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and 2030 Agenda for Sustainable Development**

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## 1. Green Belt and Road and 2030 Agenda for Sustainable Development

### 1.1 The proposal and development of the Belt and Road Initiative

Since the outbreak of the global financial crisis in 2008, the world economy has been sluggish. Trade growth has been slow and instability persists. There is an urgent need of global economy for new growth engines and new cycles. The huge demand for infrastructure and industrial development in developing countries, emerging economies included, is expected to serve as the new momentum for economic growth.

It was against this backdrop that in 2013, Chinese President Xi Jinping proposed in Kazakhstan and Indonesia to build the Silk Road Economic Belt and the 21st-Century Maritime Silk Road, namely the Belt and Road Initiative. In March 2015, the Chinese government issued *Vision and Actions on Jointly Building Silk Road Economic Belt and 21st-Century Maritime Silk Road* (hereinafter referred to as *Vision and Action*) (National Development and Reform Commission, Ministry of Foreign Affairs, and Ministry of Commerce of the People's Republic of China, 2015), which proposes the top-down design framework for jointly building the Belt and Road, including objectives and vision, principles and future potential and directions.

According to the *Vision and Action*, the B&R is aimed at promoting orderly and free flow of economic factors, highly efficient allocation of resources and deep integration of markets. It encourages the B&R countries to achieve economic policy coordination and carry out broader and more in-depth regional cooperation of higher standards; and advocates jointly creating an open, inclusive and balanced regional economic cooperation architecture that benefits all.

The B&R takes achieving shared growth through discussion and collaboration as its fundamental principle. The core lies in encouraging the B&R countries to align and coordinate development strategies, build consensus to the maximum extent, and leverage their respective comparative advantages, so as to share the achievements of the initiative and the long-term dividends. Priorities for the initiative include policy coordination, facilities connectivity, unimpeded trade, financial integration and people-to-people bond.

Since being proposed, the Belt and Road Initiative has been well-received in more and more countries. Now, it has become a “Chinese solution” for participation in global openness and cooperation, improving global environmental governance system, promoting shared development and prosperity around the world and building a community of shared destiny. In May, 2017, the Belt and Road Summit for International Cooperation was held. 29 heads of states and representatives from more than 130 countries and 70 international organizations gathered in Beijing to discuss new progress in the development of the Belt and Road Initiative.

In the past 5 years, the Belt and Road Initiative has developed from a concept and vision to concrete actions. Significant progress has been achieved. 103 countries and international organizations have signed 118 Belt and Road related cooperation agreements with China. By June, 2018, the total volume of trade in goods and direct foreign investment between China and countries along the Belt and Road has exceeded 5 trillion USD and 70 billion USD respectively. China has invested more than 20 billion USD in developing overseas economic and trade cooperation zones, creating hundreds of thousands of jobs and several billion USD of tax revenue for the local area. A series of cooperation projects have achieved concrete progress. China-Pakistan Economic Corridor (CPEC) is being developed according to schedule, China-Lao Railway, China-Thailand Railway and Hungary-Serbia Railway is under construction, parts of Jakarta-Bandung High Speed Railway have been put into construction, Gwadar Port is ready to be put into full operation. China Railway Express to Europe has now extended to 43 cities in 15 countries. A total of more than 10,000 trains have made the trans-continental voyage between China and Europe.

## 1.2 Progress of the Green Belt and Road

**Being green is an important part of the B&R.** *Vision and Actions on Jointly Building Silk Road Economic Belt and 21st-Century Maritime Silk Road* states that “we should promote ecological progress in conducting investment and trade, increase cooperation in conserving eco-environment, protecting biodiversity, and tackling climate change, and join hands to make the Silk Road an environment-friendly one”. Chinese President Xi Jinping, in his speech at the Legislative Chamber of the Supreme Assembly of Uzbekistan in June 2016, called for the pursuit of green development and efforts to jointly build a Green Silk Road. At the Belt and Road Forum for International Cooperation in May 2017, President Xi Jinping said “we should pursue the new vision of green development and a way of life and work that is green, low-carbon, circular and sustainable. Efforts should be made to strengthen cooperation in ecological and

environmental protection and promote ecological civilization so as to realize the goals set by the 2030 Agenda for Sustainable Development”.

**The essence of green Belt and Road** is to integrate green development and ecological and environmental protection into every aspect of the development of the Belt and Road with the principle of energy conservation and environmental protection under the guidance of ecological civilization and green development concepts. First of all, it could be a trigger to promote policy communication with B&R countries; second, it could prevent and control ecological and environmental risks to ensure facilities connectivity with B&R countries; third, it could make industrial capacity cooperation greener to promote unimpeded trade with B&R countries; fourth, it could improve investment and financing mechanisms to serve financial integration with B&R countries; fifth, it could strengthen international cooperation and exchange on environmental protection to promote people-to-people exchange with B&R countries. It means, making direct contributions to the realization of environment-related SDGs in B&R countries.

As a major initiative driving economic development in related countries, the Belt and Road Initiative has been widely recognized by the international community as an important solution to the implementation of the 2030 Agenda. President of the UN General Assembly Miroslav Lajčák said that China is sharing wealth and best practice through the Belt and Road Initiative to promote the implementation of Sustainable Development Goals. UN Secretary-General António Guterres pointed out that the 2030 Sustainable Development Agenda and the Belt and Road Initiative have the same ambitious goals. They all aim at creating opportunities, bringing beneficial global public products and promote global links in multiple areas including infrastructure construction, trade, finance, policy and cultural exchange with new markets and opportunities. The Belt and Road Initiative plays an important role in promoting the implementation of the Belt and Road Initiative. Fred Krupp, President of Environmental Defense Fund (EDF) agrees that EDF could bring economic prosperity and environmental improvement.

**The overall objectives and specific tasks and measures are further clarified.** In April and May 2017, it issued *Guidance on Promoting Green Belt and Road* and *Belt and Road Ecological and Environmental Cooperation Plan*. *The Guidance* pointed out that China will try to establish a practical and highly-efficient system for ecological and environmental protection cooperation, support and serve platforms and industrial technological cooperation bases and implement a series of policies and measures on ecological and environmental risk prevention in 3 to 5 years; establish a well-developed ecological and environmental protection service, support and guarantee system in 5 to 10 years. *The Plan* clarified that China would incorporate green development into major activities of the five aspects of the development of Belt and Road, including policy coordination, facilities connectivity, unimpeded trade, financial integration and people-to-people exchange with 25 key projects being listed.

