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20 Years of SCO: Cooperation on Digital Economy and Green Energy

By Staff Reporters

Chinese President Xi Jinping said that the Shanghai Cooperation Organization (SCO) countries need to follow the journey of enhancing solidarity and cooperation, upholding common security, promoting openness and integration, boosting interactions and mutual learning, and upholding equity and justice at the 21st meeting of the Council of Heads of State of the SCO held on September 17. In his speech, Xi also noted that the SCO members should continue to promote trade and investment liberalization and facilitation, and create growth drivers of cooperation such as digital economy, green energy and modern agriculture.

China will launch the second phase of the special lending facility within the SCO framework following the one in 2018 to promote Belt and Road cooperation. Such lending will mainly cover projects related to modernization, connectivity, infrastructure, and green, low-carbon and sustainable development.

The soaring development of digital economy deepens the cooperation between China and other SCO members. Last month, the China-SCO Forum on the Digital Economy Industry was held in Chongqing, China. SCO Secretary-General Vladimir Imamovich Norov said China's experience in the development of digital economy and cross-border e-commerce has provided an invaluable model for SCO countries to follow.

The SCO member states have been working on creating a greener world for the past 20 years. In the *Declaration on the Establishment of the Shanghai Cooperation Organization*, it is clearly stated that the purposes of the SCO include encouraging effective cooperation among the member states in environment. The *Dushanbe Declaration*, passed by SCO member states following the meeting, aims to promote mutually beneficial cooperation in the field of renewable energy to reduce the negative influence on the environment, and facilitate energy security and the shift to cleaner energy in the energy-efficient economy.

As to combating COVID-19, Xi emphasized that China will deepen cooperation with other developing countries, make good use of China's 100 million USD donation to COVAX, and make our due contribution to humanity's ultimate victory over the virus.

Triumphant Return
Astronauts Nie Haisheng (C), Liu Boming (R) and Tang Hongbo are out of the return capsule of the Shenzhou-12 spaceship at the Dongfeng landing site in north China's Inner Mongolia Autonomous Region on September 17, 2021. Three months ago, the three taikonauts were sent to the Chinese space station for a series of tasks, including two space walks. (PHOTO: XINHUA)

2021 World Robot Conference Focuses on Future Robotics Industry

By Staff Reporters

With the theme "Share New Achievements, Inject New Dynamics," the 2021 World Robot Conference was held from September 10 to 13 in Beijing. More than 110 companies displayed about 500 products at the exhibition, many of which made their debut.

A humanoid robot resembling Albert Einstein was a big attraction as it introduced the conference to visitors. Combining sci-tech achievements like 5G, cloud and interaction, such humanoid robots could be used to guide visitors in museums, conference venues and airports.

Based on big data, cloud computing and digital simulation, a disinfection robot on display has been used in multiple scenarios in some Chinese Grade A hospitals, making a contribution to the prevention and control of COVID-19.

Wang Yaonan, academician of the Chinese Academy of Engineering, said using artificial intelligence to develop robots in the future is very important.

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BRICS Countries Up Contribution to Global Sci-tech Innovation

By LIU Yan

The *BRICS Comprehensive Innovation Competitiveness Report 2020* was released on September 7 at the BRICS Forum on Partnership on New Industrial Revolution. The report was jointly compiled by more than 60 experts and scholars, led by the China Science and Technology Exchange Center (CSTEC).

As is shown in the report, the annual research and development investment of BRICS countries is more than one-sixth of the global total investment. Their high-tech exports exceeded 6 trillion USD, more than a quarter of global volumes. In addition, over 600,000 scientific and technological journal articles were published, accounting for more than a quarter of the global total amount.

"There is no doubt that BRICS countries continuously contribute to global scientific and technological innovation, and their international influence is growing," said Doctor Yun Tao, project manager at the CSTEC and compiler of the report.

Yun added that this is the fourth report on BRICS comprehensive innovation competitiveness, but it is the first time that the report has been jointly prepared by scholars from five BRICS countries, providing a more international perspective.

The BRICS countries' overall comprehensive innovation competitiveness increased rapidly from 2001 to 2018, and this trend will continue to 2025. Since then, China's innovation capacity will increase significantly, while the other four countries are expected to see steady growth.

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Editor's Pick

China Shows Commitment to Cut Carbon Emissions

By WANG Xiaoxia

Photo shows the Three Gorges Dam in central China's Hubei Province. (PHOTO: XINHUA)

China has pledged to achieve carbon emissions peaking by 2030 and carbon neutrality by 2060, and listed it as one of its major tasks during the 14th Five-Year Plan period. This demonstrates China's resolution to pursue green development and its responsibility to build a community with a shared future for mankind.

To achieve this goal, it requires structural reform to overcome challenges in technology, industry, infrastructure development and employment. Sci-tech innovation is the key to achieving carbon neutrality, as well as international cooperation being essential.

Sci-tech innovation is the key to achieving carbon neutrality

Experts point out carbon neutrality means achieving a balance between emissions and sequestration, which means reducing emissions of carbon dioxide and other greenhouse gas while increasing carbon sinks and developing carbon capture and storage technologies.

He Kebin, academician of the Chinese Academy of Engineering (CAE) and professor at Tsinghua University, said China's total carbon dioxide emissions are estimated to peak to 11 billion tons by 2030, but the capacity of China's carbon sink is about one billion tons. To be carbon neutral by 2060 means a reduction of more than 90 percent of emissions.

As fossil fuels make up about 85 percent of China's energy structure, it is imperative to reduce dependence on fossil energy and develop green energy.

Du Xiangwan, academician of CAE, said because of continuous development of technology, China's standard coal consumption is expected to drop to 289g/kWh, while pulverized coal-fired boiler will raise the thermal efficiency from 65 to 90 percent with lower emissions.

Non-fossil energy is under development. Wind energy, solar energy, hydropower and nuclear energy will gradually become the main sources of electricity. In addition, biomass energy also shows considerable potential, along with technological development.

Apart from reducing emissions, carbon sequestration is essential. China vows to offset its carbon emissions by 2060 through afforestation, carbon capture, storage and utilization, and ocean absorption.

Wei Wei, researcher at the Shanghai Advanced Research Institute, Chinese Academy of Sciences, said that carbon capture, utilization and storage, or CCUS, has become an indispensable technology for global emission reduction.

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WEEKLY REVIEW

Tianzhou-3 Completes Docking with China's Space Station

Six and a half hours after launch, China's cargo spacecraft Tianzhou-3, carrying supplies for the upcoming Shenzhou-13 crewed mission, successfully docked with the space station core module Tianhe on September 20.

China Closer to Top 10 Most Innovative Economies

As the only middle-income economy in the list of the world's top 30 most innovative economies, China has made continuous progress from ranking 14th last year to 12th this year, according to the *Global Innovation Index 2021* report released by World Intellectual Property Organization on Monday.

Carbon Neutrality and Green Economy Forum Held in Beijing

Hosted by the China Development Institute on September 17, Carbon Neutrality and Green Economy Forum focused on how global efforts and international cooperation can be made to reach carbon neutrality, and how China should cope with the challenges concerning carbon neutrality.

Dayawan Nuclear Power Plant: 10,000 Days, 380 Billion kWhs

By September 21, 2021, the Dayawan Nuclear Power Plant has operated safely for 10,000 days, generating electricity of more than 380 billion kWhs.

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