

INSIGHTS

China, Russia Intensify High-quality Energy Cooperation

Opinion

By TANG Zhexiao

China and Russia will continue to consolidate their energy strategic cooperation and achieve high-level development, making efforts to ensure the stability and sustainability of the global energy market, according to a China-Russia joint statement signed during Russian President Vladimir Putin's visit to China on May 16-17.

As major energy producers and consumers in the world, energy cooperation is a cornerstone of practical cooperation between China and Russia. The two countries have strengthened major projects including renewable energy, which also safeguards global energy security and the stability of supply chains.

"One of the key areas of this [Russia-China] relationship is energy cooperation, which is becoming increasingly active," said Russian President Vladimir Putin in a statement addressing a Russian-Chinese energy forum held in Beijing last year, *The Moscow Times* reported.

Energy trade between China and Russia has been expanding. In 2023, Russia exported 22.7 billion cubic meters of natural gas to China through the Power



The Power of Siberia, a key project in China-Russia energy collaboration, began transporting natural gas from Russia to China in 2022. (PHOTO: XINHUA)

of Siberia (also known as China-Russia east-route natural gas pipeline), an increase of 50 percent over the previous year, with revenue increased by more than 60 percent to 6.4 billion USD, *Russia's Nezavisimaya Gazeta* reported.

Russia is willing to work with China to deepen energy cooperation in all aspects, strengthen multilateral coordination, and jointly safeguard the global energy market and stability of supply chains, Russian deputy prime minister

Alexander Novak said during the 20th meeting of the China-Russia Energy Cooperation Committee.

Gazprom, Russia's state-owned multinational energy corporation, has become China's largest pipeline gas supplier in February 2024, overtaking previous leader Turkmenistan for the first time.

The two countries have also made positive progress in the field of hydrogen energy in recent years.

Meanwhile, construction of cross-border energy channels is on track. The Arctic LNG 2 project is a landmark case of China-Russia energy cooperation. The final prefabricated module for the second production line of the Arctic LNG 2 project left China bound for Russia's Murmansk this January, and the project is moving forward steadily as part of the construction of the Polar Silk Road.

Russia's State Atomic Energy Corporation Rosatom said in a statement that its subsidiary Rusatom Overseas signed a memorandum of understanding with China Energy Engineering Group for the construction of a pilot project for a hydrogen plant on Russia's Sakhalin Island.

The plant, which is to launch in 2029, could have a capacity of up to 36,500 tons per year of "blue" hydrogen (decarbonized hydrogen), said Rusatom overseas vice president Anton Moskvina.

Looking forward, the two sides will cooperate in oil, natural gas, liquefied natural gas, coal, electricity and other fields in accordance with market principles to ensure the stable operation of relevant cross-border infrastructure and unimpeded energy transportation, said the joint statement, adding that deepening cooperation in promising areas such as renewable energy, hydrogen energy and carbon markets will be promoted.

Comment

U. S. Curbs on AI Models Threaten AI Progress

By GONG Qian

A U.S. bipartisan bill was recently unveiled that would make it easier for the Biden administration to restrict the export of proprietary or closed source AI models (the primary software of AI intelligent systems like ChatGPT) to China. It could have significant negative ripple effects for global AI international cooperation, thus hindering the scientific and technological progress and innovation of all of humankind. Also, both China and U.S. would be victims if the bill is passed.

Curbs on AI models are unfair to the global community. As a global public good, open-source AI models represent the collective contributions of researchers, scholars and developers from countries around the world, who adhere to the common principle of openness and sharing. However, the U.S.'s restriction is a typical act of hegemony and long-arm jurisdiction, which not only damages the interests of the global academic community, but also goes against the original intention of open source sharing, Yin Ximing, an associate researcher in the School of Management, Beijing Institute of Technology, and Tsinghua University Research Center for Technological Innovation, told *Science and Technology Daily (S&T Daily)*. In the long term, it may diminish the international flow and exchange of scientific and technological expertise, affecting the spirit of global talent networks and collaborative endeavours.