**A platform for international partnership for green development on the Belt and Road is in the process of establishment.** In order to enable BRI countries to better understand the green Belt and Road, international organizations, China, some BRI

countries and non-governmental organizations have been proactively engaged in seminars, seeking exchanges and coordination on issues related to the green Belt and Road. UN Environment and Ministry of Ecology and Environment have proposed to establish an International Coalition for green development on the Belt and Road, with the goal of improving the capacity of BRI countries on environment governance by building an international platform to exchange ideas, policies and practice and organizing workshops and dialogues. By organizing China-Arab States Environmental Cooperation Forum, China-ASEAN Environmental Cooperation Forum, and China Week for SCO Cooperation, China is proactively engaged in policy dialogues with BRI countries.

### **International Coalition for Green Development on the Belt and Road**

In May 2017 President Xi Jinping of China proposed to establish the International Coalition for Green Development on the Belt and Road (the Coalition) in the opening address to the Belt and Road Forum for International Cooperation. The Coalition is co-initiated by UN Environment and Ministry of Ecology and Environment of China. It is an open, inclusive and voluntary international network which will integrate green development into the process of constructing the Belt and Road. It aims to promote international consensus and collective actions of Belt and Road countries to implement the 2030 Agenda for Sustainable Development.

The mandates of the Coalition include:

A platform for policy dialogue and communication to:

1. share green development concepts and environmental policies
2. provide communication opportunities amongst different stakeholders, and establish a joint research network;

A knowledge and information platform to:

1. build an environmental information sharing mechanism
2. provide environmental data and analysis related to the green development of the Belt and Road
3. promote capacity building on environment management

A Platform for green technology exchange and transfer to:

1. promote the exchange and transfer of advanced green and low-carbon technology
2. promote investment in green infrastructure and trade.

The Coalition's work will be delivered through a number of Thematic Partnerships made up of coalition partners. The areas of Thematic Partnerships may include, but are not limited to:

- Biodiversity and ecosystem management
- Green energy and energy efficiency
- Green finance and investment
- Improvement of environmental quality and green cities
- South-South environmental cooperation and SDGs capacity building
- Green technology innovation and Corporation Social Responsibility
- Environmental information sharing and big data
- Sustainable transportation
- Global climate governance and green transformation

In addition, under the Coalition research on green Belt and Road, a series of seminars and

workshops, capacity building activities and pilot projects will be carried out.

**The importance of enhancing the corporate environmental and social responsibility of Chinese enterprises operating overseas is emphasized.** It has been the focus of UN Environment, OECD and World Bank to appeal international investors to follow the high standards of environmental and social responsibility. The UN Global Compact launched in July 2000 was envisaged to accelerate responsible business action and to ensure that business action and strategy implemented worldwide comply with the ten principles of Global Compact including environment and labor standards, under which the businesses should support a precautionary approach to environmental challenges, undertake initiatives to promote greater environmental responsibility and encourage the development and diffusion of environmentally friendly technologies. Since the 1970s, OECD has started to promote its Guidelines for Multinational Enterprises which has been revised several times to underline the dimension of sustainable development by asking enterprises to take seriously the potential environmental impacts of their operation and to strengthen environmental management systems. The World Bank has also adopted environmental safeguards for their financing programs and requires projects to prepare EIAs that meet World Bank standards.

In 2013, China issued the *Guidelines for Environmental Protection in Foreign Investment and Cooperation* (Ministry of Commerce, Ministry of Environmental Protection of the People's Republic of China, 2013) to guide enterprises to reinforce environmental awareness, perform environmental responsibilities, observe environmental laws and regulations of the host country, conduct environmental impact assessment, implement emergency management and ensure the emission of pollutants meet the standards. In December 2016, 19 global companies of China in the fields of energy, transportation, manufacturing and environment jointly launched an Initiative on Corporate Environmental Responsibility Fulfillment for Building the Green Belt and Road. The Chinese enterprises that join the initiative declare that they will observe environmental laws, reinforce environmental management and contribute to green Belt and Road in overseas investment and international production capacity cooperation.

**Regional environmental governance capacity improves constantly.** Forum on China-Africa Cooperation (FOCAC) proposed to implement China-Africa Green Development Plan. 50 foreign aid programmes on green development and ecological and environmental protection were committed to be implemented in Africa. China-Africa Environmental Cooperation Center will be established to boost the capacity to realize green, low carbon and sustainable development in Africa. The Lancang-Mekong Environmental Cooperation Center was established and Green Lancang-Mekong was implemented. Interim Office of China-Cambodia Environmental Cooperation Center was put into use. In order to push forward environmental capacity building and personnel exchanges among BRI countries, the Chinese government embarked on Green Silk Road Envoys Program for environmental officials, youths, students, volunteers of NGOs,

scholars and experts from BRI countries. The Program discusses issues ranging from environmental impact assessment, air pollution control to water pollution control. By far, over 1,100 delegates have participated in capacity building activities on environmental governance through Green Silk Road Envoys Program.

**The concept of green economy is being incorporated into BRI.** At present, it is the global consensus to develop green economy. UN Environment has also initiated activities on green economy in Africa, Asia-Pacific, as well as Caribbean and Latin America, including research on policy, strategy and indicator system for green economy. In addition, UN Environment is propelling actively the integration of green economy concept into Belt and Road. UN Environment has participated in BRI programs in Central Asia, for instance, the Green Economy Research Fellowship Programme for Central Asia and Mongolia launched by Ministry of Ecology and Environment and Green Development Coordination Center of Beijing Normal University. Furthermore, UN Environment and Elion Foundation co-founded Belt and Road Desert Green Economy Innovation Center in Kubuqi Desert of Ordos in Inner Mongolia Autonomous Region.

**Enterprises and environmental NGOs are popularizing high efficiency clean technologies in BRI countries.** China has been vigorously promoting the use of high efficiency clean technologies in BRI projects. In October 2016, *the Belt and Road Science, Technology and Innovation Cooperation Action Plan* came into force. The Plan sets out that energy efficiency and emission reduction should be fully integrated into the key areas for technological cooperation, including joint development and demonstration of agricultural technologies, equipment and machinery such as energy- and water-efficient agriculture, dissemination of climate-smart agricultural development model, promotion and demonstration of R & D on clean and efficient use of conventional energy such as coal, oil and gas, promotion of cooperative development of new energy vehicle and crucial generic technologies and sharing of data, technology and experience in coping with extreme weather, geological disasters, flood and drought. Currently, Chinese enterprises and environmental NGOs are striving to push forward high efficiency clean technology projects operational in BRI countries.

