

Policy

# High-level Opening up Attracts Global Resources, Production Factors

By ZHONG Jianli

For more than 40 years, China has resolutely adhered to its opening up policy, and the report to the 20th CPC National Congress has pledged to continue this policy and promote high-standard opening up in order to leverage the strengths of China's enormous market, and attract global resources and production factors with the country's strong domestic economy.

To foster a world-class business environment for market players from around the globe, the Chinese government has, among other initiatives, released a new industry catalog to attract foreign direct investment in more sectors, along with making appropriate reductions to the negative list for foreign investment.

"In recent years we witnessed a government with a clear market-focused approach, optimizing approval processes, services, and supervision. The result is an improved administrative efficiency and business competitiveness, hence stimulating even further the market vitality and social creativity," said Gregoire Cuny, president of Vitesco Technologies China. He added that guided by the government's long-term industrial planning and dual-innovation policy, more and more foreign enterprises are now scaling up their investment in China.



An aerial view of Hainan Yangpu Economic Development Zone, which is an important part of the Hainan Free Trade Port. (PHOTO: VCG)

Ariura Toru, head of Business Strategy Office of Fujitsu (China) Holdings Co. Ltd., has similar ideas. He said a series of Chinese policies in recent years made him deeply appreciate the positive changes in the business environment, such as encouraging multinational companies to establish global innovation centers in Shanghai and a series of other initiatives, all of which are creating a better business environment for multinational companies.

The statistics show that in the first

10 months of 2022, the actual use of foreign capital in China reached 1.09 trillion RMB, up 14.4 percent year-on-year on a comparable basis. The actual use of foreign investment in high-tech industries grew by 31.7 percent, including 57.2 percent in high-tech manufacturing and 25 percent in high-tech service industries.

"China's commitment to further dynamize high-level opening-up will benefit enterprises both domestically and overseas, while injecting more confi-

dence and impetus into the global economic recovery," said Kilian Aviles, senior vice president of DEKRA APAC and managing director of China in DEKRA group. He further noted that China has placed a high priority on strengthening capacity for innovation and R&D, and China's potential for innovation will only continue to grow.

Through such platforms as the China International Import Expo, China International Fair for Trade in Services, and China International Consumer Products Expo, the country has opened its doors to the outside world in a wider, broader and deeper way.

China has long been sharing its advanced technological achievements from independent R&D with the world, and high-end Chinese brands are becoming increasingly popular and more welcomed by international customers. That's according to Chris Pereira, founder and CEO of North American Ecosystem Institute.

"In more ways than one, China is shaping the future of the global technological landscape," said Ronen Mense, APAC president & managing director of AppsFlyer, expressing his confidence in China's technological development. Mense believes that this is particularly true in his field of marketing measurement, where China remains the blueprint of economic success and ecosystem collaboration.

# Precise Measures for Better Pandemic Control

By Staff Reporters

Since the outbreak of the COVID-19 pandemic, China has invested in targeted and pragmatic efforts to contain the spread of the virus.

Adopting more scientific and precise measures is the key to achieving the best results with minimum costs, while minimizing impact on economic and social life.

This November, the Joint Prevention and Control Mechanism of the State Council released 20 measures to further optimize the country's COVID-19 strategies.

According to the new measures, it will no longer identify the secondary close contacts and medium-risk areas, and will cancel the circuit breaker mechanism, under which inbound China flights were suspended if it was found that an airline had a certain number of passengers onboard who, upon landing, tested positive for COVID-19.

Seen from the stages of virus evolution, it is highly likely that COVID-19 will stabilize and become less virulent. The dynamic variation of the virus has

always been the prerequisite for optimizing and adjusting anti-virus measures, Zhang Boli, an academician at the Chinese Academy of Engineering, told *Science and Technology Daily*.

According to recent data, most of the confirmed cases are asymptomatic. The proportion of severe illness and death is low, which means that the virus is less pathogenic, said Zhang.

Awareness is still required of the complexity and recurrence of the pandemic. The adjustment of the control measures is based on the changes of the situations, said Zhang, noting that only by resorting to more scientific and precise prevention and control measures can a balance be struck between pandemic prevention and socioeconomic development.

Zhang warned that adhering to wearing masks, washing hands frequently and having few gatherings is a very effective control measure. Those having close contact with an infected person are suggested to take traditional Chinese medicine as early as possible, to reduce the possibility of being tested positive.

# Data Centers to Go Green

## Case

By CHEN Chunyu

Data centers, powered by enormous amounts of electricity, have never been so vital. They are becoming the key infrastructure supporting development of digital transformation and being an important foundation of the digital economy.

A large data center can use as much electricity as a town. The stark reality of how much power is needed to drive these centers comes into clear focus after seeing data released by the Ministry of Industry and Information Technology (MIIT), which shows that China had more than 450 large and ultra-large data centers in use by the end of 2021.

Not only are they a drain on power supply, but the centers have also become major carbon emission sources. The data centers clearly need to be more energy efficient in IT systems, refrigerating systems, lighting, and electric equipment, along with having a minimal impact on the environment.

Fortunately, the power usage effectiveness (PUE) of data centers continues to improve in China. The average PUE of national green data centers in 2021 dropped to 1.3. Among them, the annual PUE of Chindata's energy data industrial base, called Taihang Mountain Energy and Information Technology Industrial Campus of the Pan-Beijing Area, located in Datong city, north China's Shanxi province, was lower than 1.2.

The base has an IT volume of 50 megawatts, and is one of the largest intelligent computing data center clusters with the highest power density in China. It developed a series of energy-saving

technologies and uses green measures to manage equipment in the data center operation process. It won the title of National Green Data Center in 2020.

