

CHINA'S ACTIONS FOR SOUTH-SOUTH COOPERATION ON CLIMATE CHANGE

Working Together to
Create a Green and
Low-Carbon Future



BRI International Green
Development Coalition
(BRIGC)

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Preface

Climate change is one of the most formidable challenges confronted by the world today. Frequent extreme weather caused by global warming has severely impacted the global economy, ecosystem, and human society. Developing countries, with relatively weak economic foundations and inadequate support in funding, technology, and capacity building, bear the burdens of severe impacts from climate change and urgent tasks of development and poverty reduction. Therefore, they are under even greater strain and challenges in addressing climate change.

South-South cooperation, as a vital mechanism for mutual support and shared development among developing countries, offers unique strengths in tackling global challenges. By sharing experience, technology, talent, and resources, the Global South countries can chart a path to a green, low-carbon transition that features complementary strengths and mutual benefits in the face of similar development challenges and climate dilemmas. Their efforts to jointly improve climate resilience make them an essential force in the global pursuit of climate action and sustainable development.

Humankind and nature form a shared community of life. As a participant, contributor, and pacesetter in promoting global ecological civilization, China has always attached great importance to combating climate change, implementing a proactive national strategy that integrates climate actions into the broader vision of ecological civilization progress and economic and social development. China has systematically advanced efforts to mitigate and adapt to climate change. A “1+N” policy framework for carbon peak and carbon neutrality has been completed to strengthen the synergy of pollution control and emission reduction. The country is working faster to build the national carbon trading market and the voluntary emission reduction trading market. The National Climate Change Adaptation Strategy 2035 was also issued to synchronize efforts on emissions reduction, pollution reduction, green development, and economic growth.



On the international stage, China has always been a staunch supporter and earnest practitioner of South-South cooperation on climate change. The country stays true to its commitment to implement climate policy and support developing countries, especially African countries, the least developed countries, and small island countries, to cope with climate challenges. In 2011, China officially launched the South-South Cooperation on Climate Change. In 2013, the Belt and Road Initiative laying on a green foundation was launched. In 2015, it proposed the “Ten-Hundred-Thousand” Program for South-South Cooperation on Climate Change and announced the establishment of a 20-billion-CNY fund for South-South cooperation on climate change. In 2019, the Belt and Road South-South Cooperation Initiative on Climate Change was launched. In 2021, China proposed the Global Development Initiative, which identified addressing climate change and green development as priority areas.

For years, China has upheld the vision of a community with a shared future for humanity and embraced the principle of providing the means for independent development. Guided by this approach, China has supported South-South climate cooperation to pool greater strength for long-term and steady success. Thus, it has witnessed increasing investment, an expanding cooperation network, and a constantly growing capacity. By October of 2024, China has signed 53 Memorandums of Understanding for South-South cooperation on climate change with 42 developing countries, and carried out nearly 100 climate change mitigation and adaptation projects. Additionally, China has implemented over 300 capacity-building programs and trained more than 10,000 participants from over 120 developing countries. According to incomplete statistics, China has provided and mobilized climate change-related financial support totaling more than 177 billion CNY to other developing countries since 2016, covering a wide range of projects related to mitigation and adaptation. Such support has facilitated clean and efficient energy use, strengthened adaptation capacity, promoted the coordination of climate change response and environmental protection, and improved the livelihoods in these developing countries. As a result, it has received widespread recognition from the international community.

By staying in unity, no challenge is too stark to overcome. Looking ahead, China will further expand the area and scope of cooperation, and explore new cooperation mechanisms. China will continue to promote South-South cooperation on climate change for greater progress and more outcomes, and foster a paradigm for such visible, tangible, and effective South-South cooperation. Furthermore, China will join the international community with a more open and inclusive stance in addressing shared challenges, seizing common ground in addressing climate change, promoting environmental-friendly modernization, developing green growth engine, sharing opportunities and creating a better future together.





I. Cooperation Principles and Actions

1. Upholding the Vision of a Community with a Shared Future for Humanity
2. Adhering to the Principle of Providing the Means for Independent Development
3. Producing Visible, Tangible and Effective Cooperation Outcomes

1. Upholding the Vision of a Community with a Shared Future for Humanity

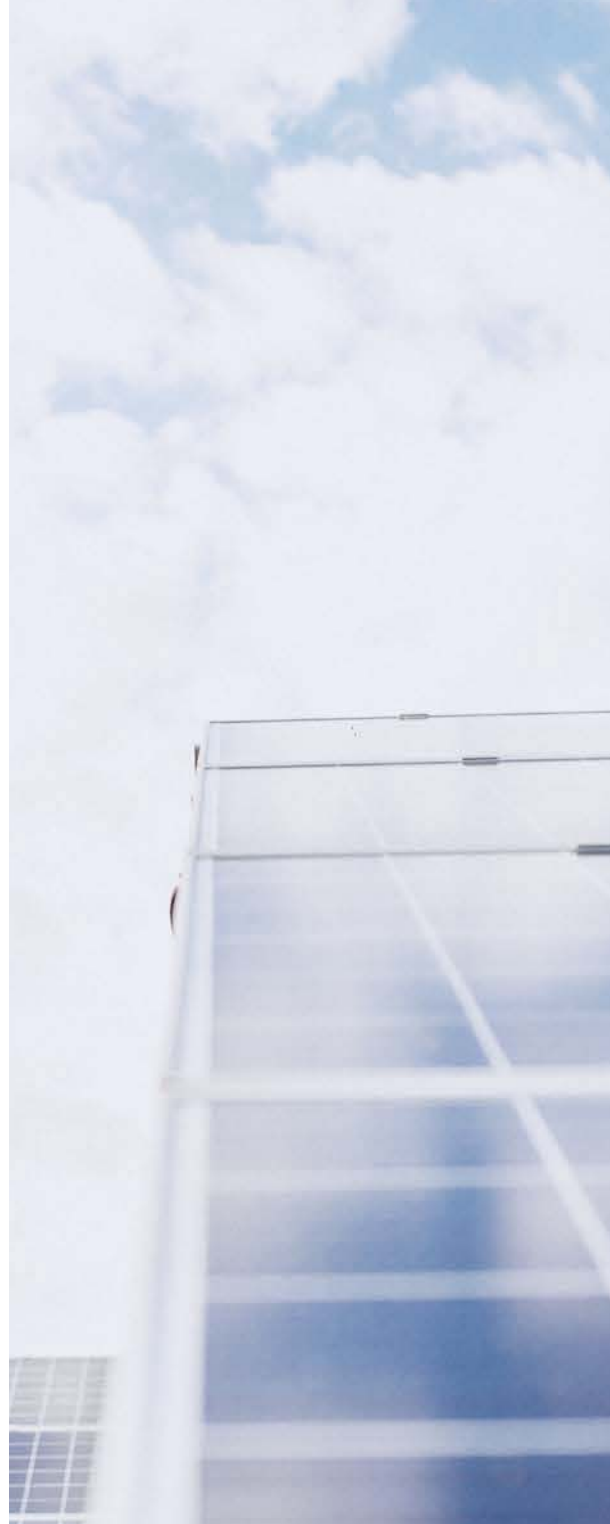
1.1 Jointly shaping the prospect of green and low-carbon development

The global efforts on climate change serve as a mirror for us to probe into the models for future global governance and provide valuable insight to build a community with a shared future for humanity. At present, climate change has turned from a future challenge into a real-time urgent crisis, posing severe threat to the economic and social development of humanity. No country can stay immune. China is deeply aware that on the journey of addressing climate change, the future of all countries is closely intertwined. It is indispensable to gather consensus and move forward in unity. President Xi Jinping stressed that we must be committed to green development, advance international cooperation on climate change, and do more to implement the Paris Agreement on climate change. The principle of common but differentiated responsibilities must be upheld, and concerns of developing countries on capital, technology, and capacity building must be addressed.

China seeks to join hands with other developing countries to pursue green and low-carbon development and protect the beautiful planet we call home. Upholding the vision of a community with a shared future for humanity, South-South cooperation on climate change was inaugurated in 2011. In 2013, the Belt and Road Initiative laying on a green foundation was launched. In 2015, China launched the “Ten-Hundred-Thousand” Program for South-South Cooperation on Climate Change and announced the establishment of the China South-South Climate Cooperation Fund, a 20-billion-CNY fund for South-South cooperation on climate change. In 2019, China launched the Belt and Road South-South Cooperation Initiative on Climate Change. In 2021, China proposed the Global Development Initiative, which identified addressing climate change and green development as priority areas.

