

# Advancing New Industrialization for Chinese Modernization

## Policy

By Staff Reporters

Chinese President Xi Jinping has made an important instruction on advancing the new industrialization to lay a strong material and technological foundation for Chinese modernization. His instruction was read out at a national meeting on pushing forward the new industrialization held on September 22-23 in Beijing.

Xi called for efforts to adapt to and lead the new round of scientific and technological revolution and industrial transformation, seek high-quality development in promotion of new industrialization, and integrate the construction of a manufacturing powerhouse with the development of the digital economy and industrial informatization, according to Xinhua.

Chinese Premier Li Qiang, who attended the meeting, stressed the importance of improving the resilience and safety of industrial and supply chains, accelerating the improvement of China's industrial innovation capacity, and constantly promoting the optimization and upgrading of the country's industrial structure.

Li also advocated deep integration of digital technology and the real economy, and the green development of the industrial sector.

China's new industrialization has shown remarkable results. China is the only country in the world with all the industrial categories mentioned in the United Nations industrial classification.

Its scale of manufacturing has been the largest for 13 consecutive years, and its output of new energy vehicles and photovoltaic industries leads the world.

Wang Weiming, director general of the First Department of Equipment Industry of the Ministry of Industry and Information Technology, said high-end



Employees work at a digital assembly line in Geely Changxing New Energy Automobile Company in Huzhou city, Zhejiang province. (PHOTO: VCG)

equipment manufacturing should be focused on. Besides, major projects should be implemented to support the new industrialization.

Enterprises should keep in mind new development concepts and work hard on innovation, said Lin Chao, a senior engineer at the China Railway Siyuan Survey and Design Group, adding that his company aims to create a Chinese-style intelligent survey and design platform for high-speed railways

to make engineering designs more digitalized and intelligent.

Zheng Lei, director of Sichuan Communications Administration, said Sichuan province will accelerate the construction and application of new information infrastructure, promote deep integration of informatization and industrialization, and accelerate large-scale application of "5G + industrial Internet" for high-quality economic and social development.

# Setting Ethical Guardrails for R&D

By LI Linxu

In its latest efforts to set ethical guardrails for science and technology, China has unveiled a range of trial measures for the ethical reviews of R&D activities.

The document, jointly released by 10 government bodies, including the Ministry of Science and Technology (MOST), the Ministry of Education, and the National Health Commission, will take effect on December 1, 2023.

It puts forward a series of comprehensive and generic measures for the ethical reviews of R&D activities in various sectors, as well as unified requirements for the basic procedures, standards and conditions of ethical reviews, said an official from MOST.

With a total of 56 measures, the document is expected to lay an institutional basis for relevant authorities and innovation entities to conduct such reviews.

R&D activities involving human participants, including tests, surveys and observations using human beings as research subjects, as well as those activities using human biological samples and personal information data, are subject to ethical reviews in accordance with these measures.

R&D activities involving experimental animals shall also carry out such ethical reviews.

For those activities that are not directly involved with human participants or experimental animals, but may pose ethical risks or challenges in life and health, ecological environment, public order, and other fields, the ethical reviews are also required.

Universities, R&D institutes, health-care and medical institutions, and enterprises are responsibility entities for the ethical review of their own R&D activities.

For those entities engaged in life sciences, medical science, artificial intelligence, and other R&D activities that involve ethically sensitive areas, an ethical review committee shall be established.

For international cooperative R&D activities that are subject to ethical reviews, they should pass the required ethical reviews of all parties.

A list will be established for emerging R&D activities that may pose higher ethical risks or challenges, and expert review procedures shall be initiated in such reviews.

This list will be dynamically adjusted as per needs and then released by MOST.

# China Enhances Efforts to Protect Black Soil

By ZHONG Jianli

China will boost its efforts to protect fertile black soil, which is mainly distributed in its three northeastern provinces and the eastern part of the Inner Mongolia autonomous region, according to the Ministry of Ecology and

Environment (MEE).

Liu Youbin, an MEE spokesperson, said at a recent press briefing that the ministry will continue to strengthen the protection of the ecological environment of black soil, including the prevention and control of the source of soil pollution on agricultural land, and

investigation and punishment of activities that damage the black soil according to law.

China has formulated the *Black Soil Protection Law*, which took effect in August 2022, to urge the improvement of the quality of black soil and promote its sustainable development.

In recent years, MEE has placed great emphasis on black soil conservation by undertaking several initiatives.

It has also enhanced monitoring and regulation of black soil ecological conservation, while the central ecological and environmental protection inspection team has prioritized its efforts to combat ecological damage to black soil.

Instances of local unauthorized occupation of black soil farmland, inadequate protection measures and insufficient remedial action have been investigated and exposed.

In addition, comprehensive measures have been taken to address black soil pollution in arable land, including preventing the introduction of heavy metal pollutants into agricultural land. This approach has effectively addressed some significant pollution issues that could impact the quality of soil environments.

Efforts have also been made to promote the utilization of agricultural waste resources such as straw, to improve the quality of arable land.

Besides, MEE has collaborated with the Beidahuang Group to establish a high-level research platform for the protection of black soil.