**Steady progress is achieved in marine environmental cooperation.** China has set up marine cooperation mechanisms with Thailand, Malaysia, Cambodia, India and Pakistan. At present, the construction of Thailand-China Joint Laboratory for Climate and Marine Ecosystem, China-Pakistan Joint Marine Research Center and China-Malaysia Joint Marine Research Center are well underway, which focus on cooperation in marine and climate change observation research, marine and coastal line protection, marine resource development and utilization, typical marine ecosystem protection and restoration, and endangered marine species protection.

**Green financing safeguards the development of green Belt and Road.** In order to support BRI, the Chinese government pledged USD 40 billion for the creation of the Silk Road Fund in the end of 2014. The Fund has signed 19 projects with a total pledged investment of USD 7 billion. The total amount of projects supported by the Fund reached USD 80 billion, covering numerous BRI countries and regions including Russia, Mongolia, Central Asia, South Asia, Southeast Asia, West Asia, North Africa and Europe.

Silk Road Fund advocates green, environment-friendly and sustainable development and supports green financing and green investment. In May 2017, at the opening ceremony of the Belt and Road Forum for International Cooperation, China pledged to contribute an additional RMB 100 billion to the Silk Road Fund to scale up the support for Belt and Road development.

1.3 Promoting the green development of the Belt and Road Initiative, transforming opportunities into reality

**Promoting the green development of the Belt and Road requires the establishment of an integrated decision-making mechanism for environmental protection and development in the construction of the Belt and Road.** Green development and ecological and environmental protection needs to be integrated into every aspect of the development of the Belt and Road. Policies and operable guidelines on greening the Belt and Road in line with the principles of international cooperation and the implementation of the 2030 SDGs need to be developed to directly help countries along the Belt and Road to realize SDGs related to environmental protection and social development.

**Greening B&R requires understanding the impacts that current and planned B&R projects will have on the local and global environment, as well as on sustainable development.** It is fundamental to have a specific analysis of the local and global impacts of B&R projects on the environment and sustainable development; this will help to identify which categories of projects should get political and financial attention in upcoming years. Showing the impacts that companies and investors are having through their involvement in B&R projects, both positive and negative, can create significant opportunities to change behaviours and ensure that greener categories of projects are approved and developed<sup>1</sup>.

**Greening Belt and Road requires applying the principle of Green Infrastructure:**

*“Infrastructure that contributes towards achieving low carbon and environmentally sustainable outcomes, such as renewable energy generation plants and mass-transport systems” and going beyond Sustainable Infrastructure: “Infrastructure that integrates environmental, social and governance aspects into a project’s planning, building and operating phases.”*

**The promotion of green development in B&R projects and all involved countries requires financing, at early stage, greener projects.** Green finance has been defined as support for environmental improvement, climate change mitigation and adaptation, resource conservation and efficient use of economic activities; namely financial services for project investment and financing, project operation and risk management in such fields as environmental protection, clean energy, green transportation, green building

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<sup>1</sup> China Dialogue.net, 2017.12.15, A green BRI is a Global Prospective, <https://www.chinadialogue.net/blog/10299-A-green-BRI-is-a-global-imperative/en>

and sustainable agriculture. Constantly implementing green financing could direct the flow of capital to greener industries and projects.

**Greening B&R requires greening the industrial chain and value chain** to build a green supply chain system. Promotion of green production, green procurement and green consumption to drive upper-stream and lower-stream industries to take energy conservation and environmental protection measures and reduce ecological and environmental impact is needed.

**Greening B&R requires cooperation in green, efficient and environmental protection technologies and industrial processes to provide effective plans for environmental governance.** It is necessary to enhance the sharing of best practice in the application of environmental protection technologies to promote capacity building in pollution prevention and treatment, facilitate the transfer and development of environmental protection technologies and help countries along the Belt and Road to develop clean industries according to their specific needs and conditions and promote effective pollution control technologies.

#### 1.4 The potential contribution of Green Belt and Road to the implementation of the 2030 SDGs

In 2015, the adoption of the 2030 Agenda for Sustainable Development and Paris Agreement offers roadmap for a new era of sustainable development. China has committed to building a Green Silk Road. At the Belt and Road Forum for International Cooperation in May 2017, Chinese President Xi Jinping proposed that “we should pursue the new vision of green development and a way of life and work that is green, low-carbon, circular and sustainable. Efforts should be made to strengthen cooperation in ecological and environmental protection and build a sound ecosystem to realize the goals set by the 2030 Agenda for Sustainable Development.” Building a Silk Road corresponds to the international green trend and is consistent with the 2030 Agenda as well as Paris Agreement.

**Promoting ecological and environmental protection policy coordination, strengthening sustainable development partnership.** Policy coordination is the foundation of the development of the Belt and Road Initiative. China will strengthen the construction of ecological and environmental protection cooperation mechanisms and platforms to carry out high-level intergovernmental dialogues with B&R countries and use cooperation mechanisms including China-ASEAN, Shanghai Cooperation Organization, Lancang-Mekong, Euro-Asia Economic Forum, Forum on China-Africa Cooperation and China-Arab States Cooperation Forum to strengthen regional communication and exchange on ecological and environmental protection. Policy coordination and exchange could effectively promote the development of sustainable partnerships among B&R countries (SDG Target 17.16) and improve the consistency of regional policy on sustainable development (SDG Target 17.14). Currently, The Ministry of Ecology and Environment of the People’s Republic of China and the United Nations Environment are working together for the establishment of the International Coalition for Green Development on the Belt and Road, which has gained the active response from the

international community, international organizations and countries along the Belt and Road.

**Reducing the environmental risks brought by facilities connectivity, protecting regional ecological systems.** Green Belt and Road requires green infrastructure construction, which means constantly promoting ecological and environmental friendly public goods and infrastructure construction for environmental protection, promoting the development and transfer of environmental protection technologies, exchange and cooperation between clean industrial parks and ensure the adoption of clean technologies in infrastructure construction. Green facilities connectivity is linked to multiple SDGs and targets. It could protect and sustainably use terrestrial and internal freshwater ecosystems and their services (SDG Target 15.1), reduce the degradation of natural habitats and halt biodiversity loss (SDG Target 15.5) and help related countries to upgrade infrastructure with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes (SDG Target 9.4).

