Policy

Leveraging Sci-tech to Advance Rule of Law

By ZHONG Jianli

The report to the 20th CPC National Congress has stressed the need to exercise law-based governance on all fronts and advance the rule of law in China.

As early as January 2021, China officially issued its plan (2020-2025) on building a law-based country, which puts forward the concept of "smart rule of law" for the first time.

The plan makes it clear that modern scientific and technological means, such as big data, cloud computing and AI, should be fully utilized to build a law-based country in a digital, networked and smart way.

With numerous practices, information technology has prompted profound changes in achieving a smart, law-based national governance system.

Smart legal service system

The people's court mediation platform has been established to support a new pattern of online dispute resolution.

By September 2022, people's courts at four levels across the country, as well as more than 90,000 mediation organizations and 350,000 mediators had joined the platform to provide online dispute resolution services for public, which greatly helps improve the efficiency of handling disputes.

A judge at Suzhou Intermediate People's Court decides on a case via video link and live broadcast. (PHOTO: VCG)

What's more, the courts also provide 24-hour online litigation services. Since the outbreak of the COVID-19 pandemic, online litigation in people's courts has risen, with more than 11 million cases filed online in 2021 nationwide.

Smart trial system

New technologies including big data, AI and blockchain have been used in judicial work to help judges find facts and apply the law.

The whole process of online case handling based on electronic files was implemented. Since 2016, the Supreme People's Court has guided courts at all levels to create electronic files, so that judges can conduct examinations and deliberations of cases based on the electronic files throughout the trial process.

In addition, various intelligent trial assistance systems were developed to greatly reduce the routine work of judges. Relying on advanced AI technology, they provide intelligent case-handling tools such as automatic case information filling, legal knowledge service, and automatic transcription of trial recordings.

All these help reduce the routine work of judges by more than 30 percent and improve the trial efficiency by more than 20 percent.

Judicial big data application

The people's courts have made use of information technology to build a big data management and service platform, and used judicial big data to improve judicial administration and serve economic and social governance.

Four platforms have been established to publicize trial procedures, trial activities, judgment documents, and execution information respectively, facilitating the disclosure of case information in accordance with the law and building of an open, dynamic, transparent and convenient judicial mechanism.

By September 2022, more than 20 million trials had been broadcast live on the website, with in excess of 50 billion visits. Meanwhile, more than 130 million judicial documents had been released and been accessed more than 90 billion times.

Digital Economy Entwined with Real Economy

By Staff Reporters

Developing digital economy has been regarded as an important strategy by many countries to revitalize their real economy, and China is no exception.

China's digital economy has developed rapidly and made remarkable achievements. By 2021, the scale of China's digital economy had reached 45.5 trillion RMB, accounting for 39.8 percent of the country's GDP. In the process, it has become one of the main engines driving China's economic growth.

At the sub-forum of Boao Technology Innovation Conference 2022 on November 27, the China Center for Information Industry Development (CCID) and Xinhuanet jointly released the *Report on the Integrated Development of Digital Economy and Real Economy (2022)*.

The report says that, through years of development, China's digital economy has been deeply integrated with its real economy, which has empowered the development and transformation of the real economy and benefited the formation of a new development pattern.

The integration of the two economies shows ten development trends, including the acceleration of breakthroughs on next-generation IT innovation, transformation of digital enterprises to new-type entity enterprises, and more coordinated development of the manufacturing industrial chain and supply chain.

What's worth mentioning is that "5G + Industrial Internet" has played an important role in digitalizing industries.

More than 4,000 "5G+ Industrial Internet" projects are now under construction in China, covering a large number of pillar industries of the national economy such as aircraft, shipping, automobiles, electronics, energy and mining, said Zhang Yunming, vice minister of the Ministry of Industry and Information Technology, at the recently held 2022 China 5G+ Industrial Internet Conference.

The report also puts forward suggestions for the integrated development of the digital and real economies in future, such as speeding up transformation of enterprises, and promoting upgrading of industrial parks.

