

Practical actions and logic for jointly building the “Green Belt and Road” for its implementation

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Abstract: The global ecological crisis has impacted the Belt and Road Initiative (BRI) region, and due to the diverse geographical characteristics, the ecological problems in countries along the Belt and Road vary. Overcoming these environmental and ecological challenges is essential for advancing and genuinely implementing green development, and has become a practical necessity for building a “Green Belt and Road.” China, the creator of the Green “Belt and Road Initiative”, actively aligns with international environmental protection standards and plays a leading role in global ecological conservation efforts. China vigorously promotes the development of key policy documents for the Green Belt and Road, providing institutional support for the initiative’s environmentally friendly construction and development. Under comprehensive theoretical planning, various green practices have been implemented, including thematic in-depth research on the Green “Belt and Road” and the “2030 Agenda for Sustainable Development,” the establishment of the “International Green Development Coalition” along the Belt and Road, the implementation of overseas investment and green finance, and the proposal of the “Ten, Hundred, Thousand” initiative for South-South Cooperation on Climate Change. These green practices clearly indicate China’s commitment to building ecological civilization and its relentless efforts toward advancing the construction of a global ecological community with shared-benefits.

Keywords: Green Belt and Road; shared-benefits; China; implementation; ecology

1. Introduction

On the morning of 18 October 2023, at the Great Hall of the People in Beijing, China, during the opening ceremony of the Third Belt and Road Forum for International Cooperation, Chinese President Xi Jinping delivered the keynote speech titled “Building an Open, Inclusive and Interconnected World for Common Development” (Xi, 2023a). President Xi announced that China will implement eight actions to support the high-quality construction of the Belt and Road Initiative; building a multi-dimensional interconnected network for the Belt and Road, supporting the construction of an open world economy, conducting practical and realistic cooperation, advancing the technological innovation, supporting people-to-people exchanges, promoting green development, building a clean governance path, and improving international cooperation mechanisms for the Belt and Road (Chernysheva et al., 2019). President Xi also emphasized that these eight actions represent China’s ongoing efforts to deepen cooperation and partnerships among countries under the Belt and Road Initiative and promote the entry of the Belt and Road into a new stage of high-quality development (Xi, 2023a). It is worth noting

that one of the important actions “promoting green development,” embodies China’s ecological civilization ideology, marking the practical implementation of China’s ecological concept and its realistic path to leading the global world in ecological civilization construction. In September 2024, President Xi attended the opening ceremony of the Beijing Summit of the Forum on China-Africa Cooperation and delivered a keynote speech. He announced that China would elevate its bilateral relations with all the African countries to the level of strategic relations. China-Africa relations would enter a new era of an all-weather China-Africa community with a shared future. China will implement ten key actions to promote modernization, including civilization mutual learning, trade prosperity partners, and green development partnerships (Liu et al., 2020).

This was not the only time China or President Xi focused on developing and constructing the relationship between different countries to prosper together in terms of economy and development. In March 2013, during President Xi’s visit to Kazakhstan, and proposed the initiative of jointly building the ‘Silk Road Economic Belt’ by adopting innovative cooperation models (Xi, 2023b). A lot of significant efforts have been made to stimulate the implementation of the BRI, which resulted in a better development in innovation and cooperation between the two countries. China is adopting a way to carry all the developing countries whether it’s in Asia or not, to build a homogenous and shared community. In September 2024, President Xi delivered a keynote speech at the opening ceremony of the Beijing Summit of the Forum on China-Africa Cooperation, stressing the need to “work together to promote eco-friendly modernization”. It also pointed out that China is ready to work with Africa, including the Partnership Action for Green Development, to help Africa achieve green development.

In March 2015, the National Development and Reform Commission (NDRC), Ministry of Foreign Affairs (MFA), and Ministry of Commerce (MOFCOM) jointly released the “Vision and Actions on Jointly Building Silk Road Economic Belt and 21st Century Maritime Silk Road” (referred to as the “Vision and Actions” hereafter) to promote this initiative. The “Vision and Actions” document emphasized the incorporation of “ecological civilization concepts into investment and trade, strengthening cooperation on ecological environment, biodiversity, and climate change adaptation to construct a Green Silk Road” (Hu et al., 2023; People’s Daily, 2015). This was the first time the word “Green” joined with the Silk Road (Xi, 2013). However, later during President Xi’s visit to Uzbekistan in June 2016, he once again proposed collaborating to create a “Green Silk Road.” This marked the formal introduction of the initiative to build a “Green Belt and Road” on the international stage. Green means efforts should be made to promote green eco-friendly and low-carbon infrastructure construction and operation management, taking into full account the impact of climate change on the construction (National Development and Reform Commission, 2015).