**Promoting green unimpeded trade, improving the efficiency of production and consumption.** In trade, green Belt and Road will facilitate environmental-friendly product and service trade, make the market of environmental services more open and expand the import and export of environmental products and services. International cooperation on green supply chains is an important measure, which promotes green development throughout the industrial chain from production to product flow and to consumption through the development of Belt and Road green supply chain cooperation platforms. These activities could increase sustainable production and consumption in countries along the Belt and Road through trade and help B&R countries to gradually improve resource-use efficiency in global consumption and production (SDG Target 8.4).

**Promoting green financial integration, encouraging investment in clean technologies.** Green Belt and Road needs financial tools to identify and prevent social and environmental risks brought by related projects, improve environmental information disclosure, strengthen project environmental risk management and make foreign investment greener. Green investment in countries along the Belt and Road has attracted wide attention with promising prospect for the development of green industries<sup>2</sup>. Green finance could effectively promote investment in energy infrastructure and clean energy technologies (SDG Target 7.a) and mobilize additional financial resources for developing countries from multiple sources (SDG Target 17.3). For example, the Silk Road Fund has been implementing the concept of green development and green finance with emphasizing green, environmental-friendly and sustainable development as one of the four investment principles and promoting the

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<sup>2</sup> financialnews.com.cn, 2018.07.09 Belt and Road: Promoting new Opportunities in the Development of Green Finance.

<http://greenfinance.xinhua08.com/a/20180709/1768414.shtml>

interaction of clean and renewable energy on multiple levels for extensive cooperation in energy and resource as one of the four investment priorities.

**Strengthening people-to-people exchange in environmental protection and, promoting capacity building in developing countries.** Green Belt and Road will strengthen the support to green demonstration projects, promote exchange and cooperation in environmental protection policy, legal system, talent training and demonstration projects, continue to carry out the Green Silk Road Envoy Plan, increase the interaction and communication between environmental management experts and technical experts in B&R countries, promote environmental protection technology and industrial cooperation and improve the environmental protection capability of B&R countries. These activities and projects will effectively support developing countries to improve technological and technical capabilities, adopt more sustainable production and consumption patterns (SDG Target 12.a), promote the development, transfer, dissemination and diffusion of environmentally sound technologies to developing countries (SDG Target 17.7) and enhance international support for implementing effective and targeted capacity-building in developing countries through South-South cooperation (SDG Target 17.9).

## 2. Opportunities and Challenges in the Development of Green Belt and Road

### 2.1 Opportunities

China, a prominent green development player domestically, has the capacity to promote environmental convergence among the Belt and Road partners (for example, on circular economy) and provide a solution to realizing environmental-related SDGs in the region. Ecological civilization could improve the capacity of green governance and green Belt and Road could promote joint efforts with B&R to implement global ecological civilization construction. Most of western countries and China have approached the concept of developing first and clean in a second stage. Greening B&R can bring in developing countries the idea of integrated environment, social and governance aspects into a comprehensive project's planning, so as to promote economic growth in a green manner.

Green Belt and Road will create tremendous opportunities for green development and capacity building in countries along the Belt and Road, including:

1. Use the 'Greenization' to promote conservation culture and lowering resource consumption, boosting green industries and low-carbon lifestyles;
2. Help B&R countries integrate the SDGs at country, regional and project levels;
3. Promote high standards in all B&R projects;
4. Construct an integrated risk governance system for the B&R while enabling sustainable development;
5. Engage with policy-makers in B&R countries to establish frameworks that incentivise sustainable B&R infrastructure investments that are currently not financially viable and set up an open access database for sustainable B&R

- infrastructure projects to implement best practice in environmental and infrastructure planning;
6. Set up a cross-sector ‘Greening the Belt and Road’ learning and leadership platform to draw attention to the environmental risks and opportunities and ways to respond to them;
  7. Support efforts to create an open and optimized policy environment and constantly improve transparency.

## 2.2 Challenges

The Belt and Road Initiative is the largest infrastructure program ever planned. It comes with both opportunities and risks – for investors, for sustainable development, and for natural resources. At the same time, although sustainable development has become a global consensus, the inability of B&R countries in promoting ecological and environmental protection and the complexity of international cooperation projects bring a series of challenges to greening the Belt and Road.

In terms of green-oriented philosophy, in many B&R countries, the introduction of low carbon technologies & environmental design requirements are disregarded or best in early-stage. Many countries are under-developed and they never had the chance before to get steadily in touch with such concepts. Moreover, they have the understandable desire to develop fast, talking “green issues” in a second stage.

In terms of policy and monitoring assessment, B&R projects are mostly very complex and transnational; they involve different standards and procedures to plan, design, construct, operate and assess projects. Moreover, the business scenario for investing in green or natural infrastructure is often not clear. In many cases local laws and technical standards are very vague or completely missing. The number and variety of sustainability standards and assessment methods makes it difficult for financial investors to ensure they invest only in sustainable infrastructure. Risk-adjusted returns are too low for some sustainable infrastructure designs because investments in sustainability are not adequately compensated by revenue streams or public incentives.

In terms of information and transparency, in particular transnational B&R projects tend to be extremely difficult; data is scattered and difficult to locate as planning (in some cases completely missing), designing and implementing B&R projects is mostly decentralised. The complexity of B&R projects, in order to attract the attention of international private companies, requires precise planning and complete transparency in its execution.

In terms of green project’s implementation, so far, most of the developed projects cannot be defined as “green” at least according to international standards; moreover, as most of involved B&R countries are under-developed, it is mostly requested to quickly develop projects so to ensure fast economic and social development without taking too much into consideration negative environmental impacts of projects developed within B&R. International and private companies feel too exposed in getting directly involved in B&R projects.

In terms of green finance and green investments, so far they have not yet gained adequate attention among finance and wider private sector players or broader stakeholders. There is not yet a general acceptance in the definition of green projects and consequently in defining what can be financed within present green investments, moreover ROR and ROI in Green B&R projects is limited connected to the expected risks in the long run.

