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WEEKLY EDITION

COP 15: China Leads Biodiversity Protection

By Staff Reporters

Chinese President Xi Jinping on Tuesday said that China has made remarkable progress in building an ecological civilization, including wildlife protection. Xi also announced China's initiative to establish the Kunming Biodiversity Fund and take the lead by investing 1.5 billion RMB to the fund.

Xi made the remarks while addressing the leaders' summit of the 15th meeting of the Conference of the Parties to the Convention on Biological Diversity (COP15) via video link in Beijing.

With the theme "Ecological Civilization: Building a Shared Future for All Life on Earth", the conference kicked off on October 11 in Kunming, Yunnan Province. The conference and related meetings provide the global community with further opportunities to join hands to build a better future in harmony with nature, and to continue efforts to achieve the *Aichi Biodiversity Targets* adopted at COP10 in Nagoya, Japan 11 years ago.

According to Zhao Yingmin, vice minister of the Ministry of Ecology and Environment, China's implementation of the *Targets* was better than the global average, since China achieved beyond-

expectation progress in three of the 20 targets and key progress in 13 others.

These achievements did not come out of nowhere as China has been taking actions all along.

China's forest coverage rate and stock volume have both increased for 30 years. 85 percent of wildlife populations under key protection have been effectively protected, the collection and preservation of biological genetic resources rank among the highest in the world, and the populations of rare animals such as giant pandas are increasing.

This is a miniature of China's efforts in biodiversity conservation and the country's contribution to the protection of nature all over the globe.

Marco Lambertini, Director General of World Wide Fund for Nature (WWF) International, said that China has made important contributions to the protection of global environment. The WWF thought highly of China's achievements in ecological civilization, its goal of carbon peaking and carbon neutrality, and the country's commitment of stopping building new coal power stations overseas. China's leadership is of great importance to achieve an ambitious and executable post-2020 global biodiversity framework, according to Lambertini.



Folk artists are performing during the opening ceremony of the 15th meeting of the Conference of the Parties to the Convention on Biological Diversity (COP15) in Kunming, southwest China's Yunnan Province. (PHOTO: XINHUA)

Editor's Pick

Mars Exploration Tasks on Track

By TANG Zhexiao

China's Mars rover Zhurong has spent more than 100 days exploring the red planet's surface, according to China National Space Administration (CNSA).

Named Zhurong after a Chinese god of fire, the six-wheeled, solar-powered rover is part of China's Tianwen-1 mission. As of August 30, Zhurong has traveled 1,064 meters on the surface of Mars, while the orbiter has been in orbit for 403 days. The two are in good condition and functioning properly, said CNSA.

During the 100 days, it activated all scientific payloads, carried out in-depth exploration activities, successfully completed the assigned tasks, and entered expansion task implementation stage.

Regarding the performance of the rover, Sun Zezhou, chief designer of the rover system for China's first Mars explo-

ration mission, evaluated it as excellent. "From the current operating conditions in orbit, it is very consistent with our expectations," said Sun.

Big leap for China

This is China's first mission to Mars, making the country the third nation after Russia and the United States to have landed a spacecraft on the planet. The mission "is a big leap forward for China because they are doing in a single step what NASA took decades to do," said Roberto Orosei, a planetary scientist at the Institute of Radio Astronomy of Bologna in Italy.

According to the team that built the probe, Tianwen means questions to heaven, a phrase taken from the name of a famous poem by one of the greatest poets of ancient China, Qu Yuan.

China's first attempted Mars mission, Yinghuo-1, was launched on a Russian rocket in November 2011 along

with Russia's Phobos-Grunt mission. The launch failed and all the spacecraft eventually fell back to Earth.

Tianwen-1 has completed the three-in-one task of orbiting, landing and roving. The historic landing of Zhurong marked a crowning moment for China. It not only demonstrated the country's growing capabilities in space, but also served as a reminder of how far the country has come.

Kitted out with six scientific payloads, the Zhurong rover conducts probes and exploration of Mars daily. "So far, the payloads have obtained a total of about 10GB of raw data," said Liu Jianjun, chief designer of the rover's ground application system.

The data, which provides new supported evidence for Mars's topography, will further understand the environment, climate and evolution process of Mars. *See page 2*

China Aims to Build A Global Center of Talent and Innovation

By Staff Reporters

Chinese President Xi Jinping stressed efforts to implement the strategy on developing a quality workforce in the new era and accelerate the work to build China into a major world center of professional talent and innovation. Xi made the remarks when speaking at a central talent-related work conference held in Beijing from September 27 to 28.

The remarks struck a chord with many people, including scientists, and also sparked lively discussions.

A quality workforce in the new era

Chen Jin, director of Research Center for Technological Innovation, Tsinghua University, said that talent is an important index for the comprehensive national strength of a country, and Xi's speech indicates that talent-related work in China has been lifted to a higher level of priority.

Shi Changhui, a researcher at Chinese Academy of Science and Technology for Development, shared his thoughts on how to build China into a major world center of professional talent and innovation. *See page 2*

China-Africa Economic and Trade Co-op Soars

By TANG Zhexiao

A total of 135 projects worth 22.9 billion USD were inked in the recently concluded second China-Africa Economic and Trade Expo (CAETE) in Changsha, Hunan Province.

First launched in 2019, CAETE has been a major platform for deepening and strengthening economic and trade cooperation between China and African countries. The event, online and offline, themed "New Start, New Opportunities, and New Accomplishments," saw more than 9,000 attendees from China and nearly 40 African countries, with Algeria, Ethiopia, Kenya, Rwanda, South Africa and Senegal as the guests of honor.

The digitalization process was accelerated in this year's expo, creating a "cloud conference, cloud exhibition and cloud transaction" model. There were 9.81 million views when the real-time signal of the opening ceremony was directly transmitted to Africa for the first time.

During the event, 2D or 3D "Cloud Exhibitions" and "Cloud Transactions" enabled visitors to make purchases

through e-commerce. The "China-Africa Online Shopping Festival" set up based on well-known e-commerce platforms in Africa, witnessed over 900 million page views and obtained a transaction volume exceeding 250 million RMB (about 38.8 million USD).