Hi-tech Zones

New Cross-border E-commerce Pilot Zones Approved

By LI Linxu

In its latest move to build a trade powerhouse, China has approved a new batch of cross-border e-commerce integrated pilot zones.

33 cities and regions are among the list newly approved by the State Council, including Langfang, Yuncheng, Baotou, Anshan, Heze, and Lhasa.

In recent years, the model of cross-border e-commerce integrated pilot zones has become increasingly mature, said Hong Yong, an associate research fellow at an e-commerce research institute under the Ministry of Commerce.

This year alone, two batches of such pilot zones have been approved, demonstrating the country's resolve to further expand opening up, added Hong.

Currently, the country has established a total of 165 such pilot zones, covering 31 provinces, autonomous regions and municipalities.

Of particular note is that an increasing number of cities in central and western China have become new entrants of these pilot zones.

The zones are urged to learn experience from previous pilot zones and leverage the role of cross-border e-commerce in transforming traditional industries, promoting industrial digitalization, and upgrading foreign trade.

More supportive measures will be rolled out by relevant government departments to help foster a favorable environment for the development of these pilot zones.

One of such measures is to encourage enterprises to jointly construct and use overseas warehouses.

According to the report to the 20th CPC National Congress, China will upgrade merchandise trade, develop new mechanisms for service trade, and promote digital trade, in order to accelerate China's transformation into a trader of quality.

Latest statistics show that in 2021, China's cross-border e-commerce turnover reached 1.92 trillion RMB, up 18.6 percent year-on-year.

Cross-border e-commerce is gaining new momentum and has become a new channel for foreign trade transformation, said an official from the Ministry of Commerce, believing that the new pilot zones will further invigorate the foreign trade enterprises.

Int'l Cooperation Highlighted in NSFC Development Plan

By LI Linxu

China is going to set up science funds available to scientists around the world, according to a development plan of the National Natural Science Foundation of China (NSFC). The plan's full text has been made public on the website of NSFC, the major funding agency for the country's basic research in natural science.

While highlighting 115 prioritized research subjects, NSFC also vows to expand opening up and deepen international cooperation in exploring global science frontiers.

Under the plan, there are three types of international cooperation programs, namely international/regional cooperation and exchange program, international/regional cooperation and research program, and foreign scholar research fund program.

The first type of program will support relevant personnel exchanges, and organizing or attending academic conferences, in order to lay a solid foundation for substantial collaboration. Based on mutual benefits, the second type of program will focus on the prioritized research subjects and international big science projects. Meanwhile, the third program will give support to foreign experts undertaking basic research in China.

Domestic scholars are encouraged to lead, organize or participate in international science programs, said NSFC, calling on them to actively take part in the global innovation network.

Over the years, China has made significant achievements in international sci-tech cooperation.

By leveraging its unique role of coordinating cross-border research programs, NSFC is continuing to expand its cooperation network and funding areas.

Statistics show that NSFC has signed 100 cooperation agreements/MoUs with science funding agencies and research institutions in 53 countries/regions.

Fuling Emerges as Major Synthetic Materials Producer

Case

By CHEN Chunyou & YONG Li

Previously, many Chinese knew Fuling district in southwest China's Chongqing municipality for producing a kind of unique preserved pickle. Today, however, it has a new calling card as a giant producer of synthetic new materials.

Fuling is the first location in China to commercially develop shale gas fields, which helped form an advanced synthetic new material industry cluster in recent years.

Globally, butadiene, acrylonitrile and adipic acid are used to produce adiponitrile.

In the past, Chongqing Huafon Chemical Co., Ltd. (Huafon), a new materials provider, imported adiponitrile from foreign manufacturers. With encouragement from the Fuling government, Huafon formed teams with researchers from local universities, and managed to use the adipic acid to produce adiponitrile. It solved problems occurring in the traditional process, such as high consumption of adipic acid and low control of its stability. In addition, the by-products of the adipic acid process were reused while high-quality adiponitrile products were produced.

Nylon 66, synthesized by polycondensation of ethylenediamine and adipic acid, is widely used in engineering plastics, industrial fibers and civil fibers. Recently, a piece of equipment, which was manufactured through patented technology of Huafon, was put into use. It will help further meet the domestic demand for nylon 66 raw materials.