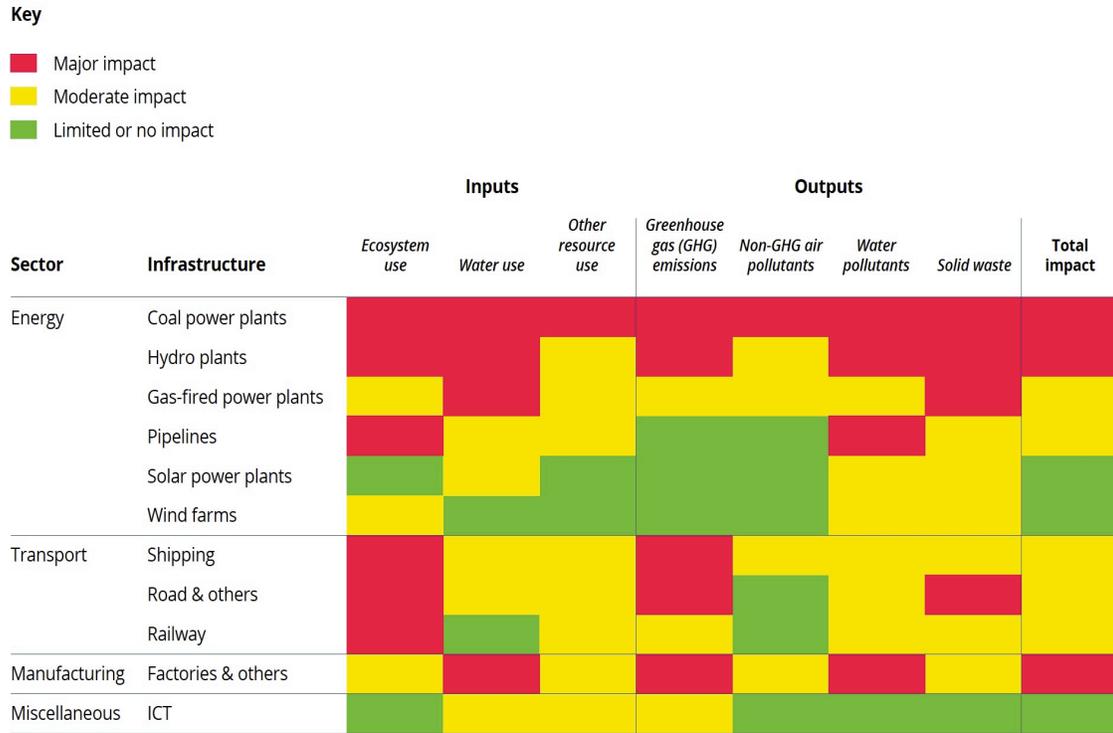


Figure 1 Infrastructure Heat Map

Source: Greening the Belt and Road Initiative report, HSBC-WWF, 2017

### **Case Study : China-Pakistan Economic Corridor**

CPEC is a vital component of B&R. CPEC aims to connect Gwadar Port in southwestern Pakistan to China's northwestern autonomous region of Xinjiang. The economic corridor is considered central to China-Pakistan relations and is considered a "game changer" for the region.

The northern areas of Pakistan are home to a large variety of fragile ecosystems recognized globally, including temperate deciduous forests, coniferous alpine forests, tundra and grasslands.

The mountain ecosystems in these areas include glaciers which support biodiversity and are an important source of freshwater for local communities as well as downstream populations. These mountain ecosystems are also an essential source of livelihood for the communities that dwell in this high-altitude region. With extreme weather and climate change related challenges, including glacial melting and glacial lake outburst floods, the vulnerabilities of local communities are exacerbated. Poverty and the extreme dependence of these communities on natural resources is a major challenge. Without environmental safeguards in place, there are risks of exacerbating environmental problems, putting pressure on dwindling natural resources, and displacing communities.

Ensuring ecological balance to avoid the impact of natural disasters emphasizes the need for an ecosystem-based approach. Conservation of natural resources is crucial for ensuring ecosystem services on a long term basis.

As CPEC gains momentum, both China and Pakistan governments need to take into consideration pressing environmental concerns and factor in viable solutions. The development of infrastructure projects includes a major investment of up to USD 62 billion. If not planned well, CPEC could have a significant negative impact on biodiversity and the livelihoods of local communities, particularly in fragile mountainous regions.