In addition, the first cross-border RMB capital pool and cross-border e-commerce settlement with Africa countries were initiated. Ten Service Centers, including Consulting Service Center and Legal Service Center, were established to deepen communication and cooperation between China and African countries.

Sonko Wilson, a 37-year-old Ugandan, said economic and trade cooperation between China and African countries are increasing rapidly. "More and more Chinese brought advanced machinery to Uganda and started businesses here since the 2019 CAETE, and Ugandan businessmen also started oil and fossil fuel companies in China."

At present, 25 Chinese economic and trade cooperation zones have been established in 16 African countries, according to the *China-Africa Economic and Trade Relationship Annual Report (2021)* released during the expo. Registered with China's Ministry of Commerce (MOC), they had attracted 623 enterprises with a total of 7.35 billion USD and created more than 46,000 jobs as the end of 2020, said the report.

Economic and trade cooperation between China and Africa has been continuously expanded. Despite the headwinds of the COVID-19 pandemic, China had remained Africa's largest trading partner for 12 consecutive years as the end of 2020. According to MOC, bilateral trade volume rose 40.5 percent year-on-year to 139.1 billion USD in the first seven months.

Sci-tech Driving China's Moderate Prosperity Goal

Edited by WANG Xiaoxia

China has made exponential advances in science and technology and this has contributed to realizing the country's dream of moderate prosperity, according to a white paper released by the State Council Information Office on September 28.

The white paper, titled "China's Epic Journey from Poverty to Prosperity," said China's R&D spending is rising, with 2.4 trillion RMB spent on R&D in 2020, ranking second in the world. The ratio of R&D to GDP reached 2.4 percent.

A total of 1,345,000 utility patent applications were filed with domestic agencies and 441,000 were granted. In addition, 69,000 international patent ap-

plications were submitted through the Patent Cooperation Treaty.

Science and technology are widely applied in manufacturing. The white paper said that advances in science and technology have contributed to more than 60 percent of economic growth.

Significant headway has been made in agricultural modernization, said the white paper. The wider application of machinery, digital and green technologies has reduced the need for manual labor, contributing to a sharp rise in rural productivity.

The contribution of sci-tech advances to agricultural production has surpassed 60 percent, while the overall level of mechanization in tilling, sowing and harvesting has reached 71 percent.

Science and technology have also

raised the capacity of governance as the application of digital technology expands in government, the countryside and society at large, said the white paper.

In addition, life has changed significantly because of science and technology. As more people turn to online education, shopping, food ordering, mobile payments, ride hailing, bike sharing, telecommuting, remote medicine, and smart homes, they now enjoy greater convenience, more choices, and a fuller life, according to the white paper.

It goes on to reveal that China's achievements in science and technology have brought greater convenience to working and daily life around the world, and injected further impetus into the global economy.



Exhibitors (left) in CAETE are selling African handicrafts at Pavilion for Light Industrial Products. (PHOTO: XINHUA)



Significant Achievements Made by China in Biodiversity

By LI Linxu

The population of giant pandas in the wild has grown from 1,114 to 1,864 over the past four decades, while the Asian elephant population in the wild has grown from 180 in the 1980s to about 300 at present in China, according to the latest figures released in a governmental white paper on October 8, days before the country hosts COP15 aimed at drawing up a new global biodiversity treaty.

The white paper, titled *Biodiversity Conservation in China*, has detailed how the world's most biodiverse country has endeavored to protect its ecosystems in pursuit of harmony between humanity and nature.

This is the first time China has released a white paper on biodiversity. Highlighting the country's philosophy, actions and achievements on biodiversity conservation, it demonstrated China's responsibility and resolve on biodiversity conservation and the confidence to work with the international community in dealing with challenges relating to biodiversity, said Zhao Yingmin, vice minister of ecology and environment.

Great efforts highlighted

Biodiversity conservation has been elevated to a national strategy in China and incorporated into mid-term and long-term plans of all regions and fields.

In recent years, an unprecedented effort has been made and a significant amount of money has been spent on biodiversity conservation by China.

Policies, laws and regulations on biodiversity conservation were implemented, mid-term and long-term programs and action plans were drafted, and well-planned campaigns to rescue rare and endangered species were

launched.

More than 260 billion RMB was earmarked in biodiversity-related causes in each of 2017 and 2018, six times the figure of 2008.

A thriving ecosystem is proof of the country's biodiversity conservation progress. This is particularly exemplified by the rescue and protection of rare and endangered species.

Many rare and endangered wildlife species such as the giant panda, Asian elephant, crested ibis, Hainan Gibbon, and Tibetan antelope are direct beneficiaries from such efforts and investments.

Through captive breeding programs of giant pandas started in 1953, they have been downgraded from "endangered" to "vulnerable" on the list of species at risk of extinction, and some have been released into natural habitats to integrate into the wild population.

Emergency measures have also been taken to save and protect 120 plant species with extremely small populations, such as the *Cycas debaoensis*, *Manglietiastrum sinicum* and *Abies beshanzuensis*.

Red line strategy implemented

To address biodiversity loss and ecosystem degradation, China has proposed and implemented measures such as building the national parks system and setting ecological conservation red lines, strengthened in-situ and ex-situ conservation, reinforced biological security management, improved the eco-environment, and coordinated the conservation of biodiversity with green development.

It was the first in the world to propose and implement the red line strategy for ecological conservation, which is an important institutional innovation in its land use planning and eco-environmental reform.

mental reform.

The country employs this innovative model to bring essential ecological functional areas for biodiversity conservation, and apply stringent conservation measures to them.

Up until now, the initially defined red lines for ecological conservation has covered various important ecosystems across key regions of biodiversity all over the country, bringing most of rare and endangered species and their habitats under protection, said Zhang Zhanhai, chief engineer of the Ministry of Natural Resources.

Aside from delineating the ecological red line areas, the country is also setting up protected areas and designating priority areas for biodiversity conservation.

Since 1956 when the first nature reserve was set up, China has established close to 10,000 protected areas of all types and at all levels, accounting for about 18 percent of its total land area.

The well-planned protected areas system has brought 90 percent of terrestrial ecosystem types and 71 percent of key state-protected wildlife species under effective protection.