Independent innovation is the key to expanding the industrial chain, said Yin Zhongyou, director of the Fuling Bureau of Science and Technology.

Now, Fuling is accelerating the construction of Baitao New Material Scitech City, which is home to new material enterprise clusters. Yin said the district will establish a number of influential R&D institutions, so as to help local enterprises to obtain patented technology and equipment, and achieve additional breakthroughs in the industrial chain.

Innovation Ecology Drives Competitive Spirit in Shantou

By CHEN Chunyou & YE Qing

Enterprises in high-tech zones can benefit from wide-ranging policies and infrastructure, and have access to talented individuals, all in an atmosphere of innovation and entrepreneurship. These features allow enterprises to focus on their advantages, and chase more growth opportunities to increase their competitiveness in the market.

Shantou High-tech Zone (SHZ) was established in 1992, and upgraded to national high-tech zone status in 2017. The zone has long been a facilitator in accumulating resources and creating platforms for local enterprises to meet regional needs.

How to decrease the environmental pollution caused by recycling used lithium batteries is a big technological difficulty. To realize the harmless treatment of pollutants, Guangdong Guanghua Sci-Tech Co., Ltd., a national torch plan key high-tech enterprise in the zone, established a cooperative team with researchers from the University of Science and Technology Beijing.

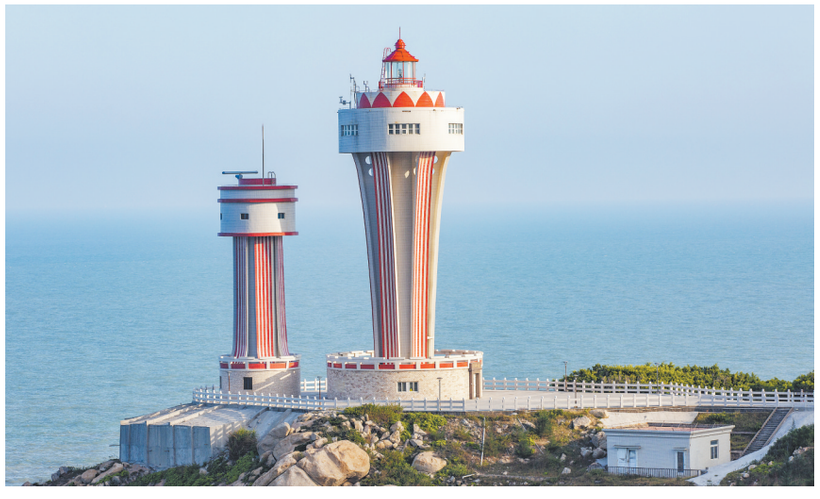
The research team developed technologies for cascade recycling of elements. The recovery rate of lithium batteries reached more than 95 percent, and the recovery rate of nickel, cobalt, and manganese was more than 99 percent.

Another noteworthy technology is the deep-hole drilling technology, developed by Shantou Huaxing Metallurgical Equipment Co., Ltd. and the National Engineering Research Center of Near-Net-Shape Forming for Metallic Materials at the South China University of Technology. It can better prolong the service life of blast furnace equipment, and reduce manufacturing costs. This technology won second prize at the National Science and Technology Progress Awards.

In 2021, Torch High Technology Industry Development Center, under the Ministry of Science and Technology, announced the 2021 pilot list for cultivating innovative industrial clusters. The software and new information technology service industry in SHZ was on the list.

In order to better develop this industry, SHZ signed an in-depth cooperation framework agreement with the adjacent Shenzhen High-tech Zone in the same year. This led to the construction of the Shenzhen-Shantou new-generation electronic information industry park.

The first phase of the park has been completed and it is planned to introduce 80 electronic information-related enterprises, and more than 2,000 experts in this sector. This will help the local traditional upstream and downstream enterprises to optimize the manufacturing process, and achieve the targeted output value of more than five billion RMB.



A view of the Nan'ao Island in Guangdong's Shantou city. (PHOTO: VCG)