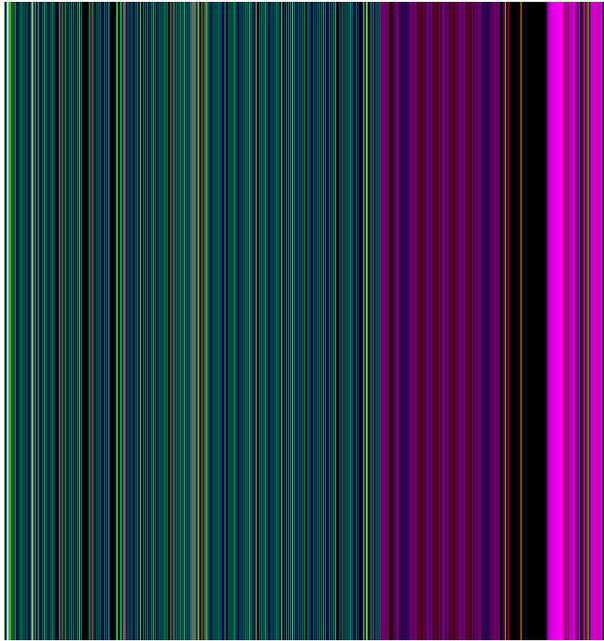


Figure 2 Routes of China-Pakistan Economic Corridor

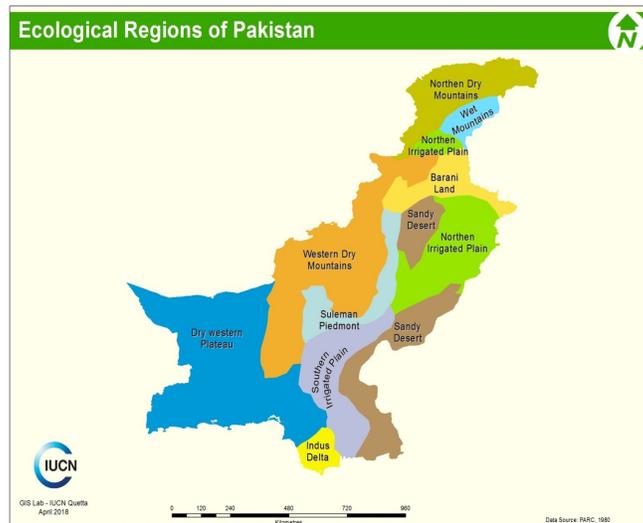
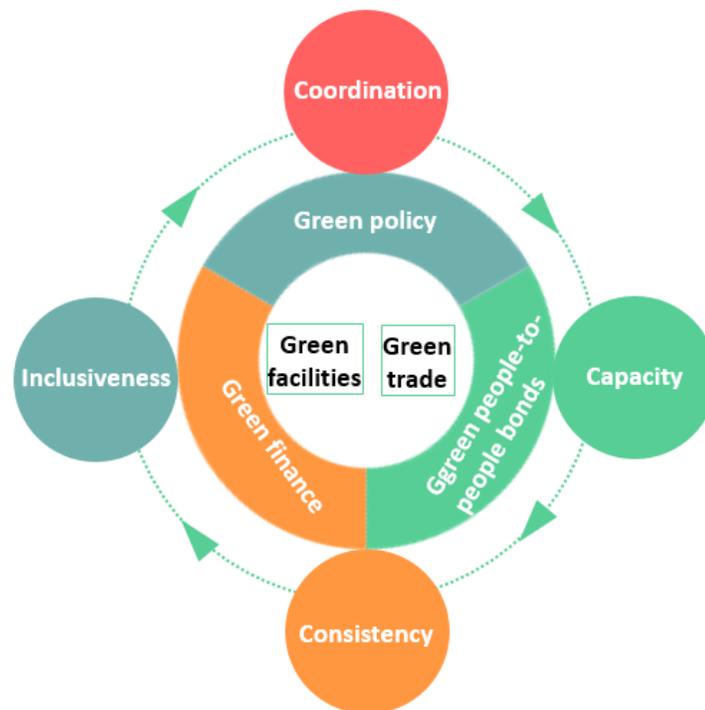


Figure 3 Ecological Regions of Pakistan

### 3. Policy Suggestions on Promoting Green Belt and Road

The United Nation 2030 Agenda for Sustainable Development is a far-reaching framework for all the countries in the world as the goal and consensus to develop and achieve in the future. However, the significance and benefits of building green Belt and Road may differ for countries along the route. Only when all the parties recognize the positive role of greening Belt and Road in their long-term sustainable development can cooperation under the Initiative advance. Therefore, firstly strategic coordination

between countries' implementation plans of sustainable development and the green Belt and Road Initiative, should be enhanced without violating the main principles of the Belt and Road Initiative, including inclusiveness, coordination, consistency and capacity-building. Secondly, by understanding the essence of the green Belt and Road Initiative, the concept of green development needs to be embedded into the efforts in achieving the "Five Goals" (namely policy coordination, facilities connectivity, unimpeded trade, financial integration and people-to-people bonds) and reduce the adverse effect to ecological environment during the implementation of the Belt and Road Initiative. Greenization of activities related to promoting "facilities connectivity" and "unimpeded trade" is the focal point while the goals of "green policy coordination", "green financial integration" and "green people-to-people bonds" could function as policy and financial support and be conducive to create an amicable external atmosphere.



3.1 Play an active role in global environmental governance, transforming the Belt and Road Initiative into one for global ecological civilization construction

**Forging the international partnership and network for green development on the platform of green Belt and Road.**

The international community needs to make concerted efforts to respect nature and to stress green development. Ecological civilization construction is not only an effective attempt of China in promoting sustainable development as the largest developing country in the world, but also an important concept and path provided by China for global environmental governance. In developing the Belt and Road, the concept of ecological civilization to provide Chinese wisdom to constructing green human community of shared destiny as well as models

and experience that could help late-comers in green development to avoid reliance on traditional path and lock-in effect need to be followed so as to help more countries and regions to accept and implement sustainable development.

**Enhancing ecological and environmental cooperation on the Belt and Road through establishing the International Coalition for Green Development on the Belt and Road.**

The Coalition is an open, inclusive and voluntary international network. The Coalition will provides a platform of policy dialogue and communication, sharing ecological civilization and green development, and facilitating green development into the implementation of BRI. It will promote international consensus and collective actions. Meanwhile, the Coalition will provides a platform of knowledge and information, bringing together international think tanks, carrying out joint research and jointly promoting Belt and Road countries to implement the 2030 Agenda.

**Participating in global environmental governance and jointly promoting ecological civilization construction worldwide on the platform of green Belt and Road.** Active involvement in the reform and construction of the global environmental governance system is needed. Moreover, an increase in the awareness of countries along the Belt and Road in building a community of shared destiny with shared responsibilities and benefits and develop international rules through joint discussion and negotiation to conduct global environmental governance is also needed. Launching fair rules for global environmental governance with the interest of all sides being taken into consideration, promoting capacity building in global environmental governance, offering a new path and new plans for the implementation of the 2030 Agenda on a global level and advancing the global environmental governance system could be elements of solution.

**Promoting the concept of ecological civilization and facilitate consensus on ecological civilization achieved on the platform of green Belt and Road.** The concepts of ecological civilization and sustainable development are both formed against the background of deep adjustment in the global economic governance system. The two concepts aim at building a green home for the human society, and therefore have a lot in common regardless of their difference in perspectives, stands and expression of the final goal. As a result, promoting the alignment of the development of the green Belt and Road and the United Nations 2030 Agenda and the mutual learning, understanding and support of ecological civilization in China and sustainable development in countries along the Belt and Road could advance the global green agenda.

3.2 Promoting strategic alignment in the development of the green Belt and Road

3.2.1 Promoting strategic alignment in constructing a green Belt and Road

**Integrating green development into the Belt and Road projects as an important part of the MOUs on B&R construction between China and related countries and international organizations.**

Any MOU should include contents related to ecological civilization and green development concepts, jointly building a green Belt and Road, promoting the alignment of the Belt and Road development with the United Nations 2030 Sustainable Development Goals (SDGs). Making full use of the bilateral strategic agreements between China and countries along the Belt and Road and international

organizations to establish ecological and environmental work groups who are responsible for the alignment of strategies and plans on green development is needed.