This platform brings together top research teams from across the country, focusing on comprehensive monitoring of black soil ecological environments, pollution and ecological surveys and assessments, as well as sustainable utilization of black soil.



A technical instructor checks the rice harvest in Jinxing village in Jilin province. (PHOTO: XINHUA)



Researchers conduct biospecimen medical research in a lab. (PHOTO: VCG)

# Boosting Market Share for Major Technological Equipment

By CHEN Chunyou & CUI Shuang

Major technological equipment is part of the lifeblood of the national economy. To boost their application in the market, China will encourage the first piece or set of major technological equipment to participate in public bids on an equal footing as other equipment.

That's according to a guideline released in September by the Ministry of Industry and Information Technology, the National Development and Reform Commission, and the State-owned Assets Supervision and Administration Commission of the State Council.

The first piece or set of major technological equipment means equipment that has made a significant technological breakthrough and holds an intellectual property right but hasn't secured market performance, and requires continuous application verification for iterative innovation.

According to the public bidding law, winning a bid is the first step for major technological equipment to enter the market. It is also essential for the innovative development of major technological equipment and their popularization in research activities.

The guideline clarifies that the tenderers should not set unreasonable conditions, such as the equipment's mar-

ket share and application performance, to exclude their participation in public bidding.

The manufacturers of major technological equipment only need to submit supporting materials, which will be considered as valid documents to participate in bids. The bid evaluation methods should be conducive to supporting major technological equipment research and innovation, promoting low-carbon and recycling development, and maintaining the security and stability of the industrial chain and supply chain.

In recent years, the insurance compensation mechanism and encouraging policies for the demonstration and application of the first set of major technological equipment have motivated local governments to introduce corresponding measures to support their development. These include incentives and subsidies, supply and demand docking, talent incentives and intellectual property protection.

Major technological equipment is key to the transformation and upgrading of the manufacturing industry. The guideline will encourage equipment manufacturing enterprises to engage in major technological equipment innovation. It will also enhance the development quality of the equipment manufacturing industry, strengthening the motivation for innovation.

# Jakarta-Bandung HSR: Chinese Tech Travels Overseas

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The crust movement is very active on Java Island, where the HSR is located. The entire line is in a district with a risk of earthquakes at magnitude 8 to 9, and 50 percent of the area that the railway runs through are hills and mountains. All these challenges require a very high standard of construction to resist earthquakes.

The design team first tried to avoid unfavorable geological bodies, like active volcanoes, as much as possible. When that was not possible, measures were taken to minimize the potential risk.

The entrance of one of the tunnels is located within a fault zone, and the design team optimized the standard tunnel design through consolidat-

ing the surrounding rock, and enlarging the fracture surface to make sure the train is safe when traveling through the tunnel.

The impact of climate change can also not be underestimated.

The content of salt fog is very high in the air as the two cities are close to the sea and the intensity of ultraviolet radiation is strong due to the low latitude.

The design team thus adopted a high-standard corrosion resistance solution, applied an advanced and new coating process and protection techniques, enhancing the EMU's performance of salt fog resistance and ultraviolet aging resistance by 50 percent.

The air conditioning system in the

HSR is also optimized accordingly to cope with the high temperature and high humidity in the area.

## Specialized for Indonesia

In addition, the design of the stations and trains respect Indonesian culture, aiming to provide a comfortable customer experience.

The four stations of the Jakarta-Bandung HSR were designed based on the Indonesian hand-weaving culture and the beautiful curves of the natural mountains and coasts of the West Java island.

The Tegalluar Station in Bandung, which integrates modern technology with the local natural environment, is also a scenic tourist spot.

To meet the needs of Muslims, who

make up over 90 percent of the Indonesian population, all four stations are equipped with suitable bathrooms and prayer rooms.

The EMU trains are also full of Indonesian characteristics. The train body is silver and red, inspired by the country's national flag. The pattern on the link between the front face of the locomotive and the carriage resembles the texture of the Komodo dragon, regarded as the national animal of Indonesia. The chairs are also decorated with designs related to intangible cultural heritage of the country.

As a flagship project under the Belt and Road initiative, the Jakarta-Bandung HSR is sure to offer a great travel experience for local residents.

# Building Global Community of Shared Future

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## Practicing true multilateralism

Building a global community of shared future requires practicing true multilateralism. China opposes all forms of unilateralism and the formation of camps and exclusive cliques targeting specific countries, and opposes actions that undermine the international order, create a new Cold War or stoke ideological confrontation in the name of the so-

called rules-based order.

China actively participates in and leads the reform of the global governance system. It follows the vision of global governance featuring extensive consultation and joint contribution for shared benefits, that is, global affairs must be discussed by all, governance systems built by all, and benefits of governance shared by all, so that every country is a participant, contributor, and ben-

eficiary of world peace and development.

## Promoting the common values of humanity

China advocates peace, development, equity, justice, democracy and freedom, the common values of humanity. With an open mind, China understands that different civilizations have different understandings of the nature of these values, and respects the efforts of people in different countries to ex-

plore their own development paths.

All countries should be open and inclusive, promote mutual learning, strive to remove all barriers to cultural exchanges, and seek nourishment from other civilizations to promote the common development of all civilizations.

China's solid actions in promoting the building of a global community of shared future were also illustrated in the white paper.