Global Climate Governance Needs All Hands on Deck

Voice of the World

By QI Liming

China's solar power and wind power are environmentally friendly. (PHOTO: VCG)

China has received high praise for accelerating green transformation and focusing on pragmatic actions as well as efforts in developing renewable energy from UN Secretary- General Antonio Guterres.

He made the remarks while in discussion with China's Special Envoy for Climate Change Xie Zhenhua at COP 27, the annual UN meeting on climate change currently taking place at Sharm el-Sheikh in Egypt until November 18.

China is making painstaking efforts to construct an ecological civilization, improve environmental quality, and develop renewable energy, and the country's proposals at COP27 are high on the agenda.

Ecological civilization benefits sustainable development

China has followed the concept that, "lucid waters and lush mountains are invaluable assets". As *Issues in Science and Technology* journal reported, China's ecological civilization model appears to offer quick and tangible fixes.

Based on abundant data and analysis, researchers have come to deeply appreciate the connections between environmental sustainability and social development.

According to Diálogo Chino, a media platform covering the relationship between China, Latin America and the environment, looking at a global scale, the discourse of ecological civilization can be seen as aiming to influence environmental governance in international fora, in "common but differentiated responsibilities" to tackle climate change within UN negotiations.

China's ecological civilization concept has the potential to influence a new paradigm for cooperation on sustainability. Understanding and engaging with the ecological civilization concept is important, and could have wide-ranging benefits, which could help shape the dynamics of transpacific exchange.

Economic transition makes carbon emission reduction possible

In October, *The World Bank Group's Country Climate and Development Report (CCDR) for China* analyzed the fundamental changes in energy, industry, transport, cities, and land use, that would enable China to realize the national commitments to reach the target of peaking carbon emissions and achieving carbon neutrality.

According to the report, without China successfully transitioning to a low-carbon economy, achieving global climate goals will be impossible. This transition will require a massive shift in resources, innovation, and new technologies to enhance energy efficiency and resource productivity. China's advanced technological capabilities mean the pathway to carbon neutrality will open new avenues for development.

The *South China Morning Post* says, great progress has been made in several areas of China's fight against environmental pollution. For instance, air quality, water quality, and soil quality have greatly improved in China during the past decade, thanks to the country's advanced technology and commitment.

Renewable energy brings achievable goals

China's tangible offerings of the transformation of energy structure appear to offer a path forward, instead of the sacrificing of social and economic development. Technology, of course, has long been at the center of global climate conversations and negotiations.

Statistics from the Global Wind Energy Council showed that, in addition to solar power, China has been leading the world in new installations of offshore wind capacity since 2018. As for the transportation sector, China is already home to the fastest-growing electric vehicle market in the world.

Another salient aspect of China's decarbonized energy future is its hefty investments in nuclear power technologies. These investments contrast with other parts of the world, where nuclear development is held back by public opposition and court challenges.

Judith Shapiro, on the faculty of the University for Peace in Costa Rica, said that by contrast, China's vision of concrete targets, achievable goals, and deployable technology represents a type of single-mindedness and decisiveness.

Rich countries fail to keep their words

From China's experience, the significant thing in tackling climate change is not only commitment, but also ample funding support. That's the reason why at COP27 China has called on wealthy nations to support developing countries most at risk of environmental damage.

The thorny issue of compensation from rich nations to poorer ones that are the most vulnerable to climate change is expected to be high on the agenda of the COP27 summit for the first time. President of COP27, Sameh Shoukry, said the issue "reflects a sense of solidarity and empathy for the suffering of the victims of climate-induced disasters."

According to the Organization for Economic Cooperation and Development (OECD), the developed nations only provided 83.3 billion USD by July of this year, failing to meet their pledge made in 2019 to deliver 100 billion USD per year by 2020 to help poorer countries cope with climate change.