1.2 Jointly forging a pathway for green and low-carbon transition

Win-win cooperation is the core theme of green and low-carbon development and also a cornerstone of South-South cooperation. As the world’s largest developing country and a responsible major country, China is fulfilling its commitments to address climate change, and to promote systemic economic and social transformation by leveraging green and low-carbon new quality productive forces, so as to coordinate carbon emissions reduction, pollution reduction, green development and continued growth. While making progress in its own response to climate change, China has worked with fellow developing countries to improve environmental policies, plans and standards, boost technological exchanges and cooperation, and expand the cooperation on green and low-carbon development. The comprehensive and coordinated action plans provided are excellent models for developing countries to address climate change and realize green and low-carbon socio-economic transformation, thereby reinforcing global ecological security and human well-being and committing to the vision of a community with a shared future for humanity.



1.3 Jointly pursuing a future of green and low-carbon development

Although developing countries are facing similar challenges on climate change, there is huge potential for cooperation in ecological resources and renewable energy. Through rolling out South-South cooperation, China has explored new international cooperation models based on the demands of fellow developing countries. By balancing and coordinating different resource endowments, the nation has explored the potential of cooperation on climate change and opened up development opportunities in fields such as renewable energy, low-carbon manufacturing, and low-carbon transportation. Through pragmatic practices, China has promoted green and low-carbon projects, industrial transformation, technological progress, capacity building, and talent training programs in other developing countries,

bridging the “last mile” to implement cooperation projects, thus aligning the climate change demand of developing countries with international competitive production capacity and technology. Upholding the vision of a community with a shared future for humanity and the principle of extensive consultation, joint contribution, and shared benefits in global governance, an open South-South cooperation on climate change is spearheading the green and low-carbon transition of the Global South. Equal exchanges have advanced climate mitigation and adaptation. An inclusive mindset has gathered a broader and more solid consensus on green and low-carbon development. As a result, sustainable development, featuring effective coordination of the economy, society, healthcare, energy and food security, ecological environment, and climate actions, would be advanced.

2. Adhering to the Principle of Providing the Means for Independent Development

2.1 Building a new paradigm of green and low-carbon cooperation

Recognizing the fact that developing countries are deeply impacted by climate change and confronted with huge development gaps and weak development foundation, China upholds the principle of providing the means for independent development in South-South cooperation on climate change, and is committed to working with other developing countries to build a new paradigm of global green and low-carbon cooperation. Besides providing financial and material support, China attaches greater importance to the dissemination and application of knowledge, technology, experience and pathways to help other developing countries tackle climate challenges and empower their green and low-carbon development. China believes that it is important to respect the resource endowment, development stage, and demand of fellow developing countries. By sharing its experience and technology in green and low-carbon development, the country endeavors to train local talent and technicians for other developing countries, thus unleashing their potential and boosting their capacity to make their development diversified, independent, and sustainable, and be more proactive in participating in global climate governance.

industrial upgrading and transformation, China has fostered new growth points by offering green and low-carbon products and encouraged enterprises and industrial parks to go global. It has mobilized public and private funds from various channels to enhance financial support to developing countries by expanding cooperation models such as financial assistance, bilateral and multilateral cooperation, and market-oriented cooperation. Cooperation on green and low-carbon infrastructure has accelerated the upgrading of “hardware” , while talent exchanges and technology cooperation have renewed the “software”.

2.2 Leading the new direction of green and low-carbon transition

China honors its commitment with actions to addressing climate change. Responding to climate change is a national strategy to achieve sustainable economic, social and environmental development, which is incorporated into the overall layout for ecological conservation and national economic and social development. A “1+N” policy framework for carbon peak and carbon neutrality was formulated to shore up emissions reduction progress across various fields, industries and localities, providing valuable experience for other developing countries to comprehensively and systemically respond to climate change and achieve green and low-carbon transition.

2.3 Focusing on the new demands in green and low-carbon development

Innovation injects strong momentum for development. China is promoting innovation-driven green and low-carbon economic and social development at home. Meanwhile, the country actively responds to the new demands and challenges of other developing countries in addressing climate change through the innovative application of new technologies and products. In terms of climate change mitigation, China has introduced high-efficiency solar panels and advanced wind turbines to increase the proportion of clean energy in power generation. It has promoted advanced technologies such as ultra-high voltage transmission, smart power grids, and microgrid systems to reduce energy loss and improve access to clean energy. Moreover, the country has built low-carbon demonstration zones and integrated energy-saving buildings, low-carbon transportation, resource recycling, and other technologies to maximize the low-carbon feature. In terms of climate change adaptation, China has provided water-saving and drought-resistant crop varieties, as well as water-saving technologies such as mulching, drip irrigation, and sprinkler irrigation, thereby increasing grain output and the climate adaptability of crops. It has also applied machine learning, big data, and artificial intelligence technologies to develop a climate monitoring and early warning system that includes early warning models for various meteorological disasters and mobile early warning apps. These efforts have helped climate-vulnerable countries to better forecast and respond to extreme weather events.

By implementing South-South cooperation on climate change, China has provided Chinese solutions that showcase and lead the new direction of green and low-carbon transition. Exchanges on environmental and climate policies, plans, and standards have strengthened and supported the top-level design of green and low-carbon development. In response to the demand of other developing countries for

3. Producing Visible, Tangible and Effective Cooperation Outcomes

3.1 Increasing support and advancing cooperation in various forms

China has supported other developing countries, especially the least developed countries, African and small island developing countries, in addressing climate challenges through various practical cooperation, including inter alia green and low-carbon investment and financing cooperation, green and low-carbon economic and trade cooperation, the construction of low-carbon demonstration zones, material assistance, personnel exchanges, and capacity building. Statistics show that as of October 2024, 53 Memorandums of Understanding on South-South cooperation on climate change have been signed with 42 developing countries, and nearly 100 climate change mitigation and adaptation projects have been carried out. A China-Africa three-year action plan was launched to address climate change, which includes the Africa Solar Belt program that aligns the solar resource endowment with the clean energy development needs of Africa to address the electricity shortage faced by rural residents. A microsatellite was donated to Ethiopia aiming to collect multispectral remote sensing data in the agriculture, forestry, water conservancy, and disaster prevention and mitigation sectors. The project not only supports Ethiopia in studying climate change, but also delivers the space dream of the Ethiopian people. China has also donated energy-saving air conditioners to Uganda for their hospitals, clinics, and epidemic prevention centers. These energy-saving products effectively cool down the high temperatures in local medical service agencies, improve the working conditions of medical workers, and cut the electricity bills by at least 20%.

3.2 Expanding cooperation network with diversified participants

In April 2023, by responding to the Early Warnings for All initiative launched by the UN Secretary-General, the Ministry of Ecology and Environment of China signed a cooperation agreement with the World Meteorological Organization and China Meteorological Administration to jointly support other developing countries in improving their disaster early warning capabilities. As for Belt and Road cooperation, over 200 agreements have been signed with other partner countries and international organizations, all of which take green and low-carbon development as an important cooperation area. China and 31 partner countries jointly put forth the Initiative for Belt and Road Partnership on Green Development. More than 170 Chinese and international partners from over 40 countries initiated the BRI International Green Development Coalition (BRIGC). The Belt and Road Energy Partnership was established with relevant countries, including building six regional energy cooperation platforms, such as the APEC Sustainable Energy Center and the China-ASEAN Clean Energy Cooperation Center. China and African countries jointly issued the Declaration on China-Africa Cooperation on Combating Climate Change, establishing a China-Africa

partnership of strategic cooperation against climate change in the new era.

3.3 Strengthening capacity and enhancing effective cooperation across different sectors

Conducting exchanges and cooperation on capacity building. Personnel development cooperation has been advanced under the Belt and Road South-South Cooperation Initiative on Climate Change and the Green Silk Road Envoys Program. More than 300 climate-related capacity-building projects have been implemented to provide training opportunities for over 10,000 personnel from more than 120 developing countries to support the training of professionals on addressing climate change. In response to the actual needs of developing countries, China has held training programs on South-South cooperation on climate change with rich content and diverse themes. These capacity-building activities cover green and low-carbon sustainable development, greenhouse gas emissions reduction and energy transition, the use of space technology to respond to climate change, BRI climate finance, low-carbon technology and industrial development, and ecological adaptation in arid areas. Meanwhile, regional training courses have been held for Pacific Island countries and African countries for targeted training, and thus such courses were well received by trainees. China has also launched the China Center for SCO Environmental Cooperation, the Lancang-Mekong Environmental Cooperation Center, the China-Africa Environmental Cooperation Center, and the China-Pacific Island Countries Climate Action Cooperation Center to steadily advance relevant cooperation.