Subsequently, the Chinese government successively issued two specified policy documents in April 2017 and March 2022 titled “Guidance on Promoting Green Belt and Road” and “Opinions on Jointly Promoting Green Development of the Belt and Road,” respectively. These initiatives solidified the development of the “Green Belt and Road” as a crucial component of the Belt and Road Initiative. The construction

and development of the “Green Belt and Road” demonstrate China’s proactive response to global environmental challenges and represent a significant choice embraced by worldwide people in this era. This study provides a clean and clear practical logic and practices along with the implicating sustainable actions for better development of Green Belt and Road while joining hands with other countries to share benefits and a green economy.

In this case report, we have discussed the practical necessities and logic for the construction of the Green Belt and Road to show the developmental progress and implementation for shared-benefits across the globe.

2. The practical necessity of jointly building the Green “Belt and Road”

As the ecological challenges continue to escalate in countries participating in the “Belt and Road Initiative (BRI)”, the environmental protection situation is becoming severe. Addressing these natural environmental issues, promoting a green transformation of the economy, and facilitating healthy development to smoothly transition into a new era of human ecological civilization have become the foremost challenges facing all nations involved.

Since President Xi Jinping proposed the “Belt and Road Initiative” in 2013, it has consistently sustained and upheld the banner of peace and development, adhering to the principles of consultation, collaboration, and shared benefits. Guided by the green eco-friendly establishment, openness, and integrity, to build a community of shared future for mankind (China Council for International Cooperation on Environment and Development, 2020), it has established a path of shared benefit and mutual advantage cooperation with policy coordination, facilities connectivity, unimpeded trade, financial integration, and people-to-people bonds as its core components (Today’s China, 2020). During the pandemic, the “Belt and Road Initiative” has demonstrated strong vitality and dynamism, stabilized international supply chains while accelerated the construction of logistics networks, and providing robust support for the global pandemic response. In the post-pandemic era, the “Belt and Road Initiative” continues to advance steadily, with cooperative initiatives flourishing. However, the global economic recovery has also accelerated the exposure of the drawbacks of the extensive economic models of countries participating in the “Belt and Road Initiative,” with frequent natural disasters occurring worldwide, casting a shadow of ecological crisis over every inch of the globe.

In this context, the international community has paid close attention to China’s advocacy of the green “Belt and Road Initiative,” hoping that the green “Belt and Road” can inject strong momentum into global sustainable development. Collaborative research by Kang Taek Goo, a research fellow at the Korea Environment Institute, and Jung Giwoong, a professor at the International Regional Studies Center of Hankuk University of Foreign Studies in South Korea, suggests that “China’s strategy in the ‘Belt and Road Initiative’ is undergoing a change, namely, incorporating the concept of ‘green’ into the ‘Belt and Road’ initiative.” They point out that “since President Xi Jinping took office in 2012, the agenda for

low-carbon green development has been continuously elevated in China's domestic strategies and foreign policies. China plans to combine the Belt and Road Initiative with its low-carbon green development policies to promote the development of eco-friendly industries and technologies in countries participating in the Belt and Road Initiative" (Kang and Giwoong, 2022). At the Third Belt and Road Forum for International Cooperation, President Xi Jinping pointed out that China will continue to deepen cooperation with all parties in the fields of green infrastructure, green energy, and green transportation, and establish dialogue and communication mechanisms for the photovoltaic industry and a network of experts in green and low-carbon development. The concept of green and low-carbon development not only plays a powerful role in China's domestic ecological civilization construction and economic transformation but also will exert a significant guiding influence on sustained and healthy economic development abroad.

At the grand level of a nation, China will bear heavy responsibilities. "Green" has always been a distinct theme of BRI cooperation. China not only focuses on domestic ecological civilization construction and green transformation but also attaches great importance to the construction and development of global ecological civilization in the process of promoting a community of shared future for mankind. With the influence and guiding power of a great civilized country, China hopes to promote sustainable development of the world economy.