With limited access to critical technologies and data, the pace of ground-breaking scientific and technological innovation in AI would slow down. Strengthening global cooperation on AI is an irreversible trend. The development of AI brings cross-border challenges, such as data security and ethical norms, requires the joint efforts and wisdom of the international community. The latest move by the U.S. is seen as deviating from the right track, Yang Yan, an associate professor focusing on the AI industry from an institute in Tianjin, told *S&T Daily*.

To deal with the common challenge, China proposed the Global Initia-

tive for AI Governance in 2023, emphasizing the need for collaborative efforts. The country is also taking steps to foster global cooperation. For example, China and France issued a joint declaration on AI and global governance in early May.

Meanwhile, according to Yin, by restricting chip exports that prohibit cloud computing manufacturers from training AI large models for China, restricting sensitive data, and restricting the use of AI models, the U.S. is attempting to curb China's rapid advancement in AI by putting more barriers in data, algorithms and computing power — three core elements of AI.

The U.S. claims that such restrictive measures are out of concern for the application of AI in political elections, cybersecurity, and biological and chemical weapons. But unsurprisingly, the bill complements a series of measures implemented over the past few years in an effort to slow China's development of this cutting-edge technology. Clearly, its strategic intent is to preserve U.S. technological dominance and global influence.

Yin thinks that the U.S. is harming itself by placing restrictions on AI models. For one thing, it would increase compliance costs for U.S. tech companies, potentially reducing their willingness to engage in international cooperation. For another, restrictions may lead to less knowledge sharing and less transparency, as companies and individual researchers might be reluctant to disclose their research findings due to stringent reviews.

Clearly, China and the U.S. have common ground in the AI industry. Yang suggested that both sides should enhance official-level communication and expand people-to-people exchanges and cooperation on AI. During their first meeting of intergovernmental dialogue on AI in Geneva on May 14, both sides recognized that the development of AI technology presents both opportunities and risks. It is expected that China and the U.S., along with the global community, should jointly form a global AI governance framework, including standards and norms, reaching broad consensus.

Biden Vs. Biden: Monster Tariffs Dismantling Global Trade

Voice of the World

Edited by TANG Zhexiao

On May 14, the Biden administration announced sharp tariffs on an array of Chinese imports, including electric vehicles (EV), lithium-ion batteries, solar cells, critical minerals, semiconductors, steel and aluminum products, and cranes.

The notable hikes include tariffs on certain steel and aluminum products from 0-7.5 percent to 25 percent in 2024, from 25 percent to 100 percent on EVs in 2024, and from 25 percent to 50 percent on semiconductors by 2025. The new measures will affect 18 billion USD of Chinese imports.

In addition to hiking tariffs, the Office of the U.S. Trade Representative also recommended increasing U.S. Customs and Border Protection's Section 301 enforcement capabilities with additional funding, encouraging U.S. companies to shift supply chains away

from China.

In June 2019, during Donald Trump's presidency, Joe Biden had posted on Twitter, now known as X: "Trump doesn't get the basics. He thinks tariffs are being paid by China. Any freshman econ student could tell you that the American people are paying his tariffs."

However, five years later, as President Biden, he decides to impose tariffs on Chinese goods.

Why is the U.S. doing this? The indications are that it is worried about the competition from China.

European think tank Bruegel thinks Biden's extraordinary decision on EVs and the timing is driven by domestic politics. It also says the measures go against the administration's green transition goals, which include tax breaks for EVs largely.

Meanwhile, as the tariffs are passed on to consumers, there are also concerns that the price hikes would negatively affect consumption.

Goldman recently noted that the 2018-2019 U.S. tariffs raised consumer

prices, which were mostly borne by U.S. businesses.

Though U.S. trade representative Katherine Tai said the revised tariffs were justified, it is risking an election-year standoff with Beijing as Biden woos American voters who give his economic policies low marks, Reuters commented. "The EV figure may have more political than practical impact in the U.S., which imports very few Chinese EVs," it added.



China's home-made BYD EV with the UEFA logo in front of the Allianz Arena soccer stadium in Munich together with the winner's trophy, Henri Delaunay Cup. (PHOTO: VCG)

Intelligent Manufacturing a Model for Developing Countries: Envoys

Overseas Echoes

By Staff Reporters

An enthusiastic and highly curious group of foreign envoys spent time in Tangshan City, Hebei province recently, as invited guests of select Chinese state-owned manufacturing enterprises in the area.