II. Progress and Achievements in Collaboration

- 1. Proactive Climate Change Mitigation**
- 2. Being Adaptive to Climate Change**
- 3. Aligning to the Sustainable Development Goals**

1. Proactive Climate Change Mitigation

1.1 Promoting low-carbon energy solutions

Facilitate low-carbon energy transitions. Committed to its role as a responsible developing nation, China has consistently supported other developing countries in their transition to low-carbon energy through concrete South-South cooperation. In 2021, China announced strong support for green, low-carbon energy development in developing countries and a halt to new overseas coal power projects. In 2022, China issued the Opinions on Jointly Promoting Green Development of the Belt and Road, actively expanding green energy collaboration with BRI partner countries. China, together with participating countries, launched the Belt and Road Energy Partnership, marking the first international energy cooperation platform initiated by China. To date, it has hosted three Belt and Road Energy Ministerial Conferences and three Belt and Road Energy Partnership Forums, where several outcomes, such as

Qingdao Initiative for Belt and Road Green Energy Cooperation and International Energy Cooperation Best Practice, were released. With the implementation of the China-Zambia-Ghana Renewable Energy Technology Transfer (China-Zambia-Ghana RETT) Project and the China-Ethiopia-Sri Lanka South-South Cooperation and Trilateral Cooperation on Renewable Energy Technology Transfer (China-Ethiopia-Sri Lanka Renewable Energy Technology Transfer SSTC Project), as well as the founding of the Technology Transfer South-South Cooperation Center (TTSSCC), China is driving renewable energy technology transfer within the United Nations framework. Through these initiatives, China shares its experiences and solutions for green, low-carbon transitions, broadening access for developing countries to the benefits of technological progress and South-South cooperation.

Column 1. Establishing a Model for South-South Technology Transfer through China-Ethiopia-Sri Lanka Trilateral Cooperation

Technology transfer within the South-South cooperation framework is a vital pathway for developing countries to address climate change and achieve sustainable development goals. The “China-Ethiopia-Sri Lanka Renewable Energy Technology Transfer SSTC Project” is co-funded by the governments of China, Ethiopia, and Sri Lanka. Aligning with the development context and actual needs of Ethiopia and Sri Lanka, the project aims to facilitate technology transfer through South-South cooperation, enhance local renewable energy technology and application, reduce greenhouse gas emissions, and drive sustainable development.

During its implementation, China has helped Ethiopia and Sri Lanka draft five provincial energy development plans, establish two joint research and promotion centers, and set up seven renewable energy demonstration sites. Additionally, a technology solicitation across China has been launched, producing the List of 1,000 Applicable Sustainable Development Technologies for the Belt and Road Countries. The project has also established a platform for experience-sharing and hosted over ten capacity-building sessions, building connections between Ethiopian and Sri Lankan entities and Chinese universities and energy enterprises. Furthermore, a bilingual information exchange website for technology transfer in Chinese and English has been launched. The project's achievements have been recognized by the United Nations for three consecutive years as “Good Practices in South-South and Triangular Cooperation in Least Developed Countries” , setting a benchmark for South-South cooperative technology transfer.

It has empowered China, Ethiopia, and Sri Lanka to share advanced renewable energy technology and experience, encouraged technology transfer and innovation, and explored new approaches to alleviate energy poverty and promote green, low-carbon growth. Sulakshana Jayawardena, Secretary of the Ministry of Power and Energy of Sri Lanka, stated that the project has improved renewable energy acceptance and application in various communities across Sri Lanka. Ato Mamusha Hailu, Head of the Minister's Office at the Ministry of Water and Energy of Ethiopia, remarked that the project has helped alleviate energy poverty in Ethiopia. For example, the selected applicable technologies and demonstration projects, such as small clean stoves, biogas generation, and photovoltaic (PV) irrigation, have brought efficient, clean energy solutions to numerous off-grid schools and communities.

Support renewable energy development. As a global frontrunner in renewable energy, China has to date contributed over 80 percent of photovoltaic modules and 70 percent of wind power equipment globally. Its products have been exported to over 200 countries and regions. Moreover, China collaborates with over 100 countries in solar, wind, hydroelectric, and thermal energy sectors. According to China's Energy Transition issued by the State Council Information Office, China's exports of wind power and photovoltaic products in 2023 helped other countries reduce carbon dioxide emissions by approximately 810 million tons contributing to the global efforts in combating climate change and transitioning to green development. Through the South-South Cooperation Projects on Climate Change, China has supported more than 40 developing countries with green, low-carbon resources such as residential solar power systems, clean stoves, solar streetlights, energy-saving lighting, and energy-efficient air conditioners, thus advancing renewable energy utilization in local communities. A series of landmark renewable energy infrastructure projects, including the Karot Hydropower Project in Pakistan, the Garissa Solar Power Plant in Kenya, the De Aar Wind Power Project in South Africa, and the Red Sea



Chinese technicians demonstrating the installation of residential solar equipment at Gwadar Port, Pakistan, in November 2019 (From Project Operator)

Integrated Smart Energy Project in Saudi Arabia, have been implemented with Chinese enterprises' involvement. These initiatives inject new momentum into energy structure optimization, economic and social progress, and environmental protection in their host countries.

Column 2. Africa Solar Belt Program under South-South Climate Cooperation

To fulfill the Declaration on China-Africa Cooperation on Combating Climate Change adopted at the 8th Ministerial Conference of the Forum on China-Africa Cooperation, China introduced the "Africa Solar Belt" program in September 2023 as a part of South-South climate cooperation efforts. Targeting Africa's collaboration demand for photovoltaic and clean energy development, the project makes use of China's strengths in the photovoltaic industry. Through integrating material assistance, dialogue and exchange, joint research, and capacity building, the initiative aims to build a China-Africa demonstration belt for solar energy, supporting African nations in overcoming electricity access challenges and advancing their green, low-carbon growth.

Under the "Africa Solar Belt" framework, China has pledged at least 100 million CNY over the next three years to provide electricity and lighting solutions for 50,000 impoverished households currently without power access, improving living standards across the region. The project will establish a China-Africa platform for exchange and cooperation in photovoltaic development, promoting the sharing of innovative photovoltaic technologies and encouraging industry partnerships with African countries on solar power initiatives. It will also strengthen Africa's capacity to address climate change by sharing practices and cultivating local talent in climate response and solar energy development.

Following the project's launch, China has engaged in consultations with ten African countries, including Chad, Sao Tome and Principe, Mali, and Burundi, and has signed memorandums of understanding or implementation agreements with five of these nations. These partnerships are expected to provide daily electricity access for nearly 30,000 off-grid households in Africa. Additionally, the program will organize "Africa Solar Belt" training sessions on South-South Climate Cooperation, building the capacity of African professionals to manage climate change challenges.



De Aar wind power turbine in Northern Cape, South Africa (Xinhua News Agency, photo by Lv Tianran)

1.2 Improving infrastructure

Support green, low-carbon infrastructure construction. China has actively supported the development of green, low-carbon infrastructure in developing countries, ensuring its overseas investment and aid projects embrace green development principles and contribute to climate change response. It has worked with developing nations to deliver a range of green, low-carbon infrastructure projects that not only elevate local economic growth and livelihoods but also effectively reduce energy consumption and greenhouse gas emissions. Following policies such as the Opinions on Jointly Promoting Green Development of the Belt and Road and the Guidelines for Ecological and Environmental Protection in Overseas Investment and Cooperation Construction Projects, Chinese companies have enhanced the environmental and climate resilience throughout project planning, design, construction, and operation, promoting green, low-carbon standards and best practices. They have empowered developing countries to enhance their capacity in addressing climate challenges by employing advanced technologies and demonstrating pilot projects.



Column 3. Backing the Construction of Green and Low-Carbon Infrastructure in Developing Countries

De Aar Wind Power Project in South Africa

South Africa enjoys tremendous wind power potential, with estimates indicating that more than 80% of its territory is naturally suited for wind energy development. The De Aar Wind Power Project, invested and constructed by Longyuan South Africa, CHN Energy Investment Group, is the largest operational wind power project in South Africa and the first wind power project funded, built, and operated by China in Africa. Since its operation in 2017, the project, with an installed capacity of 244.5 megawatts, has delivered 760 million kilowatt-hours of reliable, clean electricity annually. This output is equivalent to saving 215,800 tons of standard coal and reducing carbon dioxide emissions by 619,900 tons each year. Apart from meeting the electricity needs of 300,000 households, the project has effectively enhanced South Africa's energy mix and contributed to the country's green and low-carbon development.

"The De Aar wind power project is a flagship project showcasing win-win cooperation between South Africa and China in the new energy sector," said Cedric Thomas Frolick, house chairperson for committees at the National Assembly of South Africa. He also hopes Chinese companies will continue to leverage their technological and innovative strengths to actively participate in the construction of new energy projects in South Africa. Kirtan Bhana, chief editor of the Diplomatic Society, commented, "The South African government plans to raise the share of solar and wind energy in the national energy structure from 7% to 40% by 2030. Thanks to the support of Chinese enterprises, we are more confident than ever in achieving this goal."