In addition, the country has designated 35 priority areas for biodiversity protection. Among these, 32 terrestrial priority areas cover a total of 2.76 million sq km and make up about 28.8 percent of the total land area.

These measures have contributed to the conservation of key natural ecosystems, biological resources, and habitats for key species.

Int'l cooperation promoted

"The raging pandemic has reminded us that humans and nature have a shared future," said Zhao, adding that the international community should further intensify cooperation in the face of

the challenges of biodiversity loss and ecosystem degradation.

Facing the challenges, China firmly practices multilateralism and actively carries out international cooperation on biodiversity conservation.

The country supports collaborative efforts in building a stronger global ecological security barrier and an ecosystem that respects nature, and is ready to work with all the parties to push for the implementation of the *Convention on Biological Diversity* and other international treaties.

China has achieved remarkable results in fulfilling obligations. Since 2019, the country has been the largest contributor to the core budget of the convention and its protocols, and has strongly supported its operation and implementation.

China's implementation of the 2020 global biodiversity targets was better than the global average, making expectation-beating progress in three of the 20 goals, key progress in 13 of them and phased progress in four others, said Zhao.

It is also contributing solutions to global biodiversity conservation and working together with the international community to build a shared future for humanity and nature.

The country's proposal "*Drawing a 'Red Line' for Ecological Protection to Mitigate and Adapt to Climate Change*" has been selected by the UN as one of the 15 best Nature-based Solutions around the globe.

China will work together with the international community on a new model of global biodiversity governance that is fairer and more reasonable, so as to realize the worldwide vision of harmonious coexistence between humanity and nature, according to the white paper.



Biodiversity Conservation in China, the first white paper on biodiversity released by China on October 8, has detailed the country's endeavors on biodiversity conservation. (Graphic Design: Li Linxu; Photo: VCG)

NDRC Enhances Control of Energy Consumption

By CHEN Chunyou

China has been contributing to the global fight against climate change by taking measures to realize the goals of peaking carbon dioxide emissions and achieving carbon neutrality.

Recently, a plan was released by National Development and Reform Commission (NDRC) to further promote the double control system, which means both the quantity and intensity of energy and resources consumption need to be controlled. The double control action is necessary to promote adjustment of the economic structure and protect the environment.

Five principles are put forward in this plan, namely, adhere to the combination of prioritizing energy efficiency and ensuring rational energy consumption, combining universal needs and employing differentiated ways to solve specific cases, combining government regulations and a market-based mechanism, combining incentives and constraints, as well as implementing overall planning

and regulations.

According to the plan, for major national projects that meet relevant conditions, approved by the CPC Central Committee and the State Council, the energy consumption will be assessed and reduced accordingly in accordance with the principle of "shared responsibility by central and local governments."

In the meantime, strict control will be exerted over the projects that consume high energy and have high emissions. NDRC, in conjunction with relevant departments, will urge local governments to establish a list of projects with high energy consumption, which will serve to implement a classified control. This will push local governments to change their growth modes and adjust their economic structure to improve energy use efficiency. This is also an important means to increase the flexibility of total energy consumption control.

Great attention is paid to the role of the market in allocating resources. The national market for trading energy-consuming rights should be accelerated ac-

ording to the plan, and a trans-regional trading mechanism for total energy consumption indicators should be established, which jointly promote the flow of energy factors to high-quality projects, enterprises, industries and regions with favorable economic development conditions.

During the implementation of the double control system, NDRC will encourage local governments to implement energy budget management and carry out the evaluation of energy-consuming output performance, which will help local governments to be aware of their energy consumption. This will act as a basis for optimizing the allocation of energy factors, and prioritize household needs as well as ensuring the operation of the industries, such as the modern service industry, hi-tech industry and advanced manufacturing industry.

Local governments will be encouraged to increase the consumption of renewable energy. Considering that China's renewable energy will usher in a large-scale development in the future, the plan specifies that during the assessment of local energy consumption, regions that exceed their energy targets will have the excess deducted to encourage the better use of renewable energy.

According to the plan, the double control system will be functioning well by 2025, as the energy and resources will have been allocated more rationally and utilized more efficiently. By 2030, the double control system will have been further perfected, the intensity of energy and resources consumption will have realized a sharp decline, the total energy consumption will have been kept under reasonable control and the energy structure further optimized. By 2035, energy and resources will have been optimally allocated and the comprehensive conservation system will have become more robust, strongly supporting the realization of a steady decline of carbon emissions after reaching the peak.

Mars Exploration Tasks on Track

From page 1
Self-reliance is key to China's space progress

So far, humankind has launched 47 Mars exploration missions, of which 25 have been successful or partially successful, equating to a success rate of just over 50 percent.

The craft's plummet through the Martian atmosphere had to be performed autonomously. "Each step had only one chance, and the actions were closely linked. If there had been any flaw, the landing would have failed," said Geng Yan, an official at the Lunar

Exploration and Space Program Center of CNSA.

Foreign media believe that it is not easy for China's Tianwen-1 probe to succeed in one stroke. The words "milestone" "great leap" and "brilliant moment" frequently appeared in international public opinion on China's landing on Mars. Meanwhile the BBC website reported that the successful landing of China's Tianwen-1 probe on Mars was an "outstanding achievement" because the task was extremely difficult. "Self-reliance is the key to China's space progress," the CNN concluded.

For now, the rover and its orbiting companion have been in safe mode as the sun's charged particles interfere with their communication to Earth.

As sun outage is over, the orbiter will carry out global remote sensing exploration of Mars, to obtain scientific data on the atmospheric ionosphere and Martian space environment.

The orbiter will also work with the Zhurong rover to search for the presence of water ice outside the landing zone, with the joint cooperation of scientists who are engaged in Mars research worldwide, said CNSA.

China Aims to Build A Global Center of Talent and Innovation

From page 1
"An important move is to strengthen international exchanges of talent and actively integrate into the global innovation network," said Shi.

In terms of "introducing in" talent, Shi said a comprehensive immigration system for professionals should be established, and mechanisms for foreign talent administration and service need to be optimized, in order to attract global sci-tech talents to conduct innovative work or start businesses in China.

Regarding Chinese talent overseas exchange, more support should be given to students and scholars to study in and visit countries with strong sci-tech power.

