

# Ministers Elaborate Moves to Boost Innovation

## Policy

By CHEN Chunyou

"The Ministry of Science and Technology will prioritize its work in three areas: intensifying efforts to address crucial problems in science and technology, bolstering the cultivation of strategic forces, and deepening the reform of sci-tech systems and mechanisms," Minister of Science and Technology Yin Hejun told journalists at the first ministers' corridor during the 2024 Two Sessions.

Although the 2024 Two Sessions have wrapped up, the ministers' corridor interviews about supporting sci-tech development remain relevant, setting the tone for China's ongoing sci-tech development with clear-cut policy support.

### Solid support in place

Jin Zhuanglong, minister of industry and information technology, said as the new round of in-depth sci-tech revolution and industrial reform develops, industrial development opportunities and challenges coexist.

Jin said the Ministry of Industry and Information Technology (MIIT) will promote high-quality development of the key industrial chain of the manufacturing industry, and accelerate the construction of a modern industrial system with advanced manufacturing as the backbone.

The MIIT will implement the work plan for the stable growth of 10 industries, which took effect in 2023. These industries are iron and steel, nonferrous metals, petrochemicals, chemicals, building materials, machinery, automobiles, electric power equipment, light industry and electronic information manufacturing.

How can the integration of sci-tech innovation and industrial innovation be accelerated? Jin's answer was, by "devel-



Workers step up production to meet the influx of orders at a new energy automobile assembly line in Nanchang, Jiangxi province. (PHOTO: VCG)

oping advanced technologies, realizing their industrialization, and speeding up the formation of new quality productive forces."

China has 178 high-tech zones and 465,000 national high-tech enterprises. It is necessary to give full play to the main role of enterprises in innovation, and continue promoting building a national manufacturing innovation center, he said.

Strengthening patent transformation and application plays an important role in promoting high-quality growth, said Shen Changyu, commissioner of the China National Intellectual Property Administration (CNIPA).

"This year, China will fully implement the patent open licensing system," Shen said. Under this system, patentees may publish a declaration to license their patents in CNIPA gazettes. Those agreeing to the asking

prices and terms of the patentees may acquire the relevant patent license quickly, which will "reduce the systematic transaction cost and improve patent conversion efficiency."

According to Li Yunze, minister of the National Financial Regulatory Administration (NFRA), the NFRA will support emerging industries and future industries, and promote the digital and intelligent transformation of traditional industries to create new momentum and advantages for growth.

### Quality development matters

The ministers underpinned not just growth, but quality growth. Luo Wen, director of the State Administration for Market Regulation, said, "We will select a group of leading standard-led enterprises in such fields as information and communications, and new energy vehicles, and launch some landmark projects with improved quality to strengthen

the industrial chains."

These landmark projects will be implemented around key industrial chains such as industrial robots and large-scale application of the BeiDou Navigation Satellite System. Measures will be taken to accelerate the research and formulation of technical standards of key processes as early as possible, Luo added.

The development of enterprises needs sustainable financial support, especially those that use special and sophisticated technologies to produce novel and unique products.

In January, the NFRA issued a document to provide full life-cycle financial services to sci-tech enterprises. "Currently, the NFRA is exploring using financial asset investment companies as a platform to further expand the scope of equity investment pilots and increase support for sci-tech enterprises," Li said.

## Case Study

# Community Service Key to Starting Business

By LONG Yuemei & CHEN Chunyou

The Songshan Lake International Innovation and Entrepreneurship Community, located in the Dongguan Songshan Lake High-tech Industrial Development Zone, Guangdong province in south China, has made notable progress in high-tech enterprise cultivation over the past few years. From less than 10 high-tech enterprises in 2020, the community had developed 116 by 2023.

The "Songhu Cup" Innovation and Entrepreneurship Competition held at the end of 2023 attracted 48 sci-tech start-ups from across the country to settle in the zone, of which nearly one-fifth chose to settle in the community.