New Growth Points for China, Arab World

By HAO Nan

The global economic climate has been on a downward trend for some time, with the ongoing pandemic and Russia-Ukraine conflict, seemingly driving another wide-scale economic crisis. While making policy responses to the pressing socio- economic problems, countries are looking for new partnerships to develop alternative growth points. China is no exception, and from its perspective, the Arab world might well be such a candidate.

Stable situation

The Arab world now stands out as a region with a relatively stable security situation in a world of conflict. In the prestigious Global Peace Index 2022, conducted by Institute for Economics and Peace, half of the region is peaceful, with Qatar ranked 23, Kuwait 39, Jordan 57, UAE 60, Oman 64, and Morocco 74, among the total 163 countries.

The sub- index on terrorism finds that UAE, Qatar, Oman and so on are among those least affected by terrorism, though it is true that Iraq, Somalia, and Syria are among the most affected. Atradius, a credit insurance company gives a similar assessment. In its most recent 2022 Q2 risk mapping, Saudi Arabia, UAE, Qatar and Kuwait are perceived as middle-low risk.

The Arab world is also in a race to full vaccination. Some in the region would pass the 70 percent mass immunity threshold by 2022, among which the UAE, Qatar, Kuwait, Bahrain and Saudi Arabia are taking the lead.

With such a relatively stable situation, Economist Intelligence Unit finds that most countries in the region would embrace full recovery in 2022. It is projected that Egypt, Qatar, Saudi Arabia, Oman, Jordan, UAE and Bahrain will see their 2022 GDPs exceed those of 2019.

A Chinese company takes in charge of managing and operating a wind power station in Jordan. (PHOTO: XINHUA)

Strong demands

The Arab world, being ambitious in their green and digital future, are in strong demand of infrastructure, green technology, and digital transformation. The World Bank estimates the Arab world needs 100 billion USD every year for a reliable, strong, secure, and resilient infrastructure. Carbon emission reduction by Arab countries has been pledged by around 2070. Meanwhile, 5G adoption rate in the region is only once percent.

According to World Intellectual Property Organization's assessment, most Arab countries' innovation performance is below their development level, indicating strong demand for international cooperation. Unlike other developing regions, such international cooperation with the Arab world could well be powered by adequate capitals. The IMF estimated that the upsurge in oil price means an extra 1.3 trillion USD for the region until 2026. The estimation is well evidenced by the increasing revenue reports released by major national oil companies of Saudi Arabia, UAE, Qatar, Algeria, Libya, Iraq and so on.

Apart from oil revenue, the major sovereign funds in the region total 4.257 trillion USD, and have also been earning a steady increase in profits, as reported widely by major financial news outlets.

Mutual favorability

China and the Arab world enjoy long-standing amicable relations and cooperation. Despite the worsening international economic situation, the first eight months of 2022 saw a steady increase in two-way trade between China and most Arab countries. Establishing either Comprehensive Strategic Partnerships or Strategic Partnerships, China has signed 19 BRI cooperation documents with much of the region.

The recent years witnessed the relations further extending to peace and security. China has been making attempts to mediate the regional conflictual situation, which has had a positive response from Arab countries. The 156th Foreign Ministers' Meeting of League of Arab States, a regional organization in the Arab world, wrote of its appreciation in a statement about China's efforts in supporting peaceful resolution of regional crisis in the Arab world.

Public surveys also give positive news. Arab Barometer, a nonpartisan research network based at Princeton University finds that China leads the U.S. in popularity among the people of at least seven Arab countries. The survey has been conducted since 2006, and the 2022 edition was based on nearly 23,000 interviews across Iraq, Jordan, Lebanon, Libya, Mauritania, Morocco, the Palestinian territories, Tunisia and Sudan between October 2021 and April 2022.

Meanwhile, PwC reports that in 13 Chinese cities' 82 percent of investors are confident in investing in the Middle East and North Africa (MENA). The investors are clearly aware of the risks, but they believe the region's economic prospects, natural reserves, and geographic location outweigh the downsides.