Tian Mei, professor at Human Phenome Institute, Fudan University, said that the mechanisms of talent-related work should be further innovated. Access to the free flow of high-caliber talent should be enhanced.

Assembling a team of strategic scientists and top scholars

In his remarks, Xi also called for better cultivation of strategic scientists and letting them play their roles, and nurturing a large number of top sci-tech leaders and innovation teams, young sci-

tech talent and outstanding engineers.

This is echoed by Long Haibo, a researcher at the Development Research Center of the State Council, who said China should build a team of high-quality strategic scientists and innovative sci-tech talent, as it is key to building a country with a quality workforce.

According to Long, compared with general scientists, strategic scientists should be able to make forward-looking judgments, comprehend interdisciplinary knowledge and lead a large research project. Top sci-tech leaders, on the other hand, are representative scientists who master the latest science and technology in a certain field with distinctive insights. They are also indispensable.

As long as accelerating the building of a talent evaluation system, directed by innovative values, capability and contribution, forming and implementing a system in favor of sci-tech talents' immersion into research and innovation, can the country find, nurture and utilize more strategic scientists and top sci-tech leaders, noted Long.

Young scientists' key responsibilities

The conference suggested that the country should focus on cultivating

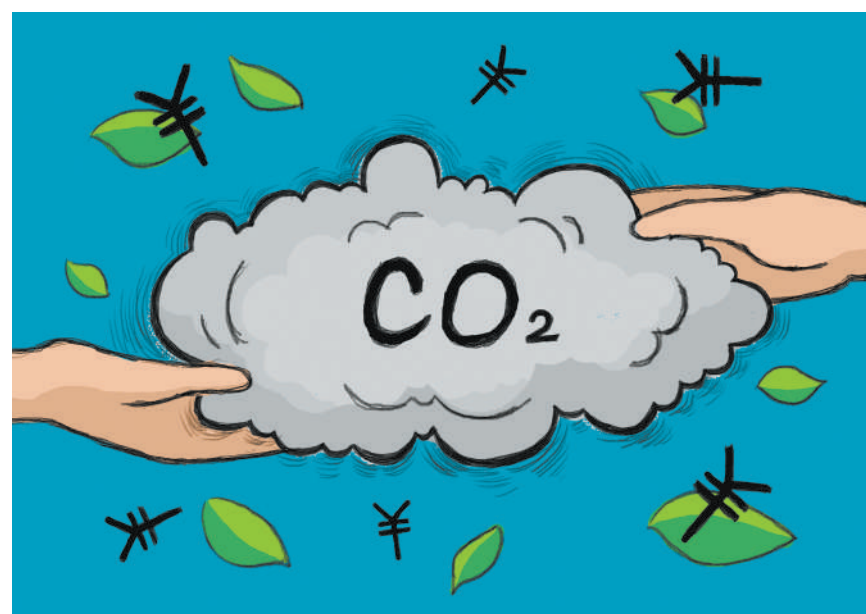
young national strategic sci-tech talent and supporting them to undertake key responsibilities.

Fu Qiaomei, researcher at the Institute of Vertebrate Paleontology and Paleoanthropology, Chinese Academy of Sciences, said that several ministries have launched policies to ease the situation of researchers, offering them more autonomy and improving the treatment to young researchers.

For now, researchers under 40 years old form the bulk of the research teams in China. Shi said support for young researchers in all types of sci-tech plans and talent programs needs to be reinforced, increasing the proportion of young scientists' programs in sci-tech plans and also enhancing the funding rate of such programs.

Shi also suggested establishing a mechanism for the steady increase of basic research funds in universities and research institutes, providing relatively stable support for young researchers.

China has the world's largest high education system. "Chinese education is capable of nurturing maestros. We should have faith in that," said Xi as he visited Tsinghua University ahead of its 110th anniversary.



Carbon emissions trading is the buying and selling of the right to emit a tonne of CO2 or equivalent (CO2e). (PHOTO: VCG)

China's Overseas Coal Plant Ban Lauded

Voice of the World

By YU Haoyuan

China will step up support for other developing countries in evolving green and low-carbon energy, and will not build new coal-fired power plants abroad. That's according to President Xi Jinping who told the General Debate of the 76th Session of the United Nations General Assembly via video that China intends to promote the harmony between people and nature. This is a significant commitment to the whole world which will pave the way for a greener future.

Financial sacrifice for global climate change goal

UN Secretary-General Antonio Guterres hailed Xi's announcement. He welcomed China's actions of no longer building coal-fired power plants outside China and its support of green and low-carbon energy. "Accelerating the global phase-out of coal is the single most important step to keep the 1.5-degree

goal of the Paris Agreement within reach," said Guterres.

The commitments pointed out that China's energy sector will need to undergo a complete shift from its current coal-based structure to a low-carbon power system, said Xinyue Ma, the China Research and Project leader at Boston University's Global Development Policy Center.

The great financial sacrifice of China has also been mentioned in some think tanks. Reuters, quoting the Global Energy Monitor, a U.S. think tank, said 44 coal plants outside China earmarked for financing by the Chinese government could be affected. "This has the potential to reduce future carbon dioxide emissions by 200 million tons a year."

Adapting to green development demands

In an article by Dr. Richard Dixon that appeared in The Scotsman website on September 30, the writer said that China's decision to end funding for overseas coal-fired power plants will have delighted green campaigners in Africa, where billions of RMB will be invested

in new plants.

Dixon claimed that Africans have already felt the significant climate impact on their daily life so that many countries have given strong resistance to proposed coal plants. Some international organizations oppose the proposal of coal plants in more than 20 African countries, including South Africa, Kenya, and Zimbabwe. As a major supporter of many of these plants, Chinese state finance is now making new coal plants very unlikely.

Independent Australia reports that the Chinese Government is making progress in reducing carbon emissions through its technology and energy sectors. John Quiggin, a professor of Economics at the University of Queensland wrote in *Independent Australia* that the Chinese government is making progress in reducing carbon emissions through its technology and energy sectors.

"China's National Development and Reform Commission has released a new plan on energy consumption that includes requiring all provinces to review already permitted high emissions projects, including those under construc-

tion. Combined with the emissions trading market launched this July, the plan suggests that Xi's stated goal of reaching a peak in China's coal consumption by 2026 may well be reached," Quiggin added.

