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New Quality Productive Forces

Low-altitude Economy Takes Off

By WANG Xiaoxia

The low-altitude economy is considered globally as an important strategic emerging industry with vast potential. China's annual Central Economic Work Conference held last December and the 2024 Government Work Report both identified the low-altitude economy as one of China's strategic emerging sectors.

In recent years, China's central government has continuously improved the relevant policies, and local governments have also carried out pilot projects in this sector. The technology and supporting industrial chains have become increasingly mature, laying a solid foundation for the explosive growth of the low-altitude economy going forward. Also, the diverse application scenarios of a low-altitude economy will drive the development of related industries and facilitate new quality productive forces.

Supportive policies trigger potential

The low-altitude economy is a comprehensive economic form that refers to a wide range of industries centered around manned and unmanned vehicles, usually operating below an altitude of 1,000 meters. This includes electric Vertical Take-off and Landing (eVTOL), Unmanned Aerial Vehicle (UAV), helicopter and traditional fixed wing aircraft. Allied economic activities include low-altitude flight, air tourism, passenger transportation, general aviation services, scientific research and education.

Low-altitude airspace has more diverse application prospects than ground traffic, and has huge development potential. By the end of 2023, the size of China's low-altitude economy was estimated to be in excess of 500 billion RMB (about 70 billion USD), with its scale expected to rise to two trillion RMB by 2030, according to the Civil Aviation Administration of China (CAAC).

To seize the opportunity, in recent years, the CAAC has promoted the construction of a low-altitude flight service system, simplified the application and approval procedure of low-altitude flights, and improved the operating environment.

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China's first domestically made polar icebreaker Xuelong 2, or Snow Dragon 2, arrived in Hong Kong for the very first time on April 8, 2024 for a five-day visit. The visit is hoped to promote Hong Kong people's understanding of polar expedition, especially young people's interest and enthusiasm for polar scientific research. (PHOTO: Ministry of Natural Resources)

Editor's Pick

Photovoltaic Industry Has a Sunny Future

By LIN Yuchen

In 2023, China's exports of electric vehicles, lithium-ion batteries, and photovoltaic (PV) products, also known as the "new three items," increased by nearly 30 percent.

Of this illustrious trio, PV products saw a remarkable surge in exports, growing by an accelerated rate of 65.5 percent in 2023. This reflects China's strong competitiveness in the international market, thanks to its outstanding technological advancements and quality in PV products. The country's PV manufacturing sector has become a benchmark industry in the global transition to renewable energy and addressing climate change.

Today, the country is leading the world in both PV installed capacity and electricity generation, widely applied in the solar energy industry, setting the standard for efficient and sustainable energy production.

Seeds of change

This story began in the late 20th

century when China, facing rapid industrialization and soaring energy demands, turned its focus towards renewable energy. The PV industry, still in its infancy globally, caught the attention of Chinese visionaries. They regarded it not just as a technology, but as a pathway to energy independence and environmental stewardship.

One of the key milestones in China's solar energy journey is the development of advanced PV technologies. A notable example is the N-type PV technology, which has revolutionized solar panel efficiency and durability. By employing N-type PV cells, Chinese manufacturers have achieved higher conversion rates, lower degradation rates, and improved performance under challenging environmental conditions. This technological leap has not only enhanced the overall efficiency of solar panels, but has also contributed significantly to reducing the cost of solar energy production, making it more competitive in the global market.

China's commitment to innovation

is further exemplified by its investment in large-scale solar projects. The country has strategically deployed solar farms across vast areas, harnessing the power of sunlight to generate clean electricity on a massive scale. One prominent project is the Longyangxia Dam Solar Park in Qinghai province that began operating in 2013. The park boasts over four million solar panels spread across 27 square kilometers. This mega-project not only demonstrates China's capacity for large-scale renewable energy deployment, but also serves as a model for sustainable energy infrastructure development worldwide.

Exploring new partnerships

Another notable aspect of China's solar energy journey is its emphasis on global collaboration and partnerships. Chinese companies have engaged in strategic alliances with international counterparts, sharing expertise, resources, and best practices to accelerate the development and adoption of solar energy technologies worldwide.