2.1. The practical logic of jointly building the Green "Belt and Road"

Global ecological crisis and ecological issues along the Belt and Road

Since the Industrial Revolution, particularly after entering the 21st century, the capital pursuit has intensified, moreover, productivity has greatly developed, and also rapid progress has been seen in scientific technology (Jiang et al., 2021). While economic and trade globalization is taking place, human involvement in the natural world is increasingly exacerbating. Regional ecological destruction issues have been replaced by global ecological crises a long time ago, with land being exploited to exhaustion, intentional freshwater source pollution, and extensive irreversible deforestation. Although ecological resources may have low acquisition costs, they possess certain irreversibility; once damaged, natural regeneration becomes challenging (Xia, 2024). According to the analysis of the World Bank's WDI (World Development Indicators) database by the Emerging Markets, biodiversity levels in the "Belt and Road" region are significantly below the global average, indicating a very fragile ecological foundation. Under the guidance of development models that followed outdated concepts such as "pollute first, clean up later" (Azadi et al., 2011), the global climate continues to deteriorate, biodiversity sharply declines, and natural resource consumption exceeds sustainable limits (Yingcong, 2017). Countries participating in the construction of the "Silk Road Economic Belt" and the "21st Century Maritime Silk Road" (referred to as the "Belt and Road Initiative") are facing significant ecological challenges. Overall, the air pollution levels in the "Belt and Road" region are much lower than the global average, especially in most Southeast Asian countries along the coast where the climate conditions are favorable. The tourism industry is a key pillar of the local economy and does not have a

significant impact on air quality in these Southeast Asian countries. Conversely, the West Asia and North Africa regions along the “Belt and Road” face unique environmental issues due to their specific geographical location, poor air dispersion conditions, and a focus on accelerating economic growth by prioritizing the development of petrochemical and heavy industries (Liu and Bennett, 2024). This has led to elevated levels of particulate matter pollution in the air, creating a stark contrast with the Southeast Asian region. These disparities underscore the regional variations and geographic characteristics of the six major economic corridors within the “Belt and Road Initiative” (Yingcong, 2017). The “Belt and Road Initiative” spans three continents; Asia, Europe, and Africa and the specific environmental issues resulting from ecological destruction vary across its extensive geographical reach. The China-Central Asia-West Asia Economic Corridor (CCAWECC) within the six major economic corridors is plagued by severe desertification, affecting over 60 countries along the economic route. Meanwhile, the China-Mongolia-Russia (CMR) Economic Corridor, situated in the mid-to-high latitude region, faces perennial permafrost hazards. In recent years, the accelerated degradation and expansion of thawed areas due to climate warming have significantly impacted the operational safety of infrastructure in the region. Additionally, Central Asia and West Asia suffer from sand and dust storms, the China-Pakistan Economic Corridor (CPEC) experiences mudflow disasters, and the Maritime Silk Road is exposed to extreme weather events (Lei et al., 2021). While some of these occurrences are attributed to the inherent vulnerability of their geographical locations, the majority stem from neglectful overdevelopment and industrial relocation along the path of industrialization and modernization, resulting in human-induced pollution and environmental degradation.

3. Jointly building the policy system for the Green “Belt and Road”

3.1. China’s active participation and leadership in global ecological governance

In September 2021, President Xi Jinping delivered a keynote speech entitled “Bolstering Confidence and Jointly Overcoming Difficulties to Build a Better World” (UN Environment Programme, 2024) at the general debate of the 76th United Nations General Assembly. When proposing the global development initiative of promoting harmonious coexistence between man and nature, President Xi Jinping stated that to accelerate green and low-carbon transition and achieve green recovery and development, China will strive to peak its carbon dioxide emissions before 2030 and achieve carbon neutrality before 2060. To fulfill this promise to the world, China will strongly support the green and low-carbon development of energy in developing countries and commit to no longer building new coal-fired power projects overseas. Faced with a global ecological crisis, China has consistently actively participated in global ecological environmental protection and governance, actively reached agreements on environmental protection and green development with governments and worldwide organizations, and consistently implemented its solutions with a positive attitude, demonstrating China’s openness,

sharing Chinese experience, and showcasing China's wisdom.