Boston University publication *BU Today* also conducted a research on the importance of Xi's coal promise. According to Xinyue Ma, China contributed about 50 percent of the global international public finance commitments between 2013 and 2018. Ending overseas coal plant projects is a significant step for China. As the biggest developing country with the largest annual CO2 emissions, it is significant for China to make firm climate commitments at home and abroad, the research showed.

Helping developing nations to achieve their emission reduction targets

Boston University's Global Development Policy Center, which conducted data analysis in 2019, assumed that if all plants under construction and under planning were initiated with no plants closing by 2033, Chinese financed coal-fired power plants abroad are estimated to emit 433 million tons of carbon diox-



Hungarian Kaposvár photovoltaic power station is one of the major projects of which China cooperates with other countries in the fields of green development under the framework of the Belt and Road Initiative. (PHOTO: XINHUA)

ide a year, this included more than 64.2 million tons in Africa.

China began its greener projects some time ago. Over the last decade, China has supported many developing countries to increase their energy power generation capacity through financing, affordable technologies, and fast project delivery.

Following the coal-plant ban abroad commitment, China has taken the first step to stop funding overseas coal plants: The Bank of China, the world's biggest supporter of coal power for the past five years, announced that it would no longer provide financial support for new coal mining and coal-fired power projects outside China.

World IT Leaders Show Confidence in China

Edited by QI Liming

The 2021 World Internet Conference (WIC) Wuzhen Summit focusing on digital civilization (taking the world's information technology forward to a new era) closed with impressive results.

Tesla, Intel, and Qualcomm leaders were present, all keen to support China's digital transformation. Tesla CEO Elon Musk, Intel's Pat Gelsinger and Qualcomm's Cristiano Amon addressed the WIC via video, showing a strong desire for future cooperation with China.

Fruitful results

More than 2,000 representatives from 96 countries and regions, attended the event, themed "Towards a New Era of Digital Civilization - Building a Community with a Shared Future in Cyberspace" online and offline.

An expo titled "The Light of Internet" was also held as part of the summit, attracting more than 300 renowned companies and institutions. Twenty sub-forums covering topics like 5G, artificial intelligence and next-generation Internet were held during the summit.

A total of 14 world-leading Internet scientific and technological achievements were unveiled and two reports on the world Internet development and China Internet development, namely "World Internet Development Report 2021" and "China Internet Development Report 2021" were released during the summit.

Opinions of tech giants and media

According to CNBC, speaking via video at the opening ceremony, Musk said Tesla is pleased to join and support China's digital economy and the compa-

ny is looking forward to the economic transformation that will be brought about by self-driving cars.

"At Tesla, we are glad to see a number of laws and regulations that have been released to strengthen data management," said Musk. "Tesla has set up a data center in China to localize all data generated from our business here, including production, sales, service, and charging." It is the first time this information has been disclosed.

It marks the second time this year that Musk has lauded China's credentials as "a global leader in digitalization," declaring that Tesla will continue to expand its investment into China. Musk said he "hopes to contribute to building a digitized future of shared benefits, responsibilities, and governance."

Qualcomm's Amon commended the speed of China's 5G rollout and the many relationships his company has cultivated with local device makers, urging American and Chinese companies to work together more.

Cisco Systems Inc. CEO Chuck Robbins spoke about aligning with the vision of a shared cyberspace community for the benefit of all.

Bloomberg commented that Tesla, Intel and Qualcomm are among a handful of the U.S. companies with ambitions to expand their business in China, which is the world's biggest market for electric vehicles as well as smartphones. Qualcomm processors dominate the Chinese smartphone arena, while Intel stands to benefit from the country's expanding investment in data centers and Internet infrastructure to support cloud services.



A creative picture of China's spacecraft. (PHOTO: VCG)

Far-reaching Achievements in Outer Space Exploration

By BI Weizi

On September 17, three Chinese astronauts returned to Earth. Three days later, the Tianzhou-3 cargo spacecraft conducted a fast autonomous rendezvous and docked with the Tianhe core cabin. Within a week, China completed these two major events that take it a vital step toward realizing its outer space dream. The news was carried in many foreign media outlets and generated much discussion in the sci-tech world.

The Associated Press published an article entitled "Chinese astronauts return after 90 days aboard space station," reporting that China has sent 14 astronauts into space since 2003, becoming the third country to send astronauts into space independently after the Soviet Union and the United States.

Reuters continued to report on the return of Shenzhou 12 and the launch and docking of Tianzhou-3. Reuters posted that China is assembling its first permanent space station and that the Shenzhou 12 mission is the first of four manned missions planned for 2021-2022, while Tianzhou-3 is the fourth of 11 missions needed to complete construction of the station.

Reuters also said that China's space station, which is expected to be completed by the end of 2022, will be the only replacement for the 20-year-old International Space Station.

The BBC posted that China has made great strides in its space strategy in recent years, and the success of Shenzhou-12 mission is another testament to China's growing confidence and capabilities in space.

Meanwhile AFP noted that the Shenzhou 12 mission is the first manned space mission carried out by China in the last five years. The Tianhe core module provided each astronaut with a separate living area, a space treadmill and an exercise bike. During their stay in the space station, three Chinese astronauts

conducted spacewalks and scientific experiments.

As *The Diplomat* magazine put it, "2021 is an exciting year for Chinese spaceflight." Christopher Bonnard, an aerospace engineer at the European Space Agency, explained that China's great achievements in the field of space in 2021 have refreshed humankind's perception of space.

According to an article on France's 20 Minutes website, the Shenzhou 12 mission once again demonstrates China's determination to increase its investment in space and shows its technological strength.

An article in the Russian newspaper *Komsomolskaya Pravda* pointed out that space engineering projects are comprehensive achievements that can give a strong impetus to the development of engineering, military technology and communications, and that China's image and Chinese power have been significantly enhanced.

The international community eagerly awaits the construction of China's space station and the prospect of future cooperation. The next group of Chinese astronauts is expected to depart for the space station soon after China completes its longest manned space mission, Deutsche Presse-Agentur said in a report. If the International Space Station retires in the next few years as planned, China will be the only country operating a "space outpost" like the station.