China-aided Somosomo Hydropower Project in Fiji

Pacific island nations are among those most severely impacted by climate change. They are highly vulnerable and sensitive to climate, as climate change-driven natural disasters, including high temperature, floods, droughts, and storm surges, have far-reaching influence on their local economic development and the well-being of residents. In response, the Chinese government supported the construction of the Somosomo Mini Hydro Project on Taveuni, Fiji's third-largest island. The project officially operational as of March 2017 includes a 700-kilowatt hydropower station and a 10-kilometer power line. This initiative has greatly improved Taveuni's power infrastructure, providing the island with affordable energy and saving Fiji an estimated 1.9 million FJD (around 6 million CNY) annually in diesel imports. It also contributes to Fiji's national target of sourcing 90% of its energy from renewables by 2025.

Create green, low-carbon economic and trade zones. In building economic and trade zones with developing countries, China has actively driven green, low-carbon, and circular development within the parks. By constructing more eco-friendly infrastructure and reducing carbon emissions through industrial clustering, China is striving for green industrial growth, low-carbon energy transitions, and sustainable resource recycling. What's more, it is also guiding enterprises to adopt emission reduction practices in line with green, low-carbon development goals. By introducing green industries and projects such as photovoltaic power generation, new energy vehicles, clean energy equipment, waste-to-energy facilities, and recycling initiatives, China continually refines the industrial composition of these zones. These efforts accelerate the shift toward green, low-carbon industries while expanding collaboration with developing nations in low-carbon industries, energy, and technology.

Column 4. Building Green Pearl in the Desert in China-Egypt TEDA Suez Economic and Trade Cooperation Zone

The China-Egypt TEDA Suez Economic and Trade Cooperation Zone (TEDA), sits in Ain Sokhna Port, Suez Province, Egypt, bordering the Red Sea to the east and over 120 kilometers from Cairo, the capital of Egypt. For Egypt, a country striving to promote national industrialization, China's practices for development zones, especially green and low-carbon development experiences, are worth studying.

To resist the old way of developing the economy at the cost of the environmental pollution, China brought a vision for a green, low-carbon industrial park to the desert of Suez, prioritizing low-carbon, environmentally friendly enterprises. This strategy aims to foster a development environment where humans and nature coexist harmoniously. TEDA emphasized the use of energy-saving materials and facilities, including plastic steel windows with vacuum double glazing and VRF central air conditioners to lower cooling loss and improve energy efficiency. Also, TEDA encouraged and helped enterprises to unlock their potential in developing distributed energy resources by making full use of local solar and wind energy. In the 2-square-kilometer Phase I area of TEDA, all main roads are lined with hybrid wind and solar-powered streetlights, marking it Egypt's first industrial park to extensively implement renewable energy lighting systems.

According to Prime Minister Mostafa Madbouly, TEDA has become one of the most important projects of the Egypt-China BRI cooperation. TEDA focused attracting new energy projects, encouraging enterprises to highlight environmental protection, which further promoted the green and low-carbon development in Egypt. Looking ahead, Egypt plans to focus on attracting more investment from China and particularly looks forward to strengthening cooperation in new energy, green economy, digital transformation and other areas of mutual interests.





TEDA in Suez Province, Egypt, photographed in August, 2023
(Xinhua News Agency, photo by Sui Xiankai)



A main road of TEDA featuring hybrid wind and solar-powered streetlights, photo taken in October in 2024 (From TEDA)

1.3 Developing low-carbon transportation

Promote green and low-carbon development in transport infrastructure. Transportation serves as a critical cornerstone of economic globalization and a key catalyst for productivity growth. Establishing efficient, eco-friendly, and low-carbon transportation systems is vital to achieving high-quality economic and social development. In September 2023, the Global Sustainable Transport Forum was successfully held in Beijing, where China's Beijing Initiative on Global Transportation Cooperation and Communication gained the endorsement of 25 countries and international organizations. Through South-South cooperation, China has actively deepened its collaboration with developing countries by initiating and implementing numerous low-carbon transportation infrastructure projects. These projects have contributed expertise, experience, and support for the green, low-carbon advancement of transportation sectors in developing nations. In addition to reinforcing their climate resilience, these initiatives provide fresh momentum for global sustainable development.

Chinese enterprises have been involved in the construction and upgrading of over 10,000 kilometers of the railway across the African continent. The Addis Ababa-Djibouti Railway, known as the "lifeline of the East African Plateau", serves as a

crucial low-carbon transport artery for East Africa. Lome-Tokoin International Airport in Togo has focused on minimizing greenhouse gas emissions during its expansion and modernization, from design and construction through to operations, with an aim of becoming a green and sustainable airport. In Southeast Asia, China has supported the development of green, low-carbon transportation infrastructure, such as the Jakarta-Bandung High-Speed Railway and the China-Laos Railway. When constructing the Jakarta-Bandung Railway project, over 75% of services and procurement were locally sourced in Indonesia, creating approximately 51,000 local job opportunities. This project has advanced low-carbon transportation in the region and contributed to improved local livelihoods. The China-Laos Railway has established a green, low-carbon freight network that links major cities across 12 BRI countries, including Laos, Thailand, Vietnam, and Myanmar. To date, the network has transported over 10 million tons of goods via international freight trains, providing substantial support for regional economic growth and trade. The China-Europe freight trains have become a fast, efficient, and environmentally friendly international logistics corridor across Eurasia, contributing to China's efforts to stabilizing global industrial and supply chains, and innovative solutions in transportation and logistics to address global climate change.

Column 5. China-Europe Freight Trains' Role in Facilitating the Development of a Low-Carbon Logistics Chain

Freight and logistics activities contribute 8%-10% of global greenhouse gas emissions. Data from the International Transport Forum indicates that global demand for freight transport is expected to triple by 2050. Rail transport, an efficient, low-carbon, and eco-friendly mode of logistics, is increasingly important to emission reduction efforts in the transportation sector.

As a flagship project and hallmark of the Belt and Road Cooperation, the China-Europe Freight Train service has operated over 90,000 trains, connecting 224 cities in 25 European countries and over 100 cities across 11 Asian nations. Being a novel form of international land transport, the China-Europe Freight Train service has facilitated smooth cross-border logistics. By continually enhancing its organization, improving transport efficiency, and shortening overall transit times, the service has substantially reduced carbon emissions and minimized environmental impact. The service produces, on average, only one-seventh the carbon emissions of road transport, but it has propelled the rapid expansion of multi-modal transport, optimizing capacity and processes across sea-rail, road-rail, and air-rail solutions. This improvement in logistics efficiency sets a strong example in promoting low-carbon development within the transportation sector and taking global climate action.



On May 25, 2024, China-Europe freight trains gathering at the broad-gauge marshalling yard at Alashankou Railway Port in Xinjiang, awaiting departure (Xinhua News Agency, Photo by Yu Hui)

Bolster green, low-carbon mobility and lifestyle transformation. China's new energy vehicle (NEV) industry has seen remarkable "leapfrog" growth in recent years, demonstrating a robust model for low-carbon economic development in developing countries. Through industry partnerships, technology exchange, commercial trade, and product donations, China is delivering high-quality NEV products, technologies, and firms worldwide, offering crucial support for the development of green, low-carbon transportation industries and lifestyle transformation in these nations.

Chinese NEVs have created a "green" landscape in Latin America's public transit, providing low-carbon and convenient travel options for local residents. Chile, for instance, boasts a sizable fleet of Chinese electric buses, with BYD, Yutong, and Foton buses operating across its capital, Santiago. Meanwhile, in Bogota, the capital of Colombia, thousands of Chinese-brand electric buses are

playing an important role in its sustainable urban transport. Major Chinese automakers such as GAC, XPeng, and GWM are accelerating efforts to establish production bases and R&D centers in Southeast Asia, while supply chain companies such as Joyson Electronics, Lizhong Group, and Prinx Chengshan are strengthening their foothold in the region.

From product exports to building entire supply chains abroad, Chinese NEV enterprises are not only delivering green, low-carbon transportation solutions to developing countries but also driving local economic growth, job creation, and progress of NEV's upstream and downstream industries. This shift helps reduce carbon emissions from road transport so as to improve local air quality, and enhances the accessibility of low-carbon mobility, elevating the quality of life and social well-being for residents in these communities.

Column 6. Chinese Electric Buses Ushering in Chile's Green Transit Era

Santiago, nestled in Chile's Central Valley, is prone to smog due to its geography and other factors. According to Chile's Ministry of the Environment, addressing air pollution could yield 8 billion USD in annual health benefits at the national level. With the transportation sector responsible for around 24.5% of Chile's greenhouse gas emissions, a series of measures have been initiated to control air pollution, including promoting the electrification of transportation.