As one of the earliest participants and ratifiers of the International Convention on Biological Diversity (CBD), China has consistently fulfilled its related commitments to protect biodiversity by successively promulgating laws such as the Environmental Protection Law of the People's Republic of China, the Forest Law of the People's Republic of China, the Wildlife Protection Law of the People's Republic of China, and the Outline of China's Nature Reserves" (Xi, 2021a). Furthermore, China actively promotes compliance with the Montreal Protocol, successfully fulfilling the Stockholm Convention (which was to eliminate or restrict the production and use of persistent organic pollutants), and deeply engages in the formulation of various rules and technical documents under the Stockholm Convention, providing compliance technical training and capacity building for developing countries. During the United Nations Climate Change Conference in Glasgow (COP 26), China and the United States jointly released the "U.S.-China Joint Glasgow Declaration on Enhancing Climate Action in the 2020s," which marks a new advancement in bilateral cooperation and is a significant milestone in the global efforts to address climate change (Qiupeng, 2023). Undoubtedly, the green recovery of the world's second-largest economy will drive the vigorous development of the global economy. During the "14th Five-Year Plan" period, China will engage in broader international cooperation in areas such as green infrastructure and renewable energy, contributing to the ecological transformation of the world economy. The president of the French Constitutional Council and former French Prime Minister, Laurent Fabius, emphasized the importance of China's past, present, and future role in the essential fight against climate change. He pointed out that "we cannot expect a 'vaccine for climate change,' but we need a 'green recovery'," and China's actions "have re-ignited genuine hope for the world" (Fabius, 2021).

3.2. China's wisdom and proposals solutions contributed to the joint building of the "Green Belt and Road"

General Secretary Xi Jinping, in his speech at the ceremony celebrating the 100th anniversary of the founding of the Communist Party of China (CPC), stated "Promote the building of a community with a shared future for mankind, advance the high-quality development of the Belt and Road Initiative, and provide new opportunities for the world with China's new development" (Xi, 2021b). While China's domestic ecological civilization construction is progressing vigorously and achieving significant accomplishments, China is also paying special attention to global ecological changes and crises, aiming to offer a Chinese solution that highlights Chinese wisdom for the construction of a global ecological civilization.

In May 2017, the Chinese Ministry of Ecology and Environment (MEE), Ministry of Foreign Affairs (MFA), National Development and Reform Commission (NDRC), and Ministry of Commerce (MOFCOM) jointly issued the "Guidance on Promoting Green Belt and Road." This document systematically elaborates on the importance of building a green Belt and Road, emphasizing the need to firmly establish a new development concept of innovation, coordination, green, openness, and sharing benefit, and to comprehensively promote the greening process of the

Belt and Road Initiative. The “Guiding Opinions” explicitly state the need to fully integrate ecological and environmental protection concepts into the construction of the BRI in an all-round and comprehensive manner. It also suggests using China’s successful experience in ecological civilization construction as a guide for the ecological civilization construction of countries participating in the Belt and Road Initiative, assisting BRI’s associated countries in enhancing their capabilities in environmental protection and disaster prevention. Addressing challenges, such as the irrational allocation of natural resources, severe environmental pollution, resource constraints, and improper economic structures in the Belt and Road Initiative partner countries, the document emphasizes the importance of cooperation and sharing benefits, urging the abandonment of extensive economic development models. Instead, it advocates for reliance on domestic innovation-driven development strategies and external scientific and technological support to help partner countries prioritize the development of resource-efficient and environmentally friendly economies. This approach involves promoting industrial upgrading and enterprise transformation among the population, ensuring that the people of partner countries tangibly experience the benefits of ecological environment governance and share in the great achievements of China’s reform and opening up and the green Belt and Road construction (National Development and Reform Commission, Ministry of Foreign Affairs, Ministry of Ecology and Environment, and Ministry of Commerce, 2017). In the same month of May, to further implement the “Vision and Actions on Jointly Building Silk Road Economic Belt and 21st-Century Maritime Silk Road,” the “13th Five-Year Plan for Ecological and Environmental Protection,” and the “Guidance on Promoting Green Belt and Road,” the Chinese Ministry of Environmental Protection issued the “Belt and Road Ecological and Environmental Cooperation Plan” (referred to as the “Plan” below). The Plan clearly emphasizes the need to establish a comprehensive coordination mechanism with multi-dimensional cooperation for mutual benefit. It aims to strengthen communication and interaction at various levels and channels among government departments, central and local authorities, government, enterprises, and the public sector. Additionally, the Plan highlights the importance of enhancing policy support, combining demand orientation with goal orientation, and further researching and implementing targeted policy measures and innovative practices to increase support for ecological and environmental protection cooperation. Building upon this foundation, the Plan outlines 25 key projects, including 6 in policy communication, 4 in facility connectivity, 3 in trade facilitation, 2 in financial connectivity, 4 in people-to-people bonds, and 6 in capacity building. All these projects cover cooperation initiatives among partner countries led by the Chinese government, playing a crucial role in advancing the green Belt and Road construction. They not only emphasize the significance of China’s contribution to global ecological civilization construction but also demonstrate China’s role as a major player in supporting the world’s ecological progress.