Russian space scientist Vitaliy Egorov said that in recent months we have seen China's achievements in the construction of the space station, and this work is steadily progressing. China will advance space research to a new stage. The results of any scientific research will eventually become an achievement for all of humankind. The success of Chinese spaceflight has contributed to a deeper understanding of the world around us, the universe and even humankind itself.

Opinion

Mutual Benefit : Robust Commercial Engagement between China and U.S.

Edited by QI Liming

In an interview with *The Wall Street Journal*, the U.S. Commerce Secretary Gina Raimondo said she would seek to improve U.S. business ties with China. "I actually think robust commercial engagement will help to mitigate any potential tensions."

Articles released by *The Hill*, *Forbes* and *Reuters* echoed Raimondo's opinion. A 2021 *China Business Report* conducted by the American Chamber of Commerce in Shanghai (AmCham Shanghai) and released this September, shows that U.S. companies' optimism about business conditions in China is at three-year high. Business groups of the U.S. have also called on the Biden administration to restart trade talks with China.

Positive outlook on business conditions in China

According to media group *The Hill*, the 2021 *China Business Report*, found that more than 75 percent of respondents described themselves as "optimistic or slightly optimistic" about their five-year business outlook. The report surveyed 338 members of AmCham Shanghai this June and July from industries including manufacturing, education and pharmaceuticals.

Forbes said that according to the report, nearly 55 percent of respondents in the above survey believe that improvements in the U.S.-China relations in the next three to five years will benefit their business. Some 51 percent expect growth in China's consumer market during that period will benefit them.

Reuters said AmCham Shanghai attributed the positive outlook to increased revenues and decreased COVID-19 infections in China. "Business in China recovered quickly from last year's lockdown," Ker Gibbs, president of AmCham Shanghai, told Reuters.

Reuters also concluded that relations between the U.S. and China reached a low point when the Trump administration launched "a trade war" and imposed sanctions on high-profile Chinese tech companies. Those tensions have eased somewhat under the Biden administration.

Petition: restart trade talks with China

According to *The Wall Street Journal*, nearly three dozen of the nation's most influential business groups, representing retailers, chip makers, farmers

and others petitioned.

Meanwhile, some of Washington's most influential big business associations, including the U.S. Chamber of Commerce, the Business Roundtable, the National Retail Federation, the American Farm Bureau Federation and the Semiconductor Industry Association are calling on the Biden administration to restart negotiations with China and cut tariffs on imports, saying they are a drag on the U.S. economy.

In a letter to the U.S. Trade Representative Katherine Tai and Treasury Secretary Janet Yellen this August, the business groups contend that China had met "important benchmarks and commitments" in the Economic and Trade Agreement between the Government of the People's Republic of China and the Government of the United States of America (*phase-one trade deal*), including opening markets to the U.S. financial institutions and reducing some regulatory barriers to U.S. agricultural exports to China.

"A worker-centered trade agenda should account for the costs that the U.S. and Chinese tariffs impose on Americans here and at home and remove tariffs that harm the U.S. interests," the letter said, referring to the administration's policy to make worker interests a priority. "We want to express our support for continued engagement with China on trade and economic issues," the letter said, and included strong backing for the *phase-one trade deal*.

Janet Yellen weighs up visit to China

According to Bloomberg, Janet Yellen is weighing up a trip to China in the coming months, which would be her first visit as the U.S. Treasury Secretary, insiders said, as the Biden administration engages in a broad review of policy toward China and the tariffs on imported goods enacted under former president Donald Trump. Climate change and trade would be top of the agenda for discussion.



Currency symbol of RMB and USD. (PHOTO: VCG)



Guests from all over the world attend the opening ceremony of 2021 World Internet Conference Wuzhen Summit. (PHOTO: XINHUA)