Now, the base realizes a 100 percent green power application by adopting a direct power supply mode, which is implemented by three parties, including local power distribution enterprises, energy storage power stations and Chindata Group.

Another example is GDS, whose four data centers, located in Langfang, Chengdu, Beijing and Shanghai, were rated as 2021 National Green Data Centers. One case in point is the Beijing No. 6 data center (BJ6), which enhances its advanced energy efficiency management system by maximizing the use of natural cooling throughout the year and implanting AI controlled technologies into the building automation system. In addition, it actively participated in green energy purchases. From December 2020 to November 2021, BJ6 achieved a PUE of 1.25 with a full-year carbon emission reduction of over 2,200 tons.

To accelerate the construction of green data centers and lead them to take an efficient, low-carbon, intensive, and circular green development path, MIIT, coupled with five other departments, released a notice in November to choose new state-level green data centers.

Of particular note is that the green data center evaluation index system has been greatly adjusted, now providing a specific path for the green development of the data center sector in the future.

While further improving the evaluation benchmark of PUE, data centers will also be guided to improve the utilization level of renewable energy. Meanwhile, future construction of centers is encouraged in areas with abundant wind resources and suitable climate, according to the notice.



A view of the Chindata's energy data industrial base in Datong city, Shanxi province. (PHOTO: Chindata Group)

# Boost for Digital Transformation of SMEs

By LI Linxu

In its latest push to advance high-quality development, China has issued a guideline to facilitate the digital transformation of small and medium-sized enterprises (SMEs).

Focusing on the digital transformation capacities of SMEs, five measures have been put forward by the guideline recently released by Ministry of Industry and Information Technology (MIIT).

These measures include carrying out digitalization evaluation, advancing management digitalization, launching business digitalization, integrating digitalization ecology, and optimizing digitalization practices.

Given its large number and wide business scope, SMEs are not only a key part but a difficult point of the country's digital transformation, said an official from MIIT, adding that their successful transformation is critical to the high-quality development of the country's

economy.

Statistics show that by the end of 2021, the number of SMEs had exceeded 48 million, making up 99 percent of all enterprises in China.

Policy support will be strengthened, said MIIT, vowing that more resources will be invested in the areas of technology, capital, service, and talent for SME transformation.

The construction of new-type infrastructure such as industrial Internet, AI, 5G and big data, as well as relevant public service systems, will be speeded up, so as to create a more favorable environment for the digital transformation of SMEs.

SMEs are urged to actively carry out digital transformation in light of their own conditions, while digital service providers and Internet platforms are urged to develop more convenient solutions for the issues faced by SMEs.

Under the guideline, replicable and promotable experience will also be de-

veloped to bolster the digital transformation of SMEs.

According to an earlier plan, about 4,000 to 6,000 SMEs selected from 100

industries, including automobile, textile and pharmaceutical sectors, are expected to be nurtured as digital transformation models during 2022-2025.



Digital technologies are applied in an embroidery enterprise in Zhuji city, Zhejiang province. (PHOTO: XINHUA)

# Chinese Technology Stars at Qatar World Cup

From page 1

The AI Kharsaah photovoltaic (PV) power station, contracted by Power Construction Corporation of China, can provide about 1.8 billion kWh of clean power annually for the country, meeting demands of about 300,000 households and reducing 900,000 metric tons of carbon emissions. Chinese-built PV power stations are also providing green and stable power for Qatar during the World Cup.

## Water-saving irrigation

At the World Cup, the technology applied to the irrigation and maintenance of soccer pitches was developed by China's Ningxia University.

Located inland, Ningxia Hui Autonomous Region suffers from an arid climate and severe water shortage, and it has rich experience in improving water usage efficiency.

According to Reuters, a Qatari stadium takes 10,000 liters of water per day

to irrigate in winter. Paradoxically, Qatar is severely short of fresh water, while desalination technology uses large amounts of crude oil.

The Chinese technology utilizes wind and solar power to lift water from underground, and uses the Internet of Things to operate smart control of irrigation.

Since 2016, with support from the Department of Science and Technology of Ningxia, Ningxia University started to

promote the water-saving irrigation equipment and technology in Arab countries, and trained a group of Arab technicians. The large-scale application was achieved successfully in typical arid areas of Oman, the United Arab Emirates, Egypt and other countries.

In 2020, China and Qatar reached a cooperation agreement on building a technology transfer center. Over the past two years, technicians have installed and upgraded Chinese equipment in Qatar, so that its smart water-saving irrigation technology shines in the World Cup stadiums.

# Indonesia Bullet Train Tracks Closer International Collaboration

From page 1

The commute between Jakarta and Bandung would be shortened from three hours to 40 minutes with the HSR.

In the middle of construction, the Chinese engineering team cooperated closely with the government bureaus of Indonesia, to overcome extreme terrain

while accommodating local cultures and traditions in design.

"The designing of Jakarta-Bandung HSR takes into full account the characteristics of local Muslim communities in Indonesia," said Wang Wenbo, a staff member at China Railway Design Group, adding that all stations have been

equipped with special toilets and prayer rooms for Muslims.

Many of the latest achievements of China's high-speed railway technological innovations have been applied, such as advanced precision measurement and control systems and earthquake early warning monitoring.

Back in 2015, when China won the construction bid over its Japanese rival, Indonesia's State Owned Enterprises Minister Rini Soemarno confirmed that Indonesia chose the Chinese bid because it did not demand any Indonesian government financing or government guarantees.