The “Plan” and “Guiding Opinions” serve as the guiding principles for the construction of the green Belt and Road, in response to the important directives from the Party Central Committee. These documents not only elucidate the significance and overall approach to building the green Belt and Road but also demonstrate

China's firm determination and practical actions in promoting the construction of the green Belt and Road.

4. Local practices in jointly building the Green “Belt and Road”

At the routine press conference held by the Ministry of Ecology and Environment (MEE) on 27 October 2023, director Xia Yingxian from the Department of Climate Change Response at the MEE answered questions from journalists regarding the achievements of China's South-South cooperation in addressing climate change. Director Xia stated that, as a responsible major developing country, China has been consistently implementing President Xi Jinping's “Ten, Hundred, Thousand” initiative for South-South cooperation on climate change and the BRI Climate Change South-South Cooperation Plan. China has been continuously improving the construction of the Belt and Road Initiative International Green Development Coalition (BRIGC or The Coalition), deepening multilateral cooperation, strengthening regional cooperation (Chinese Ministry of Ecology and Environment, 2019), and engaging in international organization collaboration to provide tangible support and assistance to other developing countries to the best of its ability. Whether in green industries, green energy, or green finance, China's contributions to environmental sustainability are significant and should not be underestimated. The main aim of this BRIGC is “to promote international consensus, understanding, cooperation, and concerted actions to realize green development on the Belt and Road, to integrate sustainable development into the BRI through joint efforts and to facilitate BRI participating countries to realize SDGs (Sustainable Development Goals) related to environment and development” (Wang, 2020). The BRIGC is open to participation from any government departments, local and international organizations, think tanks, private sector stakeholders, and civil society organizations. Accordingly, 134 Chinese and international organizations including 26 Environmental Ministries of UN Member States have joined The Coalition (UN Environment Programme, 2024). In January 2024, People's Daily released a special topic titled “Innovative Ideas and Practice Cases for the 10th Anniversary of ‘Green Belt and Road’”, reviewing the progress of China's efforts to build “Green Belt and Road”. For example, Vietnam is currently accelerating the diversified development of its energy structure and seeking more international cooperation on green energy. Relying on its own rich light resources, Vietnam has developed a solar power generation plan. China's photovoltaic industry has a leading advantage. Cooperation between China and Vietnam in photovoltaic power generation has not only eased the local power supply tension but also promoted the local economic and social prosperity for green development in a green and low-carbon way.

4.1. The Green “Belt and Road” and the 2030 sustainable development agenda

In September 2015, the United Nations Development Summit adopted “The 2030 Agenda for Sustainable Development,” with one of its key focuses being on enhancing ecological civilization construction and promoting sustainable

development. This agenda aligns closely with China's vigorous promotion of the green Belt and Road Initiative in terms of concepts, principles, and goals, complementing each other. At the 2021 annual conference of the China Council for International Cooperation on Environment and Development (CCICED) themed "Green Belt and Road and the 2030 Agenda for Sustainable Development," Erik Solheim, Chair of the Consultative Committee of the Belt and Road Initiative International Green Development Coalition (BRIGC) stated, "China has made significant achievements in afforestation, poverty alleviation, renewable energy development, and more. The Belt and Road Initiative will continue to create significant opportunities for comprehensive poverty alleviation in partner countries through green investments. Going forward, it is essential to strengthen green investments, promote green technology transfer, actively implement green finance, advocate for green lifestyles and best practices in green development to benefit more partner countries." In response, the CCICED established a specialized policy research team on the topic of "Green Belt and Road and the 2030 Agenda for Sustainable Development," focusing on various themes such as the comprehensive alignment and synergies between the Green Silk Road and the Sustainable Development Goals.

