

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.



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

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.

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.

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 academican 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)



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