**Making full use of platforms for communication to promote strategic alignment.**

Negotiation with related parties is needed to establish a fixed panel on the development of green Belt and Road under dialogue mechanisms such as the Forum on China-ASEAN Environmental Cooperation, Euro-Asia Economic Forum and China-Arab States Environmental Protection and Cooperation Forum. It is also suggested to resort to the Advisory Committee and the Communication Office of the Belt and Road Forum for International Cooperation (BRF) to set up a parallel panel on green development of the Belt and Road. The Panel aims to discuss project construction, financing guidelines and technical standards for the development of the green Belt and Road to promote strategic alignment in standards and rules.

**Promoting ecological and environmental protection policy alignment with hosting countries.** B&R projects need to be strictly monitored so to have a clear understanding of their impact on local and global environment; the implementation of an international partnership can support a successful monitoring system. The partnership should be involved in outlining a B&R policy coordination and in defining an overall and internationally accepted notion of “Green vs. Non Green”.

**Promoting alignment of the Belt and Road Initiative and South-South Cooperation.**

The Belt and Road Initiative overlaps with South-South Cooperation in many aspects. Therefore, strengthened efforts in promoting the Belt and Road strategy under the framework of South-South cooperation to make it a model for South-South cooperation between China and developing countries is needed. An international research group needs to be established to help developing countries to better understand green development and sustainable development.

3.2.1 Integrating ecological and environmental cooperation into the whole process of implementing BRI

**Enriching and stressing content related to ecological and environmental cooperation in the planning for the development of the Belt and Road Initiative.** It is necessary to formulate the *Guidelines for Compiling Belt and Road Development Cooperation Plan* that mandate the inclusion of ecological and environmental protection and cooperation on green development in Belt and Road development planning and guide authorities to enrich the content of related chapters in comprehensive plans and sector-specific plans and include the building of green Belt and Road as a key part in related documents in the future.

**Jointly working on ecological and environmental protection plans with the B&R countries, particularly those with multiple collaborative projects.** Joint analysis of ecological and environmental protection and green development plans with B&R countries together with infrastructure connectivity and international industrial capacity cooperation plans and prominent ecological and environmental challenges is needed. Such analysis needs to be updated regularly.

**Promoting technical alignment among different B&R projects.** B&R projects are mostly transnational and extremely complex to develop due to stringent technical constraints. A special commission should be established in order to develop, over the years, agreed major B&R technical standards, defined for key sectors, with the intent to simplify public tenders and international bidding procedures.

### 3.3 Safeguarding mechanisms for constructing a green Belt and Road from its source

#### 3.3.1 Supporting the development of Green Belt and Road with green finance

**Adopting green financial tools for greening the Belt and Road on the global level.** First, Belt and Road green investment and financing principles need to be further studied. Principles and guidelines for Belt and Road green investment and financing according to the United Nations 2030 SDGs and the Paris Agreement in reference to international rules and standards need to be developed. These principles and guidelines, once launched, need to be promoted in countries along the Belt and Road. Second, multilateral Belt and Road green investment and financing guarantee institutions need to be established to provide guarantee for investment and financing in green projects and energy conservation and emission reduction projects to share risks and attract the private sector to invest in green industries. The guarantee institutions are non-profit, market-oriented institutions guiding and promoting the development of Belt and Road projects. Third, an environmental and social information database on the Belt and Road Ecological and Environmental Protection Big Data Service Platform needs to be established to provide information services to investors, lenders, financiers and property owners along the Belt and Road. Fourth, financial institutions along the Belt and Road need to disclose environmental information, so as to promote the green development of financial institutions while helping businesses to pursue green development and achieve green economic development and improvement in environmental quality.

#### **Encouraging countries along the Belt and Road to regard green finance as an important instrument to realize the transition to a green development model.**

Improving the capability of B&R countries in developing green finance and encouraging them to share experience in this field. First, by encouraging the development of green industries, sectors and customers and fostering growing demand for green investment and financing. Second, by launching financial regulatory policies to encourage financial institutions to actively support the development of green industries, sectors, companies and customers, guide and encourage financial institutions to establish green investment and financing mechanisms and form a long-term mechanism for promoting green economic and social development with green finance. Third, by nurturing responsible investors.

**Giving full play to the role of financial institutions as agents to improve the environmental performance of corporate customers.** First, by encouraging financial institutions to establish a clear strategy for the development of green finance. They need to identify the strategic goals for green finance, foster green philosophy and values, improve the organizational structure of green finance and actively expand the market of

green finance, so as to effectively control environmental and climate risks. Second, by establishing and improving green finance policies and systems for overseas operations. Environmental and climate factors present both risks and opportunities, which require financial institutions to carry out in-depth research to assess and effectively control environmental risks and launch innovative green finance products for optimized green finance services. Third, by establishing an environmental and social risk assessment toolkit on the basis of international standards such as IFC Environmental and Social Performance Standards and the Equator Principles, to analyze the environmental and social conditions along the Belt and Road. Fourth, by ensuring the lifecycle management of environmental and social risks through incorporating environmental and social risk management into credit and investment management before, during and after an investment is made. Fifth, by implementing environmental information disclosure through establishing the system and framework of environmental information disclosure and improving the capability of information disclosure. Sixth, by designing a mechanism to address environmental and social risks.

### 3.3.2 Establishing ecological and environmental impact assessment mechanism for Belt and Road projects

**Establishing the environmental assessment rating mechanism for Belt and Road projects.** An environmental impact assessment and management database for Belt and Road development and investment projects needs to be set up to include ecological and environmental impact into the Belt and Road development project rating system and risk rating system and conduct risk assessment to Belt and Road development projects in terms of economic risks, political risks, social risks, cultural risks and ecological and environmental risks. Identification of the ecological and environmental impact of investment projects on different dimensions such as ecological security and environmental pollution and assess the environmental benefit of these projects is also needed. The assessment results could become an important reference for developmental and policy-based financial support.

**Developing EIA tools for Belt and Road projects.** Tools for the identification, assessment, monitoring and management of environmental, climate and social risks of development and investment projects, carry out research on investment and consulting service tools with full visibility to policy, laws and regulations, data and information and develop country-specific ecological and need to be developed along with environmental information system and assessment tools for key investment destinations along the Belt and Road as well as technical supporting tools for greater availability of public environmental data. Comprehensive and in-depth assessments of ecological and environmental risks in ecologically sensitive and vulnerable areas need to be conducted along with establishing lists of risks and control measures and requiring investment projects to carry out the tasks and requirements of related lists. In terms of the range of assessment, the inclusion of ecological health and climate change into environmental

assessment on a voluntary basis with regard to international hotspot issues needs to be promoted.