On the occasion of the 15th Conference of the Parties (COP 15) to the United Nations Convention on Biological Diversity held in China, the second phase of the project team's specialized research has shifted its focus to the significance of the Belt and Road Initiative in promoting global biodiversity conservation. This research indicates that while trade and Foreign Direct Investment (FDI) in relevant countries may grow by 9.7% and 7.6% respectively, with the assistance of the Belt and Road Initiative, resulting in up to a 3.4% actual income growth for economies along the Belt and Road, large-scale infrastructure financing, while bringing significant benefits, also poses a series of sustainability-related risks including biodiversity risks. These risks include hindering wildlife migration and increasing wildlife mortality rates (China Council for International Cooperation on Environment and Development, 2020). This represents a typical contradiction between ecology and economy, highlighting a real issue that needs to be addressed in the development of the Green Belt and Road Initiative.

4.2. Establishment of the Belt and Road Initiative international green development coalition

Since Chinese President Xi Jinping proposed the cooperative initiative of "Belt and Road" in 2013 to strengthen international cooperation, align development strategies (Huang and Meina, 2018), achieve complementary advantages, and promote common development, related cooperation has been steadily advancing and has been widely welcomed and participated in by various parties under the Belt and Road Initiative. After four years of rapid development, the first Belt and Road Forum for International Cooperation was successfully held in Beijing in 2017. That forum not only clarified the future direction of Belt and Road cooperation, specific planning routes, and key implementation projects but also explicitly proposed the establishment of the Belt and Road Initiative International Green Development

Coalition (BRIGC). On 25 April 2019, with the convening of the second Belt and Road International Cooperation Forum, the Belt and Road Green Development International Alliance, jointly initiated by the Ministry of Ecology and Environment of the People's Republic of China and foreign partners, was officially established (Xi, 2019.)

After its establishment, the Coalition has been tirelessly striving to implement the United Nations (UN) 2030 Agenda for Sustainable Development and achieve the goals of the Paris Agreement. To provide a communication channel for stakeholders in the Belt and Road initiative, promote the establishment of a joint research network, and share green development concepts and policies, the Coalition will create a platform for policy dialogue and communication, offering support and policy recommendations for green development along the Belt and Road. To raise awareness of environmental issues among relevant countries and promote the improvement of their environmental governance capabilities, the Coalition has established an environmental knowledge and information platform, regularly shares knowledge on ecological environmental protection and pollution prevention, and provides data and analysis related to green Belt and Road initiatives. Furthermore, to promote green technology cooperation and enhance the ecological environment protection, climate action, and pollution prevention capabilities of countries involved in the Belt and Road initiative, the coalition has also developed a platform for green technology exchange and transfer, fostering the development of green infrastructure, green investment, and trade.

As of now, the BRI International Green Development Coalition has attracted over 40 member organizations from multiple countries including the United States, the United Kingdom, Sri Lanka, and Pakistan. To foster international consensus on green development along the Belt and Road, carry out open, inclusive, and mutually beneficial international cooperation and practical actions for green development and support the participating countries in achieving green, low-carbon, and sustainable development, the alliance's green mission will continue to be pursued.

4.3. Implementation of outbound investment and green finance

The "Ecological and Environmental Protection Guidelines for Overseas Investment and Cooperative Construction Projects" (Hereinafter referred to as the "Guidelines"), jointly formulated by the Chinese Ministry of Ecology and Environment (MEE) and the Ministry of Commerce (MOFCOM), stipulated in Article 3: "Enterprises implementing overseas investment and cooperative construction projects shall comply with the host country's (region's) ecological and environmental laws, regulations and policy standards; and apply for the country's (region's) ecological and environmental protection permits as required." Overseas or foreign projects represent a key avenue through which Chinese enterprises and financial institutions participate in the BRI. Before the commencement of projects, environmental due diligence, baseline monitoring, and environmental impact assessments should be conducted. During the construction phase, efforts must be made to enhance ecological environment protection. Throughout the operational phase, activities such as ensuring the normal operation of pollution control facilities,

conducting ecological environment monitoring and investigations, managing solid waste, and implementing environmental risk prevention and control measures are essential. When closing or exiting a project, enterprises should also prioritize ecological environment protection during the decommissioning, dismantling, and closure phases. These requirements outlined in the Guidelines represent the most fundamental expectations for Chinese enterprises engaged in foreign investment construction. This underscores Chinese companies' proactive adherence to green development principles and their dedicated involvement in promoting the green Belt and Road Initiative.

