Han Gou, was dug in 486 BCE to connect the Yangtze and Huai rivers. Later dynasties extended it.

The Sui Dynasty (581-618) united it into a north-south waterway. The Yuan Dynasty (1271-1368) rerouted it, creating the Beijing-Hangzhou Grand Canal we know today. The over 1,700 km waterway links five major river systems into one network: the Haihe River, Yellow River, Huaihe River, Yangtze River, and Qiantang River. There is a saying among Chinese historians: "One canal, half a civilization."

From the Tang (618-907) and Song (960-1279) dynasties onward, China's economic center gradually shifted south, while the political capital remained in the north. The canal bridged this divide.

In the Northern Song Dynasty (960-1126), millions of tonnes of grain traveled the canal each year to feed the capital at Kaifeng, now in Henan province in central China. In later dynasties, the system continued, with grain boats sustaining the northern capitals. Without this supply line, national unity could not have been maintained.

The canal and the economy

The canal was first built to move grain, but it soon carried more than grain. By the Tang and Song dynasties, private merchants were loading their own goods onto the barges that carried official shipments. Silk from the south, tea from the hills, and porcelain from the kilns moved north along the water. Northern goods traveled south in return. The canal turned a collection of regional economies into something larger.

Along its banks, market towns grew into cities. Huai'an, Jining, Linqing, Cangzhou, and Tongzhou became wealthy not only from the land around them, but also from the boats that passed through.

Ke points across the canal to the museum complex where she works. "The fans, the umbrellas, the swords were industries, not just art. They fed families. The craftsmen shipped their goods along this water to buyers hundreds of miles away. The canal was their market."

For the millions of people who lived along its banks, the canal was a lifeline. It carried what they made and brought what they needed. It connected them to a world beyond their village.

The canal and culture

People and skills traveled the canal too. Northerners brought wheat and farming methods south. Southerners carried their dialects and cooking north. Along the banks, these cultures met and changed one another.

The canal passes through five distinct cultural regions: the Yan-Zhao culture of the north, the Qi-Lu culture of Shandong, the Central Plains culture, the Huaiyang culture, and the Wu-Yue culture of the south. Before the canal, these regions were largely separate. The canal brought them together. It also linked the maritime Silk Road with the overland Silk Road, connecting China's coastal trade to its continental networks.

The literary imagination followed the water. The classic *Dream of the Red Chamber* opens in the canal city of Suzhou. Lin Daiyu, the heroine, travels the canal from Yangzhou to Beijing, a journey that sets the story in motion. Kunqu Opera began in Suzhou and Yangzhou, then spread north along the canal. Peking Opera traveled the same route, carried by troupes from the south. Food traveled too. Dumplings met wontons. Along the canal, these traditions met and became something new.

Back to the bridge

As dusk falls, Ke and Hayaty return to Gongchen Bridge. The early summer light has softened.

Hayaty is silent for a moment. Then he says: "Before today, I thought I understood what a waterway could be. Now I see it differently. This is a canal of civilization. It carried more than boats. It carried a civilization over the course of centuries."

He looks down at the water. "And it belongs to ordinary people. It was built for them to use and live beside. The craftsmen, the merchants, the families who washed clothes on these stone steps kept it alive. They still do."

Ke nods. "The builders were not thinking about creating a landmark. They had practical problems to solve, keeping the capital fed and moving goods across the country. But they built something that outlasted them."

Behind them, the canal flows on. A boat moves slowly past. Living heritage is not a label. It is the way this canal has always been.

◄ Please scan the QR code to watch the video.

Institute at Zhejiang University, explains: "We aim to transform physical artifacts, which are difficult to preserve forever, into digital assets that can be copied and passed down permanently."

When Hayaty asks about AI, Diao says he is a technology optimist. In archaeology, many time-consuming tasks are being sped up, thanks to AI's power.

Monitoring a 110-km waterway

The digitization of one bridge is only the beginning. The Hangzhou section of the Grand Canal stretches 110 kilometers and contains 11 heritage elements. According to Shen Ying, deputy director of the Hangzhou Grand Canal Protection Center, these figures account for one-tenth and one-eighth of the entire Grand Canal system respectively. The canal passes through 27 cities.

