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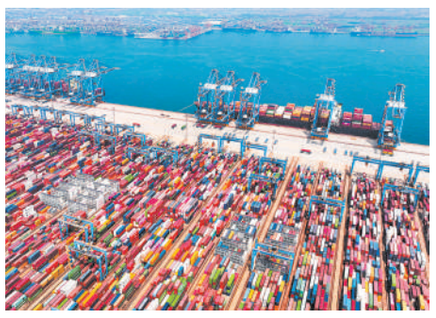

CHINA INJECTS MOMENTUM INTO GLOBAL ECONOMY

PAGE 3 | INSIGHTS

Xi Calls for Confidence, Hard Work in New Year Message

On December 31, 2024, President Xi Jinping delivered his 2025 New Year message through China Media Group and the Internet. He called on the nation to remain confident in 2025, saying the world's second-largest economy can overcome challenges and pressure through hard work.

"In 2024, we have proactively responded to the impacts of the changing environment at home and abroad. We have adopted a full range of policies to make solid gains in pursuing high-quality development," Xi said.

He noted that China's economy has rebounded and is on an upward trajectory, with its GDP for the year 2024 expected to pass the 130 trillion yuan mark. Grain output has surpassed 700 million tons, and China's bowls are now filled with more Chinese grain. Coordinated development across regions has gained stronger momentum, and mutually reinforcing advances have been made in both new urbanization and rural revitalization. Green and low-carbon development has been further enhanced. "Indeed, a more beautiful China is unfolding before us," he said.

"We have fostered new quality productive forces in light of actual conditions. New business sectors, forms and models have kept emerging," Xi said, adding that for the first time, China has produced more than 10 million new energy vehicles in a year. Breakthroughs have been made in integrated circuit, artificial intelligence, quantum communications and many other fields.

He also highlighted that for the first time, the Chang'e-6 lunar probe collected samples from the far side of the moon. The Mengxiang drilling vessel explored the mystery of the deep ocean. The Shenzhen-Zhongshan Link now connects the two cities across the sea. The Antarctic Qinling Station is now in operation on the frozen continent. All this epitomizes the lofty spirit and dreams of the Chinese people to explore stars and oceans, he noted.

In 2024, he has visited many places across the country and seen how people enjoy their enriching lives, Xi said. "I saw the big, red Huaniu apples in Tianshui, Gansu and the fishing boats in Aojiao Village, Fujian loaded with their catches...I enjoyed the hustle and bustle in Tianjin's Ancient Culture Street, and I saw how the people in Yinchuan's mixed-ethnic residential communities live together as one family."

Xi noted that the concerns of the people about jobs and incomes, elderly and child care, education and medical services are always on his mind. In 2024, basic pension has been raised, and mortgage rates have dropped. Cross-province direct settlement of medical bills has been expanded, making it easier for people to seek medical treatment across the country. And consumer goods trade-in programs have improved people's lives... "All these are real benefits to our people," he said.

In a world of both transformation and turbulence, China, as a responsible major country, is actively promoting global governance reform and deepening solidarity and cooperation among the Global South, Xi said. Deeper and more substantive advances are being made in high-quality Belt and Road cooperation. The Beijing Summit of the Forum on China-Africa Cooperation was a full success. "We put forward China's vision at the Shanghai Cooperation Organization, BRICS, APEC, G20 and other bilateral and multilateral forums. We have contributed greatly to the maintenance of world peace and stability," he said.

"In 2025, we will fully complete the 14th Five-Year Plan. We will implement more proactive and effective policies, pursue high-quality development as a top priority, promote greater self-reliance and strength in science and technology, and maintain sound momentum in economic and social development," Xi said. The Chinese economy now faces some new conditions, including challenges of uncertainties in the external environment and pressure of transformation from old growth drivers into new ones. "But we can prevail with our hard work. As always, we grow in the wind and rain, and we get stronger through hard times," he said, "We must be confident."

Source: XINHUA

Chinese research icebreaker Xuelong 2, or Snow Dragon 2, unloads materials near China's Qinling Station in Antarctica, December 27, 2024. Xuelong 2 and cargo vessel Yong Sheng, which are on China's 41st Antarctic expedition, arrived at China's Qinling Station in Antarctica on December 25, 2024 and carried out unloading operations. (PHOTO: XINHUA)

Editor's Pick

Satellite Internet: Removing 'Digital Divide'

By LIN Yuchen

China achieved a milestone in space technology recently, by successfully launching 18 low-Earth orbit satellites from the Taiyuan Satellite Launch Center using a single Long March 6 rocket. These satellites are part of the "Qianfan Constellation", marking the third phase of its deployment. Once complete, this constellation will include over 10,000 satellites orbiting Earth, creating a vast satellite internet network.

The Qianfan Constellation is just one among many satellite internet projects that China is actively pursuing. These initiatives aim to place communication "base stations" in space, delivering reliable internet access to underserved and remote regions around the globe. The vision is grand: a future where no one is left offline due to geographical barriers.

Satellite internet a game-changer

Satellite internet is, in essence, a communication network enabled by satellites acting as mobile "base stations." Unlike traditional ground-based networks, satellite internet has the capacity to reach places where terrestrial infrastructure struggles to operate, such as deserts, oceans, mountainous areas and even mid-flight.