In December 2018, Chile welcomed its first fleet of 100 BYD battery electric buses (BEV buses) into Santiago's municipal transit system, creating what was then the largest pure electric bus fleet in Latin America and heralding Chile's transition to a "green transit era". In October 2019, Chile launched its first BEV bus line - the first of its kind in Latin America - serviced by an initial fleet of 183 electric buses from Chinese manufacturers. This line covers nine districts, including Santiago, and provides zero-emission, low-carbon transportation to around 660,000 passengers. By November 2019, 20 BEV buses gifted by the Chinese government arrived at the Port of San Antonio. In June 2020, BYD further delivered 150 BEV buses to the country, expanding green, low-carbon transportation options for Santiago's residents and supporting Chile's target of a 100% electric bus fleet by 2040.

"The electric buses made in China are of good quality, high safety, low noise, comfortable traveling experience. Moreover, they are equipped with advanced technologies such as wireless network and phone charging, which greatly improves the transportation experience of residences and is widely welcomed by local drivers and passengers." said Paola Tapia, Director of the Metropolitan Public Transport Directorate of Chile. The demand in new energy vehicles will continue to increase in the future. Therefore, Chile hopes to deepen cooperation with China in areas including electric buses, charging piles, maintenance and components services, so as to further reduce carbon emissions and energy consumption of its transportation system.

Then-Minister of Transport and Telecommunications Gloria Hutt added that China's extensive experience in green mobility offers valuable insights for Chile.



In November 2019, BEV buses gifted by the Chinese government arriving at the Port of San Antonio in Chile (From Project Operator)

1.4 Establishing low-carbon demonstration zones

In November, 2015, at the twenty-first Conference of the Parties to the United Nations Framework Convention on Climate Change (COP21), President Xi Jinping launched the “Ten-Hundred-Thousand” Program for South-South Cooperation on Climate Change, proposing to build 10 low-carbon demonstration zones in developing countries. Responding to the demand for green, low-carbon growth in these nations, China has been actively involved in establishing demonstration zones in countries like Laos and Cambodia, supporting their climate action efforts by promoting green industries, technologies, and sustainable development practices.

In building these demonstration zones, China has proactively advanced the application of green and low-carbon technologies to create regional pilot examples of sustainable, low-carbon, and sustainable growth. In energy, solar and wind power have been widely applied, providing stable electricity to the demonstration zones and optimizing the energy mix. For energy savings, energy-efficient building technologies and advanced production equipment have been promoted to improve energy efficiency. In transportation, NEVs have been extensively used and public transportation systems have been improved, enhancing road efficiency and cutting greenhouse gas emissions in the transport sector.

The China-Laos Vientiane Saysettha Low-Carbon Demonstration Zone aligns closely with the Lao government’s renewable and green energy development plans, supporting the country to achieve its 2050 net-zero emissions target and offering valuable insights into low-carbon growth paths for industrial parks. Similarly, the China-Cambodia Low-Carbon Demonstration Zone in Sihanoukville Province has received materials such as solar streetlights, campus photovoltaic systems, electric motorcycles, and household solar systems. The “green energy” has illuminated Sihanoukville, while expanding renewable energy applications so as to bolster Cambodia’s climate resilience efforts.

Column 7. China-Laos Vientiane Saysettha Low-Carbon Demonstration Zone

Located near the Lao terminus of the China-Laos Railway, the Vientiane Saysettha Development Zone (SDZ) is China's sole national-level overseas economic and trade cooperation zone in Laos and a national economic zone for Laos. In July 2020, China and Laos signed a Memorandum of Understanding to establish the Lao's first low-carbon demonstration zone under the South-South climate cooperation framework in SDZ. This project aims to foster the implementation of sustainable green development principles by cultivating green modern production and lifestyles, setting Vientiane as an example of low-carbon and eco-friendly urban development for Laos and even the broader Southeast Asia region.

In terms of material support, China has provided Laos with two batches of materials, including 2,000 solar-powered LED streetlights, 12 NEV buses, 8 NEV trucks, 8 NEV environmental enforcement vehicles, and 5 environmental monitoring systems. These contributions have encouraged shifts toward low-carbon lifestyles with green transportation, improved green infrastructure with low-carbon lighting, and strengthened Laos' climate resilience and low-carbon awareness with technical exchanges and outreach events. On the technical side, a team of Chinese and Lao experts jointly developed the Low-Carbon Development Plan for the Vientiane Saysettha Development Zone, offering guidance for long-term low-carbon growth. This plan focuses on four-pronged low-carbon transitions on energy, infrastructure, industry, and management, empowering Laos to better address climate change. In April 2022, the demonstration zone was officially inaugurated. With the first batch of NEVs in service, the zone is expected to reduce carbon emissions by about 1,243 tons annually, comparable to planting over 100,000 trees.

“Saysettha Low-Carbon Demonstration Zone is a good project, which has made great contributions to the development of the green economy in Laos and brought tangible benefits to the Lao people,” remarked Sommad Pholsena, Vice President of the National Assembly of Laos. With its iconic Laotian-style gate standing on the lush plains, the zone features standardized color-coded factory buildings and straight north-south roads illuminated by solar-powered streetlights. NEV buses connecting Saysettha with Vientiane have become a popular topic and a striking sight. Under the demonstration zone's influence, SDZ has gained recognition from local residents for its pleasant environment, quality job and investment opportunities, and harmonious community atmosphere.





Night-time aerial view of the Vientiane Saysettha Development Zone (From SDZ)



NEV buses deployed in the development zone (From SDZ)

2. Being Adaptive to Climate Change

2.1 Strengthening early-warning system

Early warning is an important instrument to prevent the risk of extreme weather and climate events and adapt to the impacts of climate change. United Nations Secretary-General António Guterres launched the Early Warning for All initiative on 2022 World Meteorological Day. The initiative aims to ensure that by the end of 2027, everyone on Earth is protected by early warning systems, in particular those in developing countries, from the impacts of extreme weather and climate events. In November 2022, the Executive Action Plan for the Early Warning for All initiative was adopted at the twenty-seventh Conference of the Parties to the United Nations Framework Convention on Climate Change (COP27).

China has committed its full support to the UN Initiative. In September 2022, H.E. Wang Yi, then-Special Representative of President Xi Jinping, State Councilor of China, attended the Informal Leaders' Roundtable on Climate Action at the UN headquarters in New York. He emphasized that China supports the Global Early Warning Initiative launched by Secretary-General António Guterres. In April 2023, the World Meteorological Organization, the Ministry of Ecology and Environment of China and the China Meteorological Administration signed the Cooperation Agreement on Supporting the UN Early Warnings for All initiative. Three parties aim to help the least developed countries, developing countries in Africa, and small island developing countries to enhance early warning and climate change adaptation capacity for all through early warning capacity-building, materials assistance and joint activities.

Column 8. South-South Cooperation on Climate Change Supports Developing Countries in Improving Early Warning Capabilities

China and Pakistan jointly develop localized early-warning system

Pakistan is one of the 10 countries most severely affected by climate change and extreme weather events, with flooding being the primary natural disaster it faces. In 2022, the severe flooding submerged one-third of the country, causing more than 1,700 casualties and affecting over 33 million people. In response, the Chinese government acted swiftly to sign a Memorandum of Understanding with the Government of Pakistan to roll out an early warning project under South-South cooperation on climate change to support Pakistan in preventing and warning of extreme weather events.

The project consists of three parts, namely a Cloud-based Early Warning Supporting System, capacity-building training sessions, and a ground-based meteorological smart monitoring station. An expert team is formed to jointly analyze warning requirements, identify forecast and warning types, and design thresholds and algorithms based on the local needs and actual situation in Pakistan. The team has developed a variety of meteorological disaster early warning models, including severe glacial lake outburst flood monitoring and early warning, and monsoon outbreak monitoring and early warning scenarios. With the help of machine learning and other AI technology, the team has optimized and upgraded the meteorological forecast and warning algorithms, and produced AI-generated early warning content. By sharing management experience, jointly developing the system, receiving application feedback, and applying remote AI generation, the project integrates Chinese technology with Pakistan's local system. It has provided strong support for Pakistan's early warning and climate change adaptation capacity.

Transportable meteorological satellite data receiving and processing application system tailored for Uruguay

Agriculture and livestock are the mainstays of Uruguay's economy. However, increasing climate change has become a matter of national concern that seriously impacts the country's agriculture, forestry, and water resources. The government of Uruguay faces the challenge of effectively analyzing satellite data to support agricultural production and environmental monitoring, preventing extreme weather disasters.

In November 2019, the Ministry of Ecology and Environment (MEE) of China and the Ministry of Education and Culture of Uruguay signed a Memorandum of Understanding to send materials under South-South cooperation on climate change. The MOU stipulates that by 2022, a multi-satellite integrated meteorological satellite data mobile reception and processing application system should be delivered to Uruguay. The facility will receive data from a series of meteorological satellites, including Fengyun-3D and EOS-Aqua, to produce ecological and environmental information such as vegetation index and land surface temperature. According to the Uruguay side, the system will bring a landmark change to Uruguay by providing high-quality and latest data and image to support the prevention of extreme weather disasters, environmental monitoring, agricultural production, and academic research. The local media praised the cooperation as a model of responsibility and joint actions, reflecting China's strong determination to work with the Global South to address climate change.