Managing this vast heritage is complex. The canal runs through Hangzhou's urban core, tied to the lives of millions. This requires multi-departmental collaboration.

So Shen's team built the "Smart Canal" system, a digital platform that integrates data from multiple sources. It operates on a monitoring network called "Water, Land, Satellite, and Sky." But technology alone is not enough. Shen says some problems can be spotted only by going to the venue, doing a foot patrol. Sometimes plants grow in the bridge cracks, she explains. Tourists might see life and vitality in that, but if the roots grow too large, they damage the stones. That will eventually weaken the bridge itself.

Inspectors use what Shen calls "fingertip inspection." They compare pairs of images side by side, looking for changes. "When we spot a problem, we compare the left and right images to find differences," she says. "Those differences are the areas we need to monitor."

On the 428 boundary markers that define the protected area, small round devices have been installed. "That small device is like a digital armor," Shen says. "It is an online monitoring module."

Gongchen Bridge has a structural monitoring module. Blue markers on the 3D model indicate cracks or subsidence identified over years of monitoring. It is like taking the bridge's pulse and diagnosing its condition, Ke explains.

At Fengshan Water City Gate, the only surviving water gate among the 15 built in the Yuan Dynasty, monitoring is more precise. Researchers collect data on subsidence, bulging, arch deformation, and cracks. Hu Chaoqiao, deputy head of the Heritage Monitoring Department of the Hangzhou Grand Canal Protection Center, says they use a four-color early warning system to denote the level of danger: red, orange, yellow, and green.

A small inclination sensor functions like a nerve ending. "In the near future, it will transmit changes to our Smart Canal platform 24 hours a day," Hu says. "This is not merely an upgrade. It is a key advancement for the entire monitoring system."

From the lab to the public

Technology serves not just experts but millions of visitors.

At the Beijing-Hangzhou Grand Canal Museum, Deputy Director Xia Handan shows Hayaty a 26-meter-long scroll depicting the canal's route during the Qing Dynasty. "The painting uses text to label each location," she explains. "We can trace which cities and water facilities the canal passed through."

A data platform lets visitors explore the canal's story. "We have gathered scattered information on this screen," Xia says. "Visitors can explore food, scenery, and customs, and learn how the canal changed daily life."

At the Hangzhou Arts and Crafts Museum, 351 artifacts have been digitally preserved through 360-degree scanning. "Visitors can select an artifact and view its complete digital record," Ke says, "including name, age, and a rotating 3D image."

"Is it possible I won't need to come to the museum at all in the future?" Hayaty asks. The answer is yes. The museum already offers 360-degree virtual tours on its website and WeChat account.

Legends on the water

The most dramatic fusion of technology and experience happens on the water.

At Wulin Gate, Hayaty and Ke board a boat for an augmented reality (AR) water tour, launched in October 2025. Passengers wear Rokid's AR glasses that blend real scenery with animated stories about the canal's legends.

Shen Jiahuan, a Rokid representative, explains: "We dug deep into the cultural stories behind each scenic spot and produced animations. With our Optical See-Through solution, you see both the real scenery and the animated stories."

A central control system manages the experience. "At important scenic spots like the Xiangji Temple and Gongchen Bridge, all passengers see the same story at the same time," she says. "This creates shared cultural resonance."

Li Linwei, spokesperson of the Hangzhou Water-Land Transport & Tourism Development Group, says the tour started last October. "Visitors used to only hear stories from the tour guide. We wanted them to experience it visually. So we added AR glasses to blend virtual stories with real scenery."

As the boat returns, Hayaty reflects that the Grand Canal is a living cultural heritage. "We use technology to record it, understand it, and protect it. Technology helps us observe it from perspectives we've never had before," he says.

Part of the Beijing-Hangzhou Grand Canal in Hangzhou. (COURTESY PHOTO)

❖ Planned by WANG Junming, FENG Weidong, FANG Linlin & JIANG Yun
❖ Written by ZHONG Jianli & LONG Yun ❖ Edited by GONG Qian & SONG Ziyan
❖ PHOTOS: XINHUA & VCG