Headquartered in Qingdao, China, the Hisense Group boasts over 30 industrial parks and more than 20 researches and development centers worldwide. Its foreign branches span across the Americas, Europe, Africa, the Middle East, Australia, and Southeast Asia, with products sold in over 160 countries and regions. According to the "Global Survey of China's National Image" released by the China Foreign Languages Bureau, Hisense has been ranked among the top ten most recognized Chinese brands by foreign consumers for six consecutive years (Liang, 2017). In 2011, Hisense Group collaborated with the China-Africa Development Fund to invest in and construct a home appliance industrial park project in South Africa, with a total investment reaching up to \$40 million. The annual output of various household appliances reached 800,000 units, injecting strong impetus into the development of the China-Africa Fund. Established in 2007, the China-Africa Development Fund primarily provides equity investment and other financial services for Chinese enterprises investing in Africa, consistently adhering to Chinese policies. It has vigorously promoted green development in capacity cooperation, infrastructure, energy and mineral resources, agriculture, and people's livelihoods. In its collaboration with Hisense Group, the China-Africa Development Fund actively urged Hisense South Africa to fulfill its green responsibilities. This included establishing sustainable development goals before the project's commencement and implementing dynamic monitoring and on-site inspections throughout the process. While the China-Africa Development Fund has not established a classification system for environmental impact or a systematic end-to-end management system, it has increased its support and guidance for green projects. The fund's "14th Five-Year Plan" emphasizes expanding support for green projects. Against the backdrop of the global industrial revolution, this presents new opportunities for driving green development. Various domestic and foreign financial institutions, such as the China-Africa Development Fund should serve as the main advocates for promoting green and sustainable development, actively participating in the construction of a green "Belt and Road," and strengthening cooperation in ecological environment, biodiversity, and climate change response (Wang and Yang, 2020), thereby highlighting the green branding of international cooperation. Regarding the "Belt and Road" initiative to green China, Tham Siew Yean said that there is no discernible shift to green projects as non-green investments are also accepted. Malaysia has requirements for green governance; however, implementation can be an issue. Host economies, like Malaysia, must take ownership of green requirements for a sustained shift towards green governance. Likewise, China's investments have to comply with local laws, which can improve the environmental impact when local

laws and regulations are judiciously implemented (Tham, 2024).

4.4. Proposal for the “Ten, Hundred, Thousand” initiative for south-south cooperation on climate change

In 2015, President Xi Jinping first proposed the “Ten, Hundred, Thousand” initiative for South-South cooperation on climate change at the Paris Climate Conference. This initiative involves establishing 10 low-carbon demonstration zones, 100 projects for mitigating and adapting to climate change, and 1000 training opportunities for climate change response in developing countries. Subsequently, China signed memoranda of understanding (MoU) on low-carbon demonstration zones for climate change cooperation with several countries including Cambodia, Uruguay, Pakistan, and Papua New Guinea. Various aid materials have been put into production and transported to these partner countries.

For instance, the assistance provided to Kiribati includes 5000 sets of household photovoltaic power generation systems and 300 tons of cement for building seawalls, aiming to address electricity and coastal erosion issues faced by the Kiribati people. The aid package to Botswana consists of an integrated satellite data mobile receiving and processing system (meteorological mobile station), supporting environmental monitoring, agricultural production, and prevention of extreme weather disasters. In Cambodia, the assistance comprises 1500 sets of solar street lights, 2000 sets of households photovoltaic (PV) power generation systems, and 2 mobile air quality monitoring vehicles, aimed at driving the construction of low-carbon demonstration zones in Sihanoukville Province. In Pakistan, the aid package includes 5000 sets of household PV power generation systems, a comprehensive integrated climate change monitoring and application system, 5 smart weather ground observation stations, and a cloud-based disaster risk warning support system. This support not only promotes green and low-carbon development along the China-Pakistan Economic Corridor (CPEC) under the Belt and Road Initiative but also provides robust assistance in climate change detection and prevention of meteorological disasters.

All these efforts represent concrete measures to implement the “Ten, Hundred, Thousand” initiative for South-South cooperation on climate change and showcase China’s role as a proactive advocate and pragmatic practitioner in this plan for climate change. As of 20 October 2023, China has signed 48 cooperation agreements with 40 developing countries, organized 52 training sessions for South-South cooperation on climate change, and trained approximately 2300 professionals in the field of climate change response. During a meeting in April 2023 between China’s Minister of Ecology and Environment, Huang Runqiu, and Brazil’s Minister of Environment and Climate Change, Ricardo Silva, Silva expressed Brazil’s appreciation for China’s achievements in the field of ecological environment and its contributions to global climate change response. Silva also voiced support for China as the host country of COP15 and its efforts to promote the implementation of the “Kunming-Montreal Global Biodiversity Framework.” He expressed readiness to deepen practical cooperation with China and jointly address global environmental and climate change challenges. This recognition from developing countries signifies a high degree of acknowledgment of China’s practical implementation of ecological

concepts and praise for the construction of the green Belt and Road Initiative.