One segment of the multi-satellite integrated meteorological satellite data mobile reception and processing application system from MEE (Xinhua News Agency, Photo by Nicholas Celaya)

2.2 Strengthening efforts against floods and droughts

Meteorological disasters such as floods and droughts are adverse events directly caused by climate change. Due to frequent extreme weather events, heavy rainfall, floods, and droughts are more emergent, extreme, and recurrent disasters. Therefore, it is more urgent to meet the rising demand for adaptation to climate change. China has actively shared its experience and technology in flood and drought prevention with developing countries. Through cooperation on water resources, it has provided water conservancy facilities, technical training, and other assistance to help developing countries improve their capacity to cope with

floods and droughts. In addition, the country has also designed and built a series of water conservancy facilities for developing countries such as reservoirs, dykes, drainage systems, etc., to enhance the efficiency of water resource utilization and allocation, and to ensure water security for residential use and agricultural irrigation. China has organized technical training and exchanges along with cooperation to share practical techniques in hydrological monitoring, disaster early warning, and emergency management. China has also supported setting up a comprehensive hydrological monitoring system to provide data for early warning of floods and efforts against droughts.

Column 9. Lancang-Mekong Water Resource Cooperation Project Benefits Residents of Many Countries

The Lancang-Mekong River Basin is one of the regions mostly affected by climate change. The frequent droughts and floods crisis, coupled with backward water supply facilities in some rural areas, and the acute water shortages induced by less-developed engineering and quality deterioration, have seriously undermined the livelihoods of the local population and the economic growth of the region.

The Lancang-Mekong Cooperation Mechanism was launched in March 2016 by six countries, namely China, Cambodia, Laos, Myanmar, Thailand, and Vietnam in the River Basin. As one of the priority areas of the cooperation mechanism, Lancang-Mekong water resources cooperation has been rolled out and achieved fruitful and practical results. Since 2017, the Chinese government has implemented more than 50 livelihood demonstration projects in these countries, covering rural water supply safety, integrated management of small watersheds, dam safety monitoring, personnel training, etc., which have brought tangible benefits to local people.

The Hak village in Luang Prabang, Laos, was once plagued by water scarcity. Unhygienic drinking water often causes diarrhea and vomiting. The Lancang-Mekong Sweet Spring Action is one of the livelihood demonstration projects funded by China. The project has built a rural water supply safety demonstration site in Hak village, providing safe drinking water for about 2,000 local residents. According to the Assessment Report on the Implementation of the Five-Year Action Plan for Lancang Water Resources Cooperation (2018-2022), as of 2022, Sweet Spring Action Phase I has built 8-9 centralized water supply demonstration sites and 54 decentralized sites, benefiting tens of thousands of people.

China has also actively promoted exchanges and cooperation with the countries of the Lancang-Mekong River Basin across many areas, including water resources development and utilization, hydrological information, disaster prevention and mitigation, capacity building, and personnel training. In 2016 and 2019, the River Basin encountered severe drought and nearly lost 20% of water flow. China strived to ensure a stable discharge flow of the River and responded to the needs of downstream countries by replenishing 12.65 billion cubic meters immediately, which greatly helped the countries to address drought threat in an effective way, and avoided catastrophe in the year of severe drought.

In order to better coordinate and promote water resources cooperation in the River Basin, the six countries jointly formulated a new five-year action plan at the end of 2023, the Five-Year Action Plan on Lancang-Mekong Water Resources Cooperation (2023-2027). The plan is set to further the sustainable use, management, and protection of water resources, and to jointly address the challenges posed by global climate change and its increasing impacts.



Local Hak villagers in Luang Prabang, Laos taking water from the Sweet Spring Action demonstration site (From Project Operator)

2.3 Supporting forests and land protection

Forests can play the role of both mitigation and adaptation in addressing climate change. Deforestation and forest degradation caused by human activities are important triggers of climate change in countries around the world, especially in developing countries. The Glasgow Leaders' Declaration on Forests and Land Use, agreed upon during the Leaders' Summit at the twenty-sixth Conference of the Parties to the United Nations Framework Convention on Climate Change (COP26), commits to halt and reverse forest loss by 2030. China actively supports developing countries to protect forests and land, and has engaged with Africa, Southeast Asia, Latin America, and other regions to help them improve forest resource monitoring, restoration, management, and sustainable development through technical guidance, capacity building, joint projects, and experience sharing. Joint efforts have been made on ecological restoration projects, such as vegetation restoration and soil and water conservation, to enhance the stability of ecosystems and improve their ability to cope with floods and droughts. China established the Asia-Pacific Network for Sustainable Forest Management and Rehabilitation (APFNet). By August 2024, over 30 international training sessions have been held for 400 forestry officials and researchers, covering sustainable forest management

in response to climate change, forest resource management, and desertification prevention and control, which have contributed to expanding forest area, improving the quality of the forest ecosystems, and responding to climate change in Asia-Pacific.

Column 10. Sharing Chinese Solutions to Help Africa Build the Great Green Wall

In response to the serious desertification and land degradation, the African Union, inspired by China's Three-Norths Shelterbelt Program and other large-scale environmental projects, took the lead to launch the Great Green Wall Initiative (GGW) in 2007, which aims to address desertification and land degradation caused by climate change in the Sahel and Sahara regions. The GGW is now a flagship program for the African Union to implement the UN 2030 Agenda for Sustainable Development. The participants have expanded from 11 to over 20 countries and international organizations. The project covers the Sahara region, spanning over 780 million hectares, and influencing 232 million people.

China is very supportive of the GGW and has listed it in the China-Africa Cooperation Vision 2035, the Declaration on China-Africa Cooperation on Combating Climate Change, and China-Africa Joint Projects in nine areas. Capacity-building activities have been organized to support GGW, which include training workshops for government officials and scientific researchers from relevant African countries and regions, sharing China's technical outcomes and experience in combating desertification to help African countries enhance their capacity. Together with the Secretariat of the United Nations Convention to Combat Desertification (UNCCD), China has launched the International Training Center to Combat Desertification and the International Knowledge Management Center. More exchanges have been carried out through international platforms such as the Kubuqi International Desert Forum and the Taklamakan Desert Forum to strengthen mutual understanding with African countries. A Great Green Wall Big Data Facilitator (GGW-BDF) has been developed to provide real-time land deterioration information for African users.

A Pan-African Great Green Wall Research Center was jointly established by the Xinjiang Institute of Ecology and Geography (XIEG) of the Chinese Academy of Sciences and the Pan-African Agency of the Great Green Wall (PAGGW) in 2018. The Center focuses on ecosystem monitoring, sustainable use of land resources, personnel training, technology transfer, and other fields. Collaboration outcomes include: In Nouakchott, the capital of Mauritania, experts from China and Africa built a pilot demonstration zone for quick fixation of shifting sands and water-saving irrigation, after long-term systematic monitoring, experimental research, and application. In Kano State, Nigeria, a pilot demonstration zone for economic forestry was established. In Ethiopia, with regard to the ecological restoration and reconstruction of scrubby grasslands in low-altitude areas, a sustainable development model of livelihoods has been constructed. The project aims at removing shrubs to harness grassland, rotating animal husbandry and suspending breeding, and combining animal husbandry with farming. A 200-hectare demonstration area has been constructed as an enclosed demonstration zone. Another two hectares have been designated to pool water resources for forests and grassland restoration.



Two maintenance workers plant a sapling at the site of a desertification control project in Kano state, Nigeria, on June 5, 2023. The project was launched by the African Desertification Control Initiative (ADCI) in Nigeria and XIEG of the Chinese Academy of Sciences. (Xinhua News Agency, Photo by Guo Jun)

2.4 Safeguarding food security

Global climate change has made extreme weather more frequent and intense, and abnormal climate events are leading to increased uncertainty in agricultural production models and decreased yields of agricultural products, threatening food security in vulnerable communities and severely hindering the progress of sustainable development in poor areas. Through providing agricultural technology assistance and promoting agricultural cooperation, China has helped developing countries improve their ability to cope with droughts, floods, and other extreme weather and climate events. These efforts can improve the efficiency and quality of agricultural production, reducing food losses and ensuring food security. Agricultural technology demonstration centers have been built to spread agricultural planting techniques

and management experience, introduce drought-tolerant, pest, and disease-resistant crop varieties, and provide water and moisture conservation techniques such as drip irrigation and filming. In this way, local communities can better adapt to climate change and reduce impacts on agricultural production and life. Agricultural infrastructure such as farmland water conservancy has been jointly built to improve the conditions for farmland irrigation, and stabilize agricultural production during dry and rainy seasons. China has provided agricultural material assistance and technical support to help local communities develop eco-agriculture and organic agriculture. Encouraging less dependence on chemical pesticides and fertilizers can reduce the environmental impact of agricultural production, and increase the sustainability and resilience of agriculture.