**Improving the EIA platform and procedures for Belt and Road projects.** An environmental protection assessment consulting service platform along with an investment and financing information sharing platform among governments, businesses, banks and other stakeholders are needed to conduct independent assessment and discussion of “Belt and Road” development project information disclosure and to ensure the implementation of environmental and social security measures of related projects and protect the interests of stakeholders.

**Encouraging the participation of stakeholders in the EIA procedures.** Stakeholders need to be encouraged to comprehensively and effectively engage in environmental impact assessment and implement projects strictly in line with legislations and regulations in the hosting countries. It is important to ensure objective and scientific judgement and eliminate potential risks and hidden dangers.

3.4 Constructing a mechanism for green management through implementing the Belt and Road Initiative

**Facilitating cooperation and application of environmental standards.** Efforts on the coordination of standards for green infrastructure of China and Belt and Road countries are needed. Through joint research, a set of international standards widely acknowledged by Belt and Road countries, in green transportation, green architecture, and green energy should be developed. Relying on the Belt and Road Center for Environmental Technology Innovation and Transfer, as well as on the demonstrative base for industrial cooperation, support to businesses cooperating with Belt and Road countries, and jointly releasing environmental industry standards recognized along with relevant associations should be provided.

**Strengthening green supply chain management.** Integration of China's and international competitive industries into a green global supply chain system is needed. By joining government departments, institutions and enterprises of the Belt and Road countries together, a regional green supply chain system can be developed. Each country can bring its industrial and market advantages into full play, which makes international cooperation more extensive, deeper and to higher level. Besides, full use of the Belt and Road green supply chain cooperation platform to support and encourage enterprises should be made to actively get involved in foreign trade and investment cooperation and to promote green innovation. Pilot demonstration projects of green supply chain management, development of green supply chain environmental management policy tools and promotion of green development of the entire industrial chain of production, distribution and consumption should be carried out. A green supply chain performance measurement indication system to evaluate the performance of the enterprises and improve corporate social responsibility for sustainable development needs to be developed.

Exploring to set up the Belt and Road Green Development Fund. It is necessary to enhance financial input, and safeguard the implementation of green Belt and Road

related work. We need to promote to set up a special fund for resource development and environmental protection, with priority given to supporting environmental infrastructure, capacity building and green industries of countries along the Belt and Road. Meanwhile, it is necessary to give full play to the leading role of policy banks such as China Development Bank and the Export-Import Bank of China, to guide and encourage the pooling of all kinds of resources to the Green Development Fund. It will support and bring new momentum to green Belt and Road.

**Developing green value chain.** China has become the world's largest manufacturing hub, second largest consumer (and is expected to become the largest one in the mid- or even short-term) and the largest market and consumer of commodities (energy, resources and agricultural products), playing a key role in the global value chain. Countries along the Belt and Road could develop green value chain pilot zones and demonstration projects to drive the development of green value chain with green standards and labeling.

**Facilitating trade in environmental goods and services.** Facilitating trade in environmental goods and services will bring huge environmental benefits to countries along the Belt and Road. Increasing market openness for environmental products and services, developing green industries, and encouraging the import and export of environmental products and services related to air pollution control, water pollution prevention and control, as well as solid waste management and disposal technologies and services to be promoted. Differentiating policies for green products and non-green products, and providing classified guidance and management for product trade and investment, such as reducing tariffs of green products, offering special or preferential customs treatment, listing green products as an encouraged category for industrial investment, as well as providing green financial services is recommended. Seeking concessional loans for green projects from international financial institutions such as the World Bank and the Asian Development Bank is also encouraged. Besides, improving green product identification and labeling systems and mutual recognition of green products between countries, as well as encouraging more procurement of products with eco-labels by governments along the Belt and Road is also recommended.

3.5 Safeguarding green Belt and Road through enhancing people-to-people bond, and carrying out personnel exchange and capacity building

**Making the Green Envoys Program for Maritime Silk Road the flagship activity for environmental protection capacity building.** The Green Envoys Program (upgraded to Green Envoys Program for Maritime Silk Road in 2016) functions as an important platform for China to carry out South-South environmental cooperation and to promote regional sustainable and green development. The Green Envoys Program for Maritime Silk Road should be the flagship activity, capable of enhancing public awareness on environmental protection and strengthening capacity building in the countries along the Belt and Road. By advancing "policy communication" and facilitating "people-to-people bonds", China will strengthen cooperation and exchanges in environmental management, pollution prevention and control, green economy and other fields

through providing environmental management personnel and professional training, as well as policy guidance, and share China's ideas and practices realizing ecological civilization and green development. Local governments should be encouraged to participate in the Green Envoys Program for Maritime Silk Road, and guide environmental protection enterprises to "go global" in an orderly manner via platforms such as China-ASEAN Demonstration Base for Environmental Technology and Industry Cooperation and the Belt and Road Environmental Technology Exchange and Transfer Center (Shenzhen).

**Supporting and promoting exchanges and cooperation of environmental protection social organizations between China and countries along the route.** A supporting network ensuring government guidance, enterprise support, social participation, and industry mutual assistance needs to be established. Roles of government entities that are responsible for cooperation should be clarified and overseas environmental responsibilities of Chinese enterprises should be defined by issuing policies or guidelines to attract various parties and involve and encourage environmental social organizations to establish a cooperation network of their own. Diversified financial mechanisms and increase government procurement of services by environment protection organizations should be formulated. Special cooperation funds to support environmental protection social organizations to go global should be set up. Participation mechanisms for environmental and social organizations should be designed so to encourage their involvement in negotiations and decision-making, and create an international communication event list for environmental and social organizations.

**Promoting gender mainstreaming and improving the leadership of women.** It is necessary to improve the awareness of policy makers on the role of women in social and environmental development and promote the integration of gender mainstreaming in Belt and Road policy development and project implementation. It is important to implement the best practice of gender mainstreaming in the development of Belt and Road projects and promote female government leaders, experts and young scholars in the ecological and environmental protection sector in countries along the Belt and Road to engage in the training program of "Improving the Green Leadership of Women" and share with Belt and Road partners the methods and experience of realizing gender mainstreaming with the help of Green Envoys Program.