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Healthy China's Outstanding Contribution to the World

By QI Liming

April 7 is the World Health Day. Health is the most crucial indicator of a happy life. Chinese from all walks of life have realized the importance of staying healthy and that they themselves have the primary responsibility of looking after their own health.

Li Bin, deputy director of China's National Health Commission, said, "The level of health literacy of the Chinese is steadily improving at a rate of about two percent every year, and a healthy lifestyle has become the trend."

In June 2021, the World Health Organization (WHO) officially declared China had eliminated malaria. After eradicating smallpox, filariasis, polio and neonatal tetanus, China has exterminated another major epidemic. WHO hailed the reduction of malaria infections in China from 30 million per year to zero as a remarkable achievement.

China's success in eliminating malaria has been widely recognized by the international community. More and more countries are learning from China's experience in malaria prevention and control. Chinese medical aid teams have been

sent to 76 countries and regions.

From eliminating malaria, polio and other major infectious diseases to building the world's largest medical and health service system, China's road to health involves the well-being of about 18 percent of the world's population, providing a "China solution" for improving global health governance.

Qiao Jianrong, WHO's representative in China, said, "The health service system based on primary health care ensures the accessibility of health services and can respond to public health emergencies in a timely and effective manner."

China, Indonesia Open New Chapter in Marine Research

International Cooperation

By Staff Reporters

The first China-Indonesia joint scientific expedition in the Java Trench, the deepest point in the Indian Ocean, wind-up successfully on March 28 with the research vessel, Tansuo-1 (Discovery One), returning to Sanya city in Hainan province, south China.

It was the first expedition in the world to carry out large-scale and systematic manned deep diving research in this area.

The expedition team, consisting of experts from 11 universities and institutions from both countries, set sail from Sanya on February 8 for a 50-day deep-sea diving mission in the Java Trench.

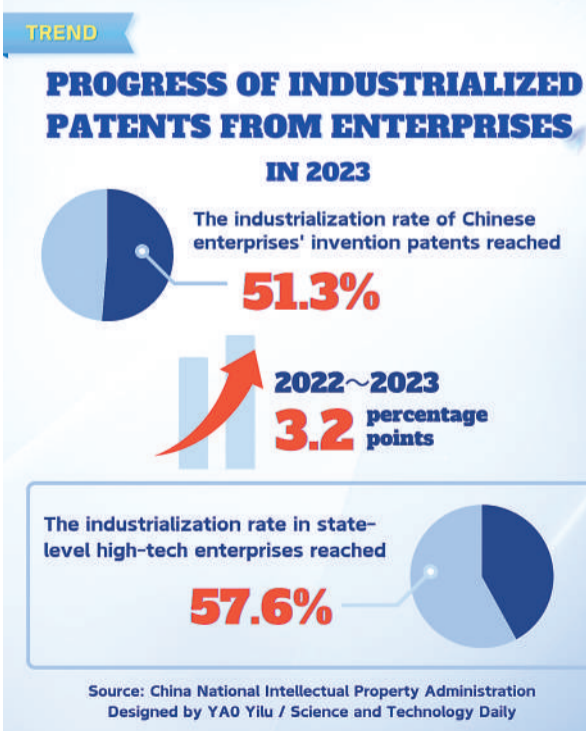
The Fendouzhe (Striver), the deep-sea manned submersible carried by Tansuo-1, completed 22 diving missions, 14 of which were at a depth of more than 6,000 meters. Six were joint diving missions, creating the deepest dive record for Indonesia.

The expedition obtained valuable samples of macrobenthos, including several new abyssal species, and rocks and sediments from the Java Trench, as well as high-definition videos and photographs. It also found two active low-temperature hydrothermal regions in the forearc basin, which provided important support for further understanding geological tectonic activities, biodiversity and co-evolution of geological life in the Java Trench.

At the welcome ceremony for the joint expedition held on March 22, the Chinese ambassador to Indonesia Lu Kang said, "China and Indonesia have been deepening research collaboration in marine sciences in recent years. I hope scientists from our two countries can achieve more high-quality research results in the future and contribute to the blue economy and sustainable development."

Luhut Binsar Pandjaitan, Indonesia's coordinating minister for maritime affairs and investment, said the joint expedition has opened a new chapter for the two countries to strengthen maritime cooperation. He hoped the two countries would expand scientific cooperation and cultivate more scientists and engineers for Indonesia.

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