Column 11. Wanbao Mozambique Agriculture Park Project Supports African Countries in Building Food Security Shields

Most countries in Africa are challenged by food shortages and insufficient production to meet domestic demand. The gap between supply and demand is huge and highly dependent on imports. Mozambique is in good natural conditions to develop agriculture. However, backward technology, poor infrastructure, and climate change lead to poor agricultural production and high climate sensitivity. Supporting rice planting is of great significance to expand food self-supply and ensure food security in Mozambique and its neighbors.

The Mozambique Agricultural Park project is one of the 13 key projects of productivity cooperation between China and Mozambique. It was built as a comprehensive agricultural park project with rice cultivation as the main business and cultivation of a variety of grain and cash crops as the auxiliary business, incorporating farmland development, grain production, storage, processing, and sales.

A simple, practical rice planting technology was developed that is easy for local people to master, suitable for Mozambique, and can be further popularized in other parts of the African continent. Efforts have been paid to guide and train local farmers. To date, about 1,500 households, an equivalent of some 10,000 persons, have been guided and trained. The guidance and training have helped to increase the yield from 1.5 tons/hectare to 7 tons/hectare. The project team has improved the irrigation and water conservation infrastructure of some projects to guarantee the specialization and efficiency of planting, which helped local villagers fight against floods, cyclones, droughts or other extreme climates. The project has actively promoted the localization of imported technologies while introducing advanced technologies from China. The cooperative planting model of “company plus households” adopted by the project has enabled local farmers to actively participate in planting and acquiring technology without increasing the debt of the local government, thus reducing poverty and achieving a balance between economic, environmental and social benefits.



Rice field in Wanbao Agriculture Park Project of Mozambique, November 28, 2019 (Xinhua News Agency, Photo by Zhang Yu)

3. Aligning to the Sustainable Development Goals

3.1 Gathering development consensus

Enhance strategy and policy alignment. The Global Development Initiative (GDI) has been put forward, placing addressing climate change as a priority area of cooperation to drive momentum for global sustainable development. Through the Belt and Road Initiative, China is calling on countries to actively respond to the challenges of climate change and safeguard global ecological security. Efforts include promoting the full implementation of the United Nations Framework Convention on Climate Change (UNFCCC) and its Paris Agreement by all parties and seeking the greatest common ground for addressing climate change among BRI partner countries. The Initiative for Belt and Road Partnership on Green Development was launched with 31 countries, advocating for the principles of equity, common but differentiated responsibilities, and respective capabilities, taking into account their national circumstances when addressing climate change. The Declaration on China-Africa Cooperation on Combating Climate Change was released with African countries, including a three-year action plan for climate change, which further strengthened China-Africa South-South cooperation to address climate change. China has actively implemented the “Ten-Hundred-Thousand” Program for South-South Cooperation on Climate Change and the Belt and Road South-South Cooperation on Climate Change, providing support to other developing countries, especially small island countries, LDCs, and African countries, in addressing climate change.

Build platforms for exchange and cooperation. The high-level conference of the Forum on Global Action for Shared Development has been organized for two years in a row, in which green development was one of the important topics. During the Forum, the Beijing Statement was issued, calling on countries to pool more resources for climate actions and green development. The Global Development Project Pool and the Global Development Project Pool Financing mechanism have been developed. The Global Development Promotion Center (GDPC) was established to mobilize resources for global development cooperation and support projects on climate change. China launched the BRI International Green Development Coalition (BRIGC), a platform with over 170 Chinese and international partners from 43 countries that focuses on climate change, green and low-carbon transition, and other topics of key concern. BRIGC has organized over 100 thematic activities to promote common ground and actions in green development.

In addition, China has established the Cooperation Center for China-Pacific Island Countries on Climate Change to conduct demonstration projects with Pacific Island countries, sharing experiences and practices in green and low-carbon development, and synergizing efforts to effectively strengthen exchanges and cooperation with Pacific Island countries. The Center held bilateral and multilateral dialogues and exchanges including inter alia High-level Forum on South-South Cooperation to Address Climate Change, Seminar on Addressing Climate Change between Developing Countries with Similar Positions, China-ASEAN Dialogue on Climate Change and Ecological Environment, China-Pacific Island Countries Dialogue on Climate Change, China-Indian Ocean Development Cooperation Forum. Together with developing countries, it's important to make common voices heard and protect our common interests.



Simon Stiell, Executive Secretary of the Secretariat of the United Nations Framework Convention on Climate Change, speaks at the High-level Forum on South-South Cooperation to Address Climate Change on Dec. 8, 2023 (Xinhua News Agency, Photo by Wang Dongzhen)

3.2 Enhancing financing and investment support

Develop investment and financing networks for green and low-carbon development. China has actively promoted the green transition of investment and financing, and proposed the BRI Green Investment Principles (GIP) to encourage and guide financial institutions and enterprises to expand green investment. GIP specifies seven principles, including the disclosure of environmental information, the use of green financial instruments, and capacity-building through multi-party cooperation. As of September 2024, it has expanded its membership to 49 signatories, 20 supporters and 2 observing institutions from 17 countries and regions around the world. In addition, in October 2023, BRIGC and other 16 Chinese and international partners launched the Green Investment and Finance Partnership (GIFP). It aims to build a communication and cooperation platform and provide practical solutions to the investment and financing bottlenecks in green BRI.

As for multilateral platforms, China has actively engaged with the World Bank, the Asian Infrastructure Investment Bank (AIIB), the Asian Development Bank (ADB), and the Multilateral Development Center for Finance Cooperation (MCDF) to provide support financing for infrastructure connectivity and green development in developing countries. The country has supported AIIB to develop environmental and social framework, and energy strategy in line with international policy standards, which will guide investors to prioritize green concepts and technologies in energy, transportation, urban, and other infrastructure projects. The MCDF was founded with the World Bank and eight other international development financial institutions, to promote information sharing, project preparation, and capacity building and to respond to the needs of developing countries for green and low-carbon development.

Intensify the financial and investment support in green and low-carbon development.

In September 2015, during his visit to the US, President Xi Jinping and the U.S. heads of state released a joint statement on climate change, announcing China's contribution of 20 billion CNY to establish the China Climate Change South-South Cooperation Fund to support other developing countries in addressing climate change. According to incomplete statistics, China has provided and mobilized climate change-related financial support totaling more than 177 billion CNY to other developing countries since 2016, covering numerous domains in climate mitigation and adaptation, including renewable energy development, green and resilient infrastructure, new energy vehicles, meteorological observation and monitoring, climate risk and early warning, agricultural technology and food security, integrated and efficient utilization of water resources, disaster prevention and mitigation, etc. And they have yielded remarkable results at multiple levels and in various areas. In October 2023, during the Third Belt and Road Forum for International Cooperation (BRF), a 780-billion-CNY Belt and Road Project Financing window was set up by Chinese financial institutions to support Belt and Road cooperation projects on the basis of market and business operation. China has also developed innovative models such as third-party market cooperation, mobilized and given full play to the comparative advantages of all parties, coordinating diversified resources, to unlock the potential of emerging markets and explore new cooperation modes. These efforts have effectively matched the demands of developing countries for green and low-carbon development with China's strengths in production and technology.

Column 12. Third-party Cooperation Creates New Paradigm for South-South Cooperation

The Mozula wind power project in Montenegro is a successful example of cooperation between Chinese and European companies in the third-party market. The wind farm, constructed by a consortium of the Shanghai Electric Power Company (SEP) and Malta state energy provider Enemalta, with a 46-MW installed capacity. The farm is expected to produce 112 GWh of clean power, offsetting 95,000 tons of greenhouse gas. Its share in overall production will reach 5% according to the 2017 national total power generation of Montenegro, providing electricity to 100,000 local residents. The wind farm will strongly support Montenegro's target to double the installed capacity of new energy, fulfilling its green energy development commitment to the European Union, and greatly ensuring the stable supply of electricity in Montenegro's coastal areas. The project is also highly recognized by the Malta side. Joe Mizzi, Malta's Minister for Energy and Water Management, said that it is Malta's first wind power project in the EU energy market. Cooperation with Chinese enterprises has enhanced Malta's popularity and status in the international market.