Above all, in today's world of volatility, uncertainty, complexity and ambiguity, it might be a good idea to tap in to the potentials of the Arab world and further enhance the China-Arab cooperation to jointly navigate through the current economic turbulence.

(Hao Nan is a Center for International Security and Strategy (CISS) Youth Fellow, Tsinghua University.)

Opinion

China Leads in Biodiversity Conservation

Edited by Tang Zhexiao

"Ecological civilization building has been the framework for China's national approaches to sustainability and conservation," said Jesse Rodenbiker, associate research scholar at Princeton University with the Center on Contemporary China, adding that the scale and speed of China's domestic conservation programs and laws are remarkable.

He was speaking at the 15th meeting of the Conference of the Parties (COP15) to the UN Convention on Biological Diversity (CBD) where the global community's attention was refocused on biodiversity.

Biodiversity is the basis for human survival and development, and has a direct bearing on our well-being. That's why in recent years, there has been a growth in awareness is growing of the emergency state of biodiversity loss, as well as the need to protect biodiversity.

Rodenbiker was making reference to the COP15, held in southwest China's Kunming in 2021, which showcased China's efforts to bring this vision of biodiversity protection into action.

An article published in the *Economist* also said China is striving to become a champion of biodiversity. COP15 has demonstrated China's green leadership credentials, and "the country is alert to the importance of global norms on mitigating climate change," said the article.

In 2020, China launched a layout plan for its national park system, prioritizing regions with vital ecological functions such as setting up national parks in Qinghai-Tibet Plateau, the Yellow River basin and Yangtze River basin.

In 2021, China's Ministry of Ecology and Environment released its first white paper on biodiversity conservation, noting the measures on improving biodiversity governance and further global cooperation.

After formally acceded to the Ramsar Convention on Wetlands in 1992, China's great efforts in protecting and restoring wetlands has also been applauded in the passing 30 years.

The well- planned protected areas system includes 90 percent of terrestrial ecosystem types and 71 percent of key state-protected wildlife species under effective protection, according to the white paper of biodiversity

"China has struggled to effectively bring the international community together on the Post- 2020 Biodiversity Framework," said Rodenbiker.

Will the China model become the global model?

Rodenbiker thought it was a question for the upcoming COP15 in Montreal in December 2022 and will be of great importance because the consequences can affect not only nature but also the future of global environmental governance.

Located close to southeast China's Jiangsu province, the Yancheng Coastal Wetlands is the largest coastal wetlands nature reserve in China. (PHOTO: XINHUA)

Hi! Tech

AI-Chemist Assists with Chemical Research

Edited by Gong Qian

An AI- Chemist laboratory with a "scientific mind" that is capable of performing all the essential steps required for chemical research. That's the most recent breakthrough from researchers from University of Science and Technology of China. Their results were published in the journal of *National Science Review.*

The laboratory consists of a service platform, mobile robots, workstations, and computational brain. It can control AI- Chemist - a mobile robot named Xiaolai - to undertake different tasks. After receiving instructions from researchers, Xiaolai can automatically and efficiently read the literatures from a cloud database, and execute the complete experimental process on 14 workstations (including proposing hypothesis, designing experimental plans, executing automated operations, analyzing experimental data, training machine learning models, and giving feedback of a new hypothesis).

More importantly, Xiaolai can propose new experiment plans based on a new hypothesis, and carry out the next round of chemical experiments by itself. Therefore, AI- Chemist can greatly save time for researchers to do experiments.

The team digitized and standardized experimental protocols written in natural language from the literatures, so the existing knowledge can be transferred to Xiaolai to enrich its brain. Xiaolai is controlled by a control system software based on Robot Operating System.

A home- developed software system, which has capacity for robotic path planning, robotic control and connection, and smart chemical operations, is in charge of coordinating the real- time interactions between the robot and the workstation.

The robot "Xiaolai" is very helpful for researchers to do experiments. (PHOTO: XINHUA)