According to the International Telecommunication Union, around one-third of the global population remains unconnected. Satellite internet provides a promising solution for bridging this digital divide. It offers fast and stable connections to regions that conventional networks find inaccessible. "Whether you're in a remote desert or deep at sea, satellite internet can offer the same connectivity as being at home," explained Xiang Kaiheng, former chief designer of China Aerospace Science and Industry Corporation's Hongyun Project.

Practical applications are already emerging. Satellite internet is being used to provide connectivity for vehicles, ships and airplanes. For individuals, it offers the ability to make satellite calls when mobile signals are unavailable. Devices supporting direct satellite communication are entering the market, and companies have started offering subscription-based services with dedicated terminals and data plans.

However, current costs remain high, reflecting the early-stage development of the technology. Experts believe that while satellite internet currently lags behind 5G in terms of speed and latency, ongoing advancements will narrow this gap. In the future, users may enjoy seamless connectivity, whether through terrestrial or satellite networks, depending on their location and needs.

Aiming for global coverage

The journey to effective satellite internet lies in building vast constellations of satellites. Low-Earth orbit (LEO) satellites, which operate at altitudes of 300 to 1,400 kilometers, play a key role in this endeavor. ***See page 3***

Milestone in Offshore Wind Power Test

By LIANG Yilian & CHEN Yu

China's first national offshore wind power research and testing base transmission chain platform in east China's Fujian province began operation on December 26, 2024.

This is the country's first wind turbine ground test platform with independent intellectual property with the most comprehensive testing capabilities in China. It can simulate tests for 25 MW wind turbines under all operational conditions. In the future, it would be able to conduct ground testing and detection of large-capacity offshore wind turbines over 10 MW, regardless of the weather.

China has led the world in cumulative installed capacity of offshore wind power for three consecutive years, entering the era of large-capacity turbines. The growth necessitated a dedicated test site capable of supporting type certification for these advanced turbines.

Jointly invested by the State Grid, China Huadian Corporation Ltd., and other institutions, the offshore wind power base is the only testing center authorized by the National Energy Administration to conduct both type and grid connection certifications. The base includes a land test center and a test wind farm. The land center features a transmission chain platform and a 150-meter blade test platform.

The transmission chain platform integrates full-scale, high-fidelity simulations with unique adjustment functions not found in other domestic test facilities. It also includes the world's largest power grid simulation device, according to Fang Risheng, director of Science and Technology Department of the State Grid Fujian Electric Power Co. Ltd.

The under-construction blade test platform will introduce an ultra-long blade biaxial high-frequency loading test, crucial for advancing offshore wind power technologies, according to Chen Dawei from the Electric Power Research Institute of State Grid Fujian Electric Power Co. Ltd.

Tech Sharing Empowers Global South

International Cooperation

By WANG Xiaoxia

More than three years ago, China proposed the Global Development Initiative at the UN General Assembly on September 21, 2021. China has been sharing its development experience and advanced technologies with other Global South countries, resulting in tangible benefits.

China also supports the cooperation projects of the UN Industrial Development Organization (UNIDO) for the Global South, and shares its modernization experience and industrialization standards to improve other countries' industrial capacities.

To ensure that developing countries, especially least developed countries, benefit equally from artificial intelligence (AI), which plays a pivotal role in enhancing productivity, China's Ministry of Industry and Information Technology and the Shanghai Municipal People's Government supported the UNIDO to establish the Global Alliance on AI for Industry and Manufacturing Centre of Excellence in July 2024.

The year 2024 marks the 40th anniversary of China's accession to the International Atomic Energy Agency (IAEA). For the past 40 years, China has adhered to open cooperation and common development with practical actions. Highlighting the more urgent needs of the Global South in the peaceful use of nuclear energy and technology, it has supported the IAEA to carry out international development assistance and cooperation in various fields. ***See page 4***

WEEKLY REVIEW

Technical Committee for AI Standardization Established

As part of its efforts to promote the growth of the AI industry and enable new industries, China has formed a technical committee for AI standardization. The Ministry of Industry and Information Technology announced this on December 30, 2024. The new committee will be in charge of creating and updating industry standards for AI-related fields.

Technology Innovation Centers to Boost Tourism

China's Ministry of Culture and Tourism said on December 30, 2024 that 11 new technology innovation centers had formally opened for business as part of the initiatives to develop the nation's tourism and cultural industries. Beijing, Liaoning, Zhejiang and Fujian are among the eight province-level regions where the first batch of centers are located.

Lunar Sample Study Applications Approved

The approved list for the eighth round of lunar sample study applications has been made public. The China National Space Administration's Lunar Exploration and Space Engineering Center announced recently that 18 researchers from 16 research institutions will be loaned 8,550.4 milligrams of lunar samples brought by the Chang'e-5 and Chang'e-6 missions.

Parker Solar Probe Sets New Record

According to NASA, its Parker Solar Probe reached a record distance of 6.1 million km from the Sun's surface on December 24, 2024, traveling at 692,000 km/h. It withstood extreme conditions and is functioning normally. This close encounter allows precise measurements, helping scientists understand solar wind origins and space weather.

Fibroblasts Converted into Functional Heart Cells

Researchers from Korea University have recently announced a method to convert fibroblasts into cardiomyocytes by activating the JAK2-STAT3 signaling pathway. The technique enhances cell maturation and function, showing potential for personalized regenerative treatments for heart disease. The findings have been published in the latest issue of the *Experimental & Molecular Medicine* magazine.

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