The Mozula wind power project in Montenegro, June 28, 2018 (Xinhua News Agency)

3.3 Improving capacity-building

Only by working together in unity to seek mutually beneficial and win-win outcomes can we effectively address climate change. In September 2014, China released the National Plan for Responding to Climate Change (2014-2020), proposing to vigorously carry out South-South cooperation on climate change, support capacity-building in developing countries, expand the field of training, create new training sessions, and help the developing countries to train talents in various field of climate change. As of October, 2024, more than 300 training sessions on climate change have been provided to more than 10,000 personnel in 120 developing countries. Training content covers climate change mitigation and adaptation,

financial mechanisms arrangement, technological innovation, and other hot topics of concern to developing countries. Field trips have been organized to visit wind power projects, new energy equipment manufacturing bases, green and low-carbon industrial parks, eco-farms, and other technique application scenarios. Lectures, field trips, exchanges, and discussions have raised their understanding of policies and actions to address climate change. Besides learning, capacity-building projects are also good opportunities for participants to communicate and exchange with Chinese experts and scholars to learn and share their experience in tackling climate change. It has facilitated the consensus, determination, and action among developing countries.

Column 13. Training Session on South-South Cooperation on Climate Change Builds Bridges of Cooperation beyond Languages and Cultures

In November 2015, at the opening ceremony of the twenty-first Conference of the Parties to the United Nations Framework Convention on Climate Change (COP21), President Xi Jinping announced that China would provide training sessions to address climate change for 1,000 personnel from developing countries. So far, China has organized a series of training courses, which have set up an important platform for mutual learning among developing countries, and have been highly praised by the participants.

Deli Koulibaly, climate officer from the Ministry of Environment and Sustainable Development of Côte d'Ivoire, said that the training has greatly helped him in his work, and that he is willing to work hard to apply what he has learned and China's useful experience to his work. Eric Mbinwani from the Ministry of Forestry of Malawi appreciated the Chinese government for providing the training opportunity. As a climate-vulnerable country, Malawi looks forward to more cooperation with China. Phut Phongsavan from Laos, believes that China has demonstrated great responsibility in addressing climate change. He spoke highly of the training content and said that training gave him an in-depth understanding to China's policies, work progress, and new energy technologies in addressing climate change, which would help him to continue to work hard on addressing climate change back to Laos.

The South-South cooperation training programs on climate change have transcended linguistic and cultural barriers, forging a bridge between China and other developing nations. They have cultivated cross-cultural friendships and a unified commitment to addressing climate change, transforming shared resolve into concrete actions and bringing the collective strength of the Global South to global climate governance.

3.4 Focusing on the vulnerable group

Climate change is one of the biggest health threats for humanity, challenging human health through air pollution, extreme weather events, food insecurity, water shortage and disease spreading. Developing countries, especially African countries, small island countries, and LDCs are the countries with the least contribution to climate change, however their people face severe health damages. Statistics from the World Health Organization (WHO) indicate that around 3 billion people (mainly in developing countries in Asia, Africa, and Latin America) are still burning traditional solid fuels such as firewood, agricultural waste, crushed coal, and kerosene in their daily lives for cooking, heating, and other related activities. Emissions from black carbon and carbon dioxide are harmful to the surrounding neighborhood and its inhabitants, especially the health of vulnerable groups, including pregnant women, children, the elders and people with chronic diseases.

In 2015, China signed a MOU on material assistance project for climate change with Myanmar, sending 10,000 clean stoves to reduce the use of fuel wood, improve combustion efficiency, and protect women's health. Additional support will be provided for Myanmar's forest resources and ecological environment protection, as well as its response to climate change. At present, China is actively developing projects on clean stoves for South-South cooperation on climate change. Projects will focus on emission reduction in the civil sector of developing countries. Special attention will

be paid to climate-vulnerable populations, including women and children. By introducing clean stoves and raising their proportion in daily cooking and heating activities in economically underdeveloped areas, the project will help developing countries actively respond to climate change while promoting green, low-carbon, and sustainable production and living styles, and contribute to Sustainable Development Goals.

In September 2024, National Disease Control and Prevention Administration and 12 other related departments, including the National Development and Reform Commission, the Ministry of Finance, and the Ministry of Ecology and Environment, issued China's National Climate Change Health Adaptation Action Plan for Climate Change (2024–2030). In this document, China proposed to promote global action on health adaptation to climate change and deepen international cooperation. It is committed to playing an active role in public health governance to build a cooperative global system for health adaptation to climate change with mutual benefits. The country follows and studies policies and strategies from international and regional organizations, engages in international exchanges and cooperation of science and technology in climate change and healthcare, and shares Chinese wisdom to provide technical support to more partner countries and regions.

III. Future Outlook

- 1. Turning South-South Cooperation on Climate Change into a Major Force for Global Climate Governance**
- 2. Fostering a Visible, Tangible and Effective Paradigm of South-South Cooperation**
- 3. Joining Hands with the International Community for Shared Challenge, Opportunities and Future**

The world is witnessing accelerated shifts in a century of global change, with limited momentum for economic recovery. In the face of complex situations and multiple challenges, addressing climate change remains an arduous task that requires broad global participation and joint actions. Looking to the future, China will collaborate with other developing nations to advance eco-friendly modernization, actively seeking common ground on climate action and working to build a “green growth engine” . Together, we aspire to make a stronger contribution to a fair and equitable global climate governance system featuring mutually beneficial cooperation.

1. Turning South-South Cooperation on Climate Change into a Major Force for Global Climate Governance

1.1 Uphold multilateralism to advance global climate governance

A shared future means a shared responsibility. China will firmly uphold the international system with the United Nations at its core, continue to strengthen cooperation with the international community in line with its responsibility to build a community with a shared future for humanity, and provide more public goods and solutions for global climate governance. China will promote the comprehensive, balanced, and effective implementation of the UNFCCC and its Paris Agreement, and endeavor a fair and equitable global climate governance system that features win-win cooperation.

1.2 Adhere to win-win cooperation to safeguard the interests of developing countries

Win-win cooperation is a trend of the times, and South-South cooperation has consolidated unity and cooperation among developing countries. China will take the initiative to give full play to its advantages in technology, capital, and experience, and increase support for other developing countries. China will work closer with other developing countries on climate change issues, safeguard our interests. China will also share opportunities, promote cooperation and development, and spread best practices to other developing countries.

2. Fostering a Visible, Tangible and Effective Paradigm of South-South Cooperation

2.1 Promote practical cooperation to facilitate the low-carbon transition

In addressing climate change, developing countries are facing similar development dilemmas and challenges. China is committed to becoming an active advocate and firm practitioner of South-South cooperation on climate change, and will continue to deepen cooperation in this field. By focusing on the practical needs of developing countries for green and low-carbon development, China will explore the best pathway to coordinate economic structural optimization and green and low-carbon development, and support climate change adaptation and mitigation actions in key areas.

2.2 Strengthen scientific and technological support for innovation-driven development

Addressing climate change requires constant exploration of new technologies and approaches. China will promote cooperation with other developing countries in the research and development, application, and promotion of green and low-carbon technologies, and develop innovative technologies

in renewable energy, energy storage, smart grid, carbon capture and storage, and other frontier areas. Providing solid scientific and technological support for South-South cooperation on climate change will open up new progress in green and low-carbon innovation and development.

2.3 Value effective cooperation to improve overall capacity

Tackling climate change requires extensive training for talents and improving their ability. China will continue to support other developing countries through material assistance, technological assistance, exchanges and seminars, and joint research. Efforts will be made for the development and implementation of flagship projects of South-South cooperation on climate change, such as the Africa Solar Belt program. China will leverage platforms including the Belt and Road South-South Cooperation Initiative on Climate Change, the Green Silk Road Envoys Program, and other projects to provide talent cultivation. These efforts will empower China to further support developing countries to produce tangible outcomes in tackling climate change.

3. Joining Hands with the International Community for Shared Challenge, Opportunities and Future

3.1 Play a leading role in sharing experience in green and low-carbon development

China has forged ahead on the path of green and low-carbon development and made positive progress — from the extensive promotion of clean energy, to industrial green transformation and upgrading, from R&D in low-carbon technology to the coordinated efforts to reduce emissions, address pollution, promote green development and maintain growth. Every step China has taken is a fine example for fellow developing world. China will continue to share its models, practical experience, expertise, and advanced technology in pursuing green and low-carbon development, provide China's solutions for other developing countries to realize green transition and address climate change. China will join hands with the Global South to make green and low-carbon development more effectively.

3.2 Expand cooperation scope to unleash the potential of green and low-carbon development

Both socioeconomic development and addressing climate change are challenges. China will work with other developing countries to broaden the horizons of green and low-carbon cooperation and deepen strategic synergy and collaboration under the framework of South-South cooperation. In the fields of clean energy, infrastructure, technological innovation, and climate investment and financing, China will explore new cooperation models, identify new cooperation highlights, unleash the huge potential of green and low-carbon development, and support all parties in fulfilling their Nationally Determined Contributions (NDCs).