Many international researchers, including Allison Goh (research assistant at the School of Law, Singapore Management University), have been focusing on the current and future prospects of green sustainable finance based on the Green Belt and Road Initiative since 2021. In one of her articles, she pointed out that “The Chinese government has been continuously improving policies and regulations to promote the green Belt and Road and green finance, and has been wholeheartedly supporting sustainable development projects along the Belt and Road” (Goh, 2021). As the initiator of the BRI and the green Belt and Road, China has been actively advancing the progress and implementation of relevant projects and vigorously supporting the economic structural transformation and development of participating countries.

China or the Chinese government not only focuses on major environmental initiators and projects but also on every big or small event that can make a difference among people, especially youth, and conveys a harmonious message to create a green world together. For example, the Lusail Stadium in Qatar, hailed as a green building model for the 2022 Qatar World Cup, was constructed and designed by Chinese companies. Another example is the Beijing “Green Winter Olympics,” which marked the first use of a carbon dioxide (CO₂) cooling system in a top-tier sports event. These vivid examples distinctly confirm the global significance and value of China’s green and low-carbon development concept across eras. As of June 2023, China has signed over 200 cooperation agreements on jointly building the “Belt and Road” initiative with 152 countries and 32 international organizations, reflecting the century-long planning and efforts of the CPC and the country towards constructing a community with a shared future for humanity. As we approach the 10th anniversary of the proposal of the “Belt and Road” initiative in 2023, the achievements of the initiative have become remarkably evident. In the face of escalating ecological crises today, after a decade of vigorous development of the “Belt and Road” initiative, the construction of a green “Belt and Road” has become the common direction of efforts for the Chinese people and the entire World.

However, looking at the global landscape, both the global energy crisis resulting from the Russia-Ukraine conflict and the cold trade chain brought on by the United States’ comprehensive competition strategy towards China, have brought significant risks and challenges to the construction of the green “Belt and Road” (Zehua, 2023). In the context of the unprecedented changes in the world over the past century, the green “Belt and Road” represents both the choice of the times and the choice of history. General Secretary Xi Jinping emphasized at the opening ceremony of the Second Belt and Road Forum (BRF) for International Cooperation that China will continue to “make green the underlying color, promote green infrastructure construction, green investment, green finance, and protect our common home on which we depend for survival” (Xi, 2019). With increasingly frequent international exchanges and closer regional cooperation, the challenge of effectively narrating China’s experience in ecological civilization construction through the green Belt and Road initiative, using Chinese stories and experiences to disseminate Chinese wisdom, and establishing a discourse system on ecological civilization in the international arena remains a task that needs to be addressed. **Figure 1** shows the

core philosophy of Green Belt and Road.



Figure 1. Core philosophy of green belt and road.

5. Conclusion

The construction and development of the Green Belt and Road Initiative is not only a practical path for China to promote the building of a global ecological community but also a vivid embodiment of Xi Jinping’s ecological civilization thought in the new era. Internationally, both countries China and a participating country of the BRI, as well as those that have yet to join, are paying increasing attention to the planning and development of the Belt and Road Initiative and the green Belt and Road. Scholars have begun studying derivative concepts such as green finance and sustainable economic development models based on the ecological Belt and Road.

In the future, China will continue to strengthen and expand participation in the construction of green ecological civilization, plan development from the perspective of harmonious coexistence between humans and nature, and implement major projects for biodiversity protection and restoration. This will be accompanied by the deepening of international exchanges and cooperation, as well as conducting research and analysis to support the concept of “one globe, one family” prospering together. The eight actions and the already initiated Ten, Hundred and Thousand models and projects are contributing to developing a green environment and addressing conflicts or differences among countries. We believe that all the powerful nations from each continent of the world should agree on coexistence and work towards a greener world with advanced technology for the future. Although the BRI, or Silk Road, was initiated by China, achieving a fully implemented green BRI will require global cooperation because all humanity shares this planet and stands to benefit collectively. Of all the actions and practices mentioned above, some have

been completed, while others are still in progress. This Green Belt and Road aims to promote green development, green production, green finance, and green coexistence to make the world a better place to live.

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