The reason behind the community's increased attraction to inbound enterprises is its enterprise-friendly services and policies.

With more than 200,000 industrial enterprises and world-class manufacturing industrial clusters in Dongguan, the community can provide complementary services and massive application scenarios for start-ups, along with a high product iteration efficiency, which makes it highly competitive in the market.

It also attracts upstream and downstream enterprises specializing in new materials and new energy. With targeted investment promotion, a vibrant cluster of industrial chains is taking shape in this sector.

Pooling technological innovation resources, the community has established the Dongguan electro-acoustic industry base, an advanced manufacturing inno-

vation workshop and other supporting bases for enterprises' high-quality development.

In addition, the community offers comprehensive services for the whole cycle of enterprise development, from marketing and promotion to financial services, intellectual property rights and policy interpretation.

It welcomes support for inbound enterprises in terms of providing start-up funds and co-sharing instruments and equipment.

In January, the Dongguan Yuansheng Intelligent Technology Co., Ltd. (Yuansheng), a provider of home care products for elders, won the Songshan Lake Angel Investment Fund. The fund has been established to gather talented individuals and innovative teams for the zone and support the development of start-ups and to date, has invested in 15 enterprises in the zone.

"Thanks to the financing, we will apply large model technology in home care and nursing scenarios," Deng Longsheng, founder of Yuansheng, said.

The community has become one of the most innovative resource-concentrated areas in the Pearl River Delta region, boasting 12 new R&D institutions, more than 200 R&D platforms and 5,000 research instruments. So far, it has attracted about 5,000 entrepreneurs and research talent.

The community strives to promote the growth of enterprises in the zone and cultivate a group of leading enterprises that can influence and stimulate the surrounding regions so that the zone can fulfill its role as a core engine driving high-quality development of Dongguan.

# China Unveils Equipment Renewal Policy

By YU Haoyuan

In the middle of March, China released an action plan to encourage large-scale equipment renewal and the trade-in of old consumer goods.

The plan will implement four key actions: equipment renewal, trade-in programs for old consumer goods, recycle and reuse initiatives, and improving standards.

Specifically, the government will promote the production and use of advanced equipment, increase the share of advanced production capacity, and facilitate greater access to high-quality, durable consumer goods for households. Resource recycling and the overall quality of national economic flows will be improved.

Taking action to renew equipment

is the first step in a general shake-up for the government in this field. This includes promoting the upgrading of equipment in major industries, speeding up the renewal of equipment in construction and municipal infrastructure sectors, replacing urban buses with electric ones, updating old agricultural machinery, and enhancing the quality of education, cultural, tourism, and medical equipment.

The second step is implementing the "trade-in" program in the consumer goods sector, which covers automobiles, household appliances, and home decoration consumer goods.

Third, initiatives will be taken for recycling and reusing resources. This initiative involves improving the infrastructure for recycling used products and equipment, supporting the trading of

second-hand goods, advancing remanufacturing and cascade utilization, and fostering high-level resource recycling.

Meanwhile, the fourth action focuses on striving to improve standards, a very necessary endeavor. It includes refining the standards for energy consumption, emission, and technical products. This will result in the subsequent improvement of resource recycling, while the domestic standards will be aligned with their international counterparts.

By 2027, investment in equipment across different sectors including industries, agriculture, construction, transportation, education, culture and tourism, and healthcare is projected to increase by over 25 percent compared to 2023.

Besides, the energy efficiency of major energy-consuming equipment in key industries will achieve energy-saving

standards. There will be greater capacity to meet top-level environmental performance criteria. In addition, there will be over 90 percent penetration of large-scale industrial enterprises by digital R&D tools while there will be over 75 percent numerical control in key processes.

What's more, the volume of scrapped automobiles is anticipated to double that of 2023, while second-hand car transactions will see a 45 percent increase over 2023. Also, the volume of scrapped household appliances will rise by 30 percent compared to 2023, meaning a further increase in the proportion of recycled materials in terms of resource supply.