The group, which numbered 83 envoys from more than 70 countries and international organizations, began with a visit to CRRC Tangshan Co., Ltd., gaining firsthand insights into the development achievements of Chinese enterprises in the rail transit equipment manufacturing sector.

The envoys remarked on the seamless integration of advanced technologies and the expertise demonstrated by workers, underscoring how such achievements reflect China's commitment to innovation and excellence in the industrial

sector. Many envoys expressed admiration for the meticulous attention to detail and the significant advancements in China's rail transit equipment manufacturing, highlighting how these developments set a high standard for the global industry.

The group initially witnessed the process of aluminum alloy profiles being transformed into car bodies, where technicians then used robotic arms to weld the car bodies. It was explained that this workshop is named after Zhang Xuesong, a national-level master technician and CRRC's most skilled operator. Zhang, originally a mechanical fitter, has seamlessly integrated various technologies such as CNC maintenance, programmable controllers, and 3D modeling, and has instituted several technological innovations.

Michael Campbell, the Nicaraguan ambassador to China, said it was clear that talent is the primary resource for development. China's advanced manufacturing and robust infrastructure capabilities

stem from these remarkable technical experts. Developing countries not only need infrastructure construction, but also the cultivation of innovative technical experts. "We hope to deepen cooperation with China in related fields," said Campbell.

At the assembly department's commissioning line, the envoys successively boarded the prototype trains of variable configuration electric multiple units (EMUs) on the Fuzhou Binhai Express Line to experience the ride. Oliver Wonekha, the Ugandan ambassador to China, said that Sino-African cooperation promotes continental connectivity. "We hope Uganda and China will further deepen cooperation and promote rapid development of Uganda's rail transit," he said.

During a symposium, which formed part of the visit, envoys from Nicaragua, Kuwait, Cameroon, and other countries engaged in discussions with Chinese enterprise representatives on topics such as infrastructure construction and fi-

ancing, green carbon reduction, external cooperation, and high-quality development. The envoys expressed their appreciation for China's technological innovation strength during this visit, hoping to deepen cooperation with China in related fields for mutual benefit and win-win outcomes.

After concluding their visit to CRRC, the envoys also visited CITIC HIC Kaicheng Intelligent Equipment Co., Ltd., where they were shown various robots and intelligent mining equipment used in coal mines and firefighting scenarios, and also watched firefighting robot-spraying operations. Salvador Moncada, the Ambassador of Honduras to China, said, "Although my time in China has been short, I have visited several Chinese companies. China's high-quality development is impressive. Honduras actively participates in building the Belt and Road Initiative and hopes for further enhanced exchanges and cooperation between the two countries' enterprises in the future."

Future 'Air Taxi' Unveiled

Hi! Tech

By Staff Reporters

How long does it take to travel from the Shanghai Pudong International Airport to the Shanghai Hongqiao International Airport 50 kilometers apart? If the road is clear, about one hour by car, and 90 minutes by public transport.

But if you take the Maxtrix 1 (M1), it will take just 20 minutes and cost you about 200 yuan, according to Liu Xingyu, deputy general manager of Chinese startup Vertaxi.

The M1 is an electric vertical take-off and landing (eVTOL) aircraft and Vertaxi, a company based in Zhuhai in south China, is the developer of the M1, which was unveiled at the 2024 China

Brand Day event in Shanghai recently.

The aircraft has composite wings with 20 rotors, which give it a wingspan of 15 meters and a fuselage length of 10 meters. It is designed to accommodate five passengers and can fly efficiently for 250 kilometers at a speed of 200 kilometers per hour. Its main application scenarios are three-dimensional transportation within cities and short-distance travel between cities.

An eVTOL uses pure electric energy, does not require a runway for take-off and landing, and can achieve intelligent and fully autonomous flight without a pilot. It is widely regarded as the best transportation option for future urban low-altitude travel due to its low-carbon, environmentally friendly, low-noise, and high-safety characteristics. It is also known as the future "air taxi".



The M1 eVTOL aircraft at the 6th China International Import Expo in Shanghai. (PHOTO: XINHUA)