China to Explore More Ways to Attract Foreign Talent

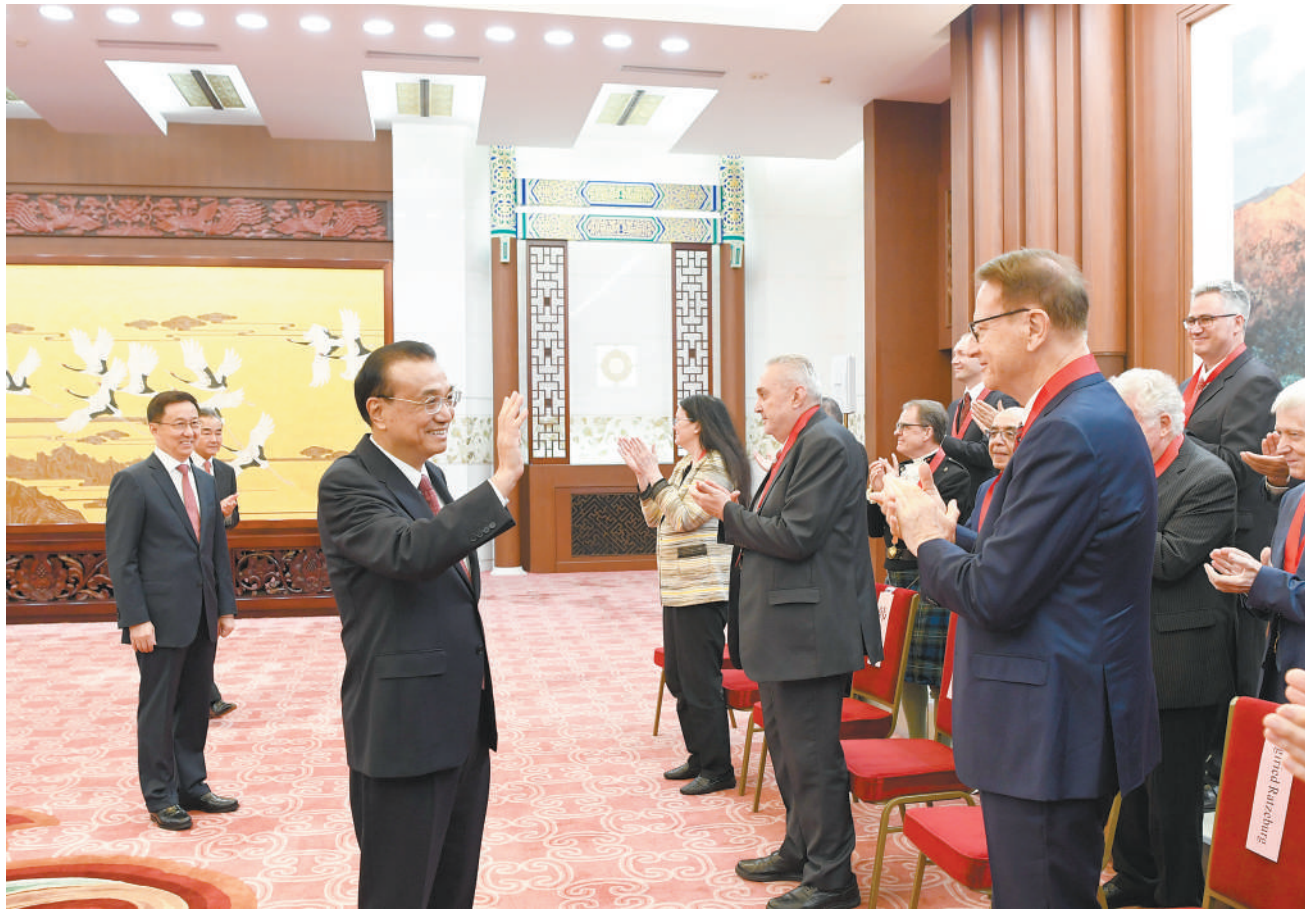
By Staff Reporters

China has a sincere need for foreign experts, with consistent policies for attracting and respecting them. The country is further expanding channels to attract and bring in foreign talent while continually improving work permit and visa systems to facilitate their employment and life in China, Premier Li Keqiang revealed this on September 30, at a grand event held annually by the Chinese government to honor foreign experts who made outstanding achievements in China.

Li congratulated the award recipients and spoke highly of their contributions to China's reform and opening-up, development and progress, as well as people-to-people exchanges with other countries. He also conveyed sincere greetings to all foreign experts working in China, their family members and international friends who support China's development.

In terms of the country's journey to achieve its own development goals, Li noted that China needs to unleash the potential of innovation as a powerful driving force and make better use of the role of talent as a fundamental support.

At the same time, China will keep deepening international cooperation in scientific and technological innovation, actively integrate into the global innovation network, promote international exchanges and cooperation in technology, talent and projects, and support scientists around the world in conducting re-



Chinese Premier Li Keqiang meets with foreign experts who have received the Friendship Award in 2020 and 2021, at the Great Hall of People in Beijing, capital of China, Sept. 30, 2021. (PHOTO: XINHUA)

search with common global challenges, he added. Li also said China will expand reform and opening-up, continue to improve its environment for innovation and entrepreneurship and build a more attractive global innovation center.

The awardees thanked Li and the

Chinese government, and expressed their willingness to continue contributing to China's development.

100 foreign experts from 32 countries were presented with the Friendship Award for 2020 and 2021. The Friendship Award is the highest award to com-

mend foreign experts who have made outstanding contributions to China's modernization drive. Since its establishment in 1991, 1,799 foreign experts have received the award.

Source: english.www.gov.cn
www.china.org

Letter to the Editor

Living in China, A Great Opportunity

By GOH Hui Hwang

My research's overall goal is to develop a set of smart data platforms for integrating renewable energy (RES), combined heat and power (CHP), demand side management (DSM), and other multiple supply and demand information so that users, power grids, and government agencies can make better use of electricity. It is also necessary to consider the electricity consumption of electric vehicles in order to demonstrate my research direction.

Harmonious academic climate in China

What impresses me most about my field of expertise is that a large amount of capital is being invested in China's scientific research environment. In addition, as China's economy continues to grow and outpace the rest of the world, more scientific and technological breakthroughs will be made in the country, and more world-class scientists will be produced by Chinese universities and research institutes. A natural trend will be for China's voice in the scientific research community to progressively grow stronger over time, and the Western-dominated science system has already begun to feel the effects of this rising tide. Following that, it is certain that more high-level publications will arise in China.

I believe that undertaking scientific research in China is more financially supported, that it is easier to establish a platform, and that the scientific research climate is more easygoing and harmonious than in other nations.

Sci-tech empowering daily life in China

Based on my experience living in China, I feel that new technologies here have improved my day-to-day life. For example, electronic payments and high-speed rail have made a significant difference in my personal and professional life. The impact of electronic payment can be seen in people's shopping and eating habits. Utility bills can be paid through mobile payment systems such as Alipay and WeChat Pay and money can be transferred to others. Electronic payment methods are also available in brick-and-mortar stores that are not online. Whenever I buy something, I can pay using my phone directly, which eliminates the need for me to carry my wallet around. Many take-out platforms

now accept electronic payments, making it extremely convenient to order take-out right from anywhere.

Statistically, the time savings that I have observed as a result of the high-speed rail system can be quantified. High-speed rail allows me to save a substantial amount of time on every trip I take and with accessible WiFi on board it allows me to conveniently work from anywhere inside the country.

Working in China, a profound and helpful experience

With the development of China's economy, more and more ties with the rest of the globe are being established, from countries to individuals. China's economy, on the other hand, is heavily oriented toward exports, and corporations in sectors such as infrastructure, technology, high-speed rail, energy, and electronics are becoming increasingly active in international trade and investment activities. Internationalization will continue to increase, interaction will continue to deepen, and international affairs will continue to get more and more diverse as time progresses.

Through my professional experience in China, I've had the opportunity to witness the country's progress of China's involvement in international cooperation efforts. This has supplied me with a plethora of essential knowledge and expertise. In the future, the ability to understand the world from a global perspective will be critical for advancement. In the years since I began working in China, I've had the opportunity to see the process through which developing countries are getting more involved in international affairs, which has helped me to obtain a better understanding of the world. Working in China will prove to be a useful addition to my professional portfolio in the years to come.

China is a varied country, with people of many different ethnic groups and cultures living together. So far, China's economy has grown at a rapid pace, providing a great number of employment prospects and the country is the best place in which to establish a business. In addition, safety and security levels in China are high which makes it very comfortable to go about daily life.