Pundits believe that all these efforts will boost investment and consumption, which could benefit present and long-term economic development.



The Songshan Lake International Innovation and Entrepreneurship Community in Dongguan city, Guangdong province has emerged as a new hub for innovative enterprises to settle down and grow. (COURTESY PHOTO)

# 'Museum Fever' for Science Popularization

By SHI Shi & ZHONG Jianli

China's latest Government Work Report highlighted the importance of promoting science outreach to the general public.

As part of national efforts to enhance scientific literacy, science museums and exhibition centers play a key role in helping the public build a scientific worldview and strengthen their ability to think critically about science-related issues.

New data shows that the proportion of citizens with adequate scientific literacy in China has reached 14.14 percent, an increase of 1.21 percentage points from 12.93 percent in 2022.

China has accelerated construction of its science museums and centers in

recent years. By tailoring exhibits to local contexts and sharing resources, they are opening doors to science for more people and boosting overall scientific understanding by the population.

"Science popularization is a process of perfecting scientific cognition through practice, theory and more practice," said Wang Yanxin, an academician of the Chinese Academy of Sciences and president of China University of Geosciences (CUG) in Wuhan.

The Yifu Museum of CUG was recently selected as one of China's national bases for popularizing natural resources in 2023. Wang said that as it is a museum set up in the university, it focuses on earth science exhibitions and is open to the public. A number of exhibitions like "simulating the moonsurface and

meteorites" and "questioning geology and exploring the Yangtze River" have attracted much public attention.

Going forward, science museums should further maximize their resources, and stimulate participation from all sectors of society while still ensuring their scientific nature, said Wang.

Since last summer, "museum fever" has continued to escalate across the nation. Tapping potential for science education in museums is also essential to improve the public's scientific literacy.

Shanghai Science and Technology Museum Director Ni Minjing said, "When children enter museums, they see real objects, become emotional, and may even rediscover things or become more knowledgeable."

To cultivate true innovation capa-

bilities, experimental teaching needs boosting and moving beyond lecture-based formats. Museums have advantages in developing more diverse, hands-on learning aligned with technological development, said Ni.

Ni also suggested strengthening training for museum educators, which could then better integrate them with science teaching. In addition, they may become science advisors to primary and middle schools, developing more science activities and exhibits tailored to youth interests.

Meanwhile, more privately-run museums are emerging with unique facilities and interactive formats. Experts said various forms of museums should be encouraged to offer more science resources through digital and online means.

## Lithium-ion Batteries: An Emerging Industry

From page 1

Today, however, Zaozhuang's focus is on cultivating lithium electricity as a leading industry, replacing fossil energy with lithium electricity.

"Zaozhuang was originally a resource-exhausted city. But over the years, it has successfully transformed and formed a complete cluster of industrial chains around lithium," Wang Ling, a member of the National Committee of the Chinese People's Political Consultative Conference, told *Science and Technology Daily*.

Zaozhuang has over 100 lithium battery enterprises, an increase of nearly five times compared with 2020, forming a full-life industrial ecology cycle.

In Fujian province, about 1,200 km south of Zaozhuang, lithium battery exports are in full swing.

According to statistics from Fuzhou

and Xiamen Customs, in 2023, Fujian exported lithium batteries valued at 128.75 billion RMB, an increase of 49.5 percent.

### Global cooperation opportunities

The Polish Alternative Fuels Association released a report last year which states that Poland has the world's second largest lithium battery production capacity, more than the U.S., second only to China's.

Aleksander Rajch, chief expert of the association, said in an interview with *Economic Information Daily* that he prefers to see China as a partner rather than a competitor.

"China has huge resources of lithium and other key raw materials. In addition, China has a huge market and potential," Rajch said. "Chinese lithium batteries are entering the European market and bringing technological innovation."