(Dr. GOH Hui Hwang, who comes from Malaysia, is a professor at School of Electrical Engineering, Guangxi University.)



Professor GOH Hui Hwang is visiting the Anthropology Museum of Guangxi with his wife. (PHOTO provided by the author)

The Myths and Facts About COVID-19 Vaccine

By Staff Reporters

At present, the pandemic is still prevalent around the globe, more than 2.2 billion doses of COVID-19 vaccines had been administered in China as of October 5, according to the National Health Commission.

Relevant scientific research and some measures taken against COVID-19 show that vaccines have good preventive and protective effects. However, there have been persistent rumors that undermine the vaccination campaign.

Science and Technology Daily recently spoke to Professor Guo Yu from College of Life Sciences at Nankai University, who provided facts related to COVID-19 vaccines that can help negate these common myths and rumors.

Myth: The COVID-19 vaccines could cause cancer.

Fact: None of the vaccines contain ingredients that can cause cancer.

There have been rumors online that COVID-19 vaccines may cause cancer. Vaccines have long been rumored to cause cancer, and now it's the turn of the COVID-19 vaccine.

However, many of the COVID-19 vaccines on the market today contain either completely inactivated virus particles, a nucleic acid sequence of the virus, or a part of the virus surface protein, which cannot continuously replicate in host cells. In addition, no RNA viruses, to which COVID-19 virus belongs,

have been found to be associated with tumors.

The ingredients contained in the inactivated vaccines, for example, contain components such as beta-propiolactone of inactivated viruses, Vero cell residues, aluminum hydroxide adjuvants, disodium hydrogen phosphate, and sodium dihydrogen phosphate. In addition, those vaccines have undergone a rigid process. The amount of other ingredients contained in those vaccines are also very low, and many of the ingredients are also applied in processed food, which are safe for human consumption.

Myth: The COVID-19 lambda variant is vaccine-resistant.

Fact: The COVID-19 lambda variant does not change the fact that the vaccine is safe and effective.

The lambda variant was designated as the "variant of interest" by WHO. According to the working definition presented on the WHO's official website, it is characterized with genetic changes that are predicted, or known to affect virus characteristics, such as transmissibility, disease severity, immune escape, diagnostic or therapeutic escape. And at the same time, the variant is identified to cause significant community transmission or multiple COVID-19 clusters, in multiple countries with increasing relative prevalence alongside increasing number of cases over time, or other apparent epidemiological impacts to suggest an emerging risk to global public

health.

At present, there are two main methods of studying immune escape in COVID-19 cases. One is in the laboratory to see whether the ability of serum of the vaccinators is less able to neutralize the mutant strain of the virus. The second is to continuously observe and document the effectiveness of vaccines in the real world.

Some recent serum virus neutralization (SVN) assays demonstrated that although the lambda variant has some immune escape properties, it was not that prominent compared to other variants.

What's more, studies that tracked the effectiveness of COVID-19 vaccines in some South American countries did not see a significant impact of the lambda variants on vaccine effectiveness. Among persons who were fully immunized, the adjusted vaccine effectiveness was 65.9 percent for the prevention of COVID-19 and 87.5 percent for the prevention of hospitalization, 90.3 percent for the prevention of ICU admission, and 86.3 percent for the prevention of COVID-19-related deaths. During the period of this analysis, the lambda variants accounted for 27 percent of the local COVID-19 cases identified.

Myth: COVID-19 vaccines make your arm magnetic after injection.

Fact: COVID-19 vaccines don't cause magnetic reactions

Recently, some videos and posts went viral with a flawed claim that iron

spoons can be attracted to one's arms after vaccination.

Some people claimed that the injection site of a particular COVID-19 vaccine on the arm became magnetized and could even attract an iron spoon. The photo they posted displayed that a metal spoon was clinging to the vaccinated arm without any support. Some recipients even made a comparison between the left and right arms. Obviously, the unvaccinated arm did not respond to a spoon.

The U.S. CDC refuted the related rumors and pointed out that receiving a COVID-19 vaccine will not make recipients magnetic, including the site of injection which is usually people's arm. COVID-19 vaccines do not contain ingredients that can produce an electromagnetic field at the site of injection. All COVID-19 vaccines are free from metals. CDC also clarified that COVID-19 vaccines do not contain microchips. Vaccines are developed to fight against disease and are not administered to track people's movement.

A U.S. website that checks and debunks rumors also sent some approved vaccines to inspection authorities for testing, but none of them were found to contain metal.

Some experts presented the reason why arms can cause a magnetic response after injection is because of the friction and surface tension led by the sweat and oil produced by human skin.

Traditional Eastern Wisdom

King Yu, Tamer of the Floods

BY WEN Haoting

King Yu is among China's most famous ancient rulers, who is also known for his wisdom and contribution in flood prevention.

According to legend, in ancient times, Chinese people were suffering from constant flooding.

To control and prevent the damage caused by flooding, King Shun (the ruler before King Yu) appointed Gun (King

Yu's father) and Yu to lead in the flood control team.

At first, King Yu's father focused on "blocking" the riverway by building a lot of water dams, but it did not ease the river currents, instead it worsened the overflow of water and caused even more damage.

After that, King Yu took over the task and changed strategies completely after thorough research on his father's methods. Instead of "blocking" the wa-

terway, he decided to "guide" the river currents. In areas with heavy rainfall, he had canals built, which discharged flood waters efficiently. In addition, he worked alongside local villagers to dredge the riverbeds, which opened up water courses and allowed floodwaters to flow into oceans, and set up the agricultural irrigation system.

Legend also has it that King Yu left his home for thirteen years to fulfill his duties. There were three times that he

passed by his house, but he didn't allow himself to go in because of the fear of delaying the task.

Due to his efforts, the frequent flooding in China was controlled. People no longer had to migrate each time after flooding. They were able to settle down near the Yellow River, where China's first agricultural civilization was established.

King Yu was selected to succeed to the throne. His dedication and sacrifice moved a lot of people. For thousands of years, people worshiped him for protecting them from natural disasters.



A picture tells the story of how King Yu controlled the flood